Appendix B

Transportation Impact Study

Midway-Pacific Highway & Old Town Mobility Element Updates

Transportation Impact Study

Midway-Pacific Highway: Proposed Project Without Sports Arena
Old Town: Proposed Project

Draft Report

December 2017

Prepared for:

The City of SAN DIEGO

Prepared by:

CHEN RYAN
3900 Fifth Avenue, Suite 210
San Diego, CA 92103

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1.0 Introduction

1.1 Purpose of the Report

This Transportation Impact Study (TIS) serves to identify and document potential traffic impacts related to the buildout of the Preferred Plan alternative of the Midway-Pacific Highway and Old Town Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway impacts. This technical report also provides vehicle miles traveled (VMT) for the Existing conditions and buildout of the Community Plan Updates and compares these to the projected 2035 VMT per person and average trip length for the entire Region.

Figure 1-1 displays the project study area for both the Midway-Pacific Highway Corridor and Old Town communities. This report identifies significant traffic impacts and potential mitigation measures associated with the implementation of the Preferred Plan for the Midway-Pacific Highway and Old Town Community Plan Updates and is intended to support the Environmental Impact Report (EIR).

Study Scenarios

Two (2) scenarios were evaluated for this Mobility Element Update transportation impact study, including:

- Existing Conditions – utilized to establish the existing base line traffic operations within the project study area.
- Preferred Plan – represents the preferred land use plan and proposed roadway network. Improvements resulting in the preferred plan roadway network were developed in collaboration between community members, City staff, and the project consultant team. Initially, the mobility issues and needs identified in the Existing Conditions Report were compared to the mobility issues and needs identified in other on-going or recent planning efforts. The Preferred Plan was modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the Preferred Plan Community Plan land uses and adopted Year 2035 land uses outside of the study communities for regional growth.

1.2 Report Organization

Following this introductory chapter, the report is organized into the following chapters:

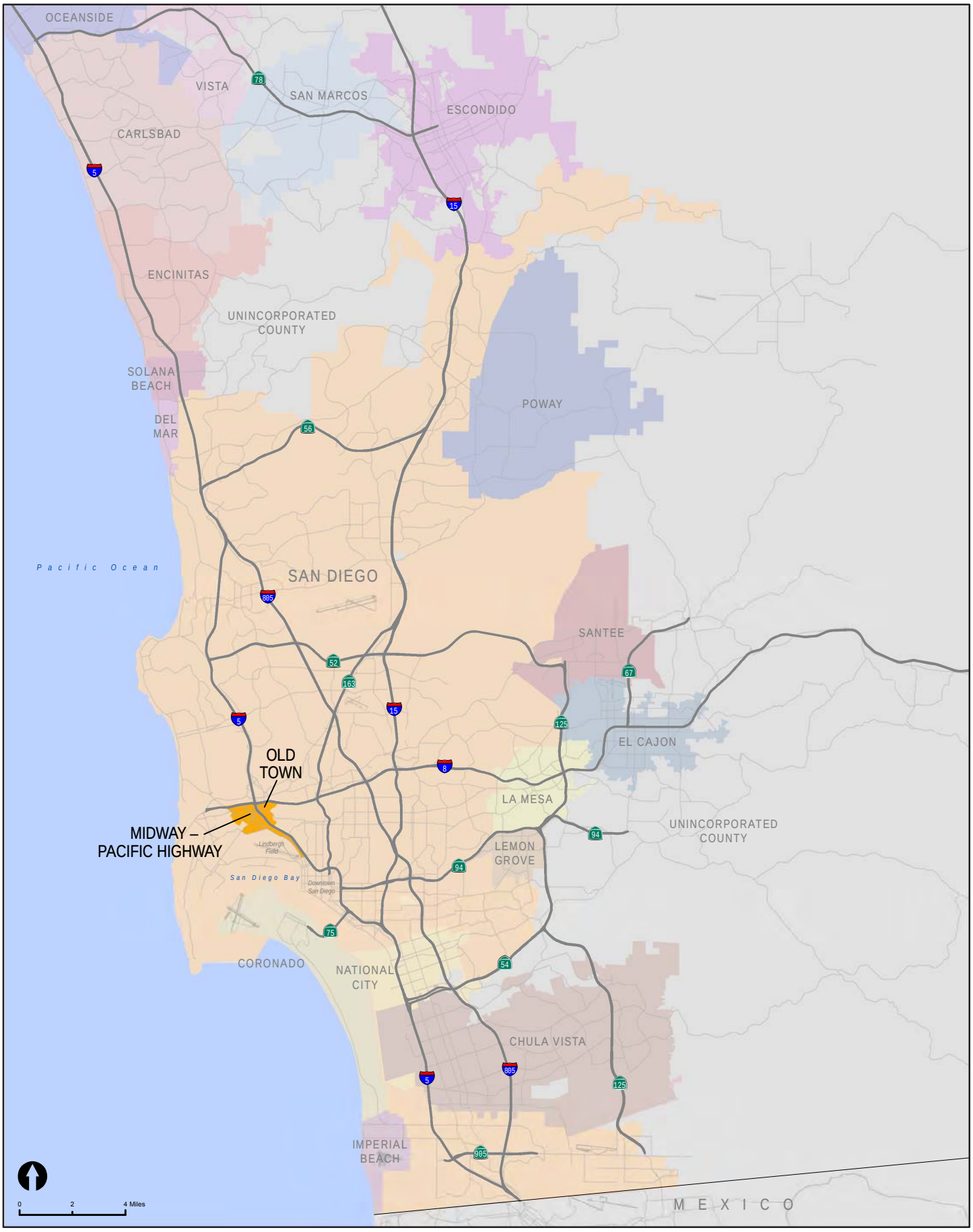
2.0 *Analysis Methodology* – This chapter describes the methodologies and standards utilized to analyze roadway, intersection, and freeway segment and freeway ramp meter traffic conditions.

3.0 *Existing Conditions* - This chapter describes the existing traffic network within the study area and provides analysis results for existing traffic conditions.

4.0 *Preferred Plan* – This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to the Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters were evaluated. Mitigation measures for significant impacts identified, if feasible.

5.0 *Adopted Plan* – This chapter is included for informational purposes and includes a description and high-level analysis of the currently adopted plan for both the Midway-Pacific Highway Corridor and Old Town communities. No impact analyses were conducted for this scenario.

6.0 *Summary* – This chapter summarizes the analysis and impact findings outlined in chapters three through five.



Midway-Pacific Highway and Old Town Community Plan Update

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Figure 1-1
Midway-Pacific Highway and Old Town within the Region

2.0 Analysis Methodology

This chapter describes the various methodologies utilized to analyze the mobility network within the Midway-Pacific Highway and Old Town communities. Analysis of the vehicular systems – roadways, intersections and freeways – were prepared for this study in accordance with the *City of San Diego Traffic Impact Study Guidelines,* SANTEC/ITE Guidelines, and the enhanced California Environmental Quality Act (CEQA) project review process.

2.1 Selection of the Study Area

This section describes the process used to identify roadway segments and intersections for analysis.

2.1.1 Roadway Segments

Roadway segments were evaluated if one or more of the following circumstances applied:

- The roadway segment is an existing or planned circulation element roadway as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The roadway segment provides freeway access to/from the Midway-Pacific Highway or Old Town communities.
- The roadway segment is located outside of either study community; however, it may influence or impact the flow of transportation within either of the communities.

2.1.2 Intersections

Intersections were evaluated if one or more of the following circumstances applied:

- The intersection is comprised of a circulation element roadway intersecting with another circulation element roadway. This includes existing and future/planned circulation element roadways as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The intersection is at a freeway ramp interchange located within the Midway-Pacific Highway or Old Town communities or is a major gateway to either community.
- The intersection is a major intersection located outside of either community, however, it may influence or impact the flow of transportation within the communities.
- The intersection meets criteria used in previous studies, whereby both streets meet one of the following:
    - 4 lanes or greater
    - 3 lanes and carries over 15,000 ADT
    - 2 lanes and carries over 10,000 ADT
- Intersections at freeway access ramps.
- Significant intersections where travel time analysis is performed.

A total of 59 intersections were identified based on the criteria listed above, which include 11 intersections located outside the study communities. These intersections were added to the study area because of their proximity to the communities, and the likelihood that changes within the communities could directly affect traffic in/out of the communities. Figure 2-1 displays the location of the 59 study intersections and roadway segments.

2.2 Level of Service Definition

Vehicular level of service (LOS) is a quantitative measure that represents quality of service for the driver. These conditions are generally described in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents the best operating conditions from a driver's perspective, while LOS F represents the worst. Table 2-1 describes generalized definitions of auto LOS A through F.

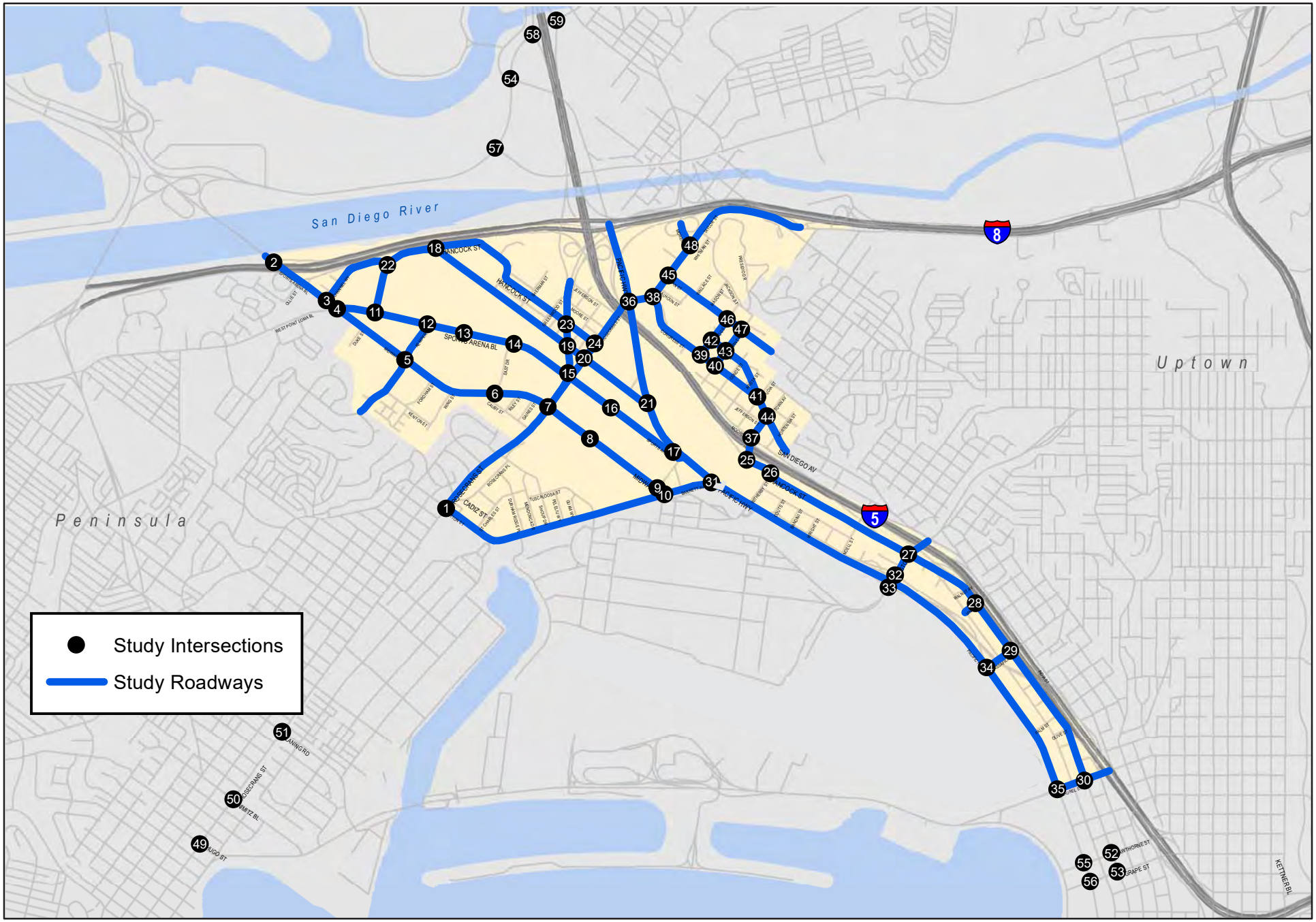
Table 2-1 Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual (2010)

2.2.1 Roadway Segment Level of Service Standards and Thresholds

Roadway segment level of service standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment level of service is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted Average Daily Traffic (ADT) volumes. Table 2-2 presents the roadway segment capacity and LOS standards utilized to analyze roadways in this report.



Midway-Pacific Highway and
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Figure 2-1
Project Study Area

Table 2-2 City of San Diego Roadway Segment Daily Capacity and Level of Service Standards

Roadway Functional Classification	Lanes	Level of Service				
		A	B	C	D	E
Freeway	8	60,000	84,000	120,000	140,000	150,000
Freeway	6	45,000	63,000	90,000	110,000	120,000
Freeway	4	30,000	42,000	60,000	70,000	80,000
Expressway	6	30,000	42,000	60,000	70,000	80,000
Prime Arterial	8	35,000	50,000	70,000	75,000	80,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
Major Arterial	7	22,500	31,500	45,000	50,000	55,000
Major Arterial	6	20,000	28,000	40,000	45,000	50,000
Major Arterial	5	17,500	24,500	35,000	40,000	45,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Major Arterial	3	11,250	15,750	22,500	26,250	30,000
Major Arterial	2	7,500	10,500	15,000	17,500	20,000
Major Arterial (one-way)	3	12,500	16,500	22,500	25,000	27,500
Major Arterial (one-way)	2	10,000	13,000	17,500	20,000	22,500
Collector (w/ two-way left turn lane)	4	10,000	14,000	20,000	25,000	30,000
Collector (w/ two-way left turn lane)	3	7,500	10,500	15,000	18,750	22,500
Collector (w/ two-way left turn lane)	2	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	4	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	3	4,000	5,000	7,500	10,000	11,000
Collector (w/o two-way left turn lane)	2	2,500	3,500	5,000	6,500	8,000
Collector (w/o two-way left turn lane) – no fronting property	2	4,000	5,500	7,500	9,000	10,000
Collector (one-way)	3	11,000	14,000	19,000	22,500	26,000
Collector (one-way)	2	7,500	9,500	12,500	15,000	17,500
Collector (one-way)	1	2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2	-	-	2,200	-	-

Source: City of San Diego Traffic Impact Study Manual (1998);
Updated with input from City of San Diego Planning Department Mobility Staff (2017)

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. LOS D is considered acceptable for Mobility Element roadway segments in the City of San Diego. Often, a roadway segment that is analyzed to be LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized (or intersection analysis, if arterial analysis is not applicable) to provide a more accurate indication of LOS.

2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Based on existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all study area.
- Peak Hour Factor: Based on existing peak hour counts.
- Existing Conditions Signal Timing: Based on existing signal timing plans (as of November 2012).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in *2000 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209*. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (sec/veh).

The *2000 HCM* methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections, based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The level of service criteria used for this technique is described in Table 2-3. The computerized analysis of intersection operations was performed utilizing the *Synchro 9.0 (2000 HCM methodology)* traffic analysis software (by Trafficware, 2011).

Table 2-3 Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board Special Report 209 (2000)

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections, were analyzed using the *2000 HCM* unsignalized intersection analysis methodology. The Synchro 8.0 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or

measured average control delay of all movements. Table 2-4 summarizes the level of service criteria for unsignalized intersections.

Table 2-4 Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: Highway Capacity Manual (2000)

The City of San Diego considers LOS D or better during the AM and PM peak hours to be acceptable intersection LOS.

2.2.3 Freeway/State Highway Level of Service Standards and Thresholds

Freeway LOS analysis is based upon procedures developed by Caltrans District 11. The procedure for calculating freeway LOS involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour ("K"), directional ("D") and truck ("T") factors to Average Daily Traffic (ADT) volumes. The base capacities were assumed to be 2,350 passenger-cars per hour per main lane (pc/h/ln) and 1,410 pc/h/ln for auxiliary lanes. A 0.95 peak-hour factor (PHF) is utilized for this analysis.

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in Table 2-5. The corresponding level of service represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour. LOS D or better is used in this study as the threshold for acceptable freeway operations based upon Caltrans and the SANDAG Regional Growth Management Strategy (RGMS) requirements.

2.2.4 Ramp Metering Analysis

Ramp metering is a means of controlling the volume of traffic entering the freeway with the goal of improving freeway main lane traffic operations and flow. Freeway ramp meter analyses estimate peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location.

Meter rates, which represent the number of vehicles permitted through the signal, onto the ramp and freeway, were obtained from Caltrans for use in the analysis. Ramp metering analyses to calculate delays at study area freeway ramps were conducted following the procedures outlined in the *City of San Diego Traffic Impact Study Manual (1998)*.

Table 2-5 Caltrans District 11 Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways and conventional highways			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for conventional highways			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
Used for freeways and expressways			
"F0"	1.01–1.25	Considerable (0-1 hour delay)	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe (1-2 hour delay)	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe (2-3 hour delay)	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe (3+ hours of delay)	Gridlock.

Source: SANTEC/ITE Guidelines for TIS in the San Diego Region.

2.2.5 Determination of Significant Impacts

This section outlines the thresholds for determining significant project-related impacts to roadways, intersections, and freeways in the City of San Diego. Generally, a significant impact is identified when the addition of project traffic results in a level of service dropping from LOS D or better to substandard LOS E or F. Table 2-6 summarizes the significant impact thresholds for facilities operating at a substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the (V/C) ratio.

Table 2-6 City of San Diego Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering*
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E	0.01	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Source: CEQA Significance Determination Thresholds, City of San Diego Development Services Department (2007)

Note:
* For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

3.0 Existing Conditions

This section describes study area intersections, roadways and freeway segments, as well as existing peak hour intersection traffic volumes, and daily roadway and freeway traffic volumes. A Vehicle Miles Traveled (VMT) comparison is also presented. Level of service analysis results for all study area facilities under Existing Conditions are presented separately below.

3.1 Vehicle Miles Traveled

The VMT generated within the communities were estimated using the SANDAG Series 12 Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to/from and within the community. Table 3-1 displays the total VMT generated within the Midway-Pacific Highway and Old Town communities and the average trip length under both the Base Year conditions. VMT calculations for the Midway-Pacific Highway and Old Town communities are included as Appendix A.

As shown, the Midway-Pacific Highway community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.5 miles vs. 5.2 miles; VMT of 156 miles vs. 27 miles, respectively).

The Old Town community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.6 miles vs. 5.2 miles; VMT of 181 miles vs. 27 miles, respectively).

Table 3-1 Vehicle Miles Traveled (VMT) Comparison Existing Conditions

Measure	Midway-Pacific Highway	Old Town	San Diego Region
	Base Year	Base Year	Base Year
Total VMT (miles)	730,121	151,300	85,182,063
Total # of Auto Trips	294,796	57,989	16,458,692
Average Trip Length[1] (miles)	2.5	2.6	5.2
Population	4,672	834	3,130,717
Daily VMT by Population (miles)	156	181	27

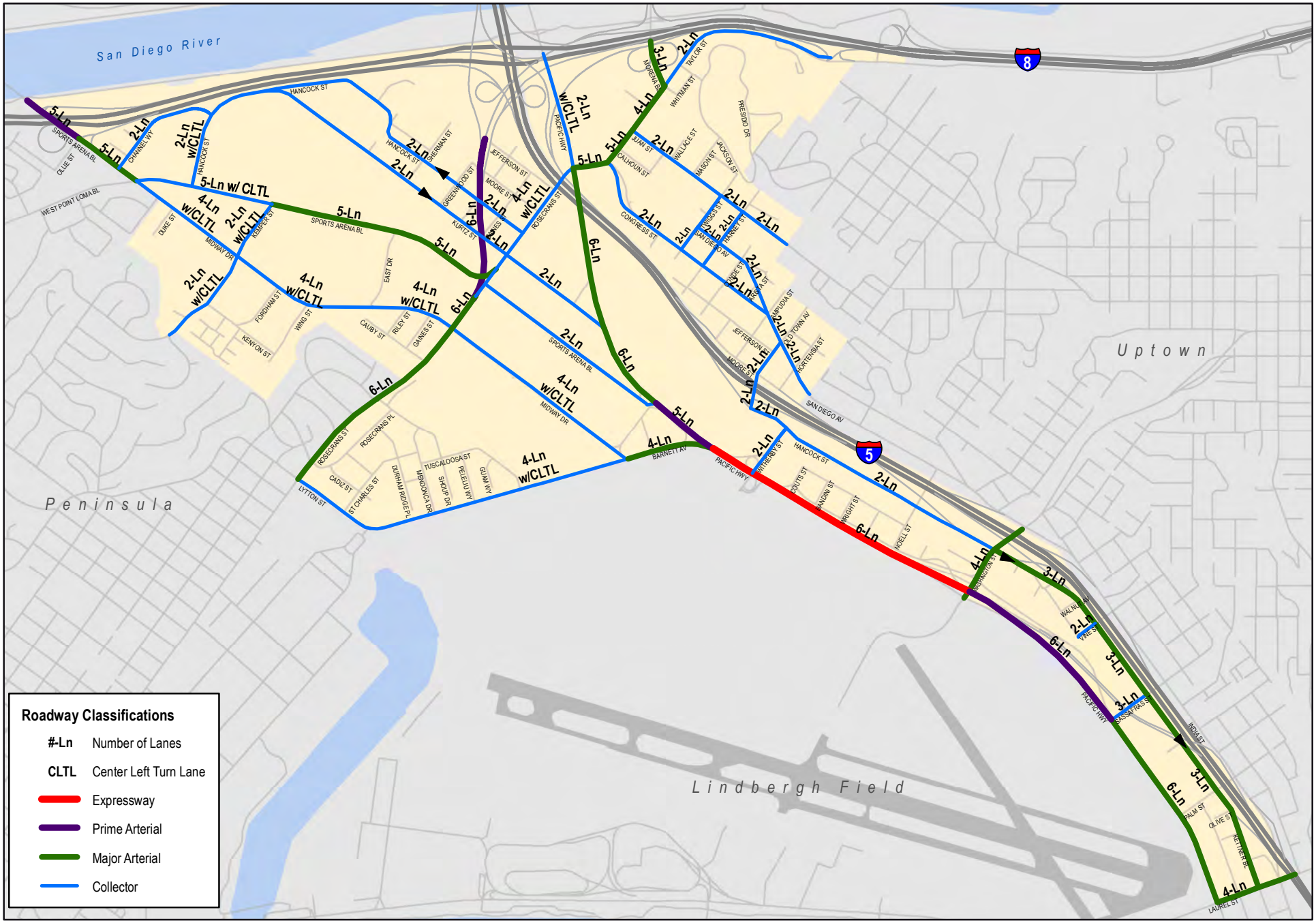
Source: SANDAG (2017); Chen Ryan Associates (2017)

Note:

[1]Average trip length is estimated by dividing the total VMT by the total # of auto trips.

3.2 Roadway Segment Analysis

Chapter 2 documents the selection of study area roadway segments and study intersections. The roadway network is comprised of regional facilities such as I-5 and I-8, as well as numerous arterials and local streets. Roadways outside the boundary of the Midway-Pacific Highway and Old Town communities were included in this assessment due to their location within the sphere of influence and will be required for the environmental studies. Figure 3-1 displays the functional classification for study area roadway segments. Table 3-2 provides a description of the study area roadway segments.



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Figure 3-1
Existing Roadway Classifications

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
North-South									
Midway/Pacific Highway Corridor									
Lytton St / Barnett Ave	Rosecrans St	Midway Dr	4-Lane Collector w/ CLTL	Commercial & Military Use	None	40	Yes	Class II	76'/86'
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76
	Kemper St	East Dr	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76'
	East Dr	Rosecrans St	4-Lane Collector w/ CLTL	Commercial	Parallel (NE Side)	35	Yes	None	60'/80'
	Rosecrans St	Barnett Ave	4-Lane Collector w/ CLTL	Commercial & Industrial	None	35	Yes	None	56'/72'
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	None	None	35	Yes	Class III	72'/84
	I-8 EB Ramps	W. Point Loma Blvd/ Sports Arena Blvd	6-Lane Major Arterial	Commercial & Multi-Family Residential	Parallel (SW Side)	35	Yes	Class III	76'/88'
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector w/ CLTL	Commercial & Multi-Family Residential	Parallel (Both)	35	Yes	None	96'/106'
	Kemper St	East Dr	5-Lane Major Arterial	Commercial & Private Recreation	Parallel (SW Side)	35	Yes	None	96'/106'
	East Dr	Rosecrans St	5-Lane Major Arterial	Commercial	None	35	Yes	None	82'/92'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	35	Intermittent	None	52'/82'
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	Commercial & Industrial	Parallel (Both)	30	Yes	None	40'/48'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	30	Gutter Only	None	48'/48'
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector w/ CLTL	Industrial	Parallel (Both)	30	Only on south side	None	62'/78'
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	Industrial	Parallel (Both)	30	Yes	None	40'/50'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Hancock St	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	Industrial	None	30	Yes	None	40'/50'
	Old Town Ave	Witherby St	2-Lane Collector	Industrial	None	30	Curb Only	None	44'/44'
	Witherby St	Washington St	2-Lane Collector	Industrial	Parallel (North) Diagonal (south)	30	Yes	None	60'/70'
Kettner Blvd	Washington St	Vine St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	None	40	Sidewalk on SW Side	None	42'/58'
	Vine St	Sassafras St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Sidewalk on SW Side	None	52'/58'
	Sassafras St	Laurel St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Yes	None	52'/68'
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector w/ CLTL	Transportation Related Utilities	Parallel (Both)	45	Yes	Class II	86'/108'
	Taylor St	Kurtz St	6-Lane Major Arterial	Institutional & Industrial	None	45	Yes	Class II	88'/110'
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	Industrial	None	45	Yes	Class II	88'/110'
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	Commercial & Industrial	None	45	Sidewalk on NE Side	Class III	92'/110'
	Barnett Ave	Washington St	Expressway	Commercial & Industrial	None	55	None	Class II	118'/118'
	Washington St	Sassafras St	6-Lane Prime Arterial	Commercial & Industrial	None	45	None	Class III	42' SB / 46' NB
	Sassafras St	Laurel St	6-Lane Major Arterial	Commercial & Industrial	None	45	Yes	Class III	98'/110'
Old Town									
Congress St	Taylor St	Twiggs St	2-Lane Collector	Commercial & Transit Station	Parallel (Both)	25	Yes	Class III	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	Class III	36'/48'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Congress St	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	Commercial, Single Family Residential & School	Parallel (Both)	25	Yes	Class III	36'/48'
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	52'/70'
	Harney St	Ampudia St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	40'/52'
	Ampudia St	Old Town Ave	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	Class III	42'/54'
	Old Town Ave	Hortensia St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	Class III	40'/56'
Juan St	Taylor St	Twiggs St	2-Lane Collector	Institutional, Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Harney St	San Juan Rd	2-Lane Collector	Commercial & Park	Parallel (Both)	30	Yes	None	36'/48'
Morena Boulevard	I-8 EB Ramps	Taylor Street	3-Lane Major	Commercial	None	Not Posted	Yes	None	56'/68'
East-West									
Midway/Pacific Highway Corridor									
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	None	40'/50'
Kemper St	Kenyon St	Midway Dr	2-Lane Collector w/ CLTL	Commercial & Industrial	Parallel (NW Side)	25	NW side only	None	62'/76'
	Midway Dr	Sports Arena Blvd	2-Lane Collector w/ CLTL	Commercial	Parallel (Both)	25	Yes	None	50'/60'
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	Commercial	None	35	Yes	None	106'/120'
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	Commercial, Multi-Family Residential & Industrial	None	35	Yes	None	106'/120'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	Commercial	None	35	Yes	None	106'/120'
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector w/ CLTL	Commercial & Institutional	Parallel (Both)	35	NW side only	None	82'/100'
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	Commercial & Industrial	None	40	Yes	Class III	92'/108'
Washington St	Frontage Rd	Pacific Hwy	4-Lane Major Arterial	None	None	25	Yes	None	62'/70'
	Pacific Hwy	Hancock St	4-Lane Major Arterial	Commercial	Parallel (SE Side)	25	Yes	None	60'/74'
Vine St	California St	Kettner Blvd	2-Lane Collector	Industrial	Diagonal (SE Side)	25	Yes	None	50'/78'
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	Institutional	None	25	Yes	None	52'/74'
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	Commercial	None	25	Yes	Class III	54'/70'
Old Town									
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	Transit Station	None	35	Yes	None	94'/118'
	Congress St	Juan St	5-Lane Major Arterial	Institutional	None	35	Yes	None	80'/98'
	Juan St	Morena Blvd	4-Lane Major Arterial	Commercial & Park	None	35	Yes	None	80'/100'
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	Commercial & Park	None	35	Curb Only	Class II	42'/42'
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	30'/42'
	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (Both)	25	Yes	None	30'/50'
Harney St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	None	30/42'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Harney St	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (SE Side)	25	Yes	None	30'/46'
Old Town Ave	Hancock St	Moore St	2-Lane Collector	None	None	25	SE Side Only	None	28'/36'
	Moore St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	38'/48'

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Figure 3-2 displays existing average daily traffic volumes for the study roadway segments, along with the current LOS. Table 3-3 displays existing roadway segment ADT and LOS for the Midway-Pacific Highway and Old Town San Diego communities. Appendix B contains the average daily traffic counts utilized in this report.

It should be noted that the existing conditions report was completed in November 2012; therefore, the traffic counts conducted to evaluate Existing conditions were collected in year 2012 as well. To ensure the counts used to evaluate existing conditions are still relevant to current conditions, a sampling of the 2012 counts were validated with recently conducted counts (collected in 2015 and 2016). Through the validation process limited growth was observed in the traffic volumes between year 2012 and year 2015/2016 conditions. Therefore, the counts used to evaluate existing conditions would still be considered valid.

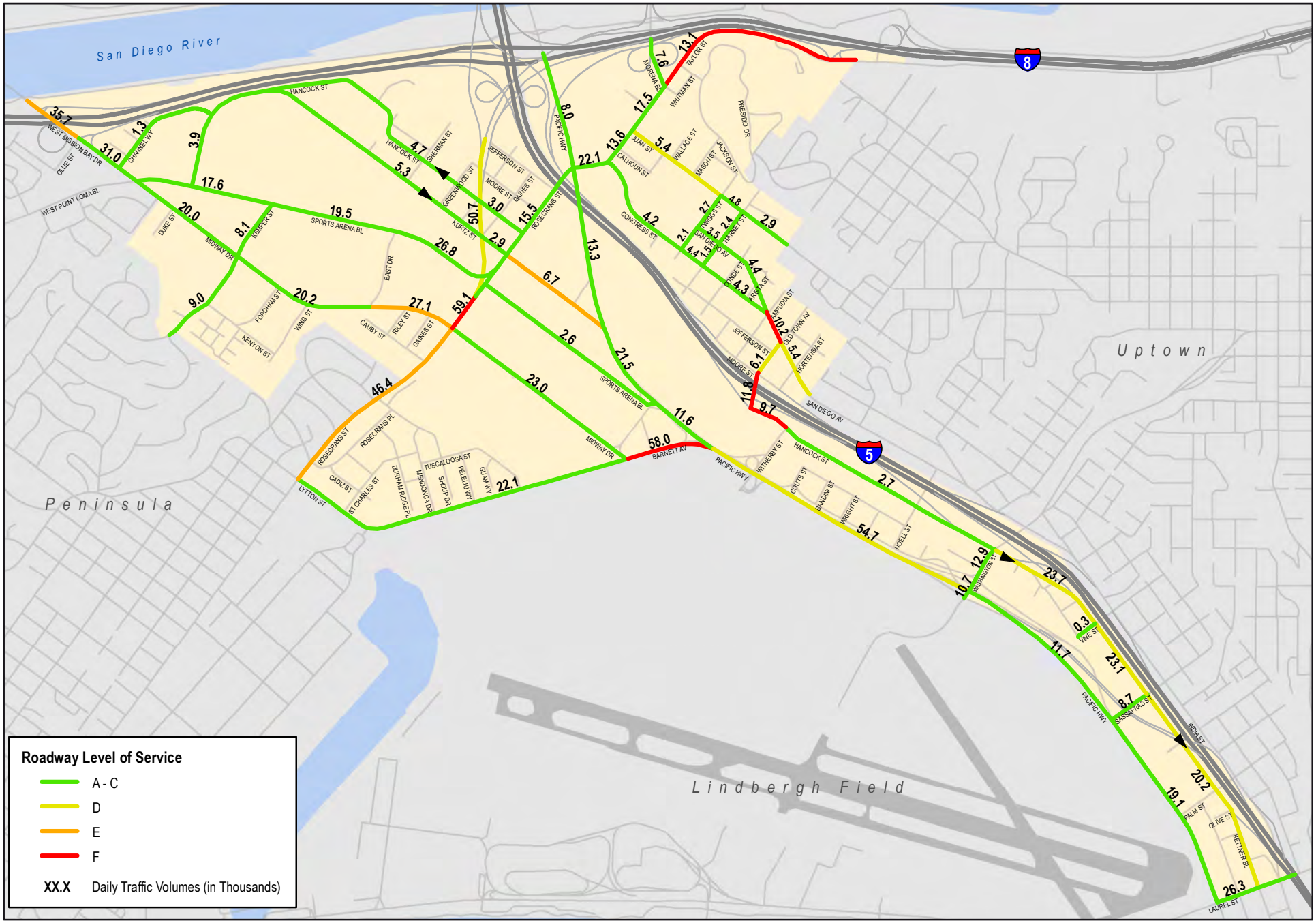
As shown in Table 3-2, the following nine (9) roadway segments operate at LOS E or F under Existing Conditions:

Midway/Pacific Highway Corridor

- Midway Drive, between East Drive and Rosecrans Street (LOS E)
- Kurtz Street, between Rosecrans Street and Pacific Highway (LOS E)
- Hancock Street, between Old Town Avenue and Witherby Street (LOS F)
- Rosecrans Street between Lytton Street and Midway Drive (LOS E)
- Rosecrans Street, between Midway Drive and Sports Arena Boulevard (LOS F)
- Barnett Avenue, between Midway Drive and Pacific Highway (LOS F)

Old Town

- San Diego Avenue, between Ampudia Street and Old Town Avenue (LOS F)
- Taylor Street, between Morena Blvd and I-8 EB Ramps (LOS F)
- Old Town Avenue, Hancock Street to Moore Street (LOS F)



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Figure 3-2
Existing Roadway Segment Traffic Volumes and Level of Service

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
North-South							
Midway/Pacific Highway Corridor							
Lytton Street/ Barnett Avenue	Rosecrans St	Midway Dr	4-Lane Collector (CLTL)	30,000	22,070	0.74	D
Midway Dr	W. Point Loma Blvd/Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	19,960	0.67	C
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,240	0.67	D
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	27,600	0.92	**E**
	Rosecrans St	Barnett Ave	4-Lane Collector (CLTL)	30,000	23,000	0.77	D
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	50,000	35,670	0.71	C
	I-8 EB Ramps	W. Point Loma Blvd/Sports Arena Blvd	6-Lane Major Arterial	50,000	31,010	0.62	C
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector (CLTL)	37,500	17,600	0.47	B
	Kemper St	East Dr	5-Lane Major Arterial	45,000	19,520	0.43	B
	East Dr	Rosecrans St	5-Lane Major Arterial	45,000	26,800	0.6	C
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	2,600	0.33	B
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	5,340	0.31	A
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	6,690	0.84	**E**
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	3,930	0.26	A
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	17,500	4,710	0.27	A
	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	17,500	2,990	0.17	A
	Old Town Ave	Witherby St	2-Lane Collector	8,000	9,680	1.21	**F**
	Witherby St	Washington St	2-Lane Collector	8,000	2,740	0.34	B
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	23,720	0.86	D
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	23,080	0.84	D
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	20,150	0.73	C
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	7,460	0.5	C
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	13,300	0.27	A
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	21,470	0.43	B
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	50,000	11,600	0.23	A
	Barnett Ave	Washington St	Expressway	80,000	54,690	0.68	C
	Washington St	Sassafras St	6-Lane Prime Arterial	60,000	11,650	0.19	A

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Pacific Hwy	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	19,160	0.38	B
Old Town							
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	4,230	0.53	C
	Twiggs St	Harney St	2-Lane Collector	8,000	4,380	0.55	C
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	4,280	0.54	C
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	3,540	0.44	C
	Conde St	Arista Ave	2-Lane Collector	8,000	4,350	0.54	C
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	10,160	1.27	**F**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	5,400	0.68	D
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	5,430	0.68	D
	Twiggs St	Harney St	2-Lane Collector	8,000	4,810	0.60	C
	Harney St	San Juan Rd	2-Lane Collector	8,000	4,230	0.53	C
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	7,585	0.25	A
East-West							
Midway/Pacific Highway Corridor							
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	8,000	1,280	0.16	A
Kemper St	Kenyon St	Midway Dr	2-Lane Collector (CLTL)	15,000	9,010	0.60	C
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,120	0.54	C
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	50,700	0.85	D
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	50,000	46,400	0.93	**E**
	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	50,000	59,100	1.18	**F**
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector (CLTL)	30,000	15,500	0.52	C
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	40,000	57,954	1.45	**F**
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	10,680	0.27	A
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	12,870	0.32	A
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	250	0.03	A
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	8,700	0.79	D
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	26,290	0.66	C
Old Town							
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	22,100	0.55	C
	Congress St	Juan St	5-Lane Major Arterial	45,000	13,560	0.30	A
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	17,530	0.44	B
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	13,140	1.64	**F**
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,080	0.26	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,670	0.33	B

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,520	0.19	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,350	0.29	A
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	11,750	1.47	**F**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,120	0.77	D

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

3.3 Intersection Analysis

As described in Chapter 2, a total of fifty-nine (59) study intersections were analyzed as part of the Existing Conditions assessment, including thirty-five (35) intersections located within Midway-Pacific Highway, thirteen (13) intersections located within Old Town, and eleven (11) intersections in adjacent communities.

Figure 3-3 displays current intersection geometries, while Figure 3-4 shows existing AM and PM peak period turning movements. The study area intersection traffic counts are provided in Appendix D.

Table 3-4 displays the existing AM and PM peak hour LOS analysis results for the key study area intersections. LOS analyses were conducted using the methodologies described in Chapter 2.0. Intersection LOS calculation worksheets for Existing Conditions are provided in Appendix E. As shown, the following four (4) study intersections currently operate at LOS E or F:

Midway-Pacific Highway

- Lytton Street & Rosecrans Street (LOS E – AM peak hour)
- West Mission Bay Drive & I-8 WB Off-Ramp (LOS E – PM peak hour)

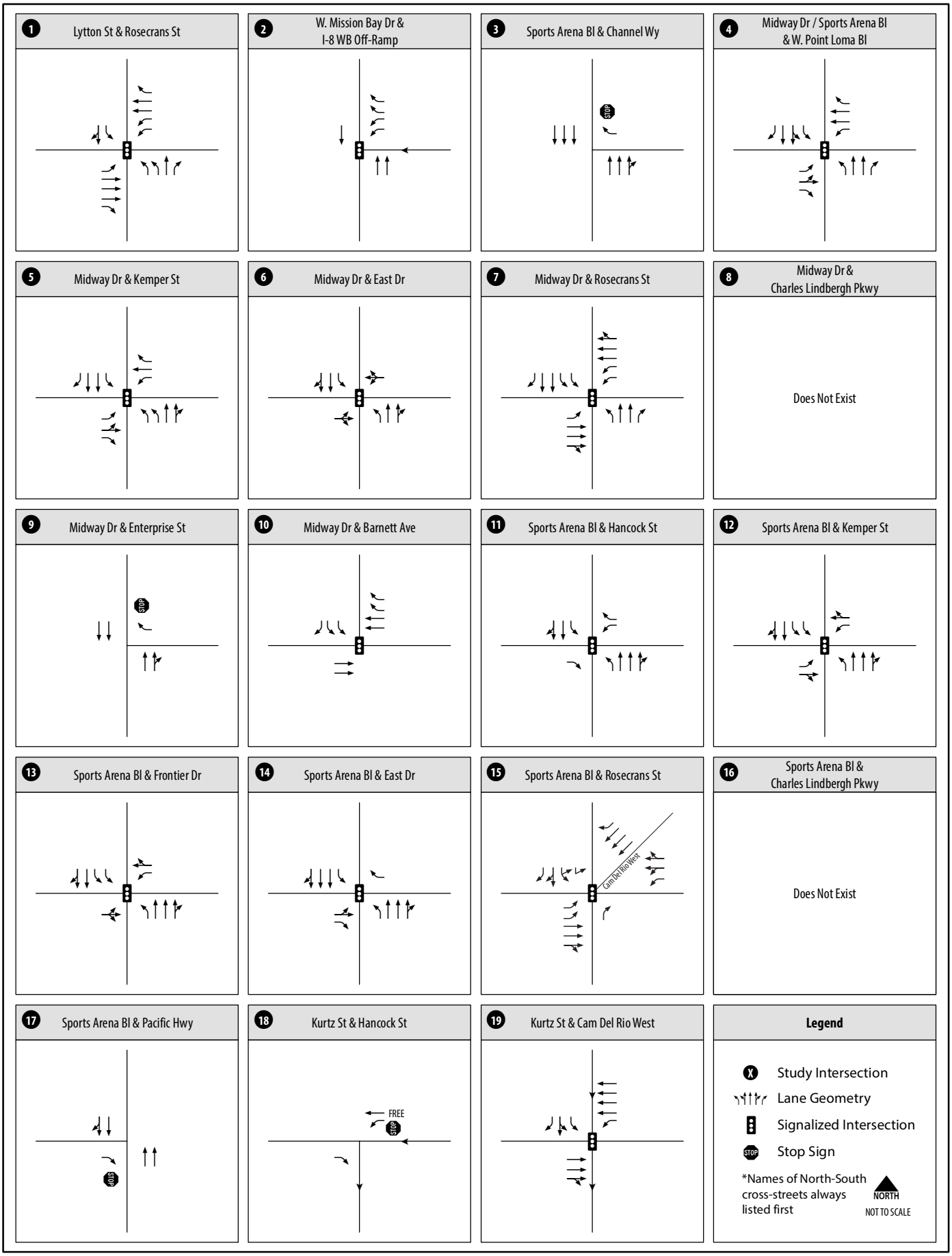
Old Town

- Pacific Highway & Taylor Street (LOS E – AM peak hour)

Intersections Outside of Study Communities

- Lowell Street/Nimitz Boulevard & Rosecrans Street (LOS E – PM peak hour)

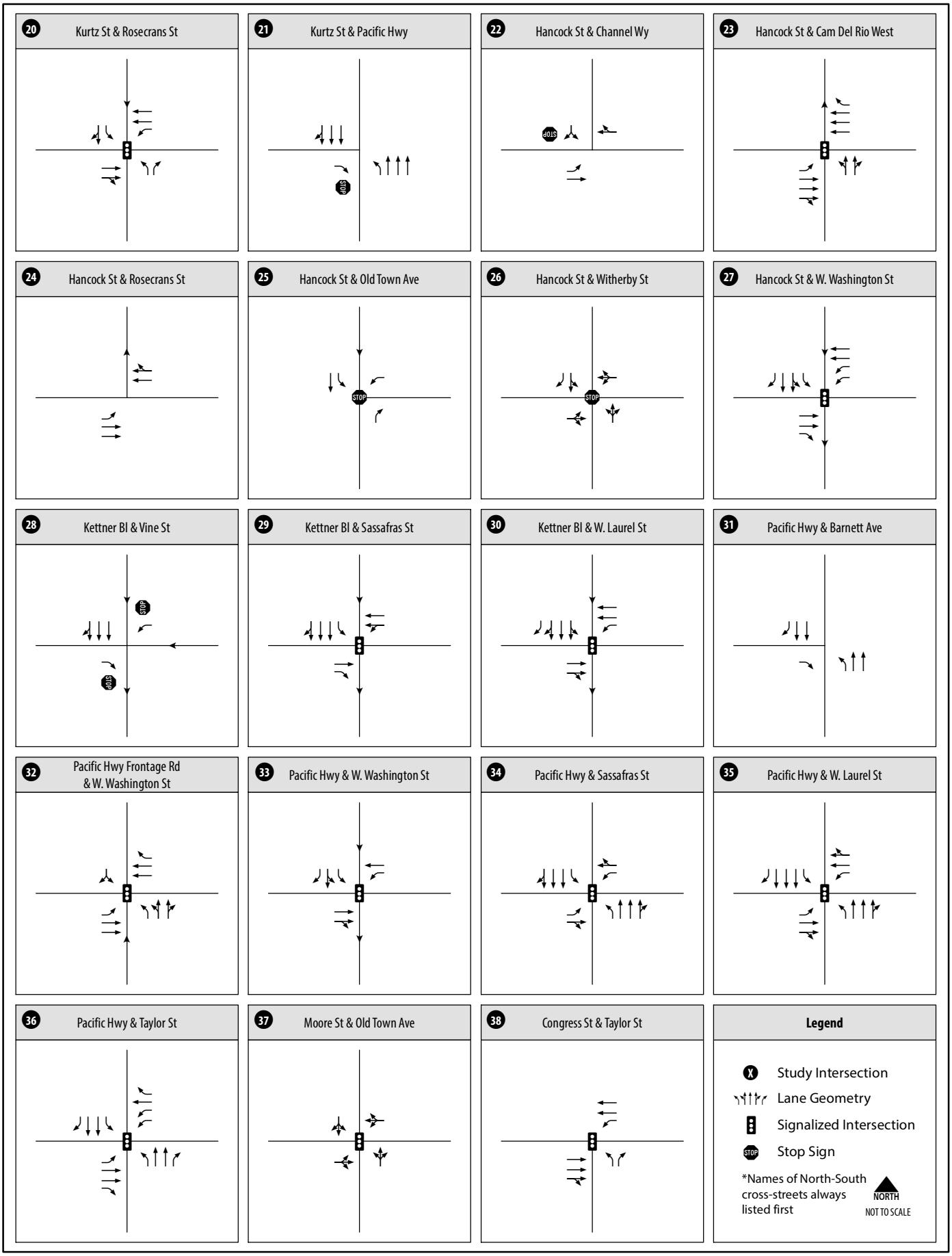
Figure 3-5 graphically displays the existing AM and PM peak hour intersection LOS results.



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Figure 3-3
Existing Intersection Geometrics (Intersections 1-19)



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Figure 3-3
Existing Intersection Geometrics (Intersections 20-38)

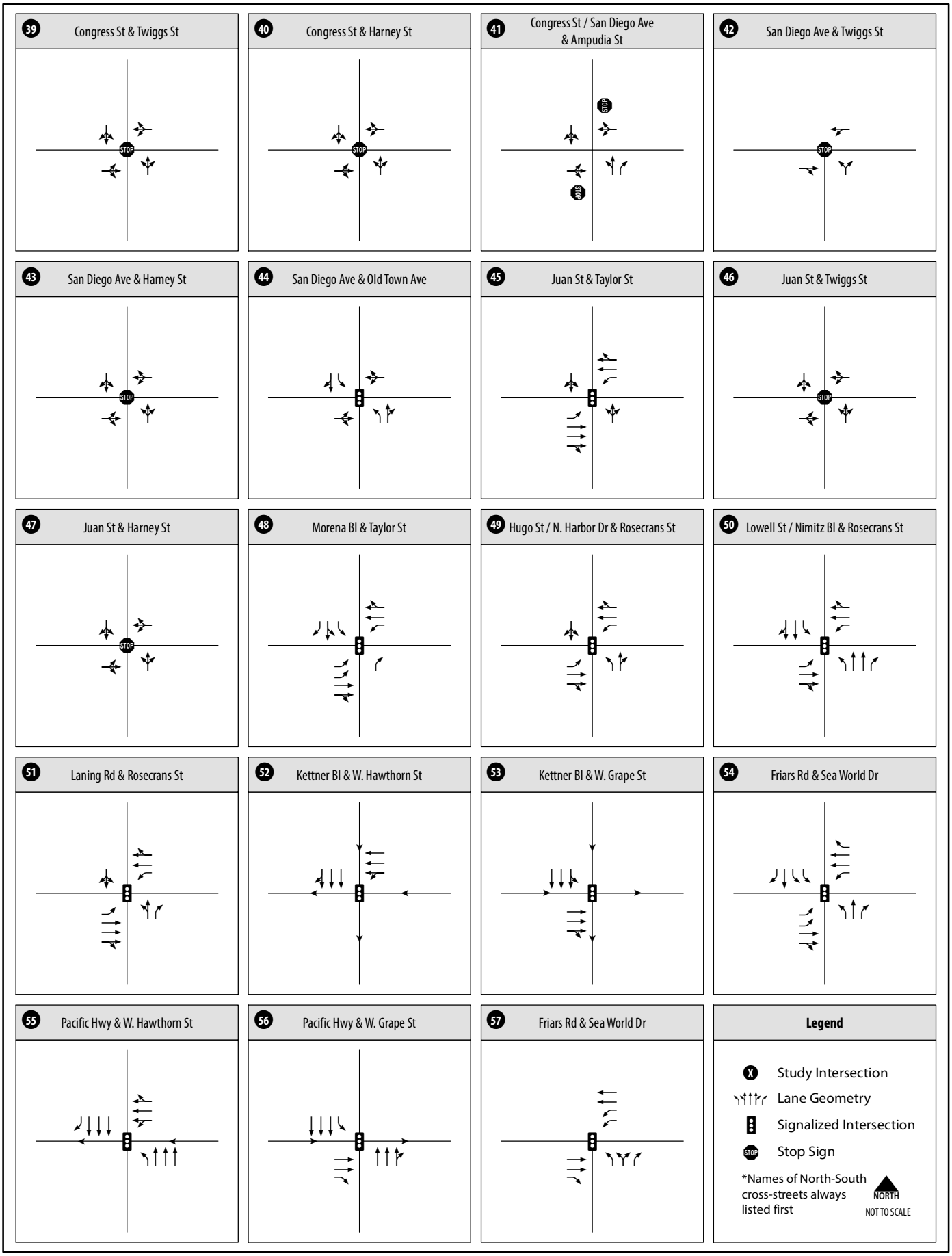
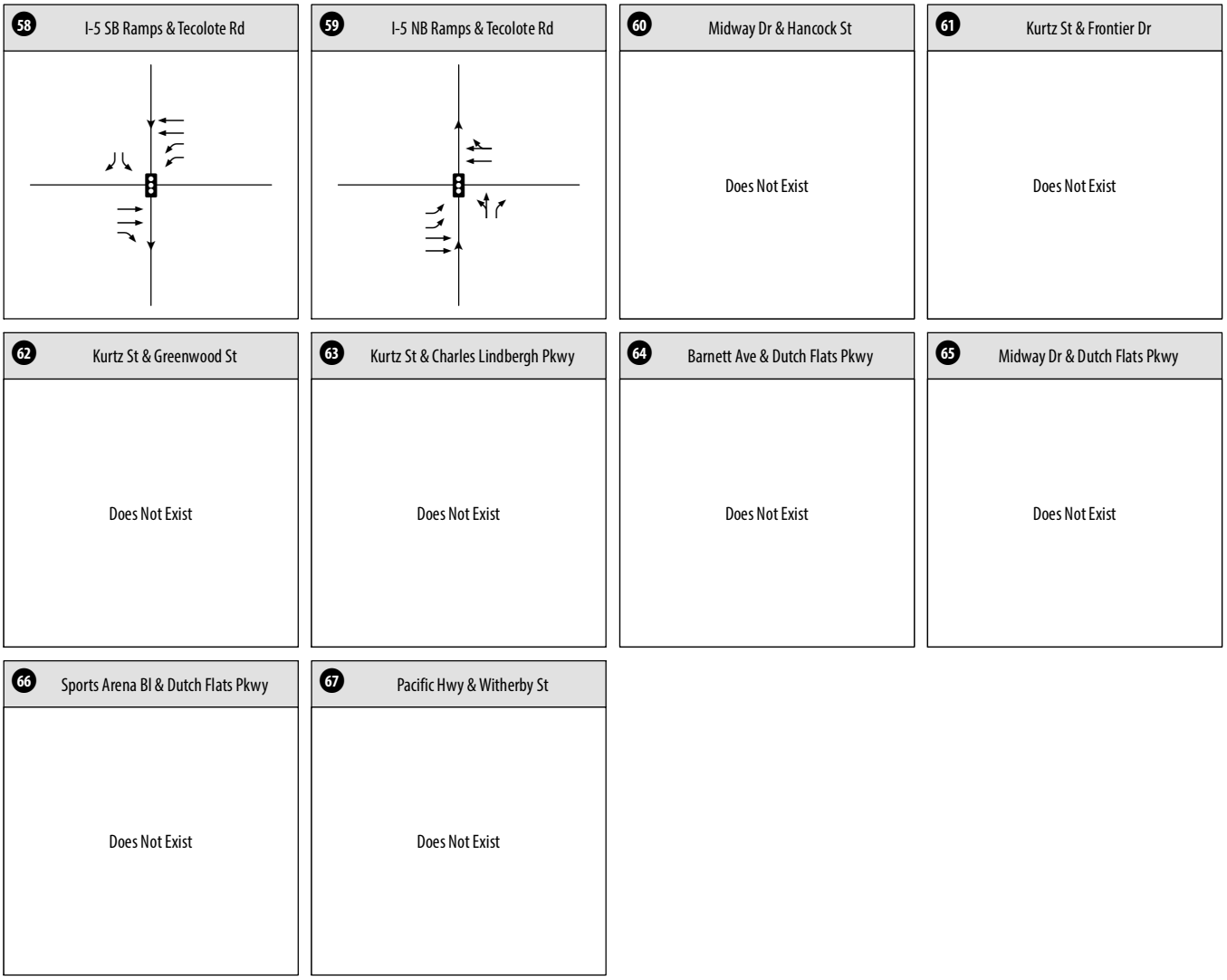


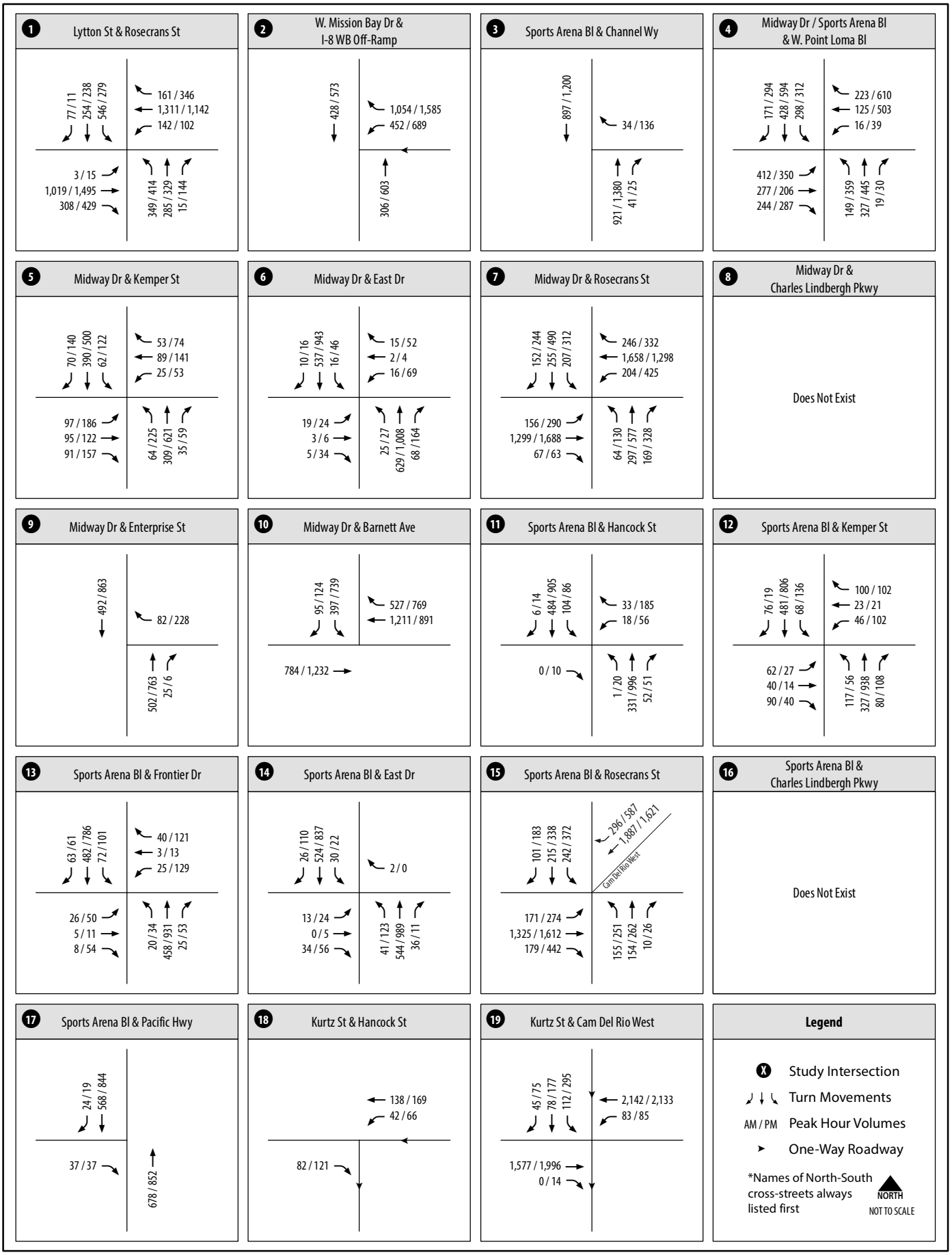
Figure 3-3
Existing Intersection Geometrics (Intersections 39-57)



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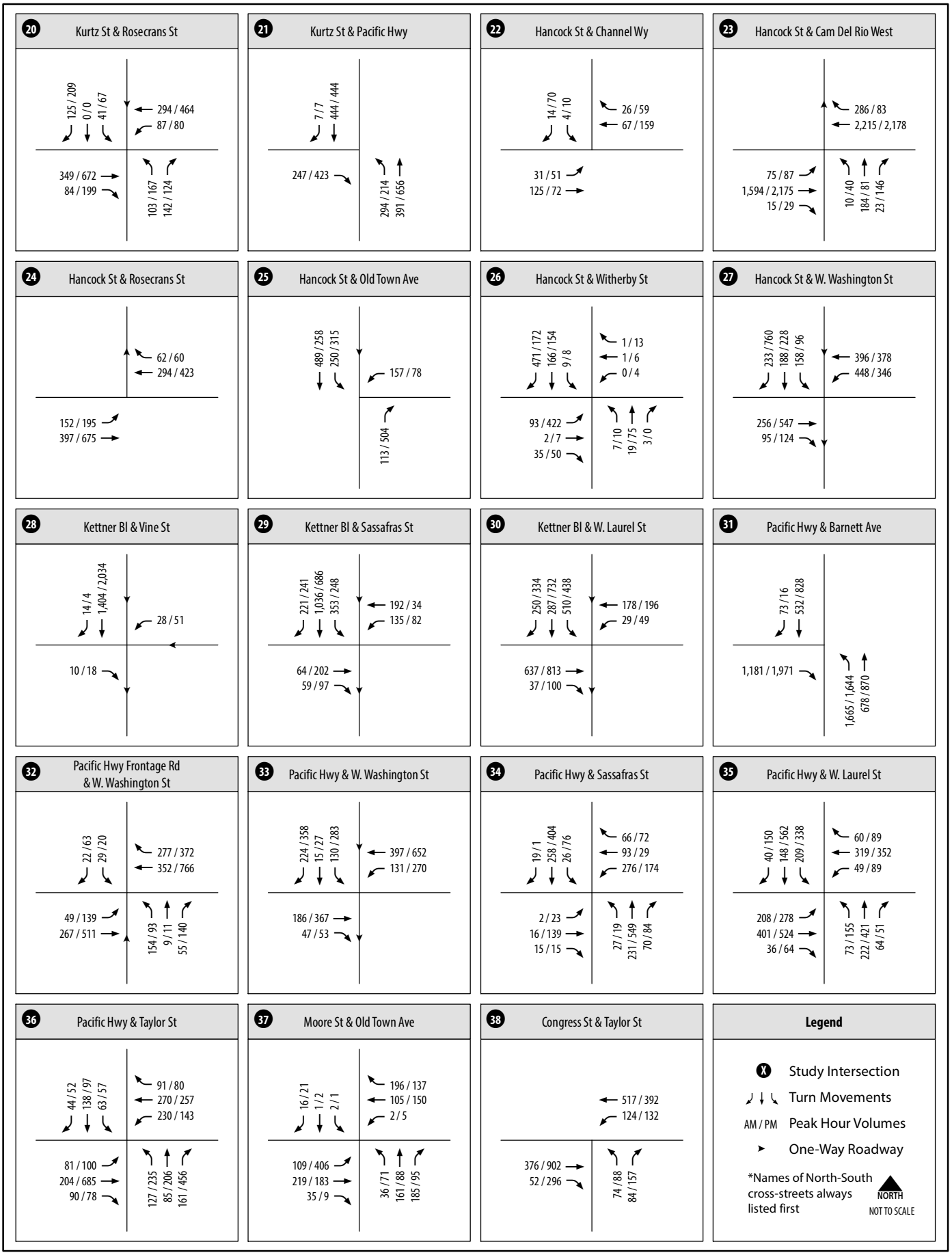
Figure 3-3
Existing Intersection Geometrics (Intersections 58-67)



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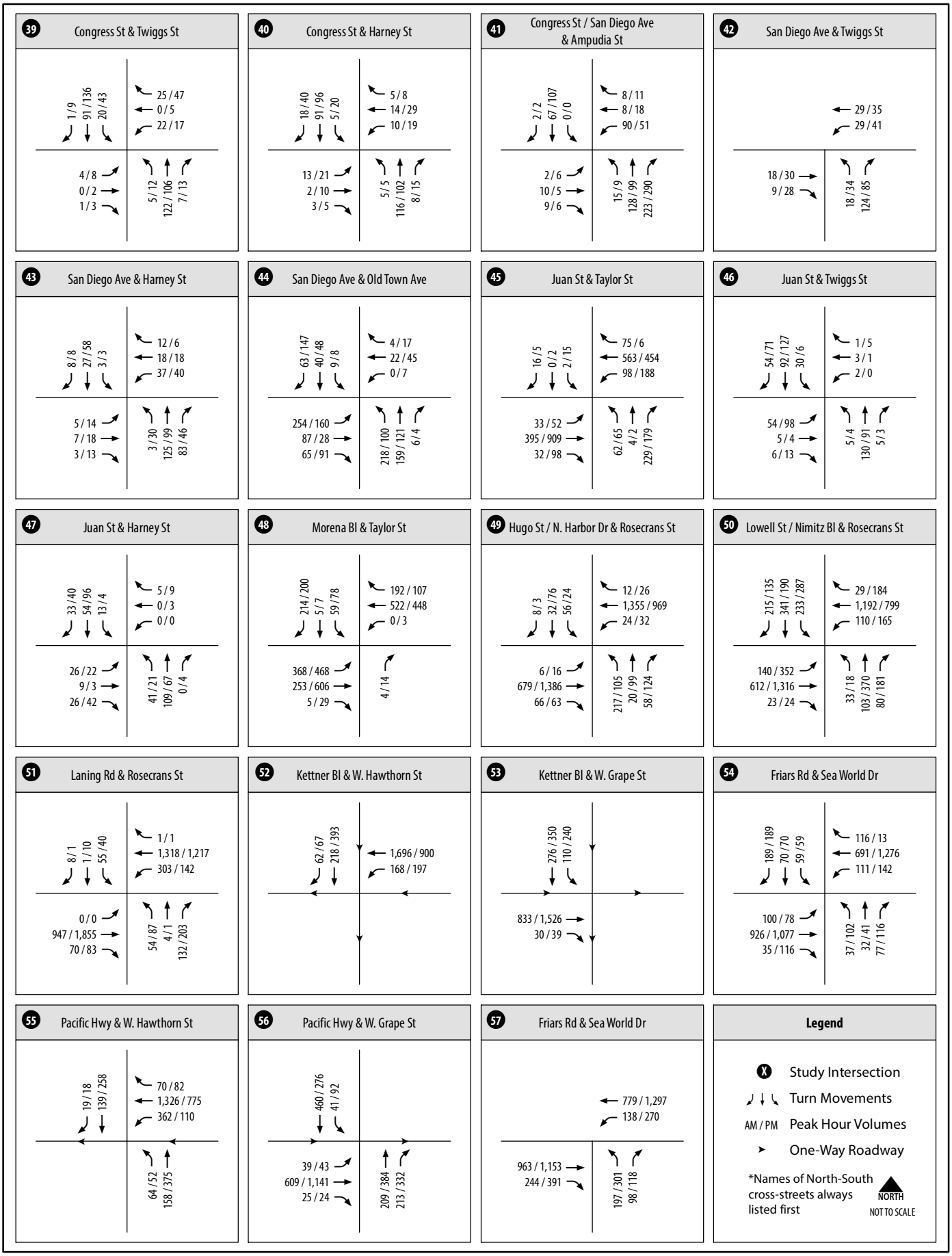
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 1-19)



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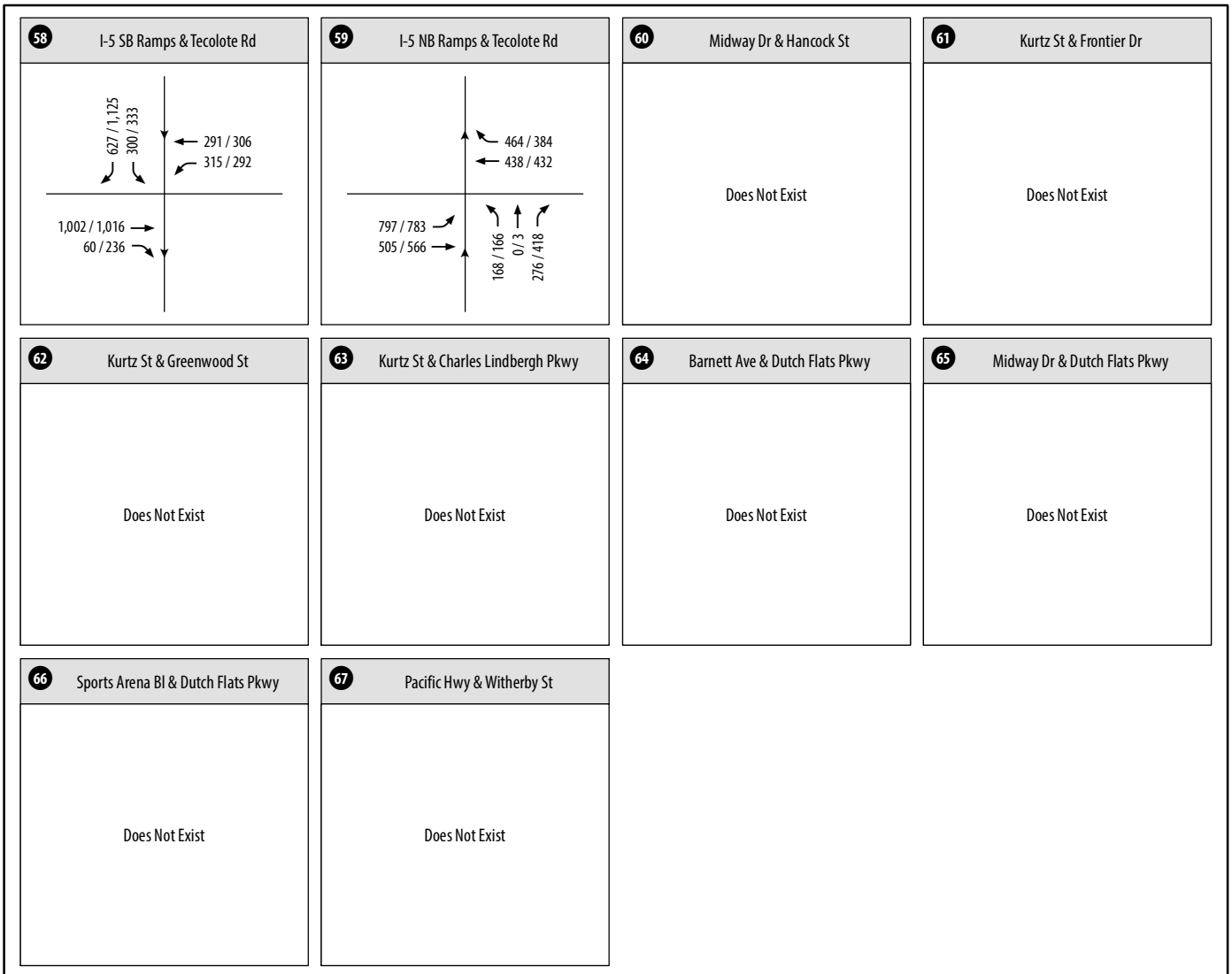
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 20-38)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movement (Intersections 39-57)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 58-67)

Table 3-4 Existing AM/PM Peak Hour Level of Service

No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
Midway-Pacific Highway						
1	Lytton St and Rosecrans St	Signal	**65.4**	**E**	44.5	D
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	14.8	B	**59.5**	**E**
3	Sports Arena Blvd and Channel Way	OWSC	11.2	B	14.7	B
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	36.6	D	47.2	D
5	Midway Dr and Kemper St	Signal	22.7	C	37.3	D
6	Midway Dr and East Dr	Signal	4.8	A	13.0	B
7	Midway Dr and Rosecrans St	Signal	34.9	C	49.1	D
8	Midway Dr and Unknown Future Connector 1	Unknown	*Does Not Exist*			
9	Midway Dr and Enterprise St	OWSC	11.0	B	18.1	C
10	Midway Dr and Barnett Ave	Signal	13.8	B	19.8	B
11	Sports Arena Blvd and Hancock St	Signal	10.0	A	13.1	B
12	Sports Arena Blvd and Kemper St	Signal	18.8	B	17.5	B
13	Sports Arena Blvd and Sports Arena Driveway	Signal	17.1	B	24.8	C
14	Sports Arena Blvd and East Dr	Signal	26.0	C	11.9	B
15	Sports Arena Blvd and Rosecrans St	Signal	35.7	D	43.2	D
16	Sports Arena Blvd and Unknown Future Connector 1	Unknown	*Does Not Exist*			
17	Sports Arena Blvd and Pacific Hwy	OWSC	10.6	B	12.0	B
18	Kurtz St and Hancock St	OWSC	*No Control Delay*			
19	Kurtz St and Camino Del Rio West	Signal	9.4	A	20.2	C
20	Kurtz St and Rosecrans St	Signal	20.0	B	31.7	C
21	Kurtz St and Pacific Hwy	OWSC	11.2	B	13.7	B
22	Hancock St and Channel Wy	OWSC	9.3	A	10.5	B
23	Hancock St and Camino Del Rio West	Signal	24.3	C	20.3	C
24	Hancock St and Rosecrans St	Unsignalized	*No Conflicting Movements*			
25	Hancock St and Old Town Ave	AWSC	16.9	C	14.6	B
26	Hancock St and Witherby St	AWSC	16.0	C	23.5	C
27	Hancock St and Washington St	Signal	22.8	C	25.9	C
28	Kettner Blvd and Vine St	TWSC	14.3	B	23.2	C
29	Kettner Blvd and Sassafras St	Signal	12.0	B	11.9	B
30	Kettner Blvd and West Laurel St	Signal	20.0	B	29.7	C
31	Pacific Hwy and Barnett Ave	Grade Separated	*No Control Delay*			
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	19.4	B	36.0	D
33	Pacific Hwy and Washington St @ Pacific St	Signal	18.7	B	31.2	C
34	Pacific Hwy and Sassafras St	Signal	14.4	B	27.3	C
35	Pacific Hwy and West Laurel St	Signal	48.4	D	42.9	D
Old Town						
36	Pacific Hwy and Taylor St	Signal	**64.6**	**E**	33.5	C
37	Moore St and Old Town Ave	Signal	16.4	B	16.4	B

Table 3-4 Existing AM/PM Peak Hour Level of Service

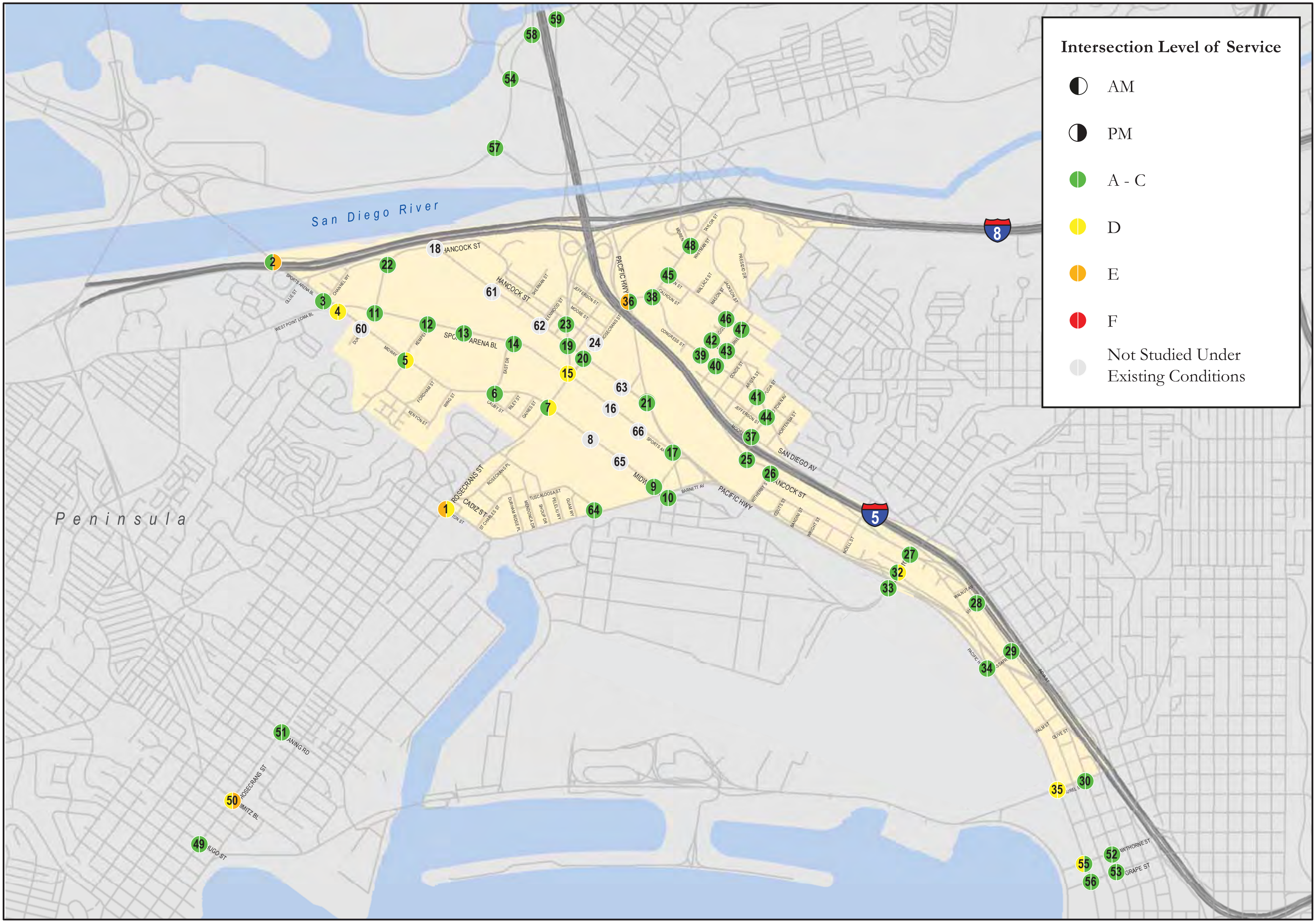
No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
38	Congress St and Taylor St	Signal	19.9	B	21.7	C
39	Congress St and Twiggs St	AWSC	8.1	A	8.6	A
40	Congress St and Harney St	AWSC	8.1	A	8.3	A
41	Congress St and San Diego Ave/Ampudia St	TWSC	12.3	B	11.5	B
42	San Diego Ave and Twiggs St	AWSC	7.9	A	8.0	A
43	San Diego Ave and Harney St	AWSC	8.2	A	8.2	A
44	San Diego Ave and Old Town Ave	Signal	18.4	B	11.6	B
45	Juan St and Taylor St	Signal	10.4	B	10.7	B
46	Juan St and Twiggs St	AWSC	8.8	A	8.5	A
47	Juan St and Harney St	AWSC	8.3	A	7.9	A
48	Morena Blvd and Taylor St	Signal	22.4	C	16.4	B
Intersections Outside of Study Communities						
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	14.7	B	20.7	C
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	41.2	D	**63.3**	**E**
51	Laning Rd and Rosecrans St	Signal	15.5	B	12.9	B
52	Kettner Blvd and West Hawthorn St	Signal	11.1	B	15.0	B
53	Kettner Blvd and West Grape St	Signal	7.4	A	8.7	A
54	Pacific Hwy and Sea World Dr	Signal	19.9	B	25.6	C
55	Pacific Hwy and West Hawthorn St	Signal	35.4	D	20.2	C
56	Pacific Hwy and West Grape St	Signal	16.8	B	24.2	C
57	Friars Rd and Sea World Dr	Signal	11.5	B	13.8	B
58	I-5 SB Ramps and Sea World Dr	Signal	15.5	B	16.3	B
59	I-5 NB Ramps and Sea World Dr	Signal	21.4	C	28.4	C

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Notes:

Bold letter indicates substandard LOS.

1 Signal = Traffic Signal; OWSC = One-Way Stop-Control; 3WSC = Three-Way Stop-Control; AWSC = All-Way Stop-Control;



Midway-Pacific Highway and Old Town Community Plan Update

CHEN RYAN

Figure 3-5
Existing AM/PM Peak Hour Intersection LOS Results

3.4 Freeway Segment Analysis

Two regional corridors run adjacent to the Midway-Pacific Highway and Old Town communities, providing regional access to and from the communities.

Interstate 5 (I-5) is a north-south freeway that traverses the United States from the Mexican to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the major metropolitan areas of San Diego, Los Angeles, Sacramento and the eastern portion of the San Francisco Bay Area. I-5 bisects the two study communities and can be accessed via the following roadway interchanges:

Midway-Pacific Highway

- Camino Del Rio West (NB on & SB off only)
- Pacific Highway (SB on & NB off only)
- Washington Street
- Palm Street (SB on only)
- Sassafras Street (NB & SB off only)

Old Town

- Old Town Avenue

Interstate 8 (I-8) is an east-west freeway that extends from the western coast of San Diego to central Arizona. I-8 runs just north of the study communities, with access provided via the following roadway interchanges:

Midway-Pacific Highway

- West Mission Bay Drive (EB & WB off only)
- Camino Del Rio West (EB on & WB off only)

Old Town

- Taylor Street

Table 3-5 displays freeway segment LOS analysis results for key freeway segments in the vicinity of the Midway-Pacific Highway and Old Town communities. Caltrans freeway volume worksheets are provided in Appendix F.

As shown, all key freeway segments are currently operating at LOS D or better with the exception of the following three (3) segments:

- I-5 NB, between Sea World Drive and I-8 (LOS E: PM Peak Period)
- I-5 SB, between I-8 and Old Town Avenue (LOS E: PM Peak Period)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: PM Peak Period)

Table 3-5 Existing Freeway Segment Level of Service Results

Freeway	Segment	ADT	Heavy Vehicle	Dir	Lanes	Capacity	AM Peak Hr %	AM Split	AM Peak Hr Vol	AM V/C	AM LOS	PM Peak Hr %	PM Split	PM Peak Hr Vol	PM V/C	PM LOS
I-8	Beginning of Freeway to Sports Arena Blvd	46,500	1.2%	EB	2M + 0A	4,700	6.3%	60%	1,900	0.40	A	8.5%	72%	3,200	0.68	C
				WB	2M + 0A	4,700		40%	1,300	0.28	A		28%	1,300	0.28	A
	Sports Arena Blvd to I-5	102,000	2.8%	EB	3M + 1A	8,450	6.4%	60%	4,400	0.52	B	7.8%	63%	5,600	0.66	C
				WB	3M + 1A	8,450		40%	2,900	0.34	A		37%	3,400	0.40	A
	I-5 to Morena Blvd	132,000	2.8%	EB	4M + 1A	10,800	6.4%	41%	3,900	0.36	A	7.2%	51%	5,500	0.51	B
				WB	5M + 0A	11,750		59%	5,500	0.47	B		49%	5,200	0.44	B
	Morena Blvd to Hotel Circle	191,000	2.8%	EB	4M + 1A	10,800	6.5%	47%	6,500	0.60	B	8.2%	55%	9,700	0.90	D
				WB	5M + 0A	11,750		53%	7,400	0.63	C		45%	8,000	0.68	C
I-5	Clairemont Dr to Sea World Dr	220,000	4.5%	NB	5M + 0A	11,750	6.4%	61%	10,000	0.85	D	8.3%	51%	10,700	0.91	D
				SB	5M + 0A	11,750		39%	6,200	0.53	B		49%	10,300	0.88	D
	Sea World Dr to I-8	199,000	4.5%	NB	4M + 1A	10,800	6.4%	62%	9,000	0.83	D	8.4%	52%	10,000	0.93	**E**
				SB	4M + 2A	12,200		38%	5,400	0.44	B		48%	9,200	0.75	C
	I-8 to Old Town Ave	199,000	4.1%	NB	4M + 1A	10,800	6.9%	49%	7,700	0.71	C	8.2%	39%	7,300	0.68	C
				SB	5M + 0A	11,750		51%	7,900	0.67	C		61%	11,400	0.97	**E**
	Old Town Ave to Washington St	192,000	4.1%	NB	4M + 0A	9,400	6.9%	49%	7,500	0.80	D	8.0%	51%	9,000	0.96	**E**
				SB	5M + 0A	11,750		51%	7,700	0.66	C		49%	8,600	0.73	C
	Washington St to Pacific Highway	142,000	4.1%	NB	4M + 0A	9,400	6.9%	54%	6,000	0.64	C	8.1%	36%	4,800	0.51	B
				SB	4M + 0A	9,400		46%	5,200	0.55	B		64%	8,400	0.89	D
	Pacific Highway to Laurel Street	147,000	4.1%	NB	4M + 1A	10,800	6.7%	58%	6,600	0.61	B	7.0%	49%	5,800	0.54	B
				SB	4M + 1A	10,800		42%	4,700	0.44	B		51%	6,100	0.56	B
	Laurel Street to Hawthorne Street	183,000	4.1%	NB	4M + 1A	10,800	6.7%	57%	8,100	0.75	C	7.3%	46%	7,100	0.66	C
				SB	4M + 1A	10,800		43%	6,000	0.56	B		54%	8,200	0.76	C

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (2016)

3.5 Freeway Ramp Metering Analysis

Table 3-6 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 3-6 Existing Freeway Ramp Meter Analysis

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Volume	Excess Demand	Delay (Minutes)	Queue (Feet)
I-8 EB / Sports Arena Boulevard	PM	2	1	490	913	423	51.8	12,267
I-5 SB / Sea World Drive	AM	1	1	318	375	57	10.8	1,653
	PM	1	1	318	528	210	39.6	6,090
I-5 NB / Sea World Drive	AM	2	0	1,118	1,261	143	7.7	4,147
	PM	2	0	1,320	1,170	0	0.0	0
I-5 SB / Old Town Avenue	PM	1	0	352	360	8	1.4	232
I-5 NB / Old Town Avenue	AM	2	0	670	466	0	0.0	0
	PM	2	0	636	631	0	0.0	0

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

As shown in Table 3-6, the following ramp meters within the study communities experience delays in excess of 15 minutes:

- I-8 EB / Sports Arena Boulevard (PM Peak) – 51.8 minute delay and 12,267 feet of queue
- I-5 SB / Sea World Drive (PM Peak) – 39.6 minute delay and 6,090 feet of queue

4.0 Preferred Plan

This chapter assess the potential traffic impacts of the Preferred Plan by comparing Preferred Plan conditions to Existing Conditions. Evaluations are provided for vehicle miles traveled (VMT), roadway segment and intersection peak hour operations, and freeway segment and ramp meter operations.

The Preferred Plan forecast traffic volumes were developed utilizing the SANDAG Series 12 Preferred Plan Future Year 2035. The modeling methodology and assumptions are provided in Chapter 5 of the Midway-Pacific Highway and Old Town Community Plan Update Mobility Report. Final SANDAG Series 12 Forecast Model Results for Year 2035, including manual adjustments, are provided in Appendix F.

4.1 Vehicle Miles Traveled

The vehicle miles traveled (VMT) within the communities were estimated using the SANDAG Series 12 Preferred Plan Future Year 2035 and Base Year models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to, from, and within the communities. Table 4-1A and Table 4-1B display the total VMT generated and average trip length within the Midway-Pacific Highway and Old Town communities, respectively, under both Preferred Plan and Base Year conditions. The results for the San Diego region are also presented in the tables for comparison purposes. VMT calculations are provided as Appendix G.

Table 4-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	835,997	105,876	14.5%	85,182,063	109,002,183	23,820,120	28.0%
Total # of Auto Trips	294,796	313,558	18,762	6.4%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.6%	5.2	5.4	0.2	3.7%
Population	4,672	27,070	22,398	479.4%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	31	-125	-80.2%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:
1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Preferred Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.6%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-80.2%).

Table 4-1B Vehicle Miles Traveled Comparison – Old Town Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	175,097	23,797	15.7%	85,182,063	109,002,183	23,820,120	28.0%
Total # of Auto Trips	57,989	61,622	3,633	6.3%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.8	0.2	8.9%	5.2	5.4	0.2	3.7%
Population	834	2,430	1,596	191.4%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	72	-109	-60.3%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region. With the implementation of the Preferred Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 8.9%. However, the anticipated population increase within the community results in an overall decrease in the daily VMT by population (-60.3%).

4.2 Roadway Segment Analysis

The majority of roadways within the Midway-Pacific Highway and Old Town communities will remain unchanged from existing conditions, however, the Preferred Plan includes roadway improvements and new roadway segments intended to accommodate anticipated future traffic demands. Table 4-2 identifies the proposed roadway segment modifications, including new roadways, in the Midway-Pacific Highway community.

Due to the historic nature of the Old Town community, the Preferred Plan does not propose any roadway widenings or other roadway capacity improvements. However, San Diego Avenue, between Twiggs Street and Conde Street, has a large curb-to-curb width (50 feet) for a standard two-lane collector roadway (typically 40 feet wide). Therefore, in order to better utilize the curb-to-curb right-of-way, it is recommended that the parallel parking on the east side of the roadway be converted to angled parking. The recommended improvement will not affect the capacity of the roadway and will increase the already constrained parking capacity within the Old Town community.

Table 4-2 Summary of Roadway Improvements

Roadway	Segment	Existing Configuration	Recommended Classification
Segment Modifications			
Lytton St / Barnett Ave	Rosecrans St and Midway Dr	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Sports Arena Blvd	I-8 WB Ramps and I-8 EB Ramps	5-Lane Prime Arterial	6-Lane Prime Arterial
Sports Arena Blvd	I-8 EB Ramps and Rosecrans St	5-Lane Major Arterial	6-Lane Major Arterial
Sports Arena Blvd	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Kurtz St	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Rosecrans St	Lytton St and Sports Arena Blvd	6-Lane Major Arterial	6-Lane Prime Arterial
Rosecrans St	Sports Arena Blvd and Taylor St	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Hancock St	Kurtz St and Rosecrans Street	2-Lane Collector (One-Way)	3-Lane Major (One-Way)
Hancock St	Old Town Ave and Witherby St	2-Lane Collector	4-Lane Collector
Barnett Ave	Midway Dr and Pacific Hwy	4-Lane Major Arterial	6-Lane Prime Arterial
Midway Drive	Rosecrans St and Barnett Avenue	4-Lane Collector W/CLTL	4-Lane Major Arterial
New Roadways			
Kemper St	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Frontier Dr	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Greenwood St	Kurtz St and Sports Arena Blvd	Does Not Exist	2-Lane Collector
Charles Lindbergh Pkwy	Kurtz St and Midway Dr	Does Not Exist	2-Lane Collector W/ CLTL
Dutch Flats Pkwy	Sports Arena Blvd and Barnett Ave	Does Not Exist	2-Lane Collector W/ CLTL

Source: Chen Ryan Associates (June 2016)

Table 4-3 displays the level of service analysis results for the study area roadway segments under both the Preferred Plan and Existing Conditions within the Midway-Pacific Highway and Old Town communities. The proposed roadway classifications and forecast ADT and LOS under buildout of the Preferred Plan are shown in Figure 4-1 and Figure 4-2.

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
North-South														
Midway Pacific Highway														
Lytton Street/ Barnett Ave	Rosecrans St	Midway Dr	4-Lane Major Arterial	40,000	24,400	0.61	C	4-Lane Collector (CLTL)	30,000	22,070	0.74	D	-0.13	No
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	23,200	0.77	D	4-Lane Collector (CLTL)	30,000	19,960	0.67	C	0.1	No
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,200	0.67	D	4-Lane Collector (CLTL)	30,000	20,240	0.67	D	0	No
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	26,800	0.89	E	4-Lane Collector (CLTL)	30,000	27,600	0.92	E	-0.03	No
	Rosecrans St	Barnett Ave	4-Lane Major Arterial	40,000	28,300	0.71	C	4-Lane Collector (CLTL)	30,000	23,000	0.77	D	-0.06	No
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	6-Lane Prime Arterial	60,000	45,800	0.76	C	5-Lane Prime Arterial	50,000	35,670	0.71	C	0.05	No
	I-8 EB Ramps	W. Point Loma Blvd	6-Lane Major Arterial	50,000	39,500	0.79	C	6-Lane Major Arterial	50,000	31,010	0.62	C	0.17	No
	W. Point Loma Blvd/Midway Dr	Kemper St	6-Lane Major Arterial	50,000	20,100	0.40	B	5-Lane Collector (CLTL)	37,500	17,600	0.47	B	-0.07	No
	Kemper St	East Dr	6-Lane Major Arterial	50,000	25,800	0.52	B	5-Lane Major Arterial	45,000	19,520	0.43	B	0.09	No
	East Dr	Rosecrans St	6-Lane Major Arterial	50,000	17,800	0.36	A	5-Lane Major Arterial	45,000	26,800	0.6	C	-0.24	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	10,700	0.71	D	2-Lane Collector	8,000	2,600	0.33	B	0.38	No
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	12,800	0.73	D	2-Lane Collector (One-Way)	17,500	5,340	0.31	A	0.42	No
	Rosecrans St	Pacific Hwy	2- Lane Collector (CLTL)	15,000	7,100	0.47	C	2-Lane Collector	8,000	6,690	0.84	E	-0.37	No

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Hancock St	Sports Arena Blvd	Kurtz St	4-Lane Collector	15,000	1,100	0.07	A	2-Lane Collector (CLTL)	15,000	3,930	0.26	A	-0.19	No
	Kurtz St	Camino Del Rio West	3-Lane Major (One-Way)	27,500	14,700	0.53	B	2-Lane Collector (One-Way)	17,500	4,710	0.27	A	0.26	No
	Camino Del Rio West	Rosecrans St	3-Lane Major (One-Way)	27,500	7,500	0.27	A	2-Lane Collector (One-Way)	17,500	2,990	0.17	A	0.10	No
	Old Town Ave	Witherby St	4-Lane Collector	15,000	11,400	0.76	D	2-Lane Collector	8,000	9,680	1.21	F	-0.45	No
	Witherby St	Washington St	2-Lane Collector	8,000	6,300	0.79	D	2-Lane Collector	8,000	2,740	0.34	B	0.45	No
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	34,800	1.27	F	3-Lane Major (One-Way)	27,500	23,720	0.86	D	0.41	Yes
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	34,700	1.26	F	3-Lane Major (One-Way)	27,500	23,080	0.84	D	0.42	Yes
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	33,200	1.21	F	3-Lane Major (One-Way)	27,500	20,150	0.73	C	0.48	Yes
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	10,600	0.71	D	2-Lane Collector (CLTL)	15,000	7,460	0.5	C	0.21	No
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	19,500	0.39	A	6-Lane Major Arterial	50,000	13,300	0.27	A	0.12	No
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	24,100	0.48	B	6-Lane Major Arterial	50,000	21,470	0.43	B	0.05	No
	Sports Arena Blvd	Barnett Ave	5-Lane Major Arterial	45,000	17,600	0.39	B	5-Lane Prime Arterial	50,000	11,600	0.23	A	0.16	No
	Barnett Ave	Washington St	Expressway	80,000	50,400	0.63	C	Expressway	80,000	54,690	0.68	C	-0.05	No
	Washington St	Sassafras St	6-Lane Major Arterial	50,000	19,100	0.38	A	6-Lane Prime Arterial	60,000	11,650	0.19	A	0.19	No
	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	31,000	0.62	C	6-Lane Major Arterial	50,000	19,160	0.38	B	0.24	No
Old Town														
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,700	0.96	E	2-Lane Collector	8,000	4,230	0.53	C	0.43	Yes

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Congress St	Twiggs St	Harney St	2-Lane Collector	8,000	6,300	0.79	D	2-Lane Collector	8,000	4,380	0.55	C	0.24	No
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	6,200	0.78	D	2-Lane Collector	8,000	4,280	0.54	C	0.24	No
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	4,900	0.61	C	2-Lane Collector	8,000	3,540	0.44	C	0.17	No
	Conde St	Arista Ave	2-Lane Collector	8,000	4,500	0.56	C	2-Lane Collector	8,000	4,350	0.54	C	0.02	No
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	12,100	1.51	**F**	2-Lane Collector	8,000	10,160	1.27	**F**	0.24	**Yes**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	6,700	0.84	**E**	2-Lane Collector	8,000	5,400	0.68	D	0.16	**Yes**
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,000	0.88	**E**	2-Lane Collector	8,000	5,430	0.68	D	0.2	**Yes**
	Twiggs St	Harney St	2-Lane Collector	8,000	6,600	0.83	**E**	2-Lane Collector	8,000	4,810	0.6	C	0.23	**Yes**
	Harney St	San Juan Rd	2-Lane Collector	8,000	3,700	0.46	C	2-Lane Collector	8,000	2,930	0.37	B	0.09	No
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	21,900	0.73	C	3-lane Major Arterial	30,000	7,585	0.25	A	0.48	No
East-West														
Midway Pacific Highway														
Channel Wy	W. Mission Bay Dr	Hancock St	4-Lane Collector	15,000	7,200	0.48	C	2-Lane Collector	8,000	1,280	0.16	A	0.32	No
Kemper St	Kenyon St	Midway Dr	4-Lane Collector	15,000	9,700	0.65	C	2-Lane Collector (CLTL)	15,000	9,010	0.6	C	0.05	No
	Midway Dr	Sports Arena Blvd	4-Lane Collector	15,000	9,800	0.65	C	2-Lane Collector (CLTL)	15,000	8,120	0.54	C	0.11	No
	Sports Arena Blvd	Hancock St	2-Lane Collector (CLTL)	15,000	9,400	0.63	C	*Does Not Exist*						No
Frontier Dr	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	12,200	0.81	D	*Does Not Exist*						No
Greenwood St	Sports Arena Blvd	Kurtz St	2-Lane Collector	8,000	7,000	0.88	**E**	*Does Not Exist*						**Yes**
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	67,300	1.12	**F**	6-Lane Prime Arterial	60,000	50,700	0.85	D	0.27	**Yes**
Rosecrans St	Lytton St	Midway Dr	6-Lane Prime Arterial	60,000	54,200	0.90	D	6-Lane Major Arterial	50,000	46,400	0.93	**E**	-0.03	No

Table 4-3 Roadway Segment Level of Service Results

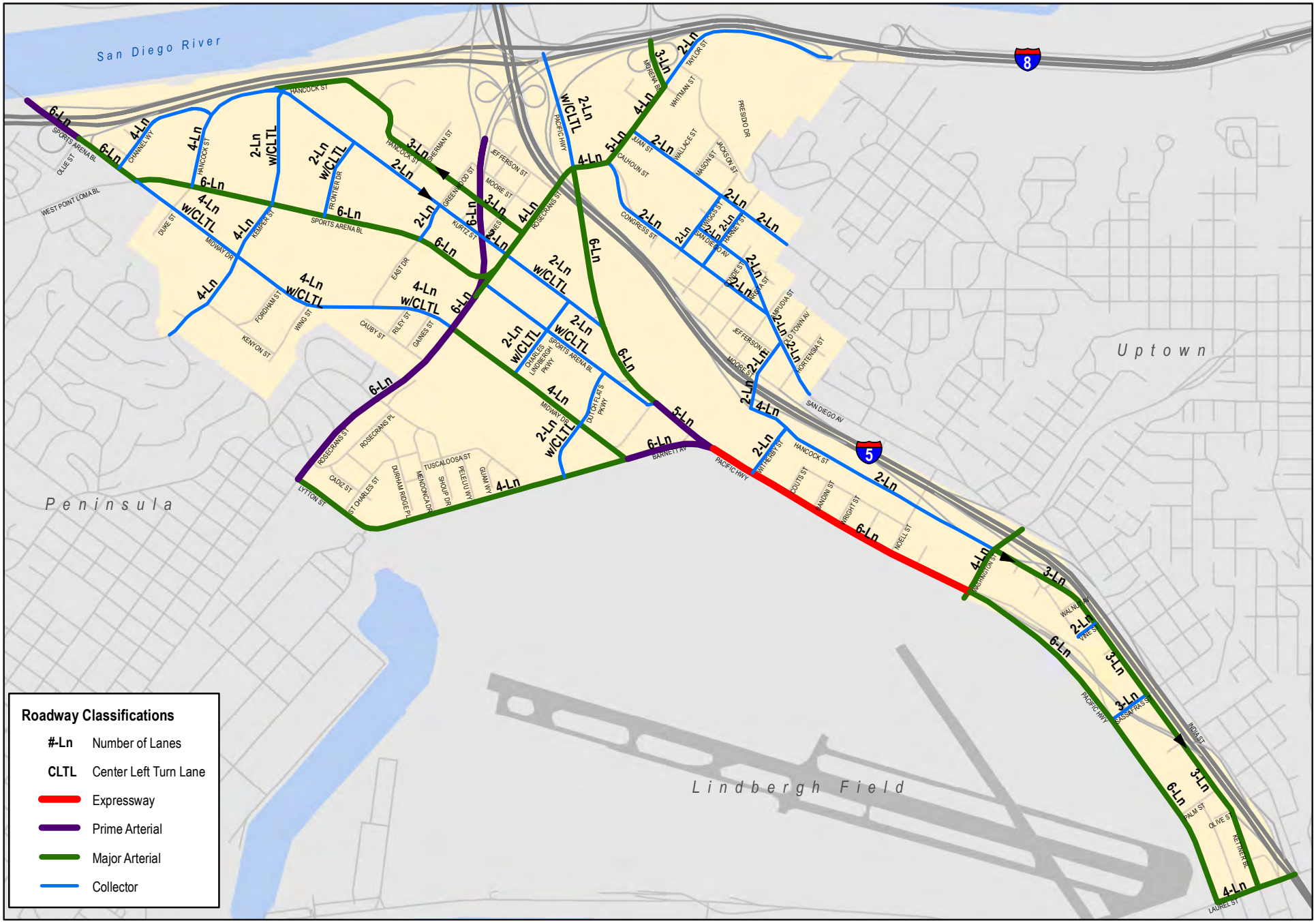
			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Prime Arterial	60,000	56,900	0.95	E	6-Lane Major Arterial	50,000	59,100	1.18	F	-0.23	No
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Major Arterial	40,000	22,000	0.55	C	4-Lane Collector (CLTL)	30,000	15,500	0.52	C	0.03	No
Charles Lindbergh Pkwy	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	5,900	0.39	B	*Does Not Exist*						No
	Sports Arena Blvd	Kurtz Street	2-Lane Collector (CLTL)	15,000	7,800	0.52	C	*Does Not Exist*						No
Dutch Flats Pkwy	Barnett Avenue	Midway Dr	2-Lane Collector (CLTL)	15,000	13,400	0.89	E	*Does Not Exist*						Yes
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,800	0.59	C	*Does Not Exist*						No
Barnett Ave	Midway Dr	Pacific Hwy	6-Lane Prime Arterial	60,000	51,600	0.86	D	4-Lane Major Arterial	40,000	57,954	1.45	F	-0.59	No
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	15,500	0.39	B	4-Lane Major Arterial	40,000	10,680	0.27	A	0.12	No
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	22,700	0.57	C	4-Lane Major Arterial	40,000	12,870	0.32	A	0.25	No
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	2,000	0.25	A	2-Lane Collector	8,000	250	0.03	A	0.22	No
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	21,100	1.92	F	3-Lane Collector	11,000	8,700	0.79	D	1.13	Yes
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	29,500	0.74	C	4-Lane Major Arterial	40,000	26,290	0.66	C	0.08	No
Old Town														
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	30,500	0.76	D	4-Lane Major Arterial	40,000	22,100	0.55	C	0.21	No
	Congress St	Juan St	5-Lane Major Arterial	45,000	21,300	0.47	B	5-Lane Major Arterial	45,000	13,560	0.30	A	0.17	No
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	25,700	0.64	C	4-Lane Major Arterial	40,000	17,530	0.44	B	0.20	No
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	15,300	1.91	F	2-Lane Collector	8,000	13,140	1.64	F	0.27	Yes

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,600	0.33	B	2-Lane Collector	8,000	2,080	0.26	A	0.07	No
Twiggs St	San Diego Ave	Juan St	2-Lane Collector	8,000	3,600	0.45	C	2-Lane Collector	8,000	2,670	0.33	B	0.12	No
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,800	0.23	A	2-Lane Collector	8,000	1,520	0.19	A	0.04	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,400	0.43	B	2-Lane Collector	8,000	2,350	0.29	A	0.14	No
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	12,200	1.53	**F**	2-Lane Collector	8,000	11,750	1.47	**F**	0.06	**Yes**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,500	0.81	**E**	2-Lane Collector	8,000	6,120	0.77	D	0.04	**Yes**

Source: Chen Ryan Associates (May 2017)

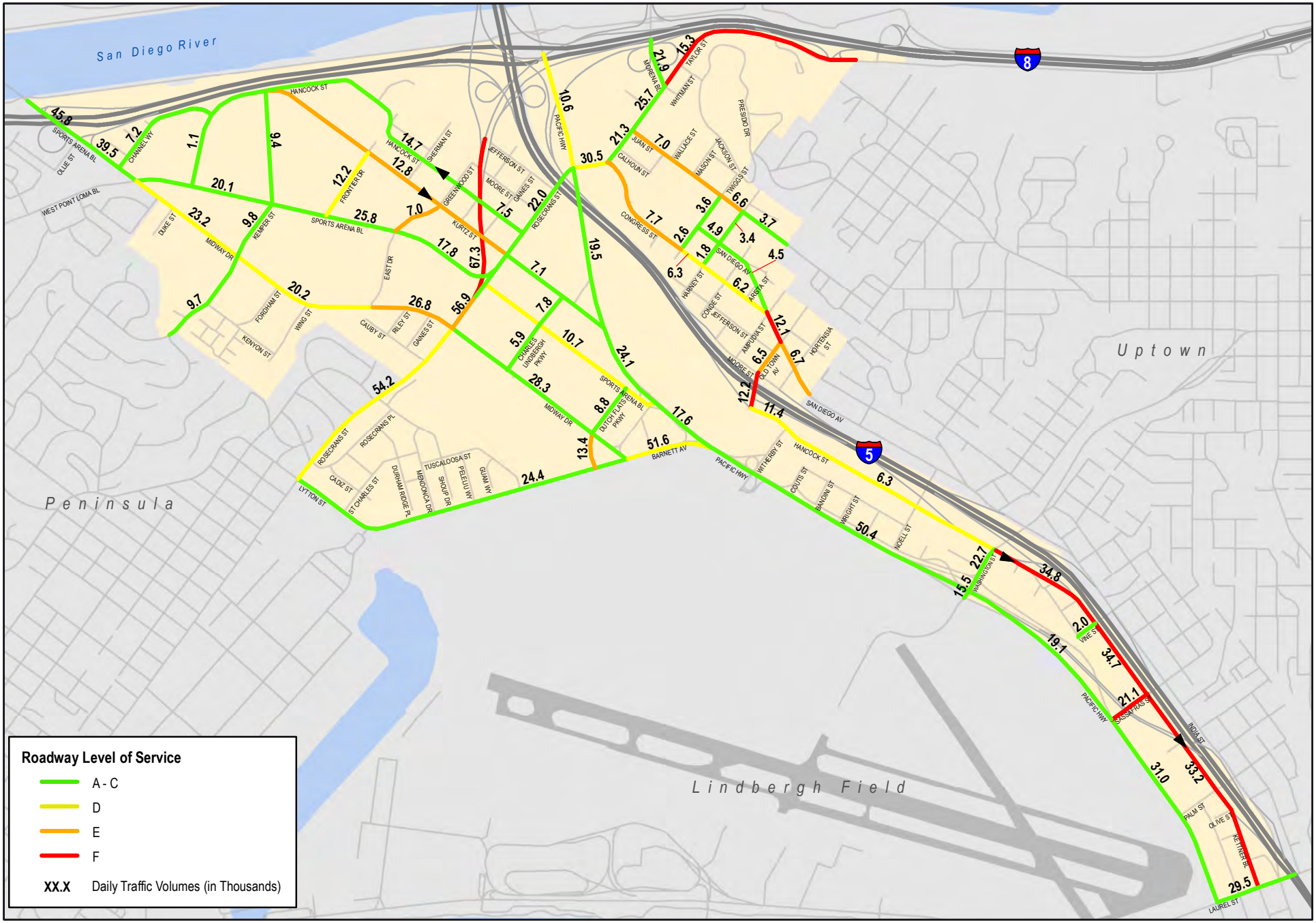
Note:
Bold letter indicates LOS E or F



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Figure 4-1
Roadway Classifications -
Preferred Plan Conditions



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Figure 4-2
Daily Roadway Segment Traffic Volumes and LOS - Preferred Plan Conditions

Based on the criteria documented in Chapter 2, the following roadway segments will have a significant impact under buildout of the Preferred Plan:

Midway-Pacific Highway Community

- Kettner Boulevard, between Washington Street and Vine Street (LOS F, ΔVC 0.41)
- Kettner Boulevard, between Vine Street and Sassafras Street (LOS F, ΔVC 0.42)
- Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F, ΔVC 0.48)
- Greenwood Street between Sport Arena Boulevard and Kurtz Street (LOS E, New Road)
- Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F, ΔVC 0.27)
- Dutch Flats Parkway between Barnett Avenue and Midway Drive (LOS E, New Road)
- Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F, ΔVC 1.13)

Old Town Community

- Congress Street between Taylor Street and Twiggs Street (LOS E, ΔVC 0.43)
- San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F, ΔVC 0.24)
- San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E, ΔVC 0.16)
- Juan Street, between Taylor Street and Twiggs Street (LOS E, ΔVC 0.20)
- Juan Street, between Twiggs Street and Harney Street (LOS E, ΔVC 0.23)
- Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F, ΔVC 0.27)
- Old Town Avenue, between Hancock Street and Moore Street (LOS F, ΔVC 0.06)
- Old Town Avenue, between Moore Street and San Diego Avenue (LOS E, ΔVC 0.04)

4.3 Intersection Analysis

AM and PM peak hour intersection LOS analyses were conducted under Preferred Plan and Existing Conditions. The following intersection improvements were assumed under buildout of the Preferred Plan:

Rosecrans Street / Sports Arena Boulevard / Camino Del Rio West:

- Remove the southbound free right-turn movement from Camino Del Rio West onto Sports Arena Boulevard and replace it with an exclusive right-turn lane.
- Allow southbound movements to continue on Sports Arena Boulevard through the intersection. It should be noted that you would still not be able to access the southern leg of Sports Arena Boulevard from westbound Rosecrans Street or southwest bound Camino del Rio West.

Sports Arena Boulevard / Pacific Highway:

- Move intersection approximately 500 feet to the north.
- Re-align Sports Arena Boulevard to create a right-angle with Pacific Highway.
- Signalize the intersection.
- Provide an exclusive eastbound left-turn lane from Sports Arena Boulevard onto Pacific Highway.
- Provide an exclusive northbound left-turn lane from Pacific Highway onto Sports Arena Boulevard.

Sports Arena Boulevard / West Point Loma Boulevard / Midway Drive

- Remove the westbound free right-turn movement from Sports Arena Boulevard onto Sports Arena Boulevard. The right-of-way will be used to extend the curb and create a curb bulb-out to reduce the pedestrian crossing distance. Right-turn movements will be permitted from the outside through lane.

- Square up and control the northbound free right-turn movement from Midway Drive onto Sports Arena Boulevard with the intersection.

West Washington Street / Pacific Highway

- Further analyze operations at this intersection to determine if additional improvements would be beneficial.

Congress Street / San Diego Avenue / Ampudia Street:

- Convert intersection to all-way stop control
- Implement bulb-outs on all legs of the intersection
- Widen the sidewalks along the north side of San Diego Avenue

Seven new intersections are recommended for the Midway-Pacific Highway community. Additionally, the roadway network was evaluated to identify intersection locations, both existing and new intersections, that would benefit from the implementation of a roundabout or signalization. A summary of recommended intersection improvements are displayed in Table 4-4. It is not known at this time if the implementation of roundabout will be feasible at any or all intersections. A roundabout feasibility analysis will need to be performed once the new intersections and roadways are designed. Therefore, to be conservative the analysis assumed that all new intersections would be signalized, unless otherwise noted. However, it is recommended that a roundabout be implemented in lieu of a signal at all new intersections, where feasible.

With the exception of the intersection of Congress Street / San Diego Avenue, / Ampudia Street, no other operational intersection improvements were identified for the Old Town community. Traffic signal warrants were conducted at the intersections where signalization is recommended. Figure 4C-103 (CA) of the California Manual on Uniform Traffic Control Devices (MUTCD) 2012 Edition was utilized for the signal warrant. All intersections where signalization is recommended met the warrants. Signal warrant worksheets are provided in Appendix H of the Mobility Report.

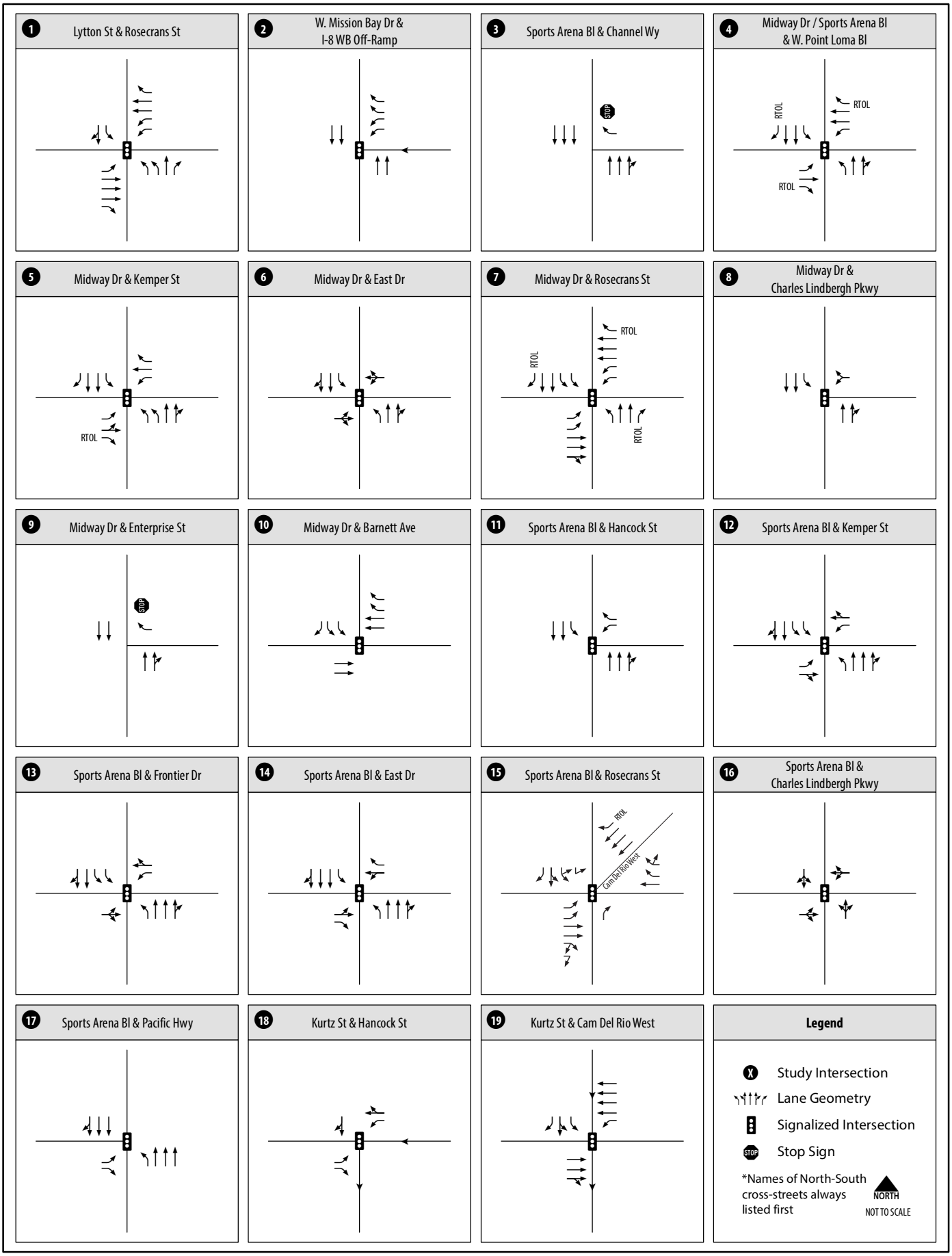
Table 4-4 Summary of Intersection Improvements

No.	Intersection	Improvement	Control
8	Midway Drive / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
12	Kemper Street / Sports Arena Boulevard	Add north leg	Signalized
13	Sports Arena Boulevard / Frontier Drive	Add north leg	Signalized
14	Sports Arena Boulevard / Greenwood Street	Add north leg	Signalized
16	Sports Arena Boulevard / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
17	Sports Arena Boulevard / Pacific Highway	Relocate intersection and signalize	Signalized
18	Kurtz Street / Hancock Street	Add south leg and signalize	Signalized
21	Kurtz Street / Pacific Highway	Signalize	Signalized
61	Kurtz Street / Frontier Drive	New intersection	Roundabout/SSSC
62	Kurtz Street / Greenwood Street	Add south leg and signalize	Signalized
63	Kurtz Street / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
64	Barnett Avenue / Dutch Flats Parkway	New intersection	Roundabout/Signalized
65	Midway Drive / Dutch Flats Parkway	New intersection	Roundabout/Signalized
66	Sports Arena Boulevard / Dutch Flats Parkway	New intersection	Roundabout/Signalized
N/A	Hancock Street / Greenwood Street	Signalize	Signalized

Source: Chen Ryan Associates (June 2016)

The proposed intersection geometrics and forecast AM/PM peak hour turning movement volumes under Preferred Plan buildout conditions are provided in Figure 4-3 and Figure 4-4, respectively.

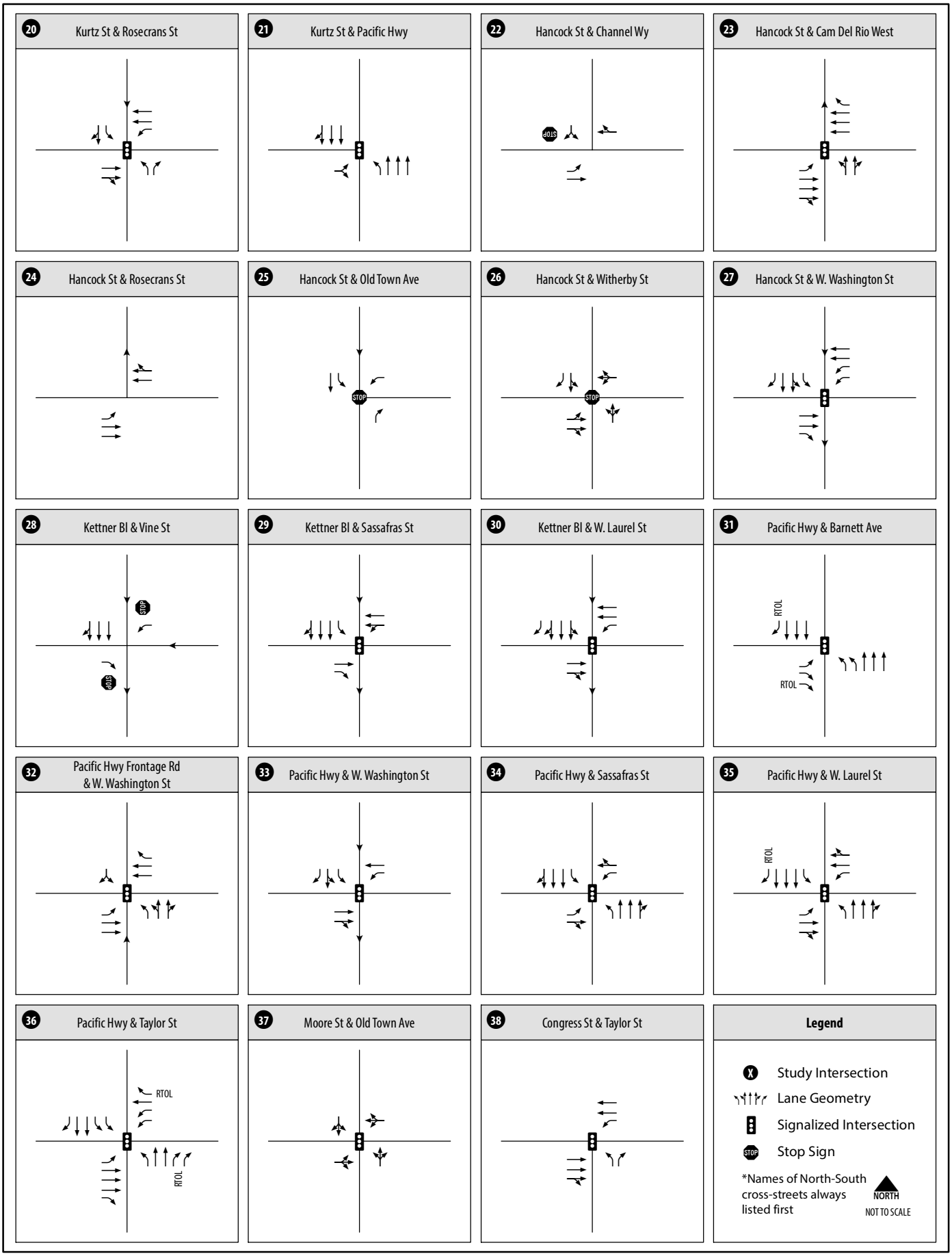
Table 4-5 displays intersection level of service and average vehicle delay results for study area intersections under Preferred Plan and Existing Conditions. Level of service calculation worksheets are provided in Appendix I.



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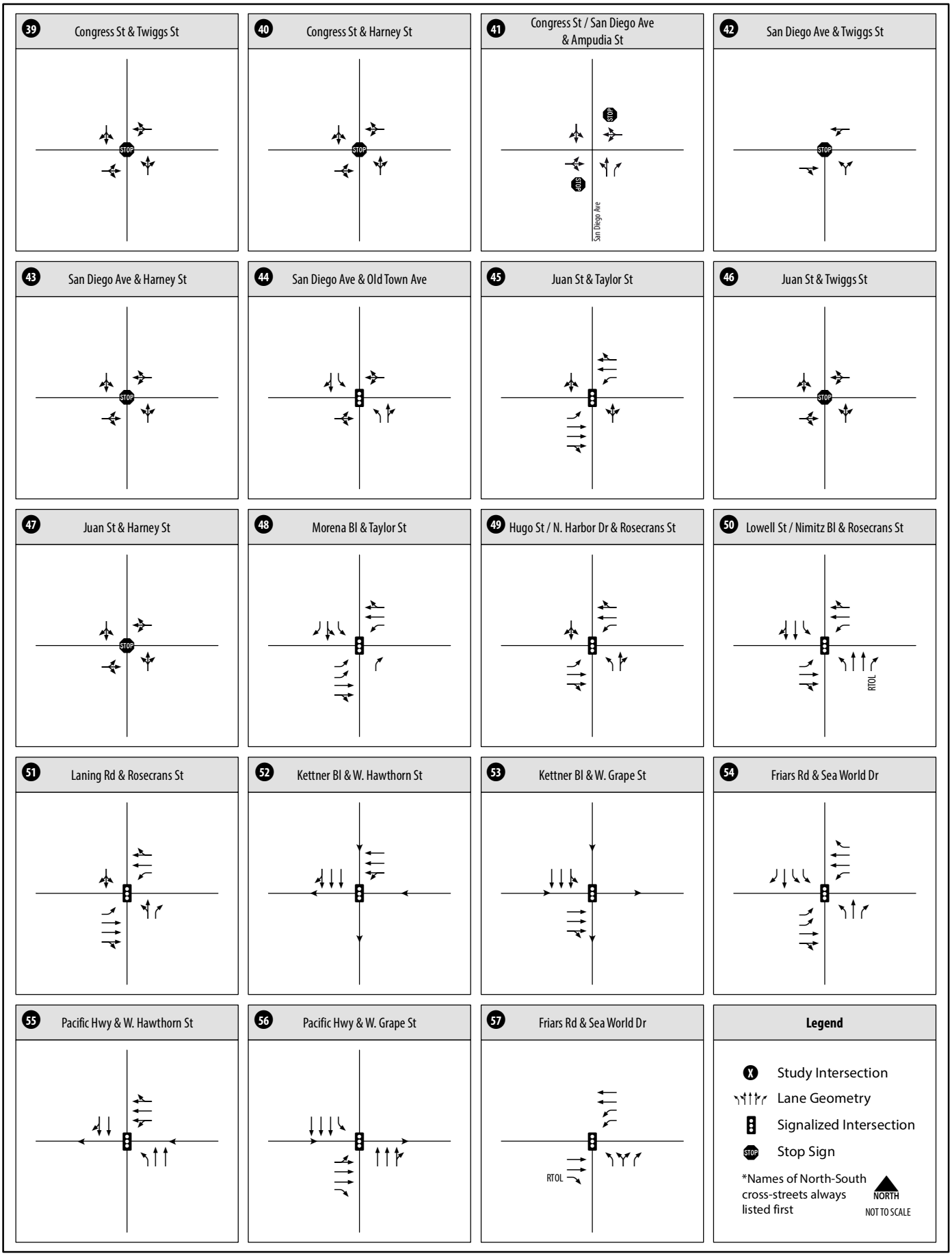
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 1-19)



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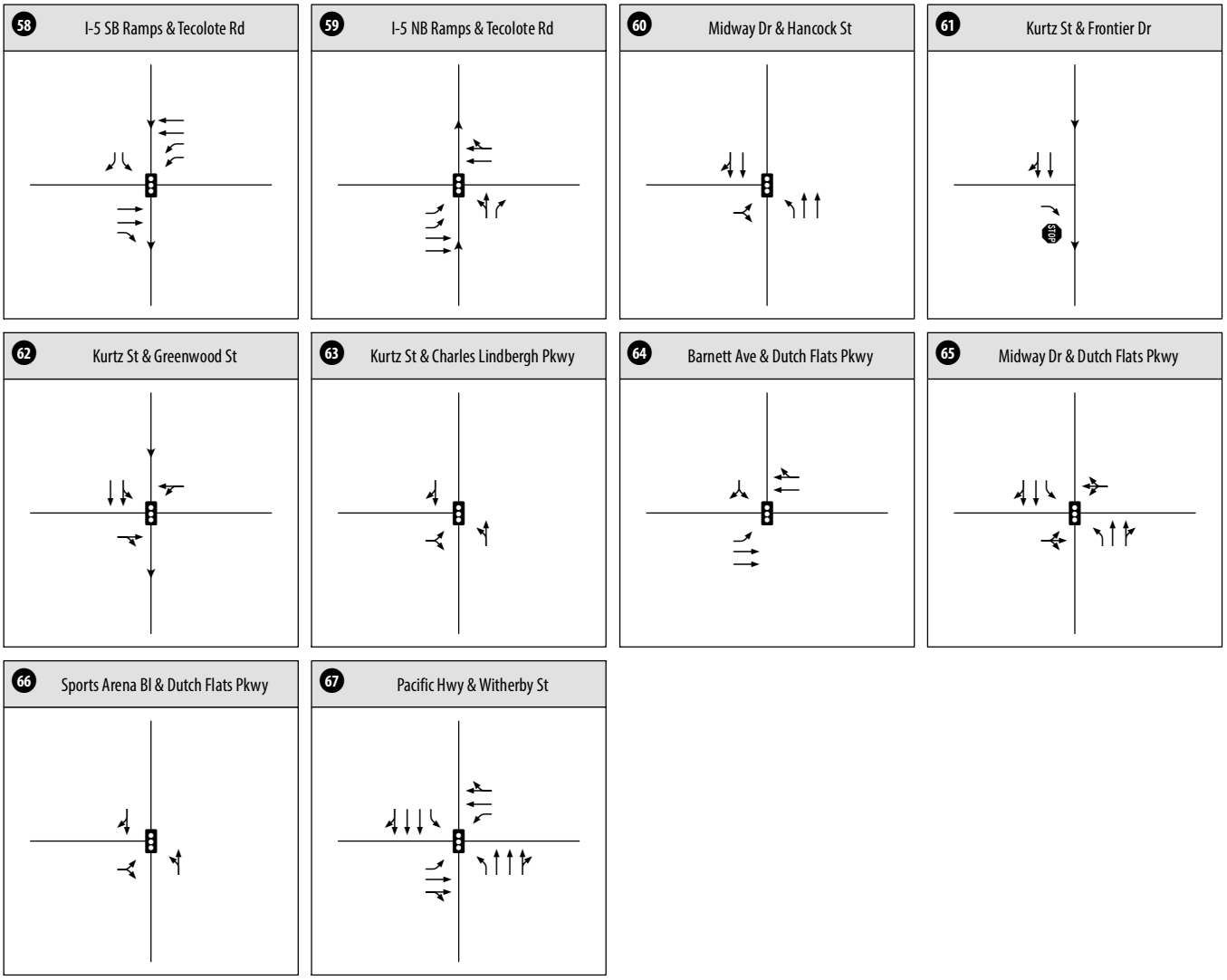
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 20-38)



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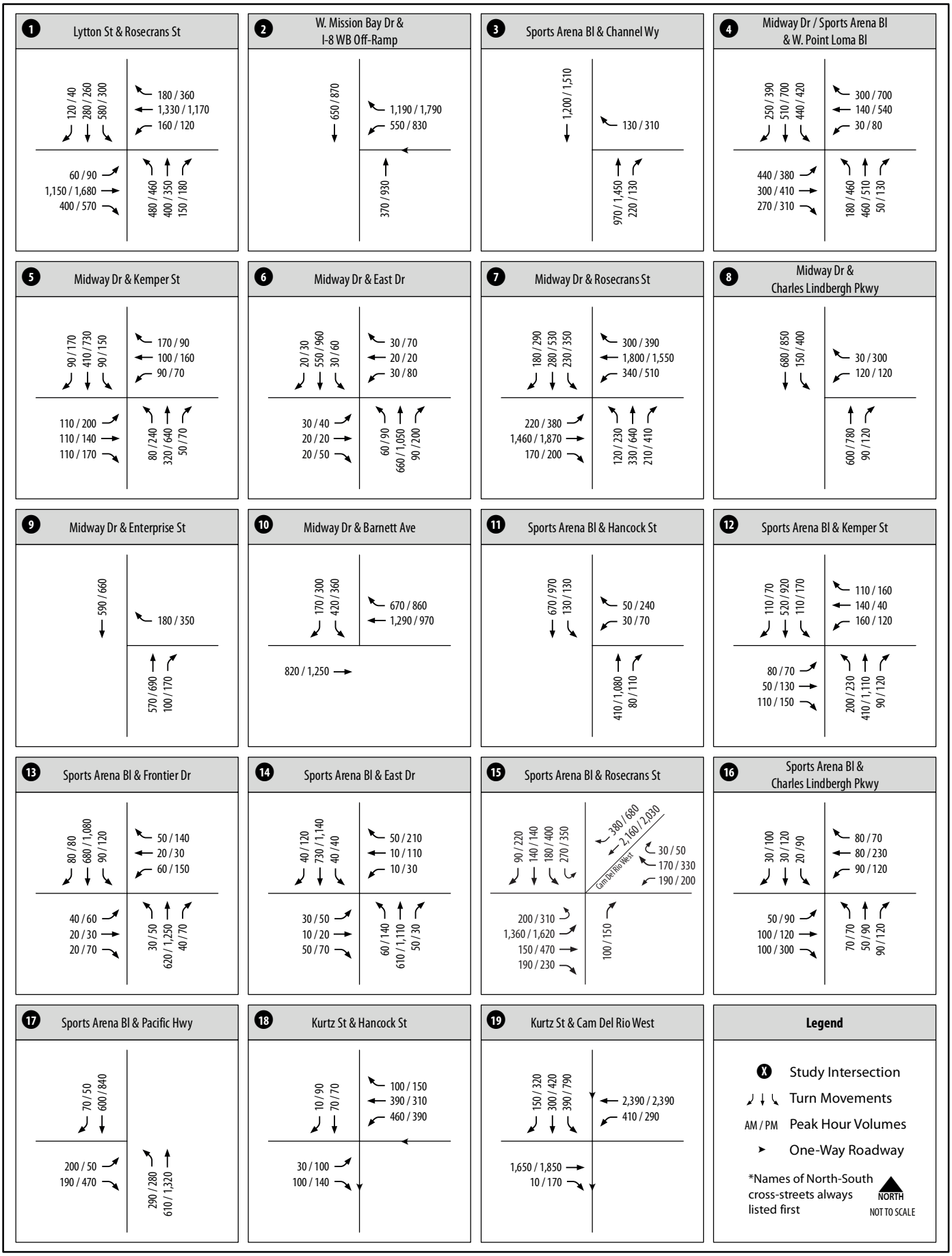
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 39-57)



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Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 58-67)

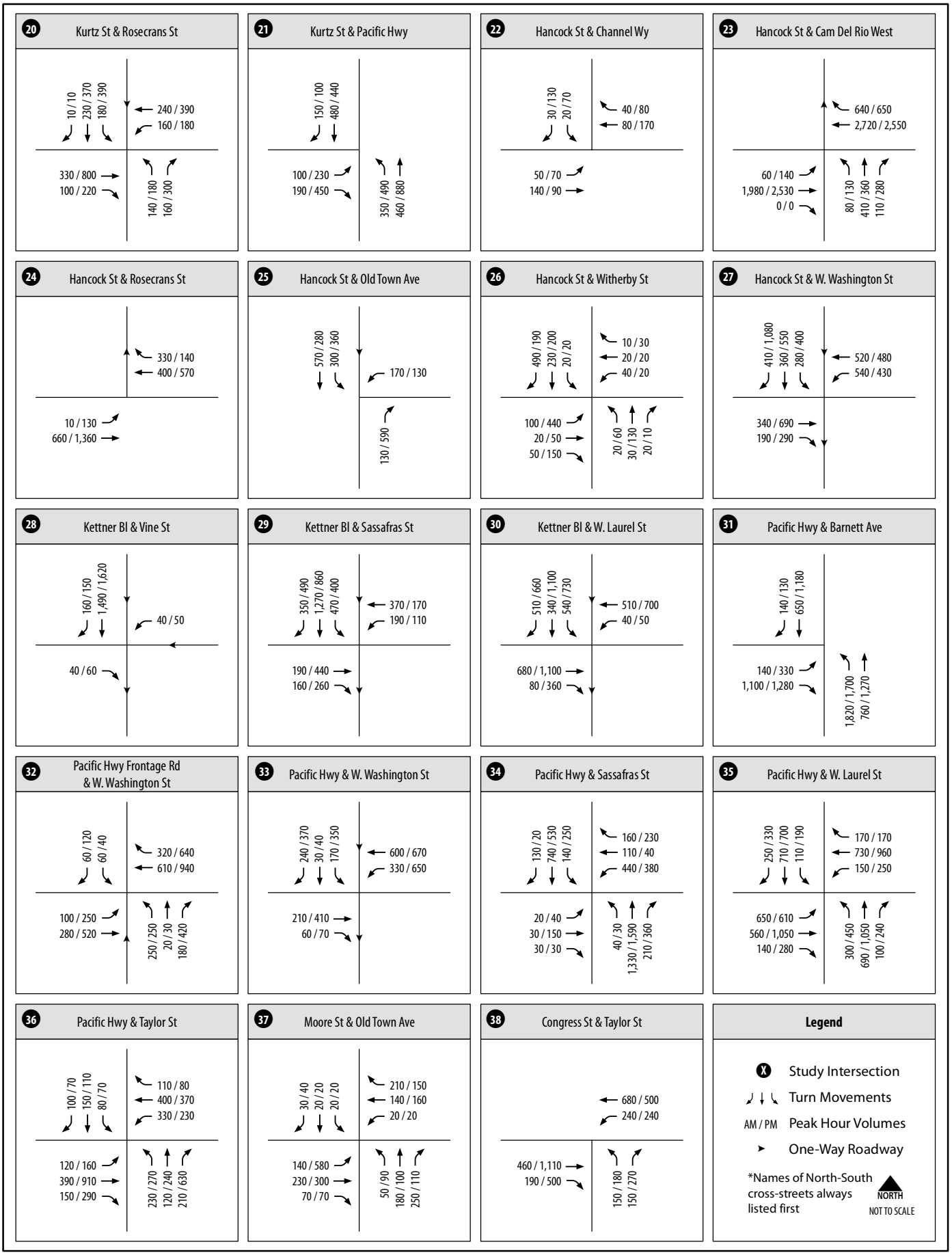


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 1-19)

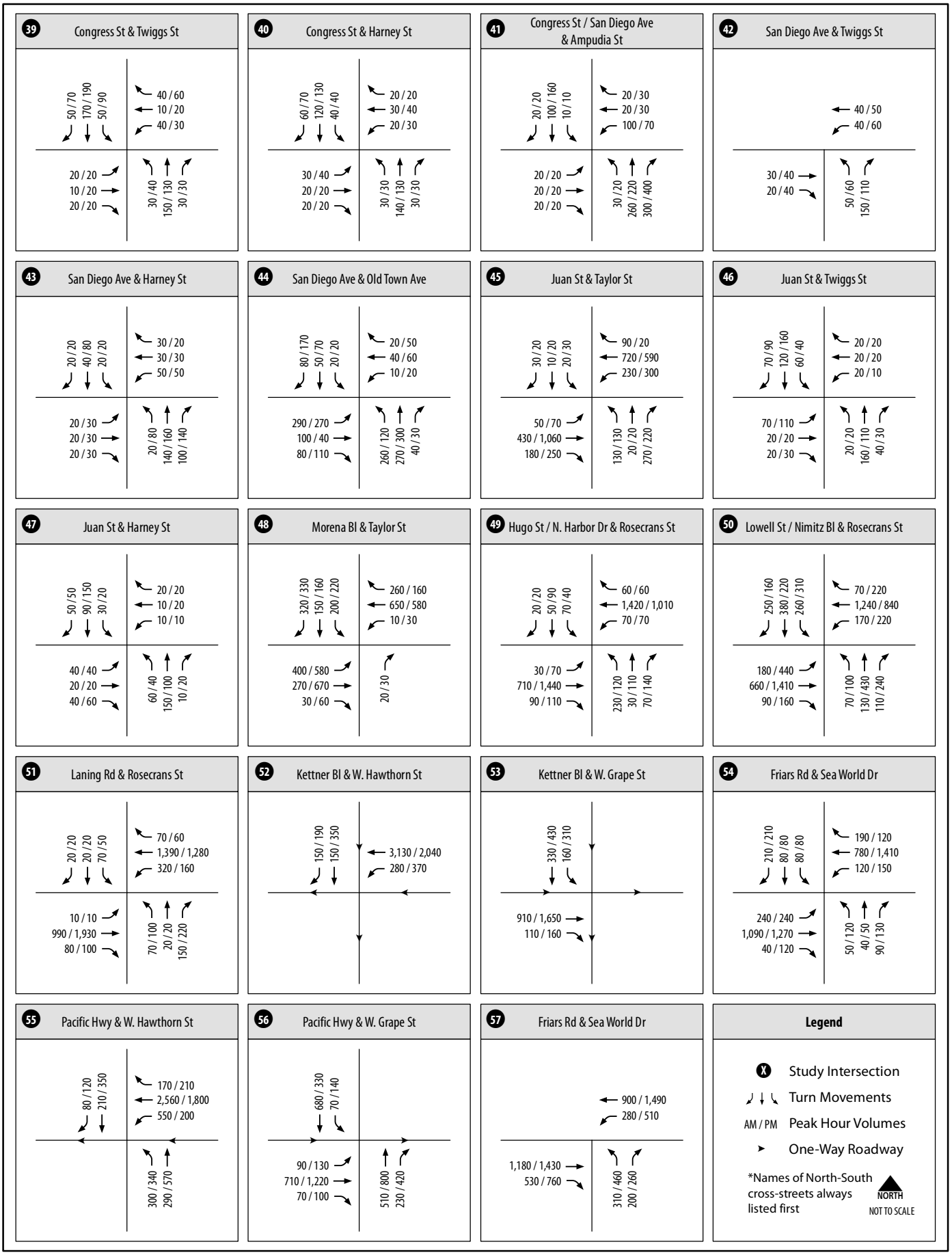


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 20-38)



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Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 39-57)

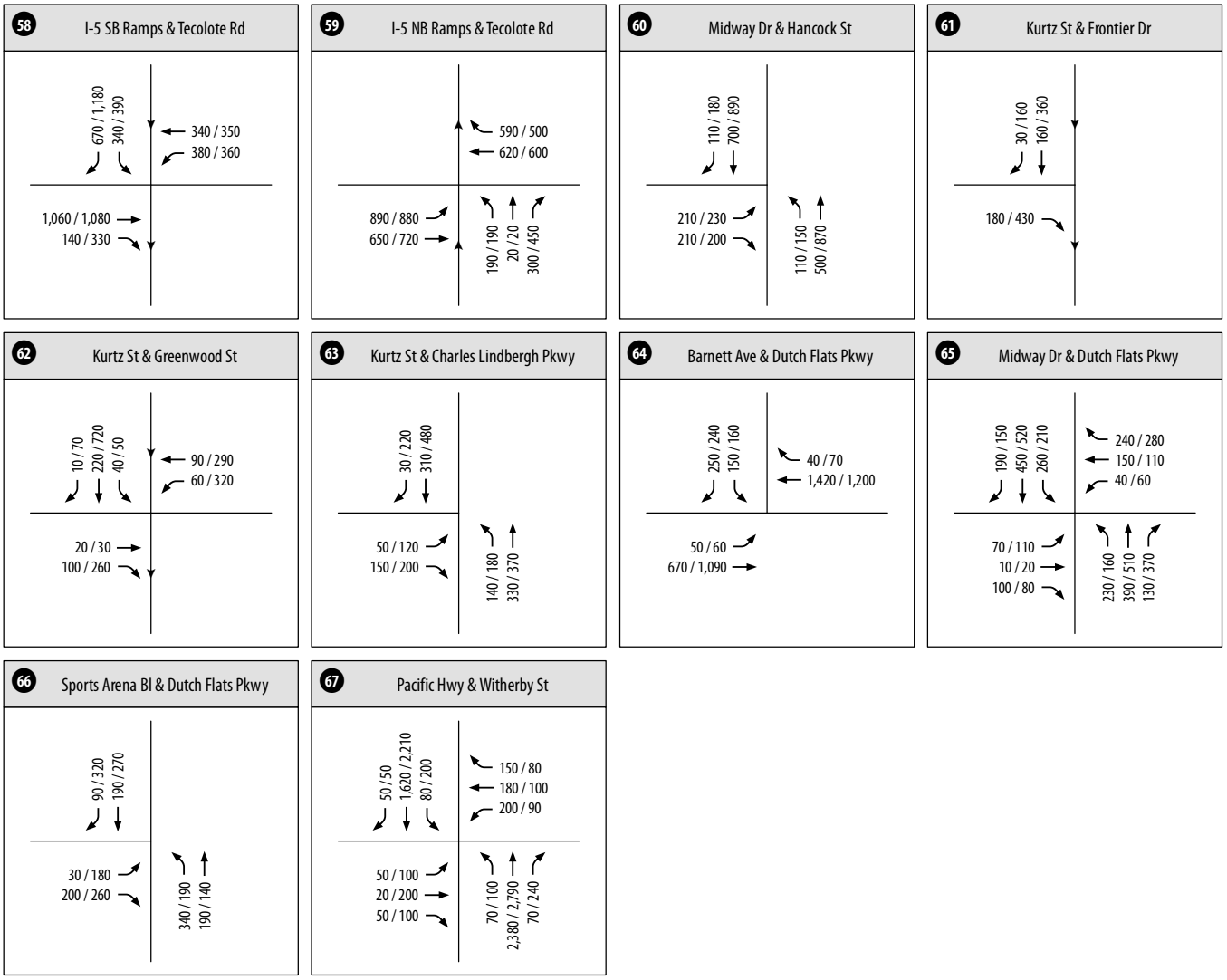


Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 58-67)

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Midway-Pacific Highway													
1	Lytton St and Rosecrans St	Signal	96.9	**F**	55.2	**E**	65.4	**E**	44.5	D	31.5	10.7	**Yes**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	15.4	B	70.2	**E**	14.8	B	59.5	**E**	0.6	10.7	**Yes**
3	Sports Arena Blvd and Channel Way	SSSC[2]	12.3	B	30.6	D	11.2	B	14.7	B	1.1	15.9	No
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	52.2	D	75.8	**E**	36.6	D	47.2	D	15.6	28.6	**Yes**
5	Midway Dr and Kemper St	Signal	31.6	C	39.1	D	22.7	C	37.3	D	8.9	1.8	No
6	Midway Dr and East Dr	Signal	7.0	A	17.8	B	4.8	A	13.0	B	2.2	4.8	No
7	Midway Dr and Rosecrans St	Signal	40.5	D	76.0	**E**	34.9	C	49.1	D	5.6	26.9	**Yes**
8	Midway Dr and Charles Lindbergh Pkwy	Signal	11.2	B	28.7	C	*Intersection does not currently exist*						No
9	Midway Dr and Enterprise St	SSSC[2]	13.4	B	26.5	D	11.0	B	18.1	C	2.4	8.4	No
10	Midway Dr and Barnett Ave	Signal	13.7	B	12.3	B	13.8	B	19.8	B	-0.1	-7.5	No
11	Sports Arena Blvd and Hancock St	Signal	14.4	B	17.4	B	10.0	A	13.1	B	4.4	4.3	No
12	Sports Arena Blvd and Kemper St	Signal	37.6	D	43.9	D	18.8	B	17.5	B	18.8	26.4	No
13	Sports Arena Blvd and Sports Arena Driveway	Signal	18.4	B	27.0	C	17.1	B	24.8	C	1.3	2.2	No
14	Sports Arena Blvd and East Dr	Signal	7.8	A	25.6	C	26.0	C	11.9	B	-18.2	13.7	No
15	Sports Arena Blvd and Rosecrans St	Signal	37.6	D	53.5	D	35.7	D	43.2	D	1.9	10.3	No
16	Sports Arena Blvd and Charles Lindbergh Pkwy	Signal	13.9	B	17.8	B	*Intersection does not currently exist*						No
17	Sports Arena Blvd and Pacific Hwy	Signal	25.8	C	17.9	B	10.6	B	12.0	B	15.2	5.9	No
18	Kurtz St and Hancock St	Signal	12.3	B	12.0	B	*Intersection does not currently exist*						No
19	Kurtz St and Camino Del Rio West	Signal	26.6	C	43.5	D	9.4	A	20.2	C	17.2	23.3	No
20	Kurtz St and Rosecrans St	Signal	29.8	C	37.0	D	20.0	B	31.7	C	9.8	5.3	No
21	Kurtz St and Pacific Hwy	Signal	31.0	C	48.3	D	11.2	B	13.7	B	19.8	34.6	No
22	Hancock St and Channel Wy	SSSC[2]	10.0	B	12.9	B	9.3	A	10.5	B	0.7	2.4	No
23	Hancock St and Camino Del Rio West	Signal	35.3	D	39.5	D	24.3	C	20.3	C	11.0	19.2	No
24	Hancock St and Rosecrans St	*No Conflicting Movements*											

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
25	Hancock St and Old Town Ave	AWSC[3]	24.8	C	20.9	C	16.9	C	14.6	B	7.9	6.3	No
26	Hancock St and Witherby St	AWSC[3]	13.9	B	34.9	D	16.0	C	23.5	C	-2.1	11.4	No
27	Hancock St and Washington St	Signal	23.1	C	77.8	**E**	22.8	C	25.9	C	0.3	51.9	**Yes**
28	Kettner Blvd and Vine St	SSSC[2]	16.5	C	19.9	C	14.3	B	23.2	C	2.2	-3.3	No
29	Kettner Blvd and Sassafras St	Signal	15.0	B	15.3	B	12.0	B	11.9	B	3.0	3.4	No
30	Kettner Blvd and West Laurel St	Signal	19.3	B	96.5	**F**	20.0	B	29.7	C	-0.7	66.8	**Yes**
31	Pacific Hwy and Barnett Ave	*No Conflicting Movements*											
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	20.4	C	47.5	D	19.4	B	36.0	D	1.0	11.5	No
33	Pacific Hwy and Washington St	Signal	20.5	C	27.7	C	18.7	B	31.2	C	1.8	-3.5	No
34	Pacific Hwy and Sassafras St	Signal	32.9	C	75.9	**E**	14.4	B	27.3	C	18.5	48.6	**Yes**
35	Pacific Hwy and West Laurel St	Signal	91.3	**F**	141.3	**F**	48.4	D	42.9	D	42.9	98.4	**Yes**
Old Town													
36	Pacific Hwy and Taylor St	Signal	31.1	C	51.2	D	64.6	**E**	33.5	C	-33.5	17.7	No
37	Moore St and Old Town Ave	Signal	23.2	C	96.5	**F**	16.4	B	16.4	B	6.8	80.1	**Yes**
38	Congress St and Taylor St	Signal	13.8	B	19.2	B	19.9	B	21.7	C	-6.1	-2.5	No
39	Congress St and Twiggs St	AWSC[3]	9.7	A	10.8	B	8.1	A	8.6	A	1.6	2.2	No
40	Congress St and Harney St	AWSC[3]	9.1	A	9.4	A	8.1	A	8.3	A	1.0	1.1	No
41	Congress St and San Diego Ave/Ampudia St	AWSC[3]	10.4	B	11.3	B	12.3	B	11.5	B	-1.9	-0.2	No
42	San Diego Ave and Twiggs St	AWSC[3]	8.0	A	8.1	A	7.9	A	8.0	A	0.1	0.1	No
43	San Diego Ave and Harney St	AWSC[3]	9.0	A	10.8	B	8.2	A	8.2	A	0.8	2.6	No
44	San Diego Ave and Old Town Ave	Signal	17.4	B	13.7	B	18.4	B	11.6	B	-1.0	2.1	No
45	Juan St and Taylor St	Signal	14.6	B	18.6	B	10.4	B	10.7	B	4.2	7.9	No
46	Juan St and Twiggs St	AWSC[3]	9.7	A	10.1	B	8.8	A	8.5	A	0.9	1.6	No
47	Juan St and Harney St	AWSC[3]	9.0	A	8.9	A	8.3	A	7.9	A	0.7	1.0	No
48	Morena Blvd and Taylor St	Signal	21.9	C	24.8	C	22.4	C	16.4	B	-0.5	8.4	No

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Intersections Outside of Study Communities													
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	29.0	C	31.6	C	14.7	B	20.7	C	14.3	10.9	No
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	60.4	**E**	111.6	**F**	41.2	D	63.3	**E**	19.2	48.3	**Yes**
51	Laning Rd and Rosecrans St	Signal	25.5	C	23.2	C	15.5	B	12.9	B	10.0	10.3	No
52	Kettner Blvd and West Hawthorn St	Signal	34.7	C	13.3	B	11.1	B	15.0	B	23.6	-1.7	No
53	Kettner Blvd and West Grape St	Signal	10.1	B	9.4	A	7.4	A	8.7	A	2.7	0.7	No
54	Pacific Hwy and Sea World Dr	Signal	24.0	C	34.1	C	19.9	B	25.6	C	4.1	8.5	No
55	Pacific Hwy and West Hawthorn St	Signal	34.4	C	31.7	C	35.4	D	20.2	C	-1.0	11.5	No
56	Pacific Hwy and West Grape St	Signal	17.9	B	31.4	C	16.8	B	24.2	C	1.1	7.2	No
57	Friars Rd and Sea World Dr	Signal	15.4	B	26.0	C	11.5	B	13.8	B	3.9	12.2	No
58	I-5 SB Ramps and Sea World Dr	Signal	17.8	B	20.0	C	15.5	B	16.3	B	2.3	3.7	No
59	I-5 NB Ramps and Sea World Dr	Signal	29.3	C	43.3	D	21.4	C	28.4	C	7.9	14.9	No
New Intersections (Midway-Pacific Highway Community)													
60	Midway Dr & Duke Street / Hancock St	Signal	27.0	C	32.1	C	*Intersection does not currently exist*						No
61	Kurtz St & Frontier Dr	SSSC[2]	9.9	A	19.0	C	*Intersection does not currently exist*						No
62	Kurtz St & Greenwood St	Signal	11.9	B	16.9	B	*Intersection does not currently exist*						No
63	Kurtz St & Charles Lindbergh Pkwy	Signal	8.3	A	22.1	C	*Intersection does not currently exist*						No
64	Barnett Ave & Dutch Flats Pkwy	Signal	24.6	C	14.5	B	*Intersection does not currently exist*						No
65	Midway Dr & Dutch Flats Pkwy	Signal	48.5	D	53.7	D	*Intersection does not currently exist*						No
66	Dutch Flats Pkwy & Sports Arena Bl	Signal	10.9	B	21.5	C	*Intersection does not currently exist*						No

Source: Chen Ryan Associates (May 2017)

Note:
Bold letter indicates LOS E or F.
[1] Significant Impact
[2] Single Side Stop Controlled
[3] All Way Stop Controlled

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following intersections:

Midway-Pacific Highway Community

1. Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)
2. Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)
4. Midway Drive / West Point Loma Drive and Sports Arena Boulevard (LOS E: PM Peak Hour)
7. Midway Drive and Rosecrans Street (LOS E: PM Peak Hour)
27. Hancock Street and Washington Street (LOS E: PM Peak Hour)
30. Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)
34. Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)
35. Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)

Old Town Community

37. Moore Street and Old Town Street (LOS F: PM Peak Hour)

Outside of the Community

50. Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)

It is important to note that three of the ten intersections listed above currently experience LOS E or F during the AM and/or PM peak period under existing conditions. Additionally, two intersections experiencing LOS E or F under existing conditions will be improved to a satisfactory LOS through implementation of the Preferred Plan.

4.4 Freeway Segment Analysis

Neither the Revenue Constrained Alternative of SANDAG's *San Diego Forward Plan* (October 2015) nor the Preferred Plan recommend freeway improvements within the project study area.

Table 4-6A and Table 4-6B display freeway segment analysis results within the project study area for the AM and PM peak hours, respectively.

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following freeway segments:

- I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour)
- I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours)
- I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour)
- I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour)
- I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)
- I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour)
- I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour)

Table 4-6A Freeway Segment Level of Service Comparison (AM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (AM)				Existing Conditions (AM)				Δ in V/C (AM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	6.30%	60%	61,200	2,600	0.55	B	46,500	1,900	0.40	A	0.15	No
			WB	2M + 0A	4,700		40%		1,700	0.36	A		1,300	0.28	A	0.08	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	6.40%	60%	122,400	5,400	0.64	C	102,000	4,400	0.52	B	0.12	No
			WB	3M + 1A	8,450		40%		3,500	0.41	B		2,900	0.34	A	0.07	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	6.40%	41%	183,300	5,500	0.51	B	132,000	3,900	0.36	A	0.15	No
			WB	5M + 0A	11,750		59%		7,700	0.66	C		5,500	0.47	B	0.19	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	6.50%	47%	217,200	7,600	0.70	C	191,000	6,500	0.60	B	0.10	No
			WB	5M + 0A	11,750		53%		8,400	0.71	C		7,400	0.63	C	0.08	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	6.40%	61%	241,500	11,000	0.94	**E**	220,000	10,000	0.85	D	0.09	**Yes**
			SB	5M + 0A	11,750		39%		6,900	0.59	B		6,200	0.53	B	0.06	No
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	6.40%	62%	231,800	10,500	0.97	**E**	199,000	9,000	0.83	D	0.14	**Yes**
			SB	4M + 2A	12,200		38%		6,400	0.52	B		5,400	0.44	B	0.08	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	6.90%	49%	243,000	9,400	0.87	D	199,000	7,700	0.71	C	0.16	No
			SB	5M + 0A	11,750		51%		9,700	0.83	D		7,900	0.67	C	0.16	No
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	6.90%	49%	227,800	8,800	0.94	**E**	192,000	7,500	0.80	D	0.14	**Yes**
			SB	5M + 0A	11,750		51%		9,300	0.79	D		7,700	0.66	C	0.13	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	6.90%	54%	171,500	7,100	0.76	C	142,000	6,000	0.64	C	0.12	No
			SB	4M + 0A	9,400		46%		6,400	0.68	C		5,200	0.55	B	0.13	No
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	6.70%	58%	216,500	9,600	0.89	D	147,000	6,600	0.61	B	0.28	No
			SB	4M + 1A	10,800		42%		7,200	0.67	C		4,700	0.44	B	0.23	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	6.70%	57%	222,200	9,900	0.92	D	183,000	8,100	0.75	C	0.17	No
			SB	4M + 1A	10,800		43%		7,600	0.70	C		6,000	0.56	B	0.14	No

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

Table 4-6B Freeway Segment Level of Service Comparison (PM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (PM)				Existing Conditions (PM)				Δ in V/C (PM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	8.50%	72%	61,200	3,100	0.66	C	46,500	3,200	0.68	C	-0.02	No
			WB	2M + 0A	4,700		28%		2,800	0.60	B		1,300	0.28	A	0.32	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	7.80%	63%	122,400	5,500	0.65	C	102,000	5,600	0.66	C	-0.01	No
			WB	3M + 1A	8,450		37%		5,400	0.64	C		3,400	0.4	A	0.24	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	7.20%	51%	183,300	6,600	0.61	B	132,000	5,500	0.51	B	0.10	No
			WB	5M + 0A	11,750		49%		8,300	0.71	C		5,200	0.44	B	0.27	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	8.20%	55%	217,200	11,000	1.02	**F**	191,000	9,700	0.9	D	0.12	**Yes**
			WB	5M + 0A	11,750		45%		9,000	0.77	C		8,000	0.68	C	0.09	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	8.30%	51%	241,500	11,700	1.00	**E**	220,000	10,700	0.91	D	0.09	**Yes**
			SB	5M + 0A	11,750		49%		11,300	0.96	**E**		10,300	0.88	D	0.08	**Yes**
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	8.40%	52%	231,800	11,600	1.07	**F**	199,000	10,000	0.93	**E**	0.14	**Yes**
			SB	4M + 2A	12,200		48%		10,700	0.88	D		9,200	0.75	C	0.13	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	8.20%	39%	243,000	8,900	0.82	D	199,000	7,300	0.68	C	0.14	No
			SB	5M + 0A	11,750		61%		13,900	1.18	**F**		11,400	0.97	**E**	0.21	**Yes**
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	8.00%	51%	227,800	10,700	1.14	**F**	192,000	9,000	0.96	**E**	0.18	**Yes**
			SB	5M + 0A	11,750		49%		10,200	0.87	D		8,600	0.73	C	0.14	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	8.10%	36%	171,500	5,700	0.61	B	142,000	4,800	0.51	B	0.10	No
			SB	4M + 0A	9,400		64%		10,200	1.09	**F**		8,400	0.89	D	0.20	**Yes**
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	7.00%	49%	216,500	8,400	0.78	C	147,000	5,800	0.54	B	0.24	No
			SB	4M + 1A	10,800		51%		9,300	0.86	D		6,100	0.56	B	0.30	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	7.30%	46%	222,200	8,300	0.77	C	183,000	7,100	0.66	C	0.11	No
			SB	4M + 1A	10,800		54%		10,400	0.96	**E**		8,200	0.76	C	0.20	**Yes**

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

4.5 Ramp Meter Analysis

Table 4-7 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 4-7 Freeway Ramp Meter Analysis Comparison

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Preferred Plan Volume	Preferred Plan Excess Demand	Preferred Plan Delay (Minutes)	Preferred Plan Queue (Feet)	Existing Delay (Minutes)	Δ In Delay
I-8 EB / Sports Arena Boulevard	PM	2	1	641	920	279	26.1	8,091	25.5	0.6
I-5 SB / Sea World Drive	AM	1	1	444	530	86	11.6	2,494	0.0	11.6
	PM	1	1	444	670	226	30.5	6,554	11.4	19.1
I-5 NB / Sea World Drive	AM	2	0	1,555	1,530	0	0.0	0	0.0	0.0
	PM	2	0	1,656	1,250	0	0.0	0	0.0	0.0
I-5 SB / Old Town Avenue	PM	1	0	461	410	0	0.0	0	0.0	0.0
I-5 NB / Old Town Avenue	AM	2	0	905	370	0	0.0	0	0.0	0.0
	PM	2	0	888	690	0	0.0	0	0.0	0.0

Source: Chen Ryan Associates, Inc. (May 2017)

Based on the significance criteria outlined in Section 2.2.5, implementation of the preferred Plan would result in a significant impact to the I-5 SB / Sea World Dive ramp during the PM peak hour.

4.6 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted through implementation of the Preferred Plan.

4.6.1 Roadway Mitigation Measures

Midway-Pacific Highway Community

Kettner Boulevard, between Washington Street and Vine Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Kettner Boulevard, between Vine Street and Sassafras Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing*

features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.

Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Greenwood Street, between Sports Arena Boulevard and Kurtz Street (LOS E) – Improving from a 2-Lane Collector to a 2-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *However, due to implementation of this improvement not being in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods and to right-of-way constraints, this improvement project is not identified in the Midway Pacific Highway IFS.*

Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F) – Improving this roadway from a 6-Lane Prime Arterial to a 6-Lane Expressway would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *This improvement would require grade separating all intersections along this segment of the roadway which is not consistent with the General Plan & Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Dutch Flats Parkway, between Barnett Avenue and Midway Drive (LOS E) – Improving from a 2-Lane Collector with a Center Left Turn-Lane to a 4-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Implementing Dutch Flats Parkway as a 4-Lane Collector with Continuous Left-Turn Lane will create longer crossing distances within a residential area and potentially could act as a barrier for pedestrians. Implementation of this improvement would not be in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F) - Widening the roadway from a 3-Lane Collector to a 4-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way available along this segment of Sassafras Street to accommodate a fourth travel lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

<u>Old Town Community</u>

Congress Street between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this*

roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Congress Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 26 regular parking spaces and 13 loading/taxi parking spaces would need to be removed in order to accommodate this mitigation measure. Finally, this mitigation measure would be in conflict with the Community Plan, which proposed balancing all travel modes through an enhanced active transportation environment. Therefore, this improvement project is not identified in the Old Town IFS.

San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 5 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 9 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 48 regular parking spaces and 4 loading parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Twiggs Street and Harney Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 11 regular parking spaces*

would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.

Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F) - Widening the roadway from a 2-Lane Collector to a 4-Lane Major Arterial would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Taylor Street to accommodate two additional through lanes and a center median, while maintaining a Class II bicycle facility. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Hancock Street and Moore Street (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane while maintaining right-of-way for the proposed Class II bicycle lanes. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Moore Street and San Diego Avenue (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 18 regular parking spaces and 1 loading parking space would need to be removed in order to accommodate this mitigation measure. Finally, a Class II bicycle facility is proposed along this segment. Therefore, this improvement project is not identified in the Old Town IFS.*

4.6.2 Intersection Mitigation Measures

<u>Midway-Pacific Highway Community</u>

1. *Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)* – The westbound through movement, as well as the southbound left-turn and through movements are projected to be over capacity, under implementation of the Preferred Plan. Implementing the following improvements would allow the intersection to operate at LOS D or better during both peak hours.

    - Add a second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street
    - Add an additional westbound through movement lane on Rosecrans Street (three total)
    - Implement right-turn overlap (RTOL) phases at all legs of the intersection

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is currently not enough right-of-way on Rosecrans Street to accommodate a third westbound through lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: If the second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street and RTOL phases at all legs are implemented (feasible improvements) the overall intersection delay would be reduced to the following:

AM: LOS E
PM: LOS D

Implementation of this improvement will partially mitigate the traffic related impact at the intersection. *This improvement project is identified in the Midway Pacific Highway IFS.*

2. *Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)* – The westbound right-turn movement, from I-8 WB to northbound West Mission Bay Drive, is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Providing a third exclusive westbound right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The Preferred Plan is consistent with the CIP Project #S00871: W. Mission Bay Drive Bridge Over San Diego River, which was reviewed by City and Caltrans staff. Further mitigations, beyond what is recommended as part of this CIP project would be inconsistent with Community Plan Policies and Goals for multimodal facilities*. *Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

4. *Midway Drive / West Point Loma Boulevard and Sports Arena Boulevard (LOS E: PM Peak Hour)* – All four left-turn movements at this intersection are projected to be over capacity during the PM peak hour. Providing dual-left turn lanes on Midway Drive in the northbound direction, on Sports Arena Boulevard in the southbound direction, and on West Point Loma Boulevard in the eastbound direction would improve intersection operations to LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way within the intersection to accommodate any of the additional left-turn lanes considering the proposed multi-use urban trails along Midway Drive and Sports Arena Boulevard, and in-road bicycle facilities. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

7. *Midway Drive and Rosecrans Street* (LOS E: PM Peak Hour) – Rosecrans Street is projected to operate at LOS E during the PM peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches of Rosecrans Street to include a fourth through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen Rosecrans Street to eight lanes through the intersection*

considering the proposed multi-use urban path improvements. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.

Partial Mitigation: None recommended, limited to no right-of-way is anticipated to be available with proposed Multi-Use Urban Path improvements.

27. *Hancock Street and Washington Street (LOS E: PM Peak Hour)* – The southbound Hancock Street to westbound Washington Street right-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Restriping the southbound approach to include a second southbound right-turn lane would allow the intersection to operate at LOS C during the PM Peak Hour. This improvement is feasible but may require additional engineering study. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *This improvement would require the removal of on-street parking, which is heavily utilized by the businesses and restaurants in this area. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

30. *Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)* – The eastbound through movement on Laurel Street is projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Widening the eastbound Laurel Street approach of the intersection to include a third through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the eastbound Laurel Street approach to three lanes. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

34. *Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)* – The southbound Pacific Highway to eastbound Sassafras Street left-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Adding a second southbound left-turn lane would allow the intersection to operate at LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the southbound approach of Pacific Hwy to include a second left-turn lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

35. *Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)* – Laurel Street is projected to be over capacity during both peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches to include a second eastbound left-turn lane and a third through lane in each direction along Laurel Street, as well as widening the northbound approach of Pacific Highway to include a second northbound left-turn lane and exclusive right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Laurel Street to widen to three lanes in each direction. Also,*

there is not enough right-of-way on northbound Pacific Highway with the improvements of the cycle track, multi-use urban path. Therefore, *this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

Old Town Community

37. Moore Street and Old Town Avenue (LOS F: PM Peak Hour) – The eastbound and westbound approaches along Old Town Avenue are projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Implementation of the following improvements would allow the intersection to operate at LOS D during the PM peak hour.

- Implement exclusive eastbound and westbound left-turn lanes on the Old Town Avenue approaches of the intersection.
- Convert the eastbound/westbound signal phasing from permitted to protected phasing.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The eastbound approach on the Old Town Avenue bridge is not wide enough to accommodate an eastbound left-turn lane. Therefore, this improvement project is not identified in the Old Town IFS.*

Partial Mitigation: None recommended.

Outside of the Community

50. *Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour*) – Both the eastbound Rosecrans Street through movement, and the eastbound Rosecrans Street to northbound Nimitz Boulevard left-turn movement are anticipated to be over capacity for both peak hours, under implementation of Preferred Plan. Widening the Rosecrans Street eastbound and westbound approaches of the intersection to include a third through lane, and providing an additional eastbound left-turn lane from Rosecrans Street to Nimitz Boulevard would improve the intersection operations to LOS D or better during both the AM and PM peak hours.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Rosecrans Street to widen to six lanes. Therefore, this improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

Partial Mitigation: None recommended.

Table 4-8 provides a comparison of Preferred Plan operations at the impacted intersections, with and without mitigation measures.

Table 4-8 Impacted Intersection Level of Service with Mitigation Measures

No.	Intersection	Control (Preferred Plan)	Mitigated Conditions AM Avg. Delay (sec)	Mitigated Conditions AM LOS	Mitigated Conditions PM Avg. Delay (sec)	Mitigated Conditions PM LOS	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS
Midway-Pacific Highway										
1	Lytton St and Rosecrans St	Signal	47.8	D	42.7	D	96.9	F	55.2	E
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	12.7	B	36.8	D	15.4	B	70.2	E
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	30.6	C	49.2	D	52.2	D	75.8	E
7	Midway Dr and Rosecrans St	Signal	32.4	C	54.4	D	40.5	D	76.0	E
27	Hancock St and Washington St	Signal	22.4	C	35.2	D	23.1	C	77.8	E
30	Kettner Blvd and West Laurel St	Signal	17.8	B	42.1	D	19.3	B	96.5	F
34	Pacific Hwy and Sassafras St	Signal	30.2	C	54.4	D	32.9	C	75.9	E
35	Pacific Hwy and West Laurel St	Signal	37.3	D	50.4	D	91.3	F	141.3	F
Old Town										
37	Moore St and Old Town Ave	Signal	28.6	C	39.1	D	23.2	C	96.5	F
Intersections Outside of Study Communities										
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	34.4	C	54.9	D	60.4	E	111.6	F

Source: Chen Ryan Associates (October 2017)

Notes:
Bold letter indicates LOS E or F.

4.6.3 Freeway Segment Mitigation Measures

I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies operational improvements along this segment. These improvements are anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvements and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

4.6.4 Ramp Meter Mitigation Measures

I-5 SB / Sea World Drive Ramp (PM Peak Hour) – Ramp meter delays would decrease to less than 15 minutes if the ramp flow rate is increased from 444 cars per hour to 555 cars per hour. Increased ramp meter flow rates can be achieved by either reducing the ramp meter cycle length or providing additional travel lanes on the ramp.

The identified significant traffic related impact to this ramp would be fully mitigated with the implementation of this improvement. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

5.0 Adopted Community Plan (No Project)

This chapter provides a comparison of the buildout of the currently Adopted Community plan or the No Project scenario analysis results to the Existing Conditions. As stated, the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan was adopted in 1991, and the Old Town San Diego Community Plan was adopted in 1987. Since the land uses and roadway network proposed by the Preferred Plan (or an alternative) would supersede the Adopted Community Plan, only a trip generation and VMT generation comparison was conducted for the Adopted Community Plan (No Project) scenario.

5.1 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Future Year 2035 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway Pacific Highway Corridor and communities, including trips to/from and within the community. Table 5-1A and Table 5-1B displays the total VMT generated within the Midway-Pacific Highway Corridor and Old Town communities, respectively, as well as the average trip length under Base Year, and Adopted Plan conditions. VMT calculations for the both communities are provided in Appendix J.

Table 5-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	832,025	101,904	14.0%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	294,796	311,502	16,706	5.7%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.8%	5.2	5.4	0.2	3.7%
Population	4,672	11,775	7,103	152.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	71	-86	-54.8%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Adopted Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.8%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-54.8%).

Table 5-1B Vehicle Miles Traveled Comparison – Old Town – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,581	20,281	13.4%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	57,989	58,192	203	0.4%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	13.0%	5.2	5.4	0.2	3.7%
Population	834	985	151	18.1%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	174	-7	-4.0%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region). With the implementation of the Adopted Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 13.0%. However, with the population increase anticipated within the community, the daily VMT by population is anticipated to decrease (-4.0%).

Appendix A
VMT Analysis Worksheets – Base Year

2008 Base Year - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	10,481	-	10,481	3,325,244
CHULA VISTA TOTAL	3,951,266	30,546	-	30,546	3,920,720
CORONADO TOTAL	431,361	6,218	-	6,218	425,143
DEL MAR TOTAL	96,012	206	-	206	95,806
EL CAJON TOTAL	2,176,865	12,696	-	12,696	2,164,169
ENCINITAS TOTAL	2,065,242	12,892	-	12,892	2,052,350
ESCONDIDO TOTAL	2,793,535	6,670	-	6,670	2,786,865
External TOTAL	347,454	1,979	-	1,979	345,475
IMPERIAL BEACH TOTAL	119,764	392	-	392	119,372
LA MESA TOTAL	1,822,392	19,612	-	19,612	1,802,780
LEMON GROVE TOTAL	831,075	7,624	-	7,624	823,451
NATIONAL CITY TOTAL	1,647,424	27,517	-	27,517	1,619,907
OCEANSIDE TOTAL	3,208,748	3,821	-	3,821	3,204,927
POWAY TOTAL	1,105,609	2,103	-	2,103	1,103,506
SAN DIEGO TOTAL	38,613,579	1,087,144	176,404	910,740	37,526,435
SAN MARCOS TOTAL	2,020,740	1,069	-	1,069	2,019,671
SANTEE TOTAL	860,205	2,581	-	2,581	857,624
SOLANA BEACH TOTAL	567,653	4,696	-	4,696	562,957
Unincorporated TOTAL	17,458,561	44,980	-	44,980	17,413,581
VISTA TOTAL	1,728,853	612	-	612	1,728,241
		730,121.50			
REGIONWIDE TOTAL	85,182,063	2,013,961	176,404	1,107,435	83,898,224
	66.7%	(670,292)			

2008 Base Year - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	2,357	-	2,357	3,333,368
CHULA VISTA TOTAL	3,951,266	7,048	-	7,048	3,944,218
CORONADO TOTAL	431,361	1,275	-	1,275	430,086
DEL MAR TOTAL	96,012	45	-	45	95,967
EL CAJON TOTAL	2,176,865	3,091	-	3,091	2,173,774
ENCINITAS TOTAL	2,065,242	2,987	-	2,987	2,062,255
ESCONDIDO TOTAL	2,793,535	1,506	-	1,506	2,792,029
External TOTAL	347,454	352	-	352	347,102
IMPERIAL BEACH TOTAL	119,764	49	-	49	119,715
LA MESA TOTAL	1,822,392	4,950	-	4,950	1,817,442
LEMON GROVE TOTAL	831,075	1,644	-	1,644	829,431
NATIONAL CITY TOTAL	1,647,424	6,346	-	6,346	1,641,078
OCEANSIDE TOTAL	3,208,748	779	-	779	3,207,969
POWAY TOTAL	1,105,609	492	-	492	1,105,117
OLD TOWN	38,613,579	241,420	16,727	224,693	38,372,159
SAN MARCOS TOTAL	2,020,740	250	-	250	2,020,490
SANTEE TOTAL	860,205	606	-	606	859,599
SOLANA BEACH TOTAL	567,653	1,106	-	1,106	566,547
Unincorporated TOTAL	17,458,561	9,472	-	9,472	17,449,089
VISTA TOTAL	1,728,853	99	-	99	1,728,754
REGIONWIDE TOTAL	85,182,063	151,301 437,175	16,727	269,147	84,896,189

Appendix B
Daily Roadway Traffic Counts

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-094

Location: Lytton St. btwn. Rosecrans St. & Midway Dr.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	11		8					12:00	222		148				
00:15	10		5					12:15	172		138				
00:30	12		5					12:30	163		160				
00:45	7	40	8	26			66	12:45	163	720	151	597			1317
01:00	3		4					13:00	149		147				
01:15	3		5					13:15	173		160				
01:30	3		6					13:30	170		151				
01:45	9	18	6	21			39	13:45	154	646	161	619			1265
02:00	5		4					14:00	154		171				
02:15	2		5					14:15	170		216				
02:30	4		4					14:30	191		219				
02:45	5	16	2	15			31	14:45	228	743	201	807			1550
03:00	4		2					15:00	223		185				
03:15	4		6					15:15	219		212				
03:30	3		2					15:30	236		226				
03:45	12	23	4	14			37	15:45	250	928	262	885			1813
04:00	14		6					16:00	243		275				
04:15	11		6					16:15	217		322				
04:30	14		13					16:30	268		247				
04:45	24	63	12	37			100	16:45	256	984	268	1112			2096
05:00	42		26					17:00	261		243				
05:15	60		24					17:15	235		219				
05:30	93		35					17:30	192		157				
05:45	104	299	47	132			431	17:45	209	897	154	773			1670
06:00	129		56					18:00	202		134				
06:15	179		82					18:15	185		167				
06:30	223		100					18:30	160		121				
06:45	213	744	124	362			1106	18:45	120	667	106	528			1195
07:00	316		159					19:00	135		103				
07:15	286		197					19:15	129		87				
07:30	194		218					19:30	78		79				
07:45	270	1066	201	775			1841	19:45	110	452	69	338			790
08:00	239		200					20:00	85		77				
08:15	247		235					20:15	97		77				
08:30	225		205					20:30	98		72				
08:45	191	902	177	817			1719	20:45	111	391	81	307			698
09:00	176		156					21:00	69		52				
09:15	127		128					21:15	67		63				
09:30	127		117					21:30	61		45				
09:45	134	564	120	521			1085	21:45	63	260	41	201			461
10:00	133		92					22:00	52		50				
10:15	145		127					22:15	54		46				
10:30	159		143					22:30	40		44				
10:45	147	584	120	482			1066	22:45	38	184	28	168			352
11:00	153		123					23:00	30		23				
11:15	148		155					23:15	20		19				
11:30	179		126					23:30	23		21				
11:45	180	660	116	520			1180	23:45	11	84	14	77			161
Total Vol.		4979		3722			**8701**			6956		6412			**13368**

Daily Totals

NB	SB	EB	WB	Combined
11935	10134			**22069**

	AM			PM		
Split %	57.2%	42.8%	**39.4%**	52.0%	48.0%	**60.6%**
Peak Hour	07:00	07:30	**07:00**	16:30	16:00	**16:00**
Volume	1066	854	**1841**	1020	1112	**2096**
P.H.F.	0.84	0.91	**0.95**	0.95	0.86	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-086

Location: Mission Bay Dr. btwn. I-8 WB Off Ramp & I-8 EB On Ramp

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		78					12:00	130		376				
00:15	16		56					12:15	154		409				
00:30	12		54					12:30	139		403				
00:45	8	49	54	242			291	12:45	145	568	475	1663			2231
01:00	9		43					13:00	133		392				
01:15	12		40					13:15	144		423				
01:30	11		45					13:30	142		428				
01:45	10	42	47	175			217	13:45	167	586	456	1699			2285
02:00	2		44					14:00	152		410				
02:15	7		26					14:15	133		431				
02:30	5		36					14:30	126		472				
02:45	5	19	21	127			146	14:45	111	522	441	1754			2276
03:00	3		24					15:00	134		460				
03:15	1		16					15:15	138		494				
03:30	1		18					15:30	129		520				
03:45	6	11	19	77			88	15:45	126	527	506	1980			2507
04:00	7		16					16:00	133		530				
04:15	4		20					16:15	159		552				
04:30	5		22					16:30	125		568				
04:45	6	22	39	97			119	16:45	130	547	574	2224			2771
05:00	9		42					17:00	164		580				
05:15	8		57					17:15	161		643				
05:30	13		64					17:30	140		591				
05:45	18	48	159	322			370	17:45	131	596	621	2435			3031
06:00	22		125					18:00	124		601				
06:15	36		162					18:15	114		578				
06:30	45		222					18:30	141		488				
06:45	51	154	270	779			933	18:45	109	488	412	2079			2567
07:00	67		329					19:00	120		388				
07:15	68		420					19:15	109		390				
07:30	86		469					19:30	109		333				
07:45	100	321	505	1723			2044	19:45	104	442	336	1447			1889
08:00	76		440					20:00	105		334				
08:15	70		451					20:15	95		315				
08:30	98		478					20:30	95		275				
08:45	111	355	424	1793			2148	20:45	70	365	267	1191			1556
09:00	118		398					21:00	63		248				
09:15	118		390					21:15	68		196				
09:30	134		366					21:30	73		192				
09:45	163	533	374	1528			2061	21:45	60	264	198	834			1098
10:00	138		230					22:00	64		159				
10:15	118		332					22:15	51		135				
10:30	102		330					22:30	59		146				
10:45	131	489	346	1238			1727	22:45	58	232	126	566			798
11:00	114		357					23:00	24		135				
11:15	140		359					23:15	22		126				
11:30	123		383					23:30	21		87				
11:45	143	520	380	1479			1999	23:45	19	86	82	430			516
Total Vol.		2563		9580			**12143**			5223		18302			**23525**

Daily Totals

NB	SB	EB	WB	**Combined**
7786	27882			**35668**

	AM			**PM**		
Split %	21.1%	78.9%	**34.0%**	22.2%	77.8%	**66.0%**
Peak Hour	11:45	07:45	**07:45**	13:15	17:15	**17:00**
Volume	566	1874	**2218**	605	2456	**3031**
P.H.F.	0.92	0.93	**0.92**	0.91	0.95	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-088

Location: Midway Dr. btwn. Sports Arena Blvd. & Kemper St.

AM Period	NB	SB	EB		WB		
00:00			15		25		
00:15			17		26		
00:30			14		19		
00:45			12	58	8	78	136
01:00			11		16		
01:15			15		11		
01:30			9		17		
01:45			8	43	14	58	101
02:00			5		13		
02:15			6		6		
02:30			7		8		
02:45			6	24	5	32	56
03:00			3		5		
03:15			5		7		
03:30			6		4		
03:45			1	15	6	22	37
04:00			12		7		
04:15			11		8		
04:30			13		5		
04:45			19	55	11	31	86
05:00			13		17		
05:15			14		17		
05:30			28		24		
05:45			43	98	31	89	187
06:00			34		27		
06:15			43		37		
06:30			58		59		
06:45			71	206	90	213	419
07:00			82		78		
07:15			102		81		
07:30			117		100		
07:45			159	460	91	350	810
08:00			125		94		
08:15			166		113		
08:30			134		112		
08:45			143	568	137	456	1024
09:00			128		143		
09:15			133		133		
09:30			154		130		
09:45			147	562	154	560	1122
10:00			141		174		
10:15			152		152		
10:30			163		163		
10:45			139	595	139	628	1223
11:00			133		133		
11:15			135		154		
11:30			154		178		
11:45			147	569	152	617	1186
Total Vol.				3253		3134	**6387**

PM Period	NB	SB	EB		WB		
12:00			171		174		
12:15			159		166		
12:30			152		196		
12:45			158	640	182	718	1358
13:00			133		187		
13:15			139		169		
13:30			163		170		
13:45			150	585	174	700	1285
14:00			145		154		
14:15			147		165		
14:30			154		199		
14:45			155	601	185	703	1304
15:00			160		187		
15:15			155		198		
15:30			144		178		
15:45			180	639	199	762	1401
16:00			182		219		
16:15			169		193		
16:30			160		221		
16:45			180	691	204	837	1528
17:00			215		223		
17:15			209		244		
17:30			195		230		
17:45			220	839	210	907	1746
18:00			197		189		
18:15			170		216		
18:30			156		202		
18:45			181	704	186	793	1497
19:00			151		186		
19:15			154		150		
19:30			113		184		
19:45			116	534	140	660	1194
20:00			102		158		
20:15			122		131		
20:30			93		134		
20:45			81	398	131	554	952
21:00			76		103		
21:15			86		102		
21:30			62		82		
21:45			61	285	76	363	648
22:00			40		95		
22:15			36		54		
22:30			43		49		
22:45			34	153	49	247	400
23:00			32		54		
23:15			27		30		
23:30			33		40		
23:45			20	112	26	150	262
				6181		7394	**13575**

Daily Totals

NB	SB	EB	WB	Combined
		9434	10528	**19962**

	AM			PM		
Split %	50.9%	49.1%	**32.0%**	45.5%	54.5%	**68.0%**
Peak Hour	11:30	11:45	**11:45**	17:00	17:00	**17:00**
Volume	631	688	**1317**	839	907	**1746**
P.H.F.	0.92	0.88	**0.95**	0.95	0.93	**0.96**

Volumes for: STATION# on Tuesday, March 16, 2010 City: San Diego Project #: 10-4068-018
Location: Midway Dr between Kemper St & Fordham St File No. MC0214-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	16	169			24	211				
12:15	18	185			26	221				
12:30	17	191			17	210				
12:45	10	215	61	760	14	215	81	857	142	1617
1:00	6	179			14	208				
1:15	8	187			10	206				
1:30	13	171			13	172				
1:45	8	145	35	682	22	191	59	777	94	1459
2:00	7	166			14	175				
2:15	7	169			12	205				
2:30	12	177			13	177				
2:45	4	175	30	687	7	165	46	722	76	1409
3:00	16	180			7	197				
3:15	8	148			5	213				
3:30	10	170			5	203				
3:45	4	189	38	687	15	230	32	843	70	1530
4:00	7	186			9	224				
4:15	11	144			9	193				
4:30	5	174			4	181				
4:45	10	174	33	678	14	202	36	800	69	1478
5:00	8	179			16	235				
5:15	28	214			18	209				
5:30	41	166			29	230				
5:45	44	184	121	743	43	166	106	840	227	1583
6:00	30	203			29	182				
6:15	42	185			31	164				
6:30	59	190			39	198				
6:45	71	155	202	733	56	175	155	719	357	1452
7:00	76	150			65	192				
7:15	90	160			58	183				
7:30	110	158			69	164				
7:45	119	105	395	573	91	140	283	679	678	1252
8:00	129	147			86	125				
8:15	111	112			108	138				
8:30	102	113			102	124				
8:45	118	88	460	460	109	135	405	522	865	982
9:00	110	86			108	123				
9:15	129	92			123	81				
9:30	120	72			113	92				
9:45	135	50	494	300	148	80	492	376	986	676
10:00	111	46			142	69				
10:15	135	46			142	52				
10:30	163	47			138	60				
10:45	152	51	561	190	150	50	572	231	1133	421
11:00	152	37			192	45				
11:15	143	18			177	51				
11:30	182	24			190	28				
11:45	169	21	646	100	219	35	778	159	1424	259
Total	3076	6593	3076	6593	3045	7525	3045	7525	6121	14118
Combined Total	9669		9669		10570		10570		20239	
AM Peak	11:45 AM				11:45 AM					
Vol.	714				861					
P.H.F.	0.935				0.974					
PM Peak		12:30 PM				4:45 PM				
Vol.		772				876				
P.H.F.		0.898				0.932				
Percentage	31.8%	68.2%			28.8%	71.2%				

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
MIDWAY DR	[GAINES ST - RILEY ST]	03100 - 03150	1190	EAST	:	14600	6/27/1990	0985-90
				WEST	:	17700	7/20/1990	0986-90
				EAST	:	13800	6/17/1991	0917-91
				WEST	:	16900	6/17/1991	0918-91
				*TOTAL	:	30700		
				EAST	:	14300	6/9/1992	0498-92
				WEST	:	16900	6/9/1992	0499-92
				*TOTAL	:	31200		
				EAST	:	12100	6/2/1995	0663-95
				WEST	:	15100	6/2/1995	0664-95
				*TOTAL	:	27200		
				EAST	:	12600	6/22/1999	0479-99
				WEST	:	14900	6/22/1999	0479-99
				*TOTAL	:	27500		
				EAST	:	10960	6/18/2002	0629-02
				WEST	:	14250	6/25/2002	0630-02
				EAST	:	18590	6/13/2006	0068-06
				WEST	:	14360	6/13/2006	0068-06
				*TOTAL	:	32950		
				EAST	:	12720	8/12/2008	0313-08
				WEST	:	14410	8/12/2008	0313-08
				*TOTAL	:	27130		
				EAST	:	12860	6/16/2009	MC0396-0
				WEST	:	14745	6/16/2009	MC0396-0
				*TOTAL	:	27605		
MIDWAY DR	[KEMPER ST - DUKE ST]	03600 - 03800	1771	EAST	:	12200	6/18/1991	0855-91
				WEST	:	12900	6/18/1991	0856-91
				*TOTAL	:	25100		
				EAST	:	13000	5/26/1993	0418-93
				WEST	:	13300	5/26/1993	0419-93
				*TOTAL	:	26300		
				EAST	:	10800	5/13/1996	0487-96

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Midway Dr (STATION#1860/FILE#MC0443-10)	Project:	10-4169-031	11,737	11,246	0	0	22,983

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	17		24					12:00	237		211				
00:15	27		40					12:15	236		200				
00:30	23		20					12:30	267		215				
00:45	18	85	17	101			186	12:45	215	955	277	903			1858
01:00	9		21					13:00	246		225				
01:15	13		15					13:15	221		182				
01:30	18		11					13:30	225		188				
01:45	14	54	27	74			128	13:45	223	915	234	829			1744
02:00	17		20					14:00	192		203				
02:15	14		13					14:15	209		201				
02:30	6		14					14:30	183		212				
02:45	6	43	9	56			99	14:45	218	802	209	825			1627
03:00	5		3					15:00	211		199				
03:15	11		11					15:15	208		205				
03:30	16		7					15:30	213		207				
03:45	16	48	10	31			79	15:45	212	844	226	837			1681
04:00	17		12					16:00	240		230				
04:15	13		12					16:15	233		193				
04:30	18		13					16:30	247		234				
04:45	19	67	19	56			123	16:45	249	969	204	861			1830
05:00	16		29					17:00	254		209				
05:15	34		28					17:15	294		225				
05:30	38		47					17:30	264		185				
05:45	72	160	38	142			302	17:45	185	997	220	839			1836
06:00	49		58					18:00	175		205				
06:15	57		61					18:15	172		158				
06:30	80		79					18:30	148		175				
06:45	104	290	98	296			586	18:45	144	639	144	682			1321
07:00	97		100					19:00	142		175				
07:15	115		139					19:15	143		147				
07:30	143		124					19:30	127		140				
07:45	136	491	117	480			971	19:45	151	563	169	631			1194
08:00	144		128					20:00	92		127				
08:15	161		113					20:15	102		133				
08:30	129		97					20:30	67		127				
08:45	148	582	106	444			1026	20:45	76	337	120	507			844
09:00	150		107					21:00	79		121				
09:15	182		142					21:15	84		87				
09:30	179		163					21:30	58		99				
09:45	176	687	131	543			1230	21:45	55	276	77	384			660
10:00	159		127					22:00	54		76				
10:15	180		139					22:15	41		53				
10:30	184		148					22:30	35		40				
10:45	189	712	167	581			1293	22:45	31	161	48	217			378
11:00	205		182					23:00	29		41				
11:15	236		178					23:15	20		26				
11:30	265		201					23:30	34		39				
11:45	248	954	228	789			1743	23:45	23	106	32	138			244
Total Vol.	4173		3593				**7766**		7564		7653				**15217**

	NB	SB	EB	WB	Total
Daily Totals :	**11,737**	**11,246**	**0**	**0**	**22,983**

	AM			PM			
Split %	53.7%	46.3%	**33.8%**		49.7%	50.3%	**66.2%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	12:15	**16:30**
Volume	988	854	**1842**	**Volume**	1061	917	**1916**
P.H.F.	0.925	0.936	**0.955**	**P.H.F.**	0.902	0.828	**0.923**
7 - 9 Vol.	1073	924	**1997**	**4 - 6 Vol.**	1966	1700	**3666**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	584	508	**1066**	**Volume**	1061	872	**1916**
P.H.F.	0.907	0.914	**0.973**	**P.H.F.**	0.902	0.932	**0.923**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-087

Location: Mission Bay Dr. btwn. I-8 EB On Ramp & Sports Arena Blvd.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	29		33					12:00	269		213				
00:15	37		32					12:15	297		241				
00:30	25		31					12:30	289		248				
00:45	27	118	14	110			228	12:45	298	1153	252	954			2107
01:00	23		31					13:00	273		249				
01:15	27		22					13:15	314		230				
01:30	21		27					13:30	298		230				
01:45	18	89	23	103			192	13:45	298	1183	253	962			2145
02:00	22		16					14:00	303		239				
02:15	19		12					14:15	295		219				
02:30	20		19					14:30	274		205				
02:45	13	74	8	55			129	14:45	284	1156	224	887			2043
03:00	9		18					15:00	252		235				
03:15	7		9					15:15	296		260				
03:30	18		8					15:30	270		240				
03:45	22	56	11	46			102	15:45	265	1083	262	997			2080
04:00	15		11					16:00	312		251				
04:15	18		12					16:15	306		285				
04:30	16		11					16:30	296		276				
04:45	23	72	25	59			131	16:45	279	1193	257	1069			2262
05:00	28		23					17:00	360		274				
05:15	31		33					17:15	292		320				
05:30	40		25					17:30	288		289				
05:45	64	163	79	160			323	17:45	282	1222	303	1186			2408
06:00	81		60					18:00	276		298				
06:15	95		77					18:15	257		274				
06:30	132		90					18:30	252		228				
06:45	136	444	121	348			792	18:45	263	1048	225	1025			2073
07:00	177		157					19:00	260		215				
07:15	202		183					19:15	212		192				
07:30	233		192					19:30	229		180				
07:45	250	862	246	778			1640	19:45	209	910	170	757			1667
08:00	204		209					20:00	217		153				
08:15	205		199					20:15	197		153				
08:30	208		209					20:30	187		144				
08:45	240	857	200	817			1674	20:45	158	759	136	586			1345
09:00	218		232					21:00	163		140				
09:15	225		213					21:15	136		110				
09:30	262		203					21:30	165		96				
09:45	249	954	235	883			1837	21:45	140	604	98	444			1048
10:00	219		228					22:00	129		71				
10:15	241		244					22:15	111		65				
10:30	222		214					22:30	104		71				
10:45	230	912	230	916			1828	22:45	99	443	64	271			714
11:00	217		233					23:00	67		69				
11:15	214		241					23:15	67		59				
11:30	215		225					23:30	55		42				
11:45	228	874	236	935			1809	23:45	30	219	44	214			433
Total Vol.		5475		5210			**10685**			10973		9352			**20325**

Daily Totals

NB	SB	EB	WB	Combined
16448	14562			**31010**

	AM			PM		
Split %	51.2%	48.8%	**34.5%**	54.0%	46.0%	**65.5%**
Peak Hour	11:45	11:45	**11:45**	16:15	17:15	**17:00**
Volume	1083	938	**2021**	1241	1210	**2408**
P.H.F.	0.91	0.95	**0.94**	0.86	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-090

Location: Sports Arena Blvd. btwn. Midway Dr. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		21			12:00			144		148		
00:15			14		21			12:15			135		137		
00:30			6		16			12:30			163		142		
00:45			5	33	14	72	105	12:45			141	583	141	568	1151
01:00			7		10			13:00			148		167		
01:15			4		7			13:15			137		161		
01:30			4		1			13:30			156		158		
01:45			3	18	9	27	45	13:45			152	593	155	641	1234
02:00			6		9			14:00			150		152		
02:15			5		7			14:15			139		140		
02:30			2		3			14:30			140		133		
02:45			2	15	3	22	37	14:45			147	576	139	564	1140
03:00			7		5			15:00			133		146		
03:15			6		7			15:15			139		180		
03:30			6		4			15:30			163		158		
03:45			6	25	5	21	46	15:45			152	587	166	650	1237
04:00			4		6			16:00			162		169		
04:15			4		4			16:15			142		171		
04:30			6		8			16:30			171		215		
04:45			8	22	8	26	48	16:45			143	618	166	721	1339
05:00			10		7			17:00			155		213		
05:15			12		5			17:15			164		220		
05:30			25		17			17:30			155		194		
05:45			32	79	12	41	120	17:45			173	647	168	795	1442
06:00			32		20			18:00			159		197		
06:15			42		22			18:15			156		175		
06:30			62		32			18:30			178		155		
06:45			71	207	51	125	332	18:45			140	633	150	677	1310
07:00			78		62			19:00			134		152		
07:15			109		61			19:15			153		152		
07:30			115		57			19:30			119		137		
07:45			135	437	57	237	674	19:45			116	522	156	597	1119
08:00			140		65			20:00			117		123		
08:15			139		80			20:15			105		133		
08:30			122		96			20:30			82		120		
08:45			145	546	91	332	878	20:45			74	378	115	491	869
09:00			124		79			21:00			78		103		
09:15			139		109			21:15			55		104		
09:30			133		122			21:30			36		90		
09:45			154	550	126	436	986	21:45			40	209	83	380	589
10:00			147		139			22:00			29		84		
10:15			141		133			22:15			27		59		
10:30			152		130			22:30			30		68		
10:45			133	573	128	530	1103	22:45			19	105	51	262	367
11:00			130		124			23:00			14		143		
11:15			128		147			23:15			20		55		
11:30			124		152			23:30			24		26		
11:45			147	529	163	586	1115	23:45			14	72	17	241	313
Total Vol.				3034		2455	**5489**					5523		6587	**12110**

Daily Totals

NB	SB	EB	WB	Combined
		8557	9042	**17599**

	AM			PM		
Split %	55.3%	44.7%	**31.2%**	45.6%	54.4%	**68.8%**
Peak Hour	09:45	11:15	**11:45**	17:45	16:30	**16:30**
Volume	594	610	**1179**	666	814	**1447**
P.H.F.	0.96	0.94	**0.95**	0.94	0.93	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-091

Location: Sports Arena Blvd. btwn. Kemper St. & East Dr.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			26		15			12:00			122		130		
00:15			14		15			12:15			131		133		
00:30			11		15			12:30			128		139		
00:45			10	61	13	58	119	12:45			133	514	143	545	1059
01:00			5		12			13:00			130		141		
01:15			5		5			13:15			163		147		
01:30			4		3			13:30			139		154		
01:45			8	22	8	28	50	13:45			155	587	166	608	1195
02:00			9		4			14:00			154		196		
02:15			5		3			14:15			174		185		
02:30			1		3			14:30			155		174		
02:45			1	16	0	10	26	14:45			156	639	187	742	1381
03:00			4		3			15:00			166		188		
03:15			0		9			15:15			198		174		
03:30			6		9			15:30			187		154		
03:45			10	20	8	29	49	15:45			174	725	165	681	1406
04:00			12		6			16:00			188		166		
04:15			5		3			16:15			204		158		
04:30			10		10			16:30			218		162		
04:45			9	36	12	31	67	16:45			213	823	165	651	1474
05:00			14		5			17:00			237		185		
05:15			14		6			17:15			246		200		
05:30			20		29			17:30			216		166		
05:45			31	79	39	79	158	17:45			231	930	179	730	1660
06:00			27		32			18:00			222		178		
06:15			30		37			18:15			244		188		
06:30			68		48			18:30			224		171		
06:45			62	187	67	184	371	18:45			206	896	166	703	1599
07:00			78		76			19:00			213		162		
07:15			101		53			19:15			194		129		
07:30			129		77			19:30			191		115		
07:45			117	425	72	278	703	19:45			185	783	101	507	1290
08:00			126		103			20:00			163		97		
08:15			124		83			20:15			159		110		
08:30			132		93			20:30			140		88		
08:45			135	517	98	377	894	20:45			148	610	70	365	975
09:00			148		86			21:00			121		73		
09:15			147		117			21:15			131		61		
09:30			127		122			21:30			135		62		
09:45			128	550	121	446	996	21:45			112	499	51	247	746
10:00			114		120			22:00			103		56		
10:15			128		122			22:15			73		44		
10:30			133		147			22:30			103		45		
10:45			130	505	124	513	1018	22:45			110	389	48	193	582
11:00			128		128			23:00			253		80		
11:15			124		133			23:15			102		36		
11:30			141		139			23:30			55		29		
11:45			143	536	163	563	1099	23:45			29	439	22	167	606
Total Vol.				2954		2596	**5550**					7834		6139	**13973**

Daily Totals

NB	SB	EB	WB	Combined
		10788	8735	**19523**

	AM			PM		
Split %	53.2%	46.8%	**28.4%**	56.1%	43.9%	**71.6%**
Peak Hour	08:30	11:15	**11:30**	17:00	14:00	**17:00**
Volume	562	565	**1102**	930	742	**1660**
P.H.F.	0.95	0.87	**0.90**	0.95	0.95	**0.93**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
SPORTS ARENA BL	[ROSECRANS ST - EAST DR]	03100 - 03300	1211	EAST	:	14780	6/15/2005	0296-05
				WEST	:	14640	6/15/2005	0296-05
				*TOTAL	:	29420		
				EAST	:	13620	7/29/2008	0315-08
				WEST	:	13160	7/29/2008	0315-08
				*TOTAL	:	26780		
SPORTS ARENA BL	[KEMPER ST - HANCOCK ST]	03600 - 03800	1210	EAST	:	11200	6/25/1990	0976-90
				WEST	:	10300	6/25/1990	0977-90
				*TOTAL	:	21500		
				EAST	:	9400	6/18/1991	0853-91
				WEST	:	7900	6/18/1991	0854-91
				*TOTAL	:	17300		
				EAST	:	8400	9/15/1994	0672-94
				WEST	:	8600	9/15/1994	0673-94
				*TOTAL	:	17000		
				EAST	:	9600	6/17/1997	0370-97
				WEST	:	9500	6/17/1997	0371-97
				*TOTAL	:	19100		
				EAST	:	9780	6/9/2005	0292-05
				WEST	:	9590	6/9/2005	0292-05
				*TOTAL	:	19370		
				EAST	:	8105	6/15/2010	MC0511-1
				WEST	:	8655	6/15/2010	MC0511-1
				*TOTAL	:	16760		
				EAST	:	7475	1/11/2011	MC1210-1
				WEST	:	8145	1/11/2011	MC1210-1
				*TOTAL	:	15620		
SPORTS ARENA BL	[HANCOCK ST - W PT LOMA BL]	03800 - 03900	1213	EAST	:	10000	6/25/1990	1001-90
				WEST	:	11200	6/25/1990	1002-90
				*TOTAL	:	21200		
				EAST	:	10600	6/26/1991	0952-91
				WEST	:	16300	6/26/1991	0953-91

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-092

Location: Sports Arena Blvd. btwn. Rosecrans St. & Enterprise St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			44		24		
00:15			2		2			12:15			33		28		
00:30			0		0			12:30			36		24		
00:45			0	2	4	7	9	12:45			37	150	21	97	247
01:00			0		3			13:00			31		28		
01:15			2		0			13:15			31		24		
01:30			0		0			13:30			30		26		
01:45			1	3	1	4	7	13:45			36	128	22	100	228
02:00			0		4			14:00			30		20		
02:15			0		0			14:15			29		24		
02:30			2		2			14:30			20		21		
02:45			0	2	8	14	16	14:45			30	109	14	79	188
03:00			2		1			15:00			17		19		
03:15			0		1			15:15			20		22		
03:30			1		3			15:30			18		20		
03:45			3	6	3	8	14	15:45			19	74	28	89	163
04:00			0		2			16:00			25		24		
04:15			0		4			16:15			33		32		
04:30			2		0			16:30			31		39		
04:45			0	2	2	8	10	16:45			18	107	35	130	237
05:00			2		2			17:00			14		54		
05:15			0		2			17:15			9		74		
05:30			1		8			17:30			15		45		
05:45			4	7	4	16	23	17:45			21	59	50	223	282
06:00			5		5			18:00			14		21		
06:15			2		3			18:15			26		28		
06:30			3		1			18:30			13		21		
06:45			6	16	1	10	26	18:45			16	69	14	84	153
07:00			10		11			19:00			9		16		
07:15			13		10			19:15			11		13		
07:30			15		14			19:30			15		11		
07:45			15	53	8	43	96	19:45			8	43	10	50	93
08:00			13		11			20:00			6		8		
08:15			12		10			20:15			7		7		
08:30			9		14			20:30			6		5		
08:45			18	52	19	54	106	20:45			10	29	3	23	52
09:00			30		13			21:00			2		2		
09:15			15		18			21:15			3		1		
09:30			19		11			21:30			9		4		
09:45			22	86	10	52	138	21:45			4	18	1	8	26
10:00			31		14			22:00			3		5		
10:15			22		42			22:15			3		2		
10:30			22		32			22:30			11		1		
10:45			31	106	28	116	222	22:45			0	17	4	12	29
11:00			28		24			23:00			7		1		
11:15			29		25			23:15			2		5		
11:30			32		24			23:30			3		2		
11:45			33	122	16	89	211	23:45			2	14	3	11	25
Total Vol.				457		421	**878**					817		906	**1723**

Daily Totals

NB	SB	EB	WB	Combined
		1274	1327	**2601**

	AM			PM		
Split %	52.1%	47.9%	**33.8%**	47.4%	52.6%	**66.2%**
Peak Hour	11:45	10:15	**11:45**	12:00	17:00	**17:00**
Volume	146	126	**238**	150	223	**282**
P.H.F.	0.83	0.75	**0.88**	0.85	0.75	**0.85**

Volumes for: Thursday, August 19, 2010 City: San Diego Project #: 10-4243-049

Location: Kurtz St (STATION#1873/FILE#MC0742-10) between Riley St & Greenwood St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		14				12:00		130			
00:15		8				12:15		127			
00:30		15				12:30		107			
00:45		11	48		48	12:45		105	469		469
01:00		9				13:00		110			
01:15		4				13:15		91			
01:30		4				13:30		104			
01:45		6	23		23	13:45		94	399		399
02:00		5				14:00		83			
02:15		6				14:15		100			
02:30		4				14:30		89			
02:45		2	17		17	14:45		90	362		362
03:00		5				15:00		109			
03:15		5				15:15		110			
03:30		8				15:30		117			
03:45		5	23		23	15:45		115	451		451
04:00		13				16:00		145			
04:15		22				16:15		116			
04:30		15				16:30		128			
04:45		12	62		62	16:45		121	510		510
05:00		12				17:00		154			
05:15		9				17:15		113			
05:30		14				17:30		105			
05:45		18	53		53	17:45		97	469		469
06:00		23				18:00		93			
06:15		21				18:15		71			
06:30		34				18:30		53			
06:45		28	106		106	18:45		47	264		264
07:00		39				19:00		43			
07:15		45				19:15		38			
07:30		66				19:30		45			
07:45		57	207		207	19:45		27	153		153
08:00		61				20:00		30			
08:15		68				20:15		42			
08:30		60				20:30		30			
08:45		69	258		258	20:45		21	123		123
09:00		57				21:00		21			
09:15		73				21:15		25			
09:30		86				21:30		27			
09:45		77	293		293	21:45		26	99		99
10:00		92				22:00		18			
10:15		89				22:15		19			
10:30		116				22:30		18			
10:45		98	395		395	22:45		15	70		70
11:00		105				23:00		18			
11:15		102				23:15		16			
11:30		103				23:30		12			
11:45		116	426		426	23:45		10	56		56
Total Vol.			1911		**1911**				3425		**3425**

Daily Totals

NB	SB	EB	WB	Combined
	5336			**5336**

	AM		PM	
Split %	100.0%	**35.8%**	100.0%	**64.2%**
Peak Hour	11:45	**11:45**	16:15	**16:15**
Volume	480	**480**	519	**519**
P.H.F.	0.92	**0.92**	0.84	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-084

Location: Kurtz St. btwn. Rosecrans St. & Pacific Highway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		8					12:00	82		48				
00:15	8		1					12:15	54		71				
00:30	6		2					12:30	68		59				
00:45	7	23	1	12			35	12:45	58	262	88	266			528
01:00	3		9					13:00	73		68				
01:15	3		1					13:15	38		88				
01:30	2		4					13:30	54		81				
01:45	5	13	5	19			32	13:45	50	215	91	328			543
02:00	2		4					14:00	53		73				
02:15	4		2					14:15	42		80				
02:30	5		1					14:30	49		67				
02:45	7	18	4	11			29	14:45	51	195	79	299			494
03:00	7		1					15:00	56		78				
03:15	10		6					15:15	49		63				
03:30	7		2					15:30	65		55				
03:45	6	30	2	11			41	15:45	65	235	50	246			481
04:00	2		5					16:00	60		54				
04:15	11		4					16:15	61		41				
04:30	3		7					16:30	53		45				
04:45	18	34	3	19			53	16:45	58	232	65	205			437
05:00	9		8					17:00	67		51				
05:15	18		4					17:15	66		38				
05:30	23		3					17:30	49		46				
05:45	36	86	5	20			106	17:45	52	234	46	181			415
06:00	41		3					18:00	44		35				
06:15	58		19					18:15	41		54				
06:30	52		22					18:30	47		34				
06:45	72	223	24	68			291	18:45	28	160	69	192			352
07:00	50		24					19:00	30		66				
07:15	62		29					19:15	16		37				
07:30	58		33					19:30	31		45				
07:45	71	241	30	116			357	19:45	27	104	44	192			296
08:00	59		54					20:00	25		42				
08:15	59		41					20:15	27		28				
08:30	59		45					20:30	23		48				
08:45	62	239	55	195			434	20:45	19	94	23	141			235
09:00	47		42					21:00	12		33				
09:15	57		24					21:15	9		25				
09:30	48		29					21:30	12		24				
09:45	49	201	33	128			329	21:45	16	49	22	104			153
10:00	54		47					22:00	11		24				
10:15	56		37					22:15	8		20				
10:30	54		60					22:30	7		22				
10:45	64	228	31	175			403	22:45	11	37	13	79			116
11:00	63		58					23:00	8		8				
11:15	65		45					23:15	8		5				
11:30	54		65					23:30	4		6				
11:45	72	254	65	233			487	23:45	5	25	3	22			47
Total Vol.		1590		1007			**2597**			1842		2255			**4097**

Daily Totals

NB	SB	EB	WB	Combined
3432	3262			**6694**

	AM			PM		
Split %	61.2%	38.8%	**38.8%**	45.0%	55.0%	**61.2%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:15	**12:45**
Volume	276	249	**519**	262	333	**548**
P.H.F.	0.84	0.88	**0.95**	0.80	0.91	**0.94**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-001

Location: Hancock St(STATION#1878/FILE#MC0592-10) between Channel Wy & Sports Arena Blvd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	60		36				
00:15	5		3					12:15	53		44				
00:30	3		2					12:30	66		41				
00:45	0	11	1	12			23	12:45	41	220	42	163			383
01:00	0		2					13:00	33		51				
01:15	1		1					13:15	43		42				
01:30	1		1					13:30	42		33				
01:45	1	3	1	5			8	13:45	46	164	30	156			320
02:00	3		1					14:00	49		42				
02:15	0		2					14:15	56		34				
02:30	1		0					14:30	42		40				
02:45	1	5	2	5			10	14:45	42	189	37	153			342
03:00	2		3					15:00	46		40				
03:15	2		0					15:15	54		32				
03:30	1		2					15:30	51		24				
03:45	3	8	1	6			14	15:45	41	192	26	122			314
04:00	1		1					16:00	56		29				
04:15	1		4					16:15	38		19				
04:30	2		2					16:30	47		23				
04:45	2	6	8	15			21	16:45	60	201	23	94			295
05:00	3		6					17:00	51		21				
05:15	2		2					17:15	48		17				
05:30	3		2					17:30	48		23				
05:45	4	12	16	26			38	17:45	28	175	21	82			257
06:00	6		10					18:00	30		18				
06:15	7		14					18:15	39		19				
06:30	6		21					18:30	25		18				
06:45	11	30	24	69			99	18:45	24	118	14	69			187
07:00	20		27					19:00	25		21				
07:15	17		23					19:15	16		15				
07:30	21		24					19:30	11		19				
07:45	18	76	37	111			187	19:45	17	69	14	69			138
08:00	20		50					20:00	14		10				
08:15	21		36					20:15	14		9				
08:30	18		28					20:30	12		13				
08:45	21	80	35	149			229	20:45	7	47	13	45			92
09:00	29		41					21:00	11		9				
09:15	29		29					21:15	9		4				
09:30	23		27					21:30	9		9				
09:45	30	111	24	121			232	21:45	6	35	12	34			69
10:00	43		35					22:00	8		13				
10:15	39		40					22:15	6		10				
10:30	30		25					22:30	6		7				
10:45	41	153	31	131			284	22:45	4	24	3	33			57
11:00	47		28					23:00	1		2				
11:15	40		33					23:15	8		2				
11:30	38		32					23:30	4		5				
11:45	51	176	31	124			300	23:45	2	15	2	11			26
Total Vol.		671		774			**1445**			1449		1031			**2480**

Daily Totals

NB	SB	EB	WB	Combined
2120	1805			**3925**

	AM			PM		
Split %	46.4%	53.6%	**36.8%**	58.4%	41.6%	**63.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:00**
Volume	230	152	**382**	220	178	**383**
P.H.F.	0.87	0.86	**0.89**	0.93	0.87	**0.89**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-076

Location: Hancock St. btwn. Greenwood St. & Riley St. (one way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	12					12:00	72				
00:15	12					12:15	105				
00:30	5					12:30	83				
00:45	9	38			38	12:45	106	366			366
01:00	7					13:00	93				
01:15	9					13:15	89				
01:30	11					13:30	80				
01:45	9	36			36	13:45	80	342			342
02:00	10					14:00	69				
02:15	19					14:15	75				
02:30	17					14:30	77				
02:45	11	57			57	14:45	67	288			288
03:00	9					15:00	82				
03:15	10					15:15	90				
03:30	8					15:30	76				
03:45	25	52			52	15:45	91	339			339
04:00	4					16:00	67				
04:15	16					16:15	72				
04:30	7					16:30	67				
04:45	22	49			49	16:45	42	248			248
05:00	20					17:00	58				
05:15	21					17:15	54				
05:30	31					17:30	52				
05:45	54	126			126	17:45	47	211			211
06:00	42					18:00	41				
06:15	55					18:15	44				
06:30	50					18:30	35				
06:45	79	226			226	18:45	52	172			172
07:00	89					19:00	24				
07:15	88					19:15	21				
07:30	69					19:30	21				
07:45	108	354			354	19:45	32	98			98
08:00	119					20:00	33				
08:15	101					20:15	32				
08:30	105					20:30	19				
08:45	97	422			422	20:45	26	110			110
09:00	96					21:00	28				
09:15	81					21:15	17				
09:30	62					21:30	18				
09:45	92	331			331	21:45	25	88			88
10:00	98					22:00	19				
10:15	81					22:15	13				
10:30	74					22:30	20				
10:45	78	331			331	22:45	17	69			69
11:00	70					23:00	18				
11:15	72					23:15	27				
11:30	85					23:30	9				
11:45	68	295			295	23:45	9	63			63
Total Vol.		2317			**2317**		2394				**2394**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
	4711				**4711**

	AM		PM	
Split %	100.0%	**49.2%**	100.0%	**50.8%**
Peak Hour	07:45	**07:45**	12:15	**12:15**
Volume	433	**433**	387	**387**
P.H.F.	0.91	**0.91**	0.91	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-077

Location: Hancock St. btwn. Gaines St. & Rosecrans St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	4					12:00	57				
00:15	8					12:15	69				
00:30	3					12:30	64				
00:45	6	21			21	12:45	69	259			259
01:00	3					13:00	49				
01:15	4					13:15	66				
01:30	5					13:30	42				
01:45	3	15			15	13:45	60	217			217
02:00	3					14:00	47				
02:15	6					14:15	52				
02:30	7					14:30	62				
02:45	5	21			21	14:45	67	228			228
03:00	5					15:00	73				
03:15	6					15:15	78				
03:30	1					15:30	63				
03:45	8	20			20	15:45	66	280			280
04:00	4					16:00	62				
04:15	9					16:15	76				
04:30	3					16:30	78				
04:45	12	28			28	16:45	71	287			287
05:00	6					17:00	70				
05:15	12					17:15	64				
05:30	17					17:30	41				
05:45	24	59			59	17:45	48	223			223
06:00	14					18:00	64				
06:15	22					18:15	38				
06:30	27					18:30	34				
06:45	33	96			96	18:45	33	169			169
07:00	32					19:00	25				
07:15	40					19:15	20				
07:30	45					19:30	24				
07:45	38	155			155	19:45	26	95			95
08:00	65					20:00	21				
08:15	42					20:15	15				
08:30	7					20:30	20				
08:45	0	114			114	20:45	16	72			72
09:00	0					21:00	20				
09:15	5					21:15	14				
09:30	30					21:30	19				
09:45	43	78			78	21:45	9	62			62
10:00	55					22:00	11				
10:15	54					22:15	13				
10:30	42					22:30	11				
10:45	53	204			204	22:45	6	41			41
11:00	39					23:00	5				
11:15	51					23:15	13				
11:30	64					23:30	5				
11:45	59	213			213	23:45	8	31			31
Total Vol.		1024			**1024**		1964				**1964**

Daily Totals

NB	SB	EB	WB	**Combined**
2988				**2988**

	AM		PM	
Split %	100.0%	**34.3%**	100.0%	**65.7%**
Peak Hour	11:30	**11:30**	16:15	**16:15**
Volume	249	**249**	295	**295**
P.H.F.	0.90	**0.90**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Hancock St (STATION#2603/FILE#MC0428-10)	Project:	10-4169-016	0	0	5,774	3,903	9,677

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			7	9		12:00			81	65	
00:15			5	9		12:15			88	68	
00:30			6	3		12:30			94	66	
00:45			3 21	7 28	49	12:45			90 353	54 253	606
01:00			5	6		13:00			66	68	
01:15			1	7		13:15			101	71	
01:30			3	2		13:30			85	67	
01:45			4 13	1 16	29	13:45			88 340	57 263	603
02:00			2	0		14:00			60	73	
02:15			0	6		14:15			65	92	
02:30			4	1		14:30			70	53	
02:45			3 9	0 7	16	14:45			75 270	73 291	561
03:00			4	2		15:00			65	72	
03:15			2	3		15:15			70	92	
03:30			6	2		15:30			74	94	
03:45			6 18	1 8	26	15:45			77 286	95 353	639
04:00			9	2		16:00			97	154	
04:15			14	2		16:15			92	114	
04:30			18	3		16:30			88	112	
04:45			26 67	3 10	77	16:45			88 365	92 472	837
05:00			36	4		17:00			97	106	
05:15			44	4		17:15			113	74	
05:30			71	6		17:30			111	80	
05:45			80 231	7 21	252	17:45			69 390	68 328	718
06:00			113	9		18:00			68	83	
06:15			148	12		18:15			58	70	
06:30			168	15		18:30			48	85	
06:45			198 627	15 51	678	18:45			60 234	58 296	530
07:00			151	25		19:00			48	46	
07:15			168	33		19:15			46	35	
07:30			165	37		19:30			43	48	
07:45			153 637	30 125	762	19:45			27 164	53 182	346
08:00			110	38		20:00			45	57	
08:15			86	36		20:15			30	53	
08:30			97	32		20:30			47	40	
08:45			90 383	39 145	528	20:45			30 152	67 217	369
09:00			90	39		21:00			32	39	
09:15			85	41		21:15			28	26	
09:30			80	45		21:30			19	27	
09:45			92 347	34 159	506	21:45			20 99	44 136	235
10:00			70	49		22:00			18	24	
10:15			71	45		22:15			14	12	
10:30			81	52		22:30			14	11	
10:45			81 303	63 209	512	22:45			9 55	7 54	109
11:00			100	68		23:00			11	7	
11:15			89	62		23:15			13	6	
11:30			99	57		23:30			9	2	
11:45			80 368	71 258	626	23:45			9 42	6 21	63
Total Vol.			3024	1037	**4061**				2750	2866	**5616**

	NB	SB	EB	WB	Total
Daily Totals :	0	0	5,774	3,903	9,677

	AM			PM		
Split %	74.5%	25.5%	**42.0%**	49.0%	51.0%	**58.0%**
AM				**PM**		
Peak Hr.	06:30	11:45	**06:45**	**Peak Hr.**	16:45	15:45	**16:00**
Volume	685	270	**792**	**Volume**	409	475	**837**
P.H.F.	0.865	0.951	**0.930**	**P.H.F.**	0.905	0.771	**0.834**
7 - 9 Vol.	1020	270	**1290**	**4 - 6 Vol.**	755	800	**1555**
Peak Hr.	07:00	08:00	**07:00**	**Peak Hr.**	16:45	16:00	**16:00**
Volume	637	145	**762**	**Volume**	409	472	**837**
P.H.F.	0.948	0.929	**0.943**	**P.H.F.**	0.905	0.766	**0.834**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-078

Location: Hancock St. btwn. Witherby St. & Noell St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		2					12:00	19		31				
00:15	1		2					12:15	17		42				
00:30	0		2					12:30	20		34				
00:45	0	3	1	7			10	12:45	16	72	26	133			205
01:00	1		1					13:00	22		29				
01:15	0		0					13:15	18		38				
01:30	2		0					13:30	12		42				
01:45	0	3	4	5			8	13:45	20	72	38	147			219
02:00	1		1					14:00	19		33				
02:15	0		0					14:15	17		32				
02:30	0		1					14:30	10		36				
02:45	0	1	1	3			4	14:45	11	57	29	130			187
03:00	0		1					15:00	19		47				
03:15	2		1					15:15	18		22				
03:30	2		1					15:30	8		42				
03:45	1	5	7	10			15	15:45	16	61	44	155			216
04:00	1		6					16:00	29		28				
04:15	2		1					16:15	25		20				
04:30	2		0					16:30	19		27				
04:45	0	5	3	10			15	16:45	14	87	39	114			201
05:00	1		6					17:00	18		54				
05:15	2		1					17:15	15		34				
05:30	5		6					17:30	19		24				
05:45	4	12	15	28			40	17:45	12	64	29	141			205
06:00	4		21					18:00	21		21				
06:15	1		18					18:15	45		23				
06:30	4		20					18:30	11		23				
06:45	5	14	25	84			98	18:45	11	88	18	85			173
07:00	11		23					19:00	7		21				
07:15	12		23					19:15	10		22				
07:30	5		46					19:30	11		18				
07:45	14	42	23	115			157	19:45	6	34	17	78			112
08:00	18		17					20:00	17		6				
08:15	7		31					20:15	9		9				
08:30	7		45					20:30	3		10				
08:45	11	43	20	113			156	20:45	7	36	4	29			65
09:00	9		49					21:00	6		6				
09:15	13		23					21:15	4		4				
09:30	10		38					21:30	13		10				
09:45	19	51	33	143			194	21:45	7	30	4	24			54
10:00	18		27					22:00	4		8				
10:15	17		33					22:15	4		5				
10:30	27		20					22:30	7		1				
10:45	21	83	19	99			182	22:45	1	16	1	15			31
11:00	18		28					23:00	1		2				
11:15	18		23					23:15	2		1				
11:30	20		34					23:30	0		4				
11:45	11	67	31	116			183	23:45	0	3	2	9			12
Total Vol.		329		733			**1062**			620		1060			**1680**

Daily Totals

NB	SB	EB	WB	Combined
949	1793			**2742**

	AM			PM		
Split %	31.0%	69.0%	**38.7%**	36.9%	63.1%	**61.3%**
Peak Hour	10:30	08:15	**11:30**	17:30	15:00	**13:15**
Volume	84	145	**205**	97	155	**220**
P.H.F.	0.78	0.74	**0.87**	0.54	0.82	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-079

Location: Kettner Blvd. btwn. Washington St. & Vine St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		55				12:00		380			
00:15		43				12:15		381			
00:30		28				12:30		400			
00:45		37	163		163	12:45		316	1477		1477
01:00		20				13:00		342			
01:15		19				13:15		341			
01:30		10				13:30		306			
01:45		14	63		63	13:45		303	1292		1292
02:00		18				14:00		326			
02:15		9				14:15		319			
02:30		6				14:30		304			
02:45		8	41		41	14:45		316	1265		1265
03:00		10				15:00		310			
03:15		10				15:15		281			
03:30		32				15:30		325			
03:45		22	74		74	15:45		306	1222		1222
04:00		63				16:00		333			
04:15		75				16:15		470			
04:30		141				16:30		470			
04:45		232	511		511	16:45		409	1682		1682
05:00		238				17:00		460			
05:15		298				17:15		439			
05:30		239				17:30		356			
05:45		279	1054		1054	17:45		356	1611		1611
06:00		233				18:00		348			
06:15		231				18:15		335			
06:30		255				18:30		299			
06:45		265	984		984	18:45		331	1313		1313
07:00		251				19:00		280			
07:15		284				19:15		271			
07:30		309				19:30		268			
07:45		360	1204		1204	19:45		279	1098		1098
08:00		367				20:00		253			
08:15		355				20:15		267			
08:30		378				20:30		244			
08:45		382	1482		1482	20:45		239	1003		1003
09:00		356				21:00		216			
09:15		381				21:15		221			
09:30		360				21:30		180			
09:45		407	1504		1504	21:45		179	796		796
10:00		344				22:00		148			
10:15		350				22:15		156			
10:30		353				22:30		147			
10:45		375	1422		1422	22:45		119	570		570
11:00		370				23:00		119			
11:15		396				23:15		77			
11:30		400				23:30		69			
11:45		379	1545		1545	23:45		81	346		346
Total Vol.			10047		**10047**				13675		**13675**

Daily Totals

NB	SB	EB	WB	Combined
	23722			**23722**

	AM		PM	
Split %	100.0%	**42.4%**	100.0%	**57.6%**
Peak Hour	11:15	**11:15**	16:15	**16:15**
Volume	1555	**1555**	1809	**1809**
P.H.F.	0.97	**0.97**	0.96	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-080

Location: Kettner Blvd. btwn. Vine St. & Sassafras St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		53				12:00		373			
00:15		47				12:15		377			
00:30		27				12:30		403			
00:45		36	163		163	12:45		382	1535		1535
01:00		23				13:00		349			
01:15		20				13:15		341			
01:30		11				13:30		305			
01:45		15	69		69	13:45		305	1300		1300
02:00		20				14:00		343			
02:15		10				14:15		324			
02:30		6				14:30		312			
02:45		9	45		45	14:45		317	1296		1296
03:00		10				15:00		300			
03:15		9				15:15		283			
03:30		28				15:30		318			
03:45		17	64		64	15:45		297	1198		1198
04:00		54				16:00		328			
04:15		68				16:15		463			
04:30		126				16:30		469			
04:45		216	464		464	16:45		399	1659		1659
05:00		213				17:00		450			
05:15		273				17:15		428			
05:30		207				17:30		353			
05:45		242	935		935	17:45		376	1607		1607
06:00		212				18:00		342			
06:15		215				18:15		329			
06:30		234				18:30		280			
06:45		239	900		900	18:45		320	1271		1271
07:00		238				19:00		266			
07:15		249				19:15		254			
07:30		292				19:30		250			
07:45		343	1122		1122	19:45		270	1040		1040
08:00		351				20:00		249			
08:15		333				20:15		273			
08:30		342				20:30		238			
08:45		364	1390		1390	20:45		231	991		991
09:00		342				21:00		211			
09:15		362				21:15		200			
09:30		357				21:30		192			
09:45		381	1442		1442	21:45		191	794		794
10:00		349				22:00		147			
10:15		339				22:15		154			
10:30		349				22:30		138			
10:45		369	1406		1406	22:45		124	563		563
11:00		366				23:00		114			
11:15		371				23:15		75			
11:30		402				23:30		64			
11:45		348	1487		1487	23:45		81	334		334
Total Vol.			9487		**9487**				13588		**13588**

Daily Totals

NB	SB	EB	WB	Combined
	23075			**23075**

	AM		PM	
Split %	100.0%	**41.1%**	100.0%	**58.9%**
Peak Hour	10:45	**10:45**	16:15	**16:15**
Volume	1508	**1508**	1781	**1781**
P.H.F.	0.94	**0.94**	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-081

Location: Kettner Blvd. btwn. Redwood St. & Palm St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		42				12:00		280			
00:15		32				12:15		337			
00:30		30				12:30		275			
00:45		23	127		127	12:45		310	1202		1202
01:00		17				13:00		291			
01:15		12				13:15		269			
01:30		11				13:30		276			
01:45		16	56		56	13:45		280	1116		1116
02:00		9				14:00		264			
02:15		8				14:15		276			
02:30		7				14:30		267			
02:45		9	33		33	14:45		264	1071		1071
03:00		9				15:00		247			
03:15		27				15:15		275			
03:30		20				15:30		272			
03:45		53	109		109	15:45		294	1088		1088
04:00		72				16:00		414			
04:15		100				16:15		397			
04:30		168				16:30		354			
04:45		177	517		517	16:45		410	1575		1575
05:00		222				17:00		383			
05:15		190				17:15		326			
05:30		214				17:30		290			
05:45		195	821		821	17:45		304	1303		1303
06:00		182				18:00		302			
06:15		230				18:15		240			
06:30		232				18:30		272			
06:45		209	853		853	18:45		235	1049		1049
07:00		232				19:00		239			
07:15		257				19:15		214			
07:30		317				19:30		222			
07:45		317	1123		1123	19:45		200	875		875
08:00		335				20:00		212			
08:15		304				20:15		208			
08:30		326				20:30		194			
08:45		316	1281		1281	20:45		187	801		801
09:00		297				21:00		177			
09:15		314				21:15		164			
09:30		357				21:30		144			
09:45		306	1274		1274	21:45		132	617		617
10:00		302				22:00		155			
10:15		281				22:15		133			
10:30		329				22:30		122			
10:45		317	1229		1229	22:45		106	516		516
11:00		331				23:00		57			
11:15		320				23:15		57			
11:30		311				23:30		69			
11:45		318	1280		1280	23:45		47	230		230
Total Vol.			8703		**8703**				11443		**11443**

Daily Totals

NB	SB	EB	WB	Combined
	20146			**20146**

	AM		PM	
Split %	100.0%	**43.2%**	100.0%	**56.8%**
Peak Hour	10:30	**10:30**	16:00	**16:00**
Volume	1297	**1297**	1575	**1575**
P.H.F.	0.98	**0.98**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just N/o Taylor St	Project:	10-4143-036	4,318	3,139	0	0	7,457

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		6					12:00	88		58				
00:15	11		3					12:15	58		67				
00:30	7		3					12:30	68		69				
00:45	5	32	1	13			45	12:45	84	298	57	251			549
01:00	5		3					13:00	50		43				
01:15	1		2					13:15	70		52				
01:30	2		3					13:30	69		32				
01:45	4	12	1	9			21	13:45	74	263	65	192			455
02:00	3		1					14:00	75		41				
02:15	6		3					14:15	62		55				
02:30	4		0					14:30	61		44				
02:45	1	14	1	5			19	14:45	69	267	50	190			457
03:00	3		0					15:00	75		43				
03:15	2		1					15:15	66		71				
03:30	3		3					15:30	70		59				
03:45	8	16	5	9			25	15:45	96	307	61	234			541
04:00	2		7					16:00	136		52				
04:15	3		4					16:15	154		60				
04:30	10		5					16:30	129		49				
04:45	7	22	11	27			49	16:45	139	558	42	203			761
05:00	10		5					17:00	103		66				
05:15	9		12					17:15	110		69				
05:30	15		20					17:30	120		65				
05:45	24	58	19	56			114	17:45	87	420	64	264			684
06:00	28		19					18:00	63		67				
06:15	22		32					18:15	46		40				
06:30	31		47					18:30	45		43				
06:45	46	127	53	151			278	18:45	30	184	30	180			364
07:00	41		53					19:00	33		28				
07:15	31		47					19:15	33		23				
07:30	51		64					19:30	44		21				
07:45	50	173	63	227			400	19:45	32	142	17	89			231
08:00	38		61					20:00	31		18				
08:15	48		44					20:15	23		12				
08:30	44		50					20:30	33		16				
08:45	44	174	52	207			381	20:45	26	113	8	54			167
09:00	46		61					21:00	34		15				
09:15	60		53					21:15	33		8				
09:30	64		62					21:30	31		8				
09:45	56	226	59	235			461	21:45	33	131	8	39			170
10:00	59		59					22:00	38		8				
10:15	59		58					22:15	40		11				
10:30	79		52					22:30	20		9				
10:45	81	278	40	209			487	22:45	25	123	11	39			162
11:00	58		54					23:00	30		8				
11:15	79		55					23:15	13		6				
11:30	86		77					23:30	14		4				
11:45	73	296	49	235			531	23:45	27	84	3	21			105
Total Vol.		1428		1383			**2811**			2890		1756			**4646**

	NB	SB	EB	WB	Total
Daily Totals :	**4,318**	**3,139**	**0**	**0**	**7,457**

	AM			PM			
Split %	50.8%	49.2%	**37.7%**	62.2%	37.8%		**62.3%**
AM				**PM**			
Peak Hr.	11:15	11:30	**11:15**	**Peak Hr.**	16:00	17:15	**16:00**
Volume	326	251	**565**	**Volume**	558	265	**761**
P.H.F.	0.926	0.815	**0.867**	**P.H.F.**	0.906	0.960	**0.889**
7 - 9 Vol.	347	434	**781**	**4 - 6 Vol.**	978	467	**1445**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:00	17:00	**16:00**
Volume	187	235	**419**	**Volume**	558	264	**761**
P.H.F.	0.917	0.918	**0.911**	**P.H.F.**	0.906	0.957	**0.889**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just S/o Taylor St	Project: 10-4143-037	8,122	5,199	0	0	13,321

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		3					12:00	120		82				
00:15	11		2					12:15	111		80				
00:30	11		5					12:30	103		82				
00:45	10	38	8	18			56	12:45	105	439	93	337			776
01:00	4		5					13:00	101		91				
01:15	3		5					13:15	96		86				
01:30	4		2					13:30	108		84				
01:45	2	13	2	14			27	13:45	121	426	85	346			772
02:00	4		4					14:00	108		84				
02:15	7		0					14:15	133		73				
02:30	3		1					14:30	150		84				
02:45	0	14	5	10			24	14:45	170	561	82	323			884
03:00	4		2					15:00	188		85				
03:15	4		2					15:15	194		81				
03:30	6		4					15:30	251		112				
03:45	12	26	6	14			40	15:45	224	857	90	368			1225
04:00	4		8					16:00	284		90				
04:15	1		6					16:15	263		88				
04:30	7		13					16:30	288		97				
04:45	9	21	26	53			74	16:45	289	1124	83	358			1482
05:00	23		19					17:00	283		82				
05:15	20		26					17:15	322		83				
05:30	34		34					17:30	242		75				
05:45	44	121	86	165			286	17:45	175	1022	82	322			1344
06:00	33		66					18:00	151		72				
06:15	53		109					18:15	113		58				
06:30	77		111					18:30	94		53				
06:45	70	233	115	401			634	18:45	80	438	57	240			678
07:00	91		121					19:00	83		44				
07:15	89		133					19:15	62		40				
07:30	86		120					19:30	54		42				
07:45	85	351	115	489			840	19:45	52	251	33	159			410
08:00	87		95					20:00	61		31				
08:15	95		82					20:15	50		38				
08:30	93		83					20:30	40		28				
08:45	96	371	95	355			726	20:45	39	190	28	125			315
09:00	92		77					21:00	28		26				
09:15	89		72					21:15	39		16				
09:30	104		82					21:30	33		17				
09:45	91	376	57	288			664	21:45	31	131	18	77			208
10:00	94		59					22:00	30		11				
10:15	101		68					22:15	37		16				
10:30	99		80					22:30	23		19				
10:45	110	404	91	298			702	22:45	24	114	16	62			176
11:00	113		71					23:00	25		14				
11:15	148		82					23:15	19		8				
11:30	138		84					23:30	11		13				
11:45	132	531	100	337			868	23:45	15	70	5	40			110
Total Vol.		2499		2442			**4941**			5623		2757			**8380**

	NB	SB	EB	WB	Total
Daily Totals :	8,122	5,199	0	0	13,321

	AM			PM			
Split %	50.6%	49.4%	**37.1%**		67.1%	32.9%	**62.9%**
AM				**PM**			
Peak Hr.	11:15	06:45	**11:15**	**Peak Hr.**	16:30	15:30	**16:30**
Volume	538	489	**886**	**Volume**	1182	380	**1527**
P.H.F.	0.909	0.919	**0.955**	**P.H.F.**	0.918	0.848	**0.943**
7 - 9 Vol.	722	844	**1566**	**4 - 6 Vol.**	2146	680	**2826**
Peak Hr.	08:00	07:00	**07:00**	**Peak Hr.**	16:30	16:00	**16:30**
Volume	371	489	**840**	**Volume**	1182	358	**1527**
P.H.F.	0.966	0.919	**0.946**	**P.H.F.**	0.918	0.923	**0.943**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-045

Location: Pacific Hy (STATION#2653/FILE#MC1190-10) between Sports Arena Blvd & Kurtz St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	12		12					12:00	164		209				
00:15	7		9					12:15	168		221				
00:30	10		9					12:30	157		269				
00:45	7	36	13	43			79	12:45	157	646	247	946			1592
01:00	12		22					13:00	181		246				
01:15	14		10					13:15	168		233				
01:30	4		10					13:30	173		215				
01:45	6	36	10	52			88	13:45	146	668	211	905			1573
02:00	5		7					14:00	154		209				
02:15	13		4					14:15	155		209				
02:30	6		0					14:30	159		215				
02:45	10	34	6	17			51	14:45	165	633	224	857			1490
03:00	6		9					15:00	174		204				
03:15	13		2					15:15	194		231				
03:30	9		16					15:30	224		256				
03:45	11	39	7	34			73	15:45	196	788	243	934			1722
04:00	9		12					16:00	218		253				
04:15	20		27					16:15	194		252				
04:30	15		28					16:30	227		296				
04:45	33	77	27	94			171	16:45	232	871	287	1088			1959
05:00	17		36					17:00	223		268				
05:15	35		41					17:15	274		233				
05:30	51		64					17:30	256		204				
05:45	86	189	91	232			421	17:45	195	948	195	900			1848
06:00	56		90					18:00	139		191				
06:15	77		98					18:15	112		153				
06:30	90		126					18:30	91		156				
06:45	145	368	151	465			833	18:45	91	433	146	646			1079
07:00	130		128					19:00	77		127				
07:15	141		146					19:15	62		99				
07:30	150		178					19:30	57		98				
07:45	162	583	193	645			1228	19:45	55	251	92	416			667
08:00	183		188					20:00	62		83				
08:15	180		192					20:15	43		69				
08:30	163		144					20:30	52		74				
08:45	148	674	156	680			1354	20:45	47	204	68	294			498
09:00	145		127					21:00	50		77				
09:15	149		145					21:15	33		71				
09:30	138		143					21:30	50		72				
09:45	165	597	156	571			1168	21:45	39	172	60	280			452
10:00	141		150					22:00	28		43				
10:15	135		169					22:15	40		60				
10:30	158		133					22:30	30		44				
10:45	137	571	169	621			1192	22:45	24	122	38	185			307
11:00	173		166					23:00	28		28				
11:15	190		175					23:15	23		22				
11:30	152		204					23:30	17		47				
11:45	149	664	212	757			1421	23:45	18	86	20	117			203
Total Vol.		3868		4211			**8079**			5822		7568			**13390**

Daily Totals

NB	SB	EB	WB	Combined
9690	11779			**21469**

	AM			PM		
Split %	47.9%	52.1%	**37.6%**	43.5%	56.5%	**62.4%**
Peak Hour	07:45	11:45	**11:45**	16:45	16:15	**16:30**
Volume	688	911	**1549**	985	1103	**2040**
P.H.F.	0.94	0.85	**0.91**	0.92	0.93	**0.98**

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-001
Location: Pacific Hwy between Barnett Ave & Enterprise St File No. MC0305-10

Start	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	0			16	195				
12:15	0	0			12	204				
12:30	0	0			15	196				
12:45	0	0			16	189	59	784		
1:00	0	0			9	198				
1:15	0	0			7	175				
1:30	0	0			8	195				
1:45	0	0			6	177	30	745		
2:00	0	0			12	212				
2:15	0	0			5	200				
2:30	0	0			3	282				
2:45	0	0			5	219	25	913		
3:00	0	0			8	260				
3:15	0	0			6	206				
3:30	0	0			4	278				
3:45	0	0			8	253	26	997		
4:00	0	0			13	300				
4:15	0	0			19	259				
4:30	0	0			28	343				
4:45	0	0			15	308	75	1210		
5:00	0	0			20	290				
5:15	0	0			27	236				
5:30	0	0			38	207				
5:45	0	0			33	196	118	929		
6:00	0	0			45	209				
6:15	0	0			35	173				
6:30	0	0			53	176				
6:45	0	0			66	190	199	748		
7:00	0	0			85	167				
7:15	0	0			92	167				
7:30	0	0			97	149				
7:45	0	0			102	165	376	648		
8:00	0	0			98	136				
8:15	0	0			108	152				
8:30	0	0			105	135				
8:45	0	0			101	122	412	545		
9:00	0	0			107	160				
9:15	0	0			110	124				
9:30	0	0			124	132	0			
9:45	0	0			132	114	473	530		
10:00	0	0			139	95				
10:15	0	0			146	89				
10:30	0	0			139	79				
10:45	0	0			160	74	584	337		
11:00	0	0			167	49				
11:15	0	0			165	34				
11:30	0	0			191	58				
11:45	0	0			147	28	670	169		
Total	0	0	0	0	3047	8555	3047	8555	0	0
Combined Total	0		0		11602		11602		0	
AM Peak					11:45 AM					
Vol.					742					
P.H.F.					0.909					
PM Peak						4:00 PM				
Vol.						1210				
P.H.F.						0.882				
Percentage					26.3%	73.7%				

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-073

Location: Pacific Highway btwn. Barnett Ave. & Washington St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	40		69					12:00	471		401				
00:15	35		43					12:15	456		459				
00:30	44		31					12:30	424		443				
00:45	22	141	36	179			320	12:45	417	1768	470	1773			3541
01:00	19		33					13:00	382		438				
01:15	21		33					13:15	391		482				
01:30	15		20					13:30	431		426				
01:45	17	72	18	104			176	13:45	378	1582	478	1824			3406
02:00	22		22					14:00	369		459				
02:15	16		17					14:15	379		493				
02:30	14		19					14:30	398		524				
02:45	30	82	15	73			155	14:45	439	1585	525	2001			3586
03:00	22		19					15:00	445		582				
03:15	31		14					15:15	440		555				
03:30	30		25					15:30	449		709				
03:45	56	139	25	83			222	15:45	482	1816	721	2567			4383
04:00	46		30					16:00	459		775				
04:15	100		87					16:15	431		699				
04:30	108		104					16:30	434		748				
04:45	158	412	133	354			766	16:45	464	1788	649	2871			4659
05:00	208		139					17:00	443		697				
05:15	322		166					17:15	479		583				
05:30	289		185					17:30	425		560				
05:45	355	1174	210	700			1874	17:45	407	1754	534	2374			4128
06:00	347		228					18:00	335		488				
06:15	420		221					18:15	310		404				
06:30	494		185					18:30	301		387				
06:45	543	1804	215	849			2653	18:45	282	1228	339	1618			2846
07:00	607		242					19:00	221		353				
07:15	573		260					19:15	201		308				
07:30	546		319					19:30	205		288				
07:45	613	2339	302	1123			3462	19:45	190	817	262	1211			2028
08:00	592		308					20:00	160		249				
08:15	550		353					20:15	169		244				
08:30	496		411					20:30	165		243				
08:45	476	2114	304	1376			3490	20:45	126	620	224	960			1580
09:00	404		322					21:00	121		204				
09:15	375		296					21:15	112		198				
09:30	335		312					21:30	124		186				
09:45	417	1531	304	1234			2765	21:45	126	483	154	742			1225
10:00	355		304					22:00	109		146				
10:15	380		358					22:15	104		142				
10:30	346		343					22:30	113		112				
10:45	380	1461	326	1331			2792	22:45	101	427	87	487			914
11:00	360		354					23:00	62		80				
11:15	398		369					23:15	79		66				
11:30	412		400					23:30	53		94				
11:45	454	1624	408	1531			3155	23:45	63	257	62	302			559
Total Vol.		12893		8937			**21830**			14125		18730			**32855**

Daily Totals

NB	SB	EB	WB	Combined
27018	27667			**54685**

	AM			PM		
Split %	59.1%	40.9%	**39.9%**	43.0%	57.0%	**60.1%**
Peak Hour	07:00	11:45	**07:45**	15:15	15:45	**15:45**
Volume	2339	1711	**3625**	1830	2943	**4749**
P.H.F.	0.95	0.93	**0.99**	0.95	0.95	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-074

Location: Pacific Highway btwn. Washington St. & Sassafras St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	14		6					12:00	145		67				
00:15	12		6					12:15	148		92				
00:30	15		2					12:30	147		88				
00:45	10	51	5	19			70	12:45	139	579	75	322			901
01:00	7		7					13:00	130		90				
01:15	9		2					13:15	120		92				
01:30	6		5					13:30	115		80				
01:45	8	30	2	16			46	13:45	133	498	91	353			851
02:00	5		2					14:00	124		77				
02:15	3		1					14:15	116		72				
02:30	4		6					14:30	130		102				
02:45	2	14	3	12			26	14:45	143	513	94	345			858
03:00	6		5					15:00	117		83				
03:15	7		2					15:15	114		98				
03:30	1		2					15:30	109		65				
03:45	7	21	5	14			35	15:45	146	486	95	341			827
04:00	6		2					16:00	117		102				
04:15	11		8					16:15	131		87				
04:30	10		13					16:30	130		96				
04:45	14	41	16	39			80	16:45	116	494	81	366			860
05:00	18		14					17:00	128		118				
05:15	22		21					17:15	175		94				
05:30	20		28					17:30	134		95				
05:45	24	84	16	79			163	17:45	125	562	80	387			949
06:00	27		16					18:00	110		97				
06:15	33		15					18:15	87		73				
06:30	59		31					18:30	97		64				
06:45	58	177	37	99			276	18:45	73	367	54	288			655
07:00	56		32					19:00	81		50				
07:15	55		36					19:15	88		55				
07:30	89		67					19:30	82		61				
07:45	91	291	56	191			482	19:45	66	317	67	233			550
08:00	82		40					20:00	59		50				
08:15	84		66					20:15	62		43				
08:30	89		66					20:30	79		47				
08:45	100	355	49	221			576	20:45	46	246	47	187			433
09:00	112		71					21:00	41		50				
09:15	79		60					21:15	52		29				
09:30	103		75					21:30	54		29				
09:45	119	413	73	279			692	21:45	45	192	28	136			328
10:00	108		53					22:00	49		29				
10:15	120		81					22:15	53		21				
10:30	100		62					22:30	45		12				
10:45	126	454	74	270			724	22:45	46	193	12	74			267
11:00	117		73					23:00	32		13				
11:15	136		83					23:15	25		9				
11:30	137		79					23:30	24		12				
11:45	150	540	83	318			858	23:45	13	94	10	44			138
Total Vol.		2471		1557			**4028**			4541		3076			**7617**

Daily Totals

NB	SB	EB	WB	Combined
7012	4633			**11645**

	AM			PM		
Split %	61.3%	38.7%	**34.6%**	59.6%	40.4%	**65.4%**
Peak Hour	11:45	11:45	**11:45**	12:00	16:30	**17:00**
Volume	590	330	**920**	579	389	**949**
P.H.F.	0.98	0.90	**0.96**	0.98	0.82	**0.88**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-044

Location: Pacific Hy (STATION#2657/FILE#MC1189-10) between Palm St & Sassafras St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	38		24					12:00	169		184				
00:15	17		20					12:15	154		151				
00:30	31		22					12:30	168		189				
00:45	26	112	31	97			209	12:45	150	641	178	702			1343
01:00	38		22					13:00	157		165				
01:15	26		20					13:15	170		172				
01:30	17		9					13:30	182		181				
01:45	8	89	8	59			148	13:45	149	658	178	696			1354
02:00	11		8					14:00	171		133				
02:15	6		3					14:15	154		140				
02:30	7		5					14:30	168		165				
02:45	4	28	3	19			47	14:45	165	658	152	590			1248
03:00	2		7					15:00	151		123				
03:15	1		1					15:15	170		153				
03:30	3		8					15:30	149		137				
03:45	7	13	16	32			45	15:45	192	662	142	555			1217
04:00	14		18					16:00	154		173				
04:15	15		33					16:15	156		172				
04:30	19		49					16:30	168		174				
04:45	30	78	71	171			249	16:45	159	637	222	741			1378
05:00	28		79					17:00	167		235				
05:15	30		83					17:15	199		199				
05:30	51		76					17:30	178		194				
05:45	51	160	75	313			473	17:45	141	685	191	819			1504
06:00	55		79					18:00	139		172				
06:15	50		91					18:15	115		147				
06:30	63		105					18:30	92		139				
06:45	63	231	121	396			627	18:45	110	456	121	579			1035
07:00	67		117					19:00	107		129				
07:15	80		131					19:15	92		104				
07:30	93		146					19:30	63		94				
07:45	112	352	151	545			897	19:45	78	340	85	412			752
08:00	116		143					20:00	84		102				
08:15	121		168					20:15	77		73				
08:30	105		144					20:30	73		96				
08:45	124	466	138	593			1059	20:45	91	325	74	345			670
09:00	102		114					21:00	84		76				
09:15	157		158					21:15	90		75				
09:30	119		149					21:30	93		76				
09:45	142	520	131	552			1072	21:45	85	352	64	291			643
10:00	117		134					22:00	94		62				
10:15	155		156					22:15	84		62				
10:30	161		133					22:30	53		51				
10:45	144	577	139	562			1139	22:45	53	284	28	203			487
11:00	164		153					23:00	52		26				
11:15	148		166					23:15	46		23				
11:30	149		196					23:30	37		16				
11:45	155	616	189	704			1320	23:45	31	166	9	74			240
Total Vol.		3242		4043			**7285**			5864		6007			**11871**

Daily Totals

	NB	SB	EB	WB	Combined
	9106	10050			**19156**

	AM			PM		
Split %	44.5%	55.5%	**38.0%**	49.4%	50.6%	**62.0%**
Peak Hour	11:45	11:15	**11:45**	16:45	16:45	**16:45**
Volume	646	735	**1359**	703	850	**1553**
P.H.F.	0.96	0.94	**0.95**	0.91	0.90	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-069

Location: Congress St. btwn. Taylor St. & Twiggs St.

AM Period	NB		SB		EB	WB	PM Period	NB		SB		EB	WB	
00:00	6		4				12:00	45		34				
00:15	4		5				12:15	32		23				
00:30	2		3				12:30	28		24				
00:45	5	17	2	14		31	12:45	37	142	31	112			254
01:00	2		6				13:00	37		38				
01:15	1		2				13:15	32		37				
01:30	2		0				13:30	40		27				
01:45	1	6	1	9		15	13:45	37	146	47	149			295
02:00	2		1				14:00	32		38				
02:15	0		0				14:15	38		40				
02:30	1		4				14:30	33		42				
02:45	1	4	1	6		10	14:45	44	147	44	164			311
03:00	2		0				15:00	37		43				
03:15	0		1				15:15	41		47				
03:30	1		2				15:30	34		40				
03:45	1	4	1	4		8	15:45	34	146	37	167			313
04:00	3		2				16:00	44		40				
04:15	2		1				16:15	35		26				
04:30	3		5				16:30	41		32				
04:45	2	10	1	9		19	16:45	32	152	36	134			286
05:00	3		0				17:00	57		27				
05:15	6		4				17:15	52		34				
05:30	4		4				17:30	47		40				
05:45	11	24	3	11		35	17:45	40	196	40	141			337
06:00	11		4				18:00	36		39				
06:15	5		12				18:15	34		55				
06:30	7		6				18:30	50		46				
06:45	11	34	14	36		70	18:45	37	157	63	203			360
07:00	16		20				19:00	28		58				
07:15	16		14				19:15	31		36				
07:30	27		20				19:30	35		27				
07:45	19	78	29	83		161	19:45	24	118	26	147			265
08:00	26		15				20:00	41		24				
08:15	17		20				20:15	39		19				
08:30	21		13				20:30	49		28				
08:45	25	89	43	91		180	20:45	38	167	16	87			254
09:00	26		31				21:00	39		18				
09:15	30		17				21:15	49		20				
09:30	27		37				21:30	39		11				
09:45	18	101	34	119		220	21:45	21	148	13	62			210
10:00	21		36				22:00	15		17				
10:15	24		25				22:15	16		11				
10:30	23		33				22:30	18		7				
10:45	19	87	29	123		210	22:45	11	60	6	41			101
11:00	25		32				23:00	10		7				
11:15	29		28				23:15	9		4				
11:30	20		37				23:30	11		6				
11:45	28	102	25	122		224	23:45	7	37	6	23			60
Total Vol.		556		627		**1183**			1616		1430			**3046**

Daily Totals

NB	SB	EB	WB	Combined
2172	2057			**4229**

	AM			PM		
Split %	47.0%	53.0%	**28.0%**	53.1%	46.9%	**72.0%**
Peak Hour	11:45	09:30	**11:15**	17:00	18:15	**18:15**
Volume	133	132	**246**	196	222	**371**
P.H.F.	0.74	0.89	**0.78**	0.86	0.88	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-070

Location: Congress St. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	8		6					12:00	49		47				
00:15	1		6					12:15	34		25				
00:30	1		5					12:30	36		25				
00:45	4	14	3	20			34	12:45	30	149	43	140			289
01:00	2		3					13:00	42		51				
01:15	0		2					13:15	24		42				
01:30	1		0					13:30	38		42				
01:45	1	4	1	6			10	13:45	30	134	36	171			305
02:00	1		0					14:00	22		43				
02:15	0		1					14:15	26		30				
02:30	1		3					14:30	31		33				
02:45	2	4	1	5			9	14:45	38	117	39	145			262
03:00	0		1					15:00	32		33				
03:15	4		3					15:15	30		40				
03:30	1		1					15:30	30		48				
03:45	1	6	0	5			11	15:45	32	124	51	172			296
04:00	0		1					16:00	42		46				
04:15	2		1					16:15	27		34				
04:30	1		4					16:30	30		32				
04:45	2	5	2	8			13	16:45	36	135	40	152			287
05:00	4		3					17:00	56		35				
05:15	5		2					17:15	54		35				
05:30	5		4					17:30	41		38				
05:45	10	24	3	12			36	17:45	35	186	45	153			339
06:00	12		5					18:00	29		42				
06:15	5		12					18:15	39		55				
06:30	9		7					18:30	44		55				
06:45	11	37	14	38			75	18:45	37	149	57	209			358
07:00	16		13					19:00	30		65				
07:15	17		16					19:15	31		48				
07:30	26		21					19:30	31		36				
07:45	19	78	24	74			152	19:45	39	131	15	164			295
08:00	19		17					20:00	59		14				
08:15	13		21					20:15	64		12				
08:30	22		17					20:30	67		19				
08:45	23	77	36	91			168	20:45	46	236	16	61			297
09:00	27		31					21:00	52		20				
09:15	34		24					21:15	54		21				
09:30	29		32					21:30	49		14				
09:45	33	123	28	115			238	21:45	36	191	18	73			264
10:00	32		29					22:00	31		13				
10:15	27		31					22:15	21		4				
10:30	24		36					22:30	14		12				
10:45	13	96	13	109			205	22:45	9	75	8	37			112
11:00	54		18					23:00	11		8				
11:15	35		29					23:15	5		3				
11:30	28		43					23:30	9		6				
11:45	38	155	26	116			271	23:45	6	31	6	23			54
Total Vol.		623		599			**1222**			1658		1500			**3158**

Daily Totals

	NB	SB	EB	WB	Combined
	2281	2099			**4380**

	AM			PM		
Split %	51.0%	49.0%	**27.9%**	52.5%	47.5%	**72.1%**
Peak Hour	11:45	11:15	**11:15**	20:00	18:15	**18:15**
Volume	157	145	**295**	236	232	**382**
P.H.F.	0.80	0.77	**0.77**	0.88	0.89	**0.96**

Prepared by NDS/ATD

Volumes for: Thursday, October 28, 2010 | **City: San Diego**

Location: Congress St (STATION#2466/FILE#MC0940-10) | **Project: 10-4300-021**

Daily Totals	NB	SB	EB	WB	Total
	1,891	2,392	0	0	4,283

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		3					12:00	42		38				
00:15	2		4					12:15	37		35				
00:30	3		1					12:30	36		45				
00:45	2	7	0	8	15			12:45	39	154	58	176			330
01:00	0		5					13:00	30		39				
01:15	1		1					13:15	29		47				
01:30	4		3					13:30	37		39				
01:45	0	5	1	10	15			13:45	28	124	54	179			303
02:00	2		0					14:00	19		37				
02:15	0		2					14:15	23		40				
02:30	0		1					14:30	27		46				
02:45	0	2	0	3	5			14:45	34	103	41	164			267
03:00	1		3					15:00	19		36				
03:15	2		5					15:15	36		32				
03:30	5		2					15:30	30		44				
03:45	3	11	4	14	25			15:45	30	115	56	168			283
04:00	0		2					16:00	33		47				
04:15	1		0					16:15	34		38				
04:30	1		0					16:30	46		65				
04:45	2	4	3	5	9			16:45	58	171	58	208			379
05:00	2		0					17:00	48		55				
05:15	2		3					17:15	45		46				
05:30	7		3					17:30	48		54				
05:45	6	17	5	11	28			17:45	40	181	39	194			375
06:00	3		13					18:00	37		44				
06:15	14		12					18:15	52		36				
06:30	10		13					18:30	23		53				
06:45	22	49	17	55	104			18:45	31	143	41	174			317
07:00	11		13					19:00	18		39				
07:15	17		25					19:15	23		42				
07:30	23		35					19:30	16		31				
07:45	17	68	38	111	179			19:45	25	82	40	152			234
08:00	34		18					20:00	16		32				
08:15	23		17					20:15	17		24				
08:30	31		36					20:30	23		26				
08:45	41	129	32	103	232			20:45	15	71	36	118			189
09:00	24		28					21:00	13		30				
09:15	39		28					21:15	9		12				
09:30	30		31					21:30	14		29				
09:45	22	115	31	118	233			21:45	15	51	30	101			152
10:00	30		30					22:00	14		18				
10:15	33		38					22:15	6		16				
10:30	23		19					22:30	7		14				
10:45	36	122	28	115	237			22:45	3	30	10	58			88
11:00	27		33					23:00	3		17				
11:15	26		28					23:15	0		7				
11:30	29		29					23:30	2		3				
11:45	49	131	27	117	248			23:45	1	6	3	30			36
Total Vol.		660		670	**1330**					1231		1722			**2953**

	NB	SB	EB	WB	Total
Daily Totals :	**1,891**	**2,392**	**0**	**0**	**4,283**

	AM			PM			
Split %	49.6%	50.4%	**31.1%**	41.7%	58.3%		**68.9%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	164	145	**309**	**Volume**	199	224	**421**
P.H.F.	0.837	0.806	**0.954**	**P.H.F.**	0.858	0.862	**0.907**
7 - 9 Vol.	197	214	**411**	**4 - 6 Vol.**	352	402	**754**
Peak Hr.	08:00	07:15	**08:00**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	129	116	**232**	**Volume**	199	224	**421**
P.H.F.	0.787	0.763	**0.795**	**P.H.F.**	0.858	0.862	**0.907**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-067

Location: San Diego Ave. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		0					12:00	22		32				
00:15	2		2					12:15	20		39				
00:30	2		1					12:30	17		38				
00:45	3	11	6	9			20	12:45	19	78	37	146			224
01:00	1		4					13:00	13		38				
01:15	1		3					13:15	18		38				
01:30	2		0					13:30	18		34				
01:45	1	5	0	7			12	13:45	17	66	36	146			212
02:00	6		3					14:00	19		33				
02:15	1		0					14:15	33		39				
02:30	1		1					14:30	30		34				
02:45	0	8	0	4			12	14:45	35	117	31	137			254
03:00	0		0					15:00	28		34				
03:15	0		1					15:15	24		38				
03:30	2		1					15:30	29		42				
03:45	0	2	0	2			4	15:45	33	114	40	154			268
04:00	1		0					16:00	30		43				
04:15	1		3					16:15	32		39				
04:30	0		1					16:30	22		34				
04:45	0	2	2	6			8	16:45	36	120	25	141			261
05:00	2		3					17:00	51		27				
05:15	2		1					17:15	60		26				
05:30	6		0					17:30	55		30				
05:45	3	13	1	5			18	17:45	41	207	31	114			321
06:00	2		0					18:00	46		43				
06:15	5		5					18:15	27		36				
06:30	7		1					18:30	38		43				
06:45	5	19	7	13			32	18:45	47	158	40	162			320
07:00	12		5					19:00	29		23				
07:15	10		5					19:15	36		34				
07:30	19		13					19:30	28		21				
07:45	12	53	17	40			93	19:45	31	124	13	91			215
08:00	24		16					20:00	39		15				
08:15	11		18					20:15	34		15				
08:30	22		18					20:30	23		17				
08:45	37	94	23	75			169	20:45	25	121	14	61			182
09:00	31		23					21:00	29		24				
09:15	22		20					21:15	26		13				
09:30	26		20					21:30	19		14				
09:45	35	114	23	86			200	21:45	29	103	7	58			161
10:00	37		28					22:00	23		10				
10:15	28		28					22:15	14		8				
10:30	22		26					22:30	18		7				
10:45	20	107	26	108			215	22:45	19	74	15	40			114
11:00	24		24					23:00	6		7				
11:15	29		20					23:15	9		7				
11:30	22		22					23:30	4		4				
11:45	20	95	19	85			180	23:45	3	22	3	21			43
Total Vol.		523		440			**963**			1304		1271			**2575**

Daily Totals

NB	SB	EB	WB	Combined
1827	1711			**3538**

	AM			PM		
Split %	54.3%	45.7%	**27.2%**	50.6%	49.4%	**72.8%**
Peak Hour	09:30	11:45	**09:45**	17:00	15:30	**17:15**
Volume	126	128	**227**	207	164	**332**
P.H.F.	0.85	0.82	**0.87**	0.86	0.95	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-068

Location: San Diego Ave. btwn. Conde St. & Arista St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		2					12:00	25		29				
00:15	3		3					12:15	21		33				
00:30	1		1					12:30	28		30				
00:45	2	11	6	12			23	12:45	32	106	28	120			226
01:00	3		7					13:00	30		24				
01:15	2		3					13:15	33		21				
01:30	3		4					13:30	29		14				
01:45	3	11	2	16			27	13:45	28	120	19	78			198
02:00	2		2					14:00	32		22				
02:15	1		1					14:15	30		20				
02:30	2		0					14:30	33		24				
02:45	0	5	1	4			9	14:45	39	134	41	107			241
03:00	0		0					15:00	31		52				
03:15	0		1					15:15	44		49				
03:30	1		1					15:30	40		43				
03:45	1	2	0	2			4	15:45	35	150	40	184			334
04:00	2		1					16:00	30		45				
04:15	2		1					16:15	34		47				
04:30	1		2					16:30	32		51				
04:45	6	11	1	5			16	16:45	44	140	55	198			338
05:00	1		5					17:00	54		58				
05:15	3		2					17:15	72		60				
05:30	7		3					17:30	69		52				
05:45	7	18	5	15			33	17:45	61	256	28	198			454
06:00	6		3					18:00	45		48				
06:15	11		1					18:15	33		49				
06:30	14		4					18:30	37		38				
06:45	13	44	19	27			71	18:45	46	161	53	188			349
07:00	24		14					19:00	45		39				
07:15	27		12					19:15	35		42				
07:30	21		18					19:30	38		47				
07:45	35	107	21	65			172	19:45	30	148	46	174			322
08:00	34		15					20:00	36		39				
08:15	23		22					20:15	33		33				
08:30	26		13					20:30	28		38				
08:45	43	126	19	69			195	20:45	28	125	36	146			271
09:00	33		22					21:00	25		45				
09:15	24		30					21:15	24		45				
09:30	38		26					21:30	21		28				
09:45	47	142	13	91			233	21:45	15	85	32	150			235
10:00	35		29					22:00	25		30				
10:15	30		21					22:15	13		13				
10:30	28		19					22:30	16		19				
10:45	29	122	22	91			213	22:45	14	68	23	85			153
11:00	22		16					23:00	9		15				
11:15	20		19					23:15	10		9				
11:30	24		14					23:30	5		11				
11:45	29	95	21	70			165	23:45	3	27	8	43			70
Total Vol.		694		467			**1161**			1520		1671			**3191**

Daily Totals

NB	SB	EB	WB	Combined
2214	2138			**4352**

	AM			PM		
Split %	59.8%	40.2%	**26.7%**	47.6%	52.4%	**73.3%**
Peak Hour	09:30	11:45	**09:15**	17:00	16:45	**16:45**
Volume	150	113	**242**	256	225	**464**
P.H.F.	0.80	0.86	**0.95**	0.89	0.94	**0.88**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: San Diego Ave (STATION#2460/FILE#MC0424-10)	Project:	10-4169-012	5,458	4,702	0	0	10,160

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		16					12:00	106		60				
00:15	7		16					12:15	82		76				
00:30	7		8					12:30	87		72				
00:45	1	20	10	50			70	12:45	92	367	70	278			645
01:00	6		5					13:00	83		69				
01:15	4		4					13:15	86		82				
01:30	3		2					13:30	73		66				
01:45	1	14	1	12			26	13:45	84	326	71	288			614
02:00	2		5					14:00	90		70				
02:15	2		3					14:15	92		83				
02:30	8		5					14:30	111		82				
02:45	0	12	2	15			27	14:45	105	398	87	322			720
03:00	1		2					15:00	99		83				
03:15	4		0					15:15	92		93				
03:30	2		5					15:30	103		87				
03:45	3	10	3	10			20	15:45	113	407	86	349			756
04:00	2		9					16:00	108		86				
04:15	1		2					16:15	123		82				
04:30	4		1					16:30	135		94				
04:45	5	12	3	15			27	16:45	131	497	82	344			841
05:00	3		9					17:00	146		97				
05:15	5		11					17:15	162		100				
05:30	10		9					17:30	119		98				
05:45	11	29	7	36			65	17:45	123	550	100	395			945
06:00	11		9					18:00	122		77				
06:15	16		16					18:15	122		63				
06:30	33		14					18:30	115		77				
06:45	29	89	22	61			150	18:45	96	455	67	284			739
07:00	48		25					19:00	121		90				
07:15	34		28					19:15	82		78				
07:30	50		31					19:30	85		80				
07:45	52	184	32	116			300	19:45	68	356	69	317			673
08:00	58		27					20:00	68		82				
08:15	52		28					20:15	71		65				
08:30	45		32					20:30	65		77				
08:45	78	233	50	137			370	20:45	47	251	105	329			580
09:00	62		39					21:00	31		86				
09:15	59		36					21:15	29		74				
09:30	73		39					21:30	38		101				
09:45	80	274	43	157			431	21:45	27	125	93	354			479
10:00	69		33					22:00	33		106				
10:15	90		49					22:15	27		100				
10:30	81		57					22:30	23		61				
10:45	85	325	57	196			521	22:45	19	102	56	323			425
11:00	79		55					23:00	11		35				
11:15	109		56					23:15	12		19				
11:30	90		59					23:30	5		24				
11:45	110	388	48	218			606	23:45	6	34	18	96			130
Total Vol.		1590		1023			**2613**			3868		3679			**7547**

	NB	SB	EB	WB	Total
Daily Totals :	**5,458**	**4,702**	**0**	**0**	**10,160**

	AM			PM			
Split %	60.8%	39.2%	**25.7%**	51.3%	48.7%		**74.3%**
AM				**PM**			
Peak Hr.	11:15	11:45	**11:45**	**Peak Hr.**	16:30	21:30	**16:30**
Volume	415	256	**641**	**Volume**	574	400	**947**
P.H.F.	0.943	0.842	**0.965**	**P.H.F.**	0.886	0.943	**0.904**
7 - 9 Vol.	417	253	**670**	**4 - 6 Vol.**	1047	739	**1786**
Peak Hr.	08:00	08:00	**08:00**	**Peak Hr.**	16:30	17:00	**16:30**
Volume	233	137	**370**	**Volume**	574	395	**947**
P.H.F.	0.747	0.685	**0.723**	**P.H.F.**	0.886	0.988	**0.904**

Prepared by NDS/ATD

VOLUME

San Diego Ave from Old Town Ave to Witherby St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_004

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	8		2				10		12:00	56		35				91	
00:15	8		7				15		12:15	97		35				132	
00:30	5		3				8		12:30	63		45				108	
00:45	3	24	3	15			6	39	12:45	60	276	54	169			114	445
01:00	2		1				3		13:00	60		44				104	
01:15	4		1				5		13:15	69		39				108	
01:30	1		2				3		13:30	53		30				83	
01:45	2	9	3	7			5	16	13:45	61	243	34	147			95	390
02:00	1		2				3		14:00	39		36				75	
02:15	2		2				4		14:15	48		45				93	
02:30	1		0				1		14:30	53		29				82	
02:45	0	4	2	6			2	10	14:45	58	198	34	144			92	342
03:00	3		0				3		15:00	49		31				80	
03:15	1		0				1		15:15	52		37				89	
03:30	0		1				1		15:30	46		40				86	
03:45	1	5	0	1			1	6	15:45	50	197	32	140			82	337
04:00	1		2				3		16:00	53		29				82	
04:15	2		2				4		16:15	44		33				77	
04:30	4		1				5		16:30	49		38				87	
04:45	3	10	4	9			7	19	16:45	53	199	41	141			94	340
05:00	5		5				10		17:00	59		52				111	
05:15	7		2				9		17:15	60		48				108	
05:30	10		3				13		17:30	53		51				104	
05:45	10	32	3	13			13	45	17:45	47	219	40	191			87	410
06:00	23		4				27		18:00	57		42				99	
06:15	20		8				28		18:15	71		38				109	
06:30	28		9				37		18:30	61		42				103	
06:45	26	97	10	31			36	128	18:45	47	236	44	166			91	402
07:00	26		15				41		19:00	65		45				110	
07:15	39		12				51		19:15	48		36				84	
07:30	52		16				68		19:30	33		42				75	
07:45	77	194	26	69			103	263	19:45	37	183	19	142			56	325
08:00	41		30				71		20:00	34		21				55	
08:15	63		15				78		20:15	44		23				67	
08:30	64		24				88		20:30	29		30				59	
08:45	41	209	28	97			69	306	20:45	22	129	18	92			40	221
09:00	46		33				79		21:00	30		23				53	
09:15	52		26				78		21:15	30		34				64	
09:30	33		35				68		21:30	32		23				55	
09:45	61	192	28	122			89	314	21:45	17	109	17	97			34	206
10:00	45		32				77		22:00	14		16				30	
10:15	45		22				67		22:15	16		13				29	
10:30	47		31				78		22:30	17		12				29	
10:45	44	181	34	119			78	300	22:45	9	56	10	51			19	107
11:00	51		29				80		23:00	14		7				21	
11:15	76		33				109		23:15	15		8				23	
11:30	49		35				84		23:30	7		7				14	
11:45	54	230	32	129			86	359	23:45	4	40	6	28			10	68
TOTALS		1187		618				1805	TOTALS		2085		1508				3593
SPLIT %		65.8%		34.2%				33.4%	SPLIT %		58.0%		42.0%				66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Peak Hour	11:45	11:45	11:45	PM Peak Hour	12:15	16:45	12:15
AM Pk Volume	270	147	417	PM Pk Volume	280	192	458
Pk Hr Factor	0.696	0.817	0.790	Pk Hr Factor	0.722	0.923	0.867
7 - 9 Volume	403	166	569	4 - 6 Volume	418	332	750
7 - 9 Peak Hour	07:45	08:00	07:45	4 - 6 Peak Hour	16:45	16:45	16:45
7 - 9 Pk Volume	245	97	340	4 - 6 Pk Volume	225	192	417
Pk Hr Factor	0.795	0.808	0.825	Pk Hr Factor	0.938	0.923	0.939

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-064

Location: Juan St. btwn. Taylor St. & Mason St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		1			12:00			32		28		
00:15			1		2			12:15			30		24		
00:30			0		1			12:30			29		41		
00:45			1	5	3	7	12	12:45			28	119	45	138	257
01:00			0		0			13:00			32		50		
01:15			3		2			13:15			30		39		
01:30			0		0			13:30			33		35		
01:45			4	7	3	5	12	13:45			41	136	44	168	304
02:00			0		5			14:00			45		46		
02:15			0		2			14:15			48		58		
02:30			1		0			14:30			48		57		
02:45			0	1	0	7	8	14:45			45	186	62	223	409
03:00			2		0			15:00			47		59		
03:15			3		1			15:15			46		70		
03:30			1		0			15:30			38		56		
03:45			0	6	0	1	7	15:45			54	185	73	258	443
04:00			0		4			16:00			47		66		
04:15			1		1			16:15			63		75		
04:30			2		1			16:30			63		52		
04:45			3	6	1	7	13	16:45			66	239	61	254	493
05:00			6		4			17:00			54		69		
05:15			2		7			17:15			50		57		
05:30			3		5			17:30			65		62		
05:45			8	19	14	30	49	17:45			59	228	48	236	464
06:00			6		14			18:00			69		50		
06:15			12		9			18:15			50		50		
06:30			22		18			18:30			44		48		
06:45			20	60	25	66	126	18:45			44	207	46	194	401
07:00			22		31			19:00			44		50		
07:15			21		36			19:15			44		29		
07:30			27		32			19:30			45		34		
07:45			34	104	44	143	247	19:45			34	167	48	161	328
08:00			30		39			20:00			36		28		
08:15			30		52			20:15			22		54		
08:30			26		48			20:30			26		31		
08:45			23	109	46	185	294	20:45			25	109	57	170	279
09:00			34		27			21:00			22		49		
09:15			37		40			21:15			15		25		
09:30			51		31			21:30			16		31		
09:45			33	155	38	136	291	21:45			10	63	25	130	193
10:00			53		49			22:00			11		27		
10:15			48		43			22:15			3		20		
10:30			36		33			22:30			8		19		
10:45			43	180	29	154	334	22:45			8	30	7	73	103
11:00			33		49			23:00			5		13		
11:15			55		38			23:15			3		5		
11:30			49		34			23:30			3		6		
11:45			36	173	20	141	314	23:45			4	15	7	31	46
Total Vol.				825		882	**1707**					1684		2036	**3720**

Daily Totals

NB	SB	EB	W8	**Combined**
		2509	2918	**5427**

	AM			**PM**		
Split %	48.3%	51.7%	**31.5%**	45.3%	54.7%	**68.5%**
Peak Hour	09:30	08:00	**09:30**	16:15	15:30	**16:15**
Volume	185	185	**346**	246	270	**503**
P.H.F.	0.87	0.89	**0.85**	0.93	0.90	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-065

Location: Juan St. btwn. Twiggs St. & Harney St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		4			12:00			39		19		
00:15			0		1			12:15			34		23		
00:30			1		2			12:30			38		20		
00:45			0	3	1	8	11	12:45			42	153	22	84	237
01:00			0		0			13:00			40		18		
01:15			1		4			13:15			43		30		
01:30			0		0			13:30			46		32		
01:45			1	2	2	6	8	13:45			35	164	16	96	260
02:00			1		3			14:00			40		26		
02:15			0		1			14:15			35		27		
02:30			0		0			14:30			44		17		
02:45			0	1	0	4	5	14:45			49	168	27	97	265
03:00			1		1			15:00			49		26		
03:15			1		2			15:15			47		27		
03:30			1		1			15:30			39		22		
03:45			0	3	0	4	7	15:45			40	175	32	107	282
04:00			0		2			16:00			54		32		
04:15			1		2			16:15			58		36		
04:30			1		2			16:30			64		30		
04:45			2	4	2	8	12	16:45			65	241	22	120	361
05:00			3		8			17:00			69		50		
05:15			0		5			17:15			59		52		
05:30			1		2			17:30			63		63		
05:45			7	11	13	28	39	17:45			50	241	41	206	447
06:00			5		7			18:00			70		68		
06:15			10		16			18:15			46		35		
06:30			9		19			18:30			49		57		
06:45			19	43	31	73	116	18:45			38	203	37	197	400
07:00			28		41			19:00			33		53		
07:15			30		41			19:15			41		37		
07:30			38		54			19:30			25		36		
07:45			29	125	53	189	314	19:45			20	119	30	156	275
08:00			33		46			20:00			28		37		
08:15			29		42			20:15			26		35		
08:30			25		52			20:30			27		40		
08:45			23	110	45	185	295	20:45			15	96	20	132	228
09:00			38		43			21:00			16		27		
09:15			30		47			21:15			10		19		
09:30			29		48			21:30			11		25		
09:45			30	127	55	193	320	21:45			8	45	15	86	131
10:00			33		51			22:00			9		14		
10:15			32		56			22:15			7		13		
10:30			44		53			22:30			3		15		
10:45			38	147	71	231	378	22:45			4	23	6	48	71
11:00			39		43			23:00			0		5		
11:15			33		49			23:15			4		7		
11:30			40		41			23:30			2		5		
11:45			34	146	36	169	315	23:45			3	9	7	24	33
Total Vol.				722		1098	**1820**					1637		1353	**2990**

Daily Totals

NB	SB	EB	WB	Combined
		2359	2451	**4810**

	AM			PM		
Split %	39.7%	60.3%	**37.8%**	54.7%	45.3%	**62.2%**
Peak Hour	10:30	10:00	**10:00**	16:30	17:15	**17:15**
Volume	154	231	**378**	257	224	**466**
P.H.F.	0.88	0.81	**0.87**	0.93	0.82	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-066

Location: Juan St. btwn. Harney St. & San Juan Rd.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			1	0		12:00			28	21	
00:15			0	1		12:15			32	24	
00:30			0	2		12:30			30	29	
00:45			0 1	0 3	4	12:45			33 123	30 104	227
01:00			0	3		13:00			29	32	
01:15			1	0		13:15			30	28	
01:30			0	0		13:30			32	21	
01:45			0 1	1 4	5	13:45			24 115	20 101	216
02:00			1	2		14:00			28	26	
02:15			0	1		14:15			27	37	
02:30			0	0		14:30			31	20	
02:45			0 1	0 3	4	14:45			28 114	30 113	227
03:00			0	0		15:00			28	26	
03:15			2	1		15:15			29	33	
03:30			1	0		15:30			22	26	
03:45			0 3	0 1	4	15:45			20 99	24 109	208
04:00			0	2		16:00			19	28	
04:15			1	1		16:15			21	28	
04:30			2	1		16:30			17	24	
04:45			2 5	2 6	11	16:45			15 72	32 112	184
05:00			2	3		17:00			11	31	
05:15			0	3		17:15			15	21	
05:30			0	2		17:30			19	22	
05:45			2 4	7 15	19	17:45			20 65	23 97	162
06:00			2	8		18:00			15	19	
06:15			9	11		18:15			25	22	
06:30			6	11		18:30			24	20	
06:45			12 29	13 43	72	18:45			29 93	17 78	171
07:00			13	27		19:00			22	19	
07:15			18	24		19:15			20	13	
07:30			20	32		19:30			21	11	
07:45			24 75	39 122	197	19:45			14 77	10 53	130
08:00			29	28		20:00			19	14	
08:15			22	25		20:15			13	18	
08:30			20	43		20:30			11	13	
08:45			24 95	29 125	220	20:45			10 53	11 56	109
09:00			26	21		21:00			14	10	
09:15			26	22		21:15			9	8	
09:30			32	25		21:30			7	6	
09:45			28 112	39 107	219	21:45			7 37	6 30	67
10:00			24	29		22:00			5	9	
10:15			29	31		22:15			5	6	
10:30			28	18		22:30			6	5	
10:45			24 105	27 105	210	22:45			2 18	2 22	40
11:00			29	25		23:00			0	2	
11:15			33	19		23:15			3	3	
11:30			30	24		23:30			1	0	
11:45			32 124	18 86	210	23:45			1 5	0 5	10
Total Vol.			555	620	**1175**				871	880	**1751**

Daily Totals

NB	SB	EB	WB	Combined
		1426	1500	**2926**

	AM			PM		
Split %	47.2%	52.8%	**40.2%**	49.7%	50.3%	**59.8%**
Peak Hour	11:00	07:45	**09:30**	12:15	12:30	**12:30**
Volume	124	135	**237**	124	119	**241**
P.H.F.	0.94	0.78	**0.88**	0.94	0.93	**0.96**

Prepared by NDS/ATD

VOLUME

Channel Way between W Mission Bay Dr & Hancock St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Period	NB		SB		EB		WB		TOTAL	
00:00					1		7		8	
00:15					0		1		1	
00:30					0		3		3	
00:45					0	1	2	13	2	14
01:00					1		0		1	
01:15					0		1		1	
01:30					1		2		3	
01:45					0	2	0	3	0	5
02:00					1		0		1	
02:15					0		0		0	
02:30					0		0		0	
02:45					0	1	0		0	1
03:00					1		1		2	
03:15					1		2		3	
03:30					0		0		0	
03:45					0	2	0	3	0	5
04:00					1		0		1	
04:15					1		1		2	
04:30					0		1		1	
04:45					0	2	2	4	2	6
05:00					0		1		1	
05:15					0		1		1	
05:30					1		3		4	
05:45					2	3	5	10	7	13
06:00					3		4		7	
06:15					1		6		7	
06:30					2		2		4	
06:45					3	9	7	19	10	28
07:00					3		5		8	
07:15					4		3		7	
07:30					5		10		15	
07:45					6	18	10	28	16	46
08:00					5		7		12	
08:15					6		12		18	
08:30					7		10		17	
08:45					4	22	10	39	14	61
09:00					6		10		16	
09:15					4		7		11	
09:30					8		12		20	
09:45					9	27	11	40	20	67
10:00					8		12		20	
10:15					10		13		23	
10:30					7		12		19	
10:45					5	30	8	45	13	75
11:00					4		14		18	
11:15					9		12		21	
11:30					7		17		24	
11:45					7	27	20	63	27	90
TOTALS						144		267		411
SPLIT %						35.0%		65.0%		32.1%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					4		9		13	
12:15					7		23		30	
12:30					14		11		25	
12:45					10	35	4	47	14	82
13:00					9		15		24	
13:15					6		22		28	
13:30					12		7		19	
13:45					8	35	13	57	21	92
14:00					4		24		28	
14:15					9		16		25	
14:30					10		22		32	
14:45					7	30	14	76	21	106
15:00					7		22		29	
15:15					5		17		22	
15:30					4		29		33	
15:45					9	25	27	95	36	120
16:00					8		30		38	
16:15					6		26		32	
16:30					11		28		39	
16:45					7	32	23	107	30	139
17:00					9		28		37	
17:15					7		29		36	
17:30					4		18		22	
17:45					8	28	18	93	26	121
18:00					6		14		20	
18:15					5		13		18	
18:30					3		12		15	
18:45					2	16	9	48	11	64
19:00					2		9		11	
19:15					3		11		14	
19:30					2		11		13	
19:45					0	7	7	38	7	45
20:00					1		6		7	
20:15					3		6		9	
20:30					2		6		8	
20:45					1	7	4	22	5	29
21:00					6		6		12	
21:15					2		7		9	
21:30					1		5		6	
21:45					2	11	7	25	9	36
22:00					2		3		5	
22:15					1		6		7	
22:30					4		2		6	
22:45					1	8	4	15	5	23
23:00					3		0		3	
23:15					2		2		4	
23:30					3		1		4	
23:45					0	8	1	4	1	12
TOTALS						242		627		869
SPLIT %						27.8%		72.2%		67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Peak Hour	09:30	11:30	11:45	PM Peak Hour	12:15	15:30	15:45
AM Pk Volume	35	69	95	PM Pk Volume	40	112	145
Pk Hr Factor	0.875	0.750	0.792	Pk Hr Factor	0.714	0.933	0.929
7 - 9 Volume	40	67	107	4 - 6 Volume	60	200	260
7 - 9 Peak Hour	07:45	07:30	07:45	4 - 6 Peak Hour	16:30	16:30	16:30
7 - 9 Pk Volume	24	39	63	4 - 6 Pk Volume	34	108	142
Pk Hr Factor	0.857	0.813	0.875	Pk Hr Factor	0.773	0.931	0.910

Prepared by NDS/ATD

VOLUME

Kemper St from Kenyon St to Midway Dr

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		10				13		12:00	91		101				192	
00:15	4		3				7		12:15	104		110				214	
00:30	3		8				11		12:30	75		93				168	
00:45	3	13	7	28			10	41	12:45	79	349	119	423			198	772
01:00	2		4				6		13:00	85		101				186	
01:15	5		5				10		13:15	85		118				203	
01:30	3		8				11		13:30	82		106				188	
01:45	1	11	2	19			3	30	13:45	72	324	92	417			164	741
02:00	2		2				4		14:00	57		105				162	
02:15	1		4				5		14:15	102		96				198	
02:30	1		5				6		14:30	79		114				193	
02:45	2	6	3	14			5	20	14:45	62	300	87	402			149	702
03:00	7		1				8		15:00	59		83				142	
03:15	1		4				5		15:15	82		86				168	
03:30	4		4				8		15:30	73		79				152	
03:45	1	13	3	12			4	25	15:45	70	284	80	328			150	612
04:00	0		4				4		16:00	68		83				151	
04:15	3		0				3		16:15	66		112				178	
04:30	1		3				4		16:30	70		106				176	
04:45	9	13	2	9			11	22	16:45	68	272	107	408			175	680
05:00	2		0				2		17:00	72		102				174	
05:15	11		3				14		17:15	75		117				192	
05:30	10		4				14		17:30	75		111				186	
05:45	14	37	5	12			19	49	17:45	73	295	93	423			166	718
06:00	19		3				22		18:00	64		98				162	
06:15	26		7				33		18:15	62		93				155	
06:30	50		14				64		18:30	67		92				159	
06:45	44	139	24	48			68	187	18:45	73	266	76	359			149	625
07:00	58		42				100		19:00	45		67				112	
07:15	64		22				86		19:15	44		52				96	
07:30	61		35				96		19:30	49		56				105	
07:45	57	240	40	139			97	379	19:45	40	178	51	226			91	404
08:00	57		42				99		20:00	50		49				99	
08:15	58		39				97		20:15	39		47				86	
08:30	61		46				107		20:30	29		53				82	
08:45	72	248	42	169			114	417	20:45	25	143	45	194			70	337
09:00	66		57				123		21:00	32		36				68	
09:15	84		63				147		21:15	25		35				60	
09:30	81		72				153		21:30	21		25				46	
09:45	61	292	60	252			121	544	21:45	10	88	40	136			50	224
10:00	91		77				168		22:00	16		28				44	
10:15	89		91				180		22:15	17		24				41	
10:30	64		68				132		22:30	10		27				37	
10:45	69	313	77	313			146	626	22:45	10	53	12	91			22	144
11:00	76		68				144		23:00	12		18				30	
11:15	75		71				146		23:15	9		12				21	
11:30	77		92				169		23:30	5		15				20	
11:45	89	317	79	310			168	627	23:45	5	31	7	52			12	83
TOTALS		1642		1325				2967	TOTALS		2583		3459				6042
SPLIT %		55.3%		44.7%				32.9%	SPLIT %		42.8%		57.2%				67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Peak Hour	11:30	11:45	11:30	PM Peak Hour	12:00	12:45	12:45
AM Pk Volume	361	383	743	PM Pk Volume	349	444	775
Pk Hr Factor	0.868	0.870	0.868	Pk Hr Factor	0.839	0.933	0.954
7 - 9 Volume	488	308	796	4 - 6 Volume	567	831	1398
7 - 9 Peak Hour	08:00	08:00	08:00	4 - 6 Peak Hour	17:00	16:45	16:45
7 - 9 Pk Volume	248	169	417	4 - 6 Pk Volume	295	437	727
Pk Hr Factor	0.861	0.918	0.914	Pk Hr Factor	0.983	0.934	0.947

Prepared by NDS/ATD

VOLUME

Kemper St from Midway Dr to Sports Arena Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_002

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		5						8		12:00	87		116						203	
00:15	1		3						4		12:15	93		107						200	
00:30	4		4						8		12:30	86		119						205	
00:45	1	9	3	15					4	24	12:45	72	338	110	452					182	790
01:00	1		2						3		13:00	74		66						140	
01:15	1		3						4		13:15	80		114						194	
01:30	0		2						2		13:30	84		103						187	
01:45	0	2	3	10					3	12	13:45	67	305	70	353					137	658
02:00	1		2						3		14:00	76		78						154	
02:15	0		1						1		14:15	72		96						168	
02:30	1		0						1		14:30	69		82						151	
02:45	1	3	4	7					5	10	14:45	61	278	73	329					134	607
03:00	1		0						1		15:00	62		68						130	
03:15	1		0						1		15:15	65		73						138	
03:30	1		3						4		15:30	61		72						133	
03:45	2	5	0	3					2	8	15:45	61	249	93	306					154	555
04:00	2		4						6		16:00	51		108						159	
04:15	3		1						4		16:15	66		92						158	
04:30	2		4						6		16:30	65		87						152	
04:45	3	10	3	12					6	22	16:45	69	251	77	364					146	615
05:00	5		2						7		17:00	66		90						156	
05:15	3		1						4		17:15	54		82						136	
05:30	12		5						17		17:30	59		73						132	
05:45	10	30	7	15					17	45	17:45	47	226	107	352					154	578
06:00	16		8						24		18:00	44		90						134	
06:15	20		11						31		18:15	59		92						151	
06:30	26		15						41		18:30	47		73						120	
06:45	21	83	33	67					54	150	18:45	42	192	52	307					94	499
07:00	38		27						65		19:00	47		51						98	
07:15	26		29						55		19:15	41		34						75	
07:30	45		43						88		19:30	52		48						100	
07:45	53	162	44	143					97	305	19:45	41	181	49	182					90	363
08:00	46		51						97		20:00	46		41						87	
08:15	43		64						107		20:15	18		32						50	
08:30	56		59						115		20:30	31		44						75	
08:45	61	206	62	236					123	442	20:45	21	116	18	135					39	251
09:00	63		76						139		21:00	23		22						45	
09:15	61		75						136		21:15	12		24						36	
09:30	70		56						126		21:30	11		26						37	
09:45	47	241	68	275					115	516	21:45	7	53	25	97					32	150
10:00	74		74						148		22:00	11		22						33	
10:15	77		108						185		22:15	11		23						34	
10:30	74		75						149		22:30	10		20						30	
10:45	80	305	99	356					179	661	22:45	8	40	14	79					22	119
11:00	75		86						161		23:00	3		9						12	
11:15	92		97						189		23:15	3		7						10	
11:30	80		102						182		23:30	3		6						9	
11:45	81	328	86	371					167	699	23:45	1	10	4	26					5	36
TOTALS		1384		1510						2894	TOTALS		2239		2982						5221
SPLIT %		47.8%		52.2%						35.7%	SPLIT %		42.9%		57.1%						64.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Peak Hour	11:45	11:45	11:45		PM Peak Hour	12:00	12:00	12:00
AM Pk Volume	347	428	775		PM Pk Volume	338	452	790
Pk Hr Factor	0.933	0.899	0.945		Pk Hr Factor	0.909	0.950	0.963
7 - 9 Volume	368	379	747		4 - 6 Volume	477	716	1193
7 - 9 Peak Hour	08:00	08:00	08:00		4 - 6 Peak Hour	16:15	16:00	16:00
7 - 9 Pk Volume	206	236	442		4 - 6 Pk Volume	266	364	615
Pk Hr Factor	0.844	0.922	0.898		Pk Hr Factor	0.964	0.843	0.967

Table 3-2. Roadway Segment Level of Service
Existing Conditions

Roadway	Segment	Class	Lanes	LOS E Capacity	Existing		
					ADT	V/C	LOS
Rosecrans Street	From Pacific Highway to Sports Arena Blvd.	Major	4	40,000	15,503	0.39	B
	From Sports Arena Blvd. to Midway Dr.	Major	6	50,000	59,120	1.18	F
	From Midway Dr. to Lytton St.	Major	6	50,000	46,384	0.93	E
	From Lytton St. to Roosevelt Rd.	Major	5	45,000	42,513	0.94	E
	From Laning Rd. to Nimitz Blvd.	Major	4	40,000	34,259	0.86	D
	From Nimitz Blvd. to N. Harbor Dr.	Major	4	40,000	36,450	0.91	E
	From N. Harbor Dr. to Canon St.	Major	4	40,000	34,390	0.86	D
	From Canon St. to Talbot St.	Major (1)	2	27,000	17,850	0.66	C
	From Talbot St. to Kellogg St.	Major (1)	2	27,000	15,200	0.56	B
Camino Del Rio	North of Sports Arena Blvd.	Prime	7	70,000	50,700	0.72	C
Pacific Highway	North of Rosecrans St.	Major (2)	2	20,000	5,818	0.29	A
	South of Rosecrans St.	Prime	6	60,000	13,070	0.22	A
Sports Arena Blvd.	Northwest of Rosecrans St.	Major	5	45,000	26,780	0.60	C
Midway Drive	Northwest of Rosecrans St.	Major	4	40,000	27,130	0.68	C
	Southeast of Rosecrans St.	Major	4	40,000	29,440	0.74	C
Lytton Street	Northwest of Rosecrans St.	Major (2)	2	20,000	11,797	0.59	C
	Southeast of Rosecrans St.	Major	4	40,000	19,650	0.49	B
Nimitz Boulevard	Northwest of Rosecrans St.	Major	4	40,000	17,264	0.43	B
	Southeast of Rosecrans St.	Major	4	40,000	12,020	0.30	A
North Harbor Drive	Rosecrans St. to Scott Rd.	Major	4	40,000	6,321	0.16	A
Canon Street	Northwest of Rosecrans St.	Collector	2	15,000	12,870	0.86	D
Talbot Street	Northwest of Rosecrans St.	Collector	2	8,000	5,950	0.74	D

(1) LOS E Capacity has been estimated based on results of the Highway Capacity Manual Urban Street Methodology.
(2) Since a published standard capacity for a 2-Lane Major does not exist, capacity is assumed to be half of a 4-Lane Major.

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
CAM RIO	[HANCOCK ST - MOORE ST]	03800W - 03700W	1032	SOUTH	:	35800	6/10/1992	0493-92
				*TOTAL	:	64900		
				NORTH	:	27610	7/27/2005	0408-05
				SOUTH	:	32160	7/27/2005	0408-05
				*TOTAL	:	59770		
				EAST	:	27290	9/16/2008	0346-08
				WEST	:	28560	9/16/2008	0346-08
				*TOTAL	:	55852		
CAM RIO	[SPORTS ARENA BL - KURTZ ST]	03899W - 03850W	9369	NORTH	:	24400	6/4/1987	1019-87
				SOUTH	:	28700	6/4/1987	1020-87
				*TOTAL	:	53100		
				NORTH	:	23900	6/25/1990	1005-90
				SOUTH	:	29100	6/25/1990	1006-90
				*TOTAL	:	53000		
				NORTH	:	24200	6/20/1991	0934-91
				SOUTH	:	30200	6/20/1991	0935-91
				*TOTAL	:	54400		
				NORTH	:	25780	7/25/2002	0814-02
				SOUTH	:	27180	7/25/2002	0815-02
				*TOTAL	:	52960		
				NORTH	:	23720	9/10/2008	0405-08
				SOUTH	:	26980	9/10/2008	0405-08
				*TOTAL	:	50700		
CAM RIO N	[CAM ARR - MSS CTR RD]	00750 - 01200	6721	EAST	:	4400	9/27/1990	1924-90
				WEST	:	5300	9/27/1990	1925-90
				*TOTAL	:	9700		
				EAST	:	3400	10/14/1993	0900-93
				WEST	:	4400	10/25/1993	0901-93
				EAST	:	3700	10/17/1996	1006-96
				WEST	:	4200	10/17/1996	1007-96
				*TOTAL	:	7900		

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION	WK-DAY VOLUME	STARTING DATE	FILE NUMBER
ROSECRANS ST	[MALAGA ST - MADRID ST]	03050 - 03200	9371	SOUTH	20220	7/21/2005	0668-05
				*TOTAL	39770		
				NORTH	21650	9/9/2008	0407-08
				SOUTH	21120	9/9/2008	0407-08
				*TOTAL	42770		
ROSECRANS ST	[MIDWAY DR - SPORTS ARENA BL]	03500 - 03650	9370	NORTH	26900	6/2/1987	0986-87
				SOUTH	27300	6/2/1987	0987-87
				*TOTAL	54200		
				NORTH	28100	6/6/1988	1008-88
				SOUTH	28200	6/6/1988	1009-88
				*TOTAL	56300		
				NORTH	26700	6/25/1990	1009-90
				SOUTH	26700	6/25/1990	1010-90
				*TOTAL	53400		
				NORTH	27400	6/20/1991	0936-91
				SOUTH	28200	6/20/1991	0937-91
				*TOTAL	55600		
				NORTH	31110	7/16/2002	0674-02
				SOUTH	27000	7/16/2002	0675-02
				*TOTAL	58110		
				NORTH	28720	9/9/2008	0406-08
				SOUTH	30400	9/9/2008	0406-08
				*TOTAL	59120		
ROSECRANS ST	[SPORTS ARENA BL - KURTZ ST]	03650 - 03750	1882	NORTH	12000	6/2/1987	0992-87
				SOUTH	9500	6/2/1987	0993-87
				*TOTAL	21500		
				NORTH	14300	6/28/1988	1133-88
				SOUTH	10800	6/28/1988	1134-88
				*TOTAL	25100		
				NORTH	12700	6/9/1989	0693-89
				SOUTH	8300	6/9/1989	0694-89
				*TOTAL	21000		

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-002
Location: Barnett Ave between Midway St & Pacific Hwy File No. MC0306-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	52	359			34	402				
12:15	31	417			34	411				
12:30	30	405			28	417				
12:45	27	395	140	1576	26	388	122	1618	262	3194
1:00	34	408			23	374				
1:15	17	433			19	370				
1:30	30	493			24	400				
1:45	22	479	103	1813	29	364	95	1508	198	3321
2:00	27	414			20	374				
2:15	18	421			15	358				
2:30	19	460			23	397				
2:45	9	475	73	1770	11	443	69	1572	142	3342
3:00	20	477			19	398				
3:15	19	538			14	486				
3:30	23	597			31	495				
3:45	12	701	74	2313	30	501	94	1880	168	4193
4:00	16	663			22	505				
4:15	25	661			26	485				
4:30	54	576			33	518				
4:45	46	572	141	2472	77	513	158	2021	299	4493
5:00	58	583			76	502				
5:15	76	575			113	592				
5:30	88	597			166	575				
5:45	140	567	362	2322	228	515	583	2184	945	4506
6:00	118	565			198	479				
6:15	169	443			345	473				
6:30	208	422			376	463				
6:45	207	451	702	1881	474	454	1393	1869	2095	3750
7:00	275	459			485	441				
7:15	342	422			481	397				
7:30	361	411			493	400				
7:45	339	412	1317	1704	525	362	1984	1600	3301	3304
8:00	331	407			515	322				
8:15	344	362			536	312				
8:30	419	374			473	311				
8:45	351	357	1445	1500	448	266	1972	1211	3417	2711
9:00	355	382			341	314				
9:15	297	365			337	289				
9:30	264	345			342	257				
9:45	246	302	1162	1394	348	265	1368	1125	2530	2519
10:00	289	320			286	260				
10:15	264	310			288	233				
10:30	296	272			304	233				
10:45	292	263	1141	1165	341	262	1219	988	2360	2153
11:00	302	284			348	229				
11:15	356	286			384	241				
11:30	331	263			412	226				
11:45	338	194	1327	1027	383	174	1527	870	2854	1897
Total	7987	20937	7987	20937	10584	18446	10584	18446	18571	39383
Combined Total	28924		28924		29030		29030		57954	
AM Peak	11:45 AM				7:30 AM					
Vol.	1519				2069					
P.H.F.	0.911				0.965					
PM Peak		3:30 PM				5:00 PM				
Vol.		2622				2184				
P.H.F.		0.935				0.922				
Percentage	27.6%	72.4%			36.5%	63.5%				

Day: TUESDAY
Date: 5/11/10

Classification Report / Prepared by: National Data & Surveying Services
Location: Washington St from Pacific Hwy & Frontage Rd

City: San Diego
Project #: 10-4143-030

SUMMARY

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	30	4	2	1	1	0	0	1	0	0	0	0	39
01:00	0	46	8	0	3	0	0	2	1	0	0	0	0	60
02:00	0	43	7	0	1	2	0	2	5	0	0	0	0	60
03:00	2	67	14	2	7	0	0	5	9	0	0	0	0	106
04:00	2	116	37	0	18	1	0	6	5	0	0	0	0	185
05:00	6	271	56	8	24	6	0	15	15	0	3	0	0	404
06:00	9	350	55	21	32	6	0	16	6	0	2	0	0	497
07:00	10	425	49	20	24	5	0	14	8	0	1	0	0	556
08:00	11	475	81	25	35	9	0	18	7	0	3	0	0	664
09:00	4	474	78	15	36	5	0	17	9	0	2	0	0	640
10:00	5	510	65	29	28	2	0	21	7	0	1	0	0	668
11:00	6	526	83	27	31	5	0	20	8	0	3	0	0	709
12:00 PM	6	503	81	29	34	8	0	22	2	0	3	0	0	688
13:00	12	536	68	19	25	1	0	21	4	0	1	0	0	687
14:00	5	563	78	17	30	5	0	14	4	0	2	0	0	718
15:00	7	603	86	22	14	1	0	12	1	0	0	0	0	746
16:00	7	702	82	33	22	7	0	22	1	0	0	0	0	876
17:00	9	636	62	23	23	4	0	16	3	0	0	0	0	776
18:00	4	433	48	8	23	4	0	11	4	0	0	0	0	535
19:00	5	325	34	6	18	2	0	8	3	0	0	0	0	401
20:00	1	250	23	3	5	2	0	0	3	0	0	0	0	287
21:00	1	179	24	1	2	0	0	2	2	0	0	0	0	211
22:00	3	75	14	2	2	0	0	0	1	0	0	0	0	97
23:00	0	59	4	1	2	0	0	0	0	0	0	0	0	66
Totals	**115**	**8197**	**1141**	**313**	**440**	**76**		**264**	**109**		**21**			**10676**
% of Totals	1%	77%	11%	3%	4%	1%		2%	1%		0%			100%
	55	3333	537	149	240	42	0	136	81	0	15	0	0	4588
% AM	1%	31%	5%	1%	2%	0%		1%	1%		0%			43%
AM Peak Hour	08:00	11:00	11:00	10:00	09:00	08:00		10:00	05:00		05:00			11:00
Volume	11	526	83	29	36	9		21	15		3			709
	60	4864	604	164	200	34	0	128	28	0	6	0	0	6088
% PM	1%	46%	6%	2%	2%	0%		1%	0%		0%			57%
PM Peak Hour	13:00	16:00	15:00	16:00	12:00	12:00		12:00	13:00		12:00			16:00
Volume	12	702	86	33	34	8		22	4		3			876

Peak Period Totals	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1220 ⟷	11%	1375 ⟷	13%	1652 ⟷	15%	6429 ⟷	60%

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-106

Location: Washington St. btwn. Frontage St. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		6			12:00			133		132		
00:15			13		8			12:15			133		119		
00:30			12		4			12:30			117		128		
00:45			10	47	2	20	67	12:45			128	511	121	500	1011
01:00			11		6			13:00			143		139		
01:15			7		4			13:15			148		114		
01:30			4		1			13:30			128		109		
01:45			2	24	3	14	38	13:45			129	548	115	477	1025
02:00			4		4			14:00			126		106		
02:15			1		2			14:15			110		110		
02:30			1		1			14:30			158		126		
02:45			6	12	4	11	23	14:45			156	550	117	459	1009
03:00			3		2			15:00			142		121		
03:15			2		7			15:15			141		143		
03:30			3		11			15:30			129		124		
03:45			1	9	7	27	36	15:45			159	571	97	485	1056
04:00			3		6			16:00			134		128		
04:15			4		9			16:15			133		97		
04:30			4		9			16:30			180		108		
04:45			12	23	19	43	66	16:45			136	583	118	451	1034
05:00			19		19			17:00			144		121		
05:15			13		33			17:15			123		108		
05:30			20		47			17:30			119		96		
05:45			24	76	63	162	238	17:45			80	466	55	380	846
06:00			28		70			18:00			68		49		
06:15			20		62			18:15			68		59		
06:30			31		111			18:30			67		53		
06:45			35	114	104	347	461	18:45			68	271	50	211	482
07:00			48		107			19:00			72		44		
07:15			68		112			19:15			65		43		
07:30			75		106			19:30			64		37		
07:45			71	262	138	463	725	19:45			65	266	42	166	432
08:00			87		117			20:00			59		42		
08:15			89		135			20:15			45		31		
08:30			96		123			20:30			50		37		
08:45			103	375	119	494	869	20:45			33	187	28	138	325
09:00			89		125			21:00			55		22		
09:15			89		116			21:15			39		31		
09:30			106		112			21:30			36		25		
09:45			80	364	98	451	815	21:45			37	167	23	101	268
10:00			101		95			22:00			34		15		
10:15			97		80			22:15			29		20		
10:30			89		98			22:30			36		14		
10:45			114	401	111	384	785	22:45			26	125	14	63	188
11:00			112		113			23:00			17		7		
11:15			135		113			23:15			29		10		
11:30			124		121			23:30			21		13		
11:45			113	484	120	467	951	23:45			17	84	7	37	121
Total Vol.				2191		2883	**5074**					4329		3468	**7797**

Daily Totals

NB	SB	EB	WB	Combined
		6520	6351	**12871**

	AM			PM		
Split %	43.2%	56.8%	**39.4%**	55.5%	44.5%	**60.6%**
Peak Hour	11:15	07:45	**11:30**	15:45	12:15	**14:30**
Volume	505	513	**995**	606	507	**1104**
P.H.F.	0.94	0.93	**0.94**	0.84	0.91	**0.97**

Prepared by NDS/ATO

VOLUME

Vine St from California St to Kettner Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0		0		0	12:00	6		0		6
00:15	0		0		0	12:15	7		1		8
00:30	0		0		0	12:30	1		1		2
00:45	0		0		0	12:45	0	14	0	2	0 16
01:00	0		0		0	13:00	2		1		3
01:15	0		0		0	13:15	1		3		4
01:30	0		0		0	13:30	2		1		3
01:45	0		0		0	13:45	4	9	0	5	4 14
02:00	0		0		0	14:00	5		2		7
02:15	0		0		0	14:15	9		2		11
02:30	0		0		0	14:30	8		3		11
02:45	0		0		0	14:45	4	26	2	9	6 35
03:00	0		0		0	15:00	2		2		4
03:15	0		0		0	15:15	0		4		4
03:30	0		0		0	15:30	1		2		3
03:45	0		0		0	15:45	2	5	1	9	3 14
04:00	1		0		1	16:00	1		3		4
04:15	0		0		0	16:15	2		5		7
04:30	0		0		0	16:30	4		6		10
04:45	0	1	0		0 1	16:45	5	12	3	17	8 29
05:00	0		0		0	17:00	3		2		5
05:15	0		1		1	17:15	1		2		3
05:30	0		0		0	17:30	2		1		3
05:45	4	4	0	1	4 5	17:45	1	7	0	5	1 12
06:00	1		0		1	18:00	2		1		3
06:15	3		1		4	18:15	1		0		1
06:30	0		1		1	18:30	0		1		1
06:45	2	6	0	2	2 8	18:45	0	3	0	2	0 5
07:00	0		1		1	19:00	1		1		2
07:15	0		2		2	19:15	1		1		2
07:30	4		2		6	19:30	0		0		0
07:45	1	5	2	7	3 12	19:45	1	3	1	3	2 6
08:00	5		1		6	20:00	1		1		2
08:15	4		1		5	20:15	1		5		6
08:30	2		0		2	20:30	2		0		2
08:45	2	13	0	2	2 15	20:45	0	4	0	6	0 10
09:00	3		1		4	21:00	0		0		0
09:15	3		3		6	21:15	0		0		0
09:30	5		0		5	21:30	0		0		0
09:45	1	12	2	6	3 18	21:45	1	1	0		1 1
10:00	5		3		8	22:00	1		0		1
10:15	2		0		2	22:15	2		1		3
10:30	5		2		7	22:30	0		0		0
10:45	2	14	1	6	3 20	22:45	0	3	0	1	0 4
11:00	3		1		4	23:00	0		0		0
11:15	2		0		2	23:15	2		0		2
11:30	5		2		7	23:30	0		0		0
11:45	4	14	2	5	6 19	23:45	1	3	0		1 3
TOTALS		69		29	98	TOTALS		90		59	149
SPLIT %		70.4%		29.6%	39.7%	SPLIT %		60.4%		39.6%	60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Peak Hour	11:30	09:15	11:30	PM Peak Hour	13:45	16:00	14:00
AM Pk Volume	22	8	27	PM Pk Volume	26	17	35
Pk Hr Factor	0.786	0.667	0.844	Pk Hr Factor	0.722	0.708	0.795
7 - 9 Volume	18	9	27	4 - 6 Volume	19	22	41
7 - 9 Peak Hour	07:30	07:00	07:30	4 - 6 Peak Hour	16:15	16:00	16:15
7 - 9 Pk Volume	14	7	20	4 - 6 Pk Volume	14	17	30
Pk Hr Factor	0.700	0.875	0.833	Pk Hr Factor	0.700	0.708	0.750

Prepared by NDS/ATD

Volumes for: Thursday, May 26, 2011	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Sassafras St between Kettner Blvd & Pacific Hy	Project: 11-4109-048	0	0	3,496	5,220	8,716

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			19		2			12:00			82		94		
00:15			15		1			12:15			77		75		
00:30			15		2			12:30			67		83		
00:45			17	66	1	6	72	12:45			73	299	74	326	625
01:00			13		2			13:00			53		91		
01:15			10		4			13:15			59		65		
01:30			2		5			13:30			66		54		
01:45			4	29	3	14	43	13:45			53	231	68	278	509
02:00			2		1			14:00			48		65		
02:15			3		1			14:15			59		72		
02:30			4		3			14:30			47		58		
02:45			1	10	1	6	16	14:45			78	232	70	265	497
03:00			1		0			15:00			57		54		
03:15			1		3			15:15			49		85		
03:30			1		4			15:30			44		63		
03:45			0	3	2	9	12	15:45			46	196	66	268	464
04:00			6		6			16:00			52		73		
04:15			6		9			16:15			55		57		
04:30			11		31			16:30			54		68		
04:45			10	33	42	88	121	16:45			56	217	65	263	480
05:00			8		59			17:00			60		54		
05:15			15		84			17:15			69		52		
05:30			11		92			17:30			67		67		
05:45			15	49	74	309	358	17:45			58	254	52	225	479
06:00			17		81			18:00			55		62		
06:15			20		84			18:15			40		50		
06:30			19		118			18:30			38		58		
06:45			28	84	100	383	467	18:45			32	165	55	225	390
07:00			23		104			19:00			53		44		
07:15			32		109			19:15			45		35		
07:30			24		125			19:30			67		51		
07:45			33	112	114	452	564	19:45			42	207	67	197	404
08:00			31		106			20:00			50		43		
08:15			47		127			20:15			33		40		
08:30			35		104			20:30			45		35		
08:45			42	155	121	458	613	20:45			40	168	53	171	339
09:00			34		94			21:00			49		33		
09:15			33		85			21:15			38		44		
09:30			36		101			21:30			30		41		
09:45			32	135	99	379	514	21:45			38	155	30	148	303
10:00			35		78			22:00			35		36		
10:15			49		82			22:15			35		29		
10:30			53		80			22:30			35		16		
10:45			53	190	79	319	509	22:45			49	154	14	95	249
11:00			72		83			23:00			39		22		
11:15			51		60			23:15			27		13		
11:30			62		67			23:30			19		8		
11:45			63	248	78	288	536	23:45			19	104	5	48	152

Total Vol.			1114		2711	3825					2382		2991	5373
									NB	SB	EB		WB	Total
								Daily Totals :	0	0	3,496		5,220	8,716
			AM								PM			
Split %			29.1%		70.9%	43.9%					44.3%		55.7%	56.1%
ADT								PHF						
Peak Hr.			11:00		07:00	11:00		Peak Hr.			12:00		12:00	12:00
Volume			268		472	613		Volume			299		326	625
P.H.F.			0.953		0.929	0.879		P.H.F.			0.913		0.837	0.888
7 - 9 Vol.			267		518	1177		4 - 6 Vol.			471		488	959
Peak Hr.			10:00		07:30	08:00		Peak Hr.			17:00		16:30	16:45
Volume			155		472	613		Volume			254		263	480
P.H.F.			0.774		0.929	0.879		P.H.F.			0.913		0.911	0.914

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-109

Location: Laurel St. btwn. Pacific Highway & Kettner Blvd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			36		20			12:00			181		168		
00:15			37		14			12:15			240		195		
00:30			33		17			12:30			239		194		
00:45			18	124	12	63	187	12:45			201	861	200	757	1618
01:00			14		2			13:00			217		210		
01:15			11		8			13:15			173		183		
01:30			13		2			13:30			185		183		
01:45			9	47	5	17	64	13:45			204	779	139	715	1494
02:00			11		2			14:00			280		171		
02:15			4		2			14:15			185		163		
02:30			5		5			14:30			228		163		
02:45			3	23	6	15	38	14:45			175	868	136	633	1501
03:00			4		3			15:00			219		151		
03:15			6		6			15:15			205		145		
03:30			3		20			15:30			186		148		
03:45			4	17	14	43	60	15:45			219	829	158	602	1431
04:00			8		24			16:00			185		163		
04:15			2		45			16:15			203		139		
04:30			23		81			16:30			269		164		
04:45			47	80	147	297	377	16:45			212	869	155	621	1490
05:00			89		195			17:00			219		140		
05:15			130		199			17:15			206		154		
05:30			155		189			17:30			175		116		
05:45			139	513	191	774	1287	17:45			154	754	133	543	1297
06:00			126		151			18:00			157		167		
06:15			105		172			18:15			155		149		
06:30			120		137			18:30			187		214		
06:45			87	438	131	591	1029	18:45			177	676	159	689	1365
07:00			96		147			19:00			170		169		
07:15			100		143			19:15			186		154		
07:30			118		142			19:30			179		180		
07:45			133	447	183	615	1062	19:45			167	702	181	684	1386
08:00			136		188			20:00			207		157		
08:15			161		205			20:15			217		160		
08:30			149		172			20:30			212		147		
08:45			167	613	173	738	1351	20:45			212	848	138	602	1450
09:00			160		191			21:00			186		145		
09:15			173		186			21:15			157		146		
09:30			162		227			21:30			155		145		
09:45			165	660	221	825	1485	21:45			195	693	102	538	1231
10:00			187		221			22:00			135		99		
10:15			210		212			22:15			138		118		
10:30			246		228			22:30			124		109		
10:45			216	859	207	868	1727	22:45			162	559	94	420	979
11:00			218		223			23:00			120		84		
11:15			210		183			23:15			171		72		
11:30			195		216			23:30			124		47		
11:45			192	815	216	838	1653	23:45			74	489	36	239	728
Total Vol.				4636		5684	**10320**					8927		7043	**15970**

Daily Totals

NB	SB	EB	WB	Combined
		13563	12727	**26290**

	AM			PM		
Split %	44.9%	55.1%	**39.3%**	55.9%	44.1%	**60.7%**
Peak Hour	10:15	09:45	**10:15**	16:30	12:15	**12:15**
Volume	890	882	**1760**	906	799	**1696**
P.H.F.	0.90	0.97	**0.93**	0.84	0.95	**0.97**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
TAYLOR ST	[HOTEL CR S - SD 008 R-A, E]	-	2631	EAST	:	7170	6/30/2010	MC0522-1
				WEST	:	7425	6/30/2010	MC0522-1
				*TOTAL	:	14595		
TAYLOR ST	[PACIFIC HY - CONGRESS ST]	04000 - 04010	2493	EAST	:	10500	7/22/1997	0524-97
				WEST	:	11900	7/22/1997	0525-97
				*TOTAL	:	22400		
				EAST	:	9300	6/2/1999	0330-99
				WEST	:	8000	6/2/1999	0330-99
				*TOTAL	:	17300		
				EAST	:	12230	6/20/2002	0648-02
				WEST	:	14880	6/20/2002	0649-02
				*TOTAL	:	27110		
				EAST	:	11780	6/15/2005	0315-05
				WEST	:	10230	6/15/2005	0315-05
				*TOTAL	:	22010		
				EAST	:	11990	8/20/2008	0336-08
				WEST	:	10060	8/20/2008	0336-08
				*TOTAL	:	22050		
TAYLOR ST	[PACIFIC HY - SN DIEGO AV]	04000 - 04010	2625	EAST	:	11700	3/8/1990	0341-90
				WEST	:	9700	3/8/1990	0342-90
				*TOTAL	:	21400		
				EAST	:	11000	3/15/1991	0420-91
				WEST	:	8400	3/15/1991	0421-91
				*TOTAL	:	19400		
				EAST	:	10100	11/3/1994	0810-94
				WEST	:	7500	11/3/1994	0811-94
				*TOTAL	:	17600		
				EAST	:	12500	6/18/1996	0666-96
				WEST	:	7000	6/18/1996	0667-96
				*TOTAL	:	19500		
TAYLOR ST	[CALHOUN ST - JUAN ST]	04030 - 04100	2491	NORTH	:	11300	9/21/1994	0700-94
				SOUTH	:	7700	9/21/1994	0701-94

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-099

Location: Taylor St. btwn. Congress St. & Juan St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		6					12:00	129		107				
00:15	9		9					12:15	140		116				
00:30	10		3					12:30	142		130				
00:45	3	40	7	25			65	12:45	149	560	93	446			1006
01:00	4		0					13:00	135		110				
01:15	3		1					13:15	149		99				
01:30	3		0					13:30	155		129				
01:45	4	14	0	1			15	13:45	140	579	96	434			1013
02:00	6		5					14:00	144		104				
02:15	3		3					14:15	141		95				
02:30	8		3					14:30	152		90				
02:45	1	18	1	12			30	14:45	164	601	87	376			977
03:00	3		1					15:00	185		92				
03:15	2		3					15:15	145		84				
03:30	2		9					15:30	193		119				
03:45	1	8	5	18			26	15:45	229	752	91	386			1138
04:00	5		3					16:00	214		117				
04:15	3		9					16:15	107		111				
04:30	7		12					16:30	117		123				
04:45	6	21	8	32			53	16:45	111	549	113	464			1013
05:00	7		14					17:00	134		122				
05:15	10		24					17:15	102		71				
05:30	13		27					17:30	119		105				
05:45	18	48	51	116			164	17:45	101	456	99	397			853
06:00	22		55					18:00	81		98				
06:15	28		69					18:15	87		66				
06:30	45		73					18:30	110		57				
06:45	49	144	99	296			440	18:45	76	354	69	290			644
07:00	53		125					19:00	82		49				
07:15	75		130					19:15	80		48				
07:30	85		111					19:30	80		46				
07:45	62	275	124	490			765	19:45	70	312	47	190			502
08:00	102		144					20:00	89		54				
08:15	124		110					20:15	75		40				
08:30	112		170					20:30	56		42				
08:45	91	429	224	648			1077	20:45	58	278	31	167			445
09:00	87		184					21:00	61		33				
09:15	115		207					21:15	49		37				
09:30	92		108					21:30	50		23				
09:45	92	386	103	602			988	21:45	41	201	32	125			326
10:00	85		75					22:00	39		22				
10:15	99		92					22:15	38		22				
10:30	101		101					22:30	33		18				
10:45	104	389	95	363			752	22:45	19	129	11	73			202
11:00	118		95					23:00	24		16				
11:15	142		101					23:15	16		12				
11:30	151		103					23:30	16		4				
11:45	121	532	112	411			943	23:45	20	76	11	43			119
Total Vol.		2304		3014			**5318**			4847		3391			**8238**

Daily Totals

NB	SB	EB	WB	Combined
7151	6405			**13556**

	AM			PM		
Split %	43.3%	56.7%	**39.2%**	58.8%	41.2%	**60.8%**
Peak Hour	11:15	08:30	**08:30**	15:15	16:15	**15:15**
Volume	543	785	**1190**	781	469	**1192**
P.H.F.	0.90	0.88	**0.92**	0.85	0.95	**0.90**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-003

Location: Taylor St (STATION#2490/FILE#MC0594-10) between Juan St & Sunset St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	20		8					12:00	203		143				
00:15	23		6					12:15	172		164				
00:30	10		9					12:30	153		132				
00:45	5	58	6	29			87	12:45	172	700	139	578			1278
01:00	15		2					13:00	205		130				
01:15	3		7					13:15	187		139				
01:30	7		4					13:30	179		136				
01:45	2	27	5	18			45	13:45	164	735	134	539			1274
02:00	4		0					14:00	163		125				
02:15	1		1					14:15	175		113				
02:30	3		3					14:30	199		131				
02:45	4	12	6	10			22	14:45	191	728	116	485			1213
03:00	2		2					15:00	196		110				
03:15	4		5					15:15	223		136				
03:30	1		6					15:30	231		132				
03:45	1	8	6	19			27	15:45	213	863	128	506			1369
04:00	4		4					16:00	238		143				
04:15	3		8					16:15	263		116				
04:30	7		6					16:30	257		152				
04:45	7	21	13	31			52	16:45	284	1042	129	540			1582
05:00	12		24					17:00	249		143				
05:15	15		40					17:15	300		135				
05:30	18		30					17:30	231		145				
05:45	21	66	59	153			219	17:45	186	966	133	556			1522
06:00	16		52					18:00	189		138				
06:15	32		83					18:15	179		117				
06:30	40		85					18:30	159		113				
06:45	51	139	107	327			466	18:45	100	627	85	453			1080
07:00	59		112					19:00	142		93				
07:15	59		132					19:15	131		85				
07:30	69		121					19:30	93		88				
07:45	103	290	148	513			803	19:45	125	491	70	336			827
08:00	79		123					20:00	97		67				
08:15	124		132					20:15	99		73				
08:30	99		127					20:30	117		53				
08:45	92	394	149	531			925	20:45	94	407	44	237			644
09:00	87		173					21:00	94		50				
09:15	103		141					21:15	106		29				
09:30	88		136					21:30	86		43				
09:45	101	379	120	570			949	21:45	98	384	33	155			539
10:00	118		116					22:00	76		26				
10:15	112		120					22:15	78		26				
10:30	113		126					22:30	49		29				
10:45	123	466	130	492			958	22:45	36	239	21	102			341
11:00	120		123					23:00	39		12				
11:15	162		132					23:15	24		16				
11:30	148		149					23:30	32		8				
11:45	155	585	164	568			1153	23:45	12	107	11	47			154
Total Vol.		2445		3261			**5706**			7289		4534			**11823**

Daily Totals

NB	SB	EB	WB	Combined
9734	7795			**17529**

	AM			PM		
Split %	42.8%	57.2%	**32.6%**	61.7%	38.3%	**67.4%**
Peak Hour	11:45	11:30	**11:30**	16:30	12:00	**16:30**
Volume	683	620	**1298**	1090	578	**1649**
P.H.F.	0.84	0.95	**0.94**	0.91	0.88	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-100

Location: Taylor St. btwn. Morena Blvd. & I-8 EB Ramps - Hotel Circle

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		7					12:00	118		114				
00:15	7		8					12:15	94		128				
00:30	7		4					12:30	89		124				
00:45	4	27	8	27			54	12:45	98	399	119	485			884
01:00	5		1					13:00	93		105				
01:15	4		1					13:15	102		93				
01:30	0		2					13:30	125		108				
01:45	6	15	0	4			19	13:45	109	429	110	416			845
02:00	4		1					14:00	115		91				
02:15	1		4					14:15	125		99				
02:30	0		1					14:30	121		85				
02:45	3	8	1	7			15	14:45	133	494	84	359			853
03:00	1		2					15:00	147		96				
03:15	1		1					15:15	148		94				
03:30	2		5					15:30	188		100				
03:45	0	4	0	8			12	15:45	189	672	99	389			1061
04:00	5		3					16:00	191		116				
04:15	0		8					16:15	201		113				
04:30	4		10					16:30	196		105				
04:45	1	10	12	33			43	16:45	211	799	113	447			1246
05:00	4		10					17:00	212		100				
05:15	3		21					17:15	205		96				
05:30	8		29					17:30	183		122				
05:45	15	30	41	101			131	17:45	138	738	98	416			1154
06:00	13		61					18:00	112		100				
06:15	17		73					18:15	86		104				
06:30	16		83					18:30	102		108				
06:45	28	74	113	330			404	18:45	79	379	74	386			765
07:00	28		124					19:00	90		51				
07:15	33		132					19:15	78		40				
07:30	43		129					19:30	72		43				
07:45	43	147	132	517			664	19:45	70	310	46	180			490
08:00	56		152					20:00	73		42				
08:15	74		129					20:15	59		51				
08:30	53		252					20:30	48		34				
08:45	74	257	261	794			1051	20:45	56	236	32	159			395
09:00	62		243					21:00	53		27				
09:15	54		249					21:15	62		24				
09:30	73		144					21:30	50		19				
09:45	62	251	128	764			1015	21:45	33	198	21	91			289
10:00	66		113					22:00	27		18				
10:15	63		96					22:15	28		13				
10:30	82		98					22:30	31		11				
10:45	64	275	96	403			678	22:45	23	109	19	61			170
11:00	84		89					23:00	16		10				
11:15	81		122					23:15	17		18				
11:30	127		113					23:30	10		5				
11:45	86	378	98	422			800	23:45	11	54	12	45			99
Total Vol.		1476		3410			**4886**			4817		3434			**8251**

Daily Totals

NB	SB	EB	WB	Combined
6293	6844			**13137**

	AM			PM		
Split %	30.2%	69.8%	**37.2%**	58.4%	41.6%	**62.8%**
Peak Hour	11:30	08:30	**08:30**	16:30	12:00	**16:15**
Volume	425	1005	**1248**	824	485	**1251**
P.H.F.	0.84	0.96	**0.93**	0.97	0.95	**0.97**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Twiggs St (STATION#1589/FILE#MC05334-10)	Project:	10-4169-122	0	0	840	1,240	2,080

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB		
00:00			2	2		12:00			21	19		
00:15			1	3		12:15			16	28		
00:30			2	2		12:30			11	20		
00:45			2	7	0	7	14	12:45			13	61	26	93	154
01:00			3	1		13:00			10	19		
01:15			1	1		13:15			15	23		
01:30			1	1		13:30			12	18		
01:45			0	5	1	4	9	13:45			16	53	14	74	127
02:00			1	1		14:00			13	19		
02:15			0	1		14:15			11	21		
02:30			0	1		14:30			8	22		
02:45			0	1	0	3	4	14:45			14	46	21	83	129
03:00			0	0		15:00			9	26		
03:15			0	0		15:15			12	25		
03:30			1	0		15:30			10	20		
03:45			0	1	1	1	2	15:45			19	50	15	86	136
04:00			1	0		16:00			21	17		
04:15			0	0		16:15			15	23		
04:30			1	0		16:30			23	16		
04:45			0	2	1	1	3	16:45			16	75	22	78	153
05:00			0	0		17:00			17	21		
05:15			0	1		17:15			17	27		
05:30			0	0		17:30			25	27		
05:45			1	1	1	2	3	17:45			24	83	32	107	190
06:00			0	2		18:00			17	36		
06:15			3	1		18:15			23	29		
06:30			3	4		18:30			25	31		
06:45			6	12	1	8	20	18:45			18	83	30	126	209
07:00			3	3		19:00			17	32		
07:15			4	1		19:15			24	30		
07:30			5	5		19:30			12	25		
07:45			10	22	3	12	34	19:45			13	66	21	108	174
08:00			9	7		20:00			9	17		
08:15			6	4		20:15			12	14		
08:30			8	15		20:30			7	18		
08:45			9	32	7	33	65	20:45			15	43	16	65	108
09:00			8	13		21:00			8	13		
09:15			11	9		21:15			7	21		
09:30			7	13		21:30			10	19		
09:45			9	35	13	48	83	21:45			8	33	17	70	103
10:00			10	17		22:00			8	24		
10:15			8	21		22:15			9	16		
10:30			11	17		22:30			6	15		
10:45			10	39	20	75	114	22:45			2	25	6	61	86
11:00			12	13		23:00			6	2		
11:15			13	29		23:15			4	4		
11:30			10	18		23:30			3	2		
11:45			15	50	24	84	134	23:45			2	15	3	11	26
Total Vol.			207		278	**485**					633		962	**1595**

	NB	SB	EB	WB	Total
Daily Totals :	**0**	**0**	**840**	**1,240**	**2,080**

	AM			PM		
Split %	42.7%	57.3%	**23.3%**	39.7%	60.3%	**76.7%**
AM				**PM**		
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	17:30	17:45	**17:45**
Volume	63	91	**154**	**Volume**	89	128	**217**
P.H.F.	0.750	0.813	**0.875**	**P.H.F.**	0.890	0.889	**0.969**
7 - 9 Vol.	54	45	**99**	**4 - 6 Vol.**	158	185	**343**
Peak Hr.	07:45	08:00	**08:00**	**Peak Hr.**	17:00	17:00	**17:00**
Volume	33	33	**65**	**Volume**	83	107	**190**
P.H.F.	0.825	0.550	**0.707**	**P.H.F.**	0.830	0.836	**0.848**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-101

Location: Twiggs St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			4	2		12:00			22	25	
00:15			1	2		12:15			21	32	
00:30			2	1		12:30			21	39	
00:45			2	1		12:45			23	38	
			9	6	15				87	134	221
01:00			1	0		13:00			19	33	
01:15			1	0		13:15			23	28	
01:30			4	0		13:30			15	42	
01:45			1	0		13:45			27	41	
			7	0	7				84	144	228
02:00			0	0		14:00			23	26	
02:15			0	0		14:15			11	28	
02:30			1	0		14:30			16	26	
02:45			0	1		14:45			16	33	
			1	1	2				66	113	179
03:00			0	1		15:00			20	31	
03:15			1	1		15:15			22	29	
03:30			3	0		15:30			29	28	
03:45			2	0		15:45			26	36	
			6	2	8				97	124	221
04:00			1	1		16:00			12	24	
04:15			0	0		16:15			19	24	
04:30			1	1		16:30			22	30	
04:45			1	0		16:45			26	28	
			3	2	5				79	106	185
05:00			2	4		17:00			38	23	
05:15			1	0		17:15			33	19	
05:30			1	1		17:30			37	12	
05:45			5	4		17:45			22	21	
			9	9	18				130	75	205
06:00			4	1		18:00			37	19	
06:15			6	1		18:15			22	25	
06:30			7	3		18:30			31	21	
06:45			6	4		18:45			36	16	
			23	9	32				126	81	207
07:00			8	4		19:00			26	18	
07:15			6	8		19:15			24	16	
07:30			7	11		19:30			18	17	
07:45			16	7		19:45			27	16	
			37	30	67				95	67	162
08:00			12	9		20:00			25	14	
08:15			11	11		20:15			22	16	
08:30			27	12		20:30			19	14	
08:45			20	13		20:45			22	13	
			70	45	115				88	57	145
09:00			15	11		21:00			23	26	
09:15			23	10		21:15			10	10	
09:30			11	10		21:30			13	2	
09:45			22	15		21:45			15	7	
			71	46	117				61	45	106
10:00			12	11		22:00			7	14	
10:15			18	18		22:15			15	5	
10:30			17	15		22:30			13	7	
10:45			34	13		22:45			7	2	
			81	57	138				42	28	70
11:00			22	18		23:00			6	3	
11:15			35	14		23:15			9	2	
11:30			31	15		23:30			5	6	
11:45			31	9		23:45			4	4	
			119	56	175				24	15	39
Total Vol.			436	263	**699**				979	989	**1968**

Daily Totals

NB	SB	EB	WB	Combined
		1415	1252	**2667**

	AM			PM		
Split %	62.4%	37.6%	**26.2%**	49.7%	50.3%	**73.8%**
Peak Hour	10:45	11:45	**11:45**	16:45	13:00	**13:00**
Volume	122	105	**200**	134	144	**228**
P.H.F.	0.87	0.67	**0.83**	0.88	0.86	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-102

Location: Harney St. btwn. Congress St. & San Diego Ave.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			1		2			12:00			7		10		
00:15			1		2			12:15			23		17		
00:30			8		2			12:30			17		8		
00:45			1	11	2	8	19	12:45			16	63	10	45	108
01:00			0		2			13:00			13		14		
01:15			3		0			13:15			5		6		
01:30			0		0			13:30			8		13		
01:45			0	3	0	2	5	13:45			14	40	9	42	82
02:00			0		0			14:00			11		8		
02:15			0		0			14:15			8		11		
02:30			0		0			14:30			13		11		
02:45			0	0	0	0		14:45			18	50	13	43	93
03:00			1		2			15:00			7		13		
03:15			0		2			15:15			10		13		
03:30			0		0			15:30			17		15		
03:45			0	1	0	4	5	15:45			21	55	13	54	109
04:00			0		0			16:00			16		16		
04:15			0		0			16:15			12		14		
04:30			0		1			16:30			13		11		
04:45			1	1	1	2	3	16:45			7	48	3	44	92
05:00			1		0			17:00			19		19		
05:15			2		2			17:15			22		19		
05:30			0		1			17:30			18		16		
05:45			1	4	4	7	11	17:45			5	64	14	68	132
06:00			2		3			18:00			21		14		
06:15			0		4			18:15			10		11		
06:30			1		8			18:30			28		21		
06:45			2	5	7	22	27	18:45			17	76	15	61	137
07:00			1		3			19:00			23		17		
07:15			3		11			19:15			16		15		
07:30			4		6			19:30			18		16		
07:45			4	12	11	31	43	19:45			22	79	15	63	142
08:00			4		11			20:00			12		13		
08:15			3		6			20:15			7		5		
08:30			4		11			20:30			9		3		
08:45			8	19	16	44	63	20:45			8	36	7	28	64
09:00			4		6			21:00			8		7		
09:15			3		3			21:15			13		12		
09:30			9		7			21:30			12		12		
09:45			6	22	2	18	40	21:45			13	46	9	40	86
10:00			10		6			22:00			5		10		
10:15			19		13			22:15			9		7		
10:30			7		3			22:30			8		7		
10:45			5	41	10	32	73	22:45			7	29	2	26	55
11:00			14		11			23:00			10		7		
11:15			7		9			23:15			7		4		
11:30			13		10			23:30			4		0		
11:45			16	50	14	44	94	23:45			3	24	2	13	37
Total Vol.				169		214	**383**					610		527	**1137**

Daily Totals

NB	SB	EB	WB	Combined
		779	741	**1520**

	AM			PM		
Split %	44.1%	55.9%	**25.2%**	53.6%	46.4%	**74.8%**
Peak Hour	11:45	11:30	**11:45**	18:30	17:00	**18:30**
Volume	63	51	**112**	84	68	**152**
P.H.F.	0.68	0.75	**0.70**	0.75	0.89	**0.78**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-103

Location: Harney St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		3			12:00			18		15		
00:15			1		3			12:15			34		13		
00:30			0		3			12:30			21		26		
00:45			2	6	1	10	16	12:45			23	96	14	68	164
01:00			1		1			13:00			15		27		
01:15			0		2			13:15			20		21		
01:30			0		0			13:30			15		32		
01:45			0	1	0	3	4	13:45			13	63	33	113	176
02:00			1		1			14:00			32		18		
02:15			0		1			14:15			27		18		
02:30			0		1			14:30			8		29		
02:45			0	1	0	3	4	14:45			19	86	44	109	195
03:00			0		2			15:00			18		27		
03:15			1		0			15:15			12		37		
03:30			0		1			15:30			12		30		
03:45			0	1	1	4	5	15:45			22	64	35	129	193
04:00			0		0			16:00			18		28		
04:15			0		1			16:15			24		22		
04:30			1		1			16:30			22		21		
04:45			2	3	5	7	10	16:45			30	94	25	96	190
05:00			0		0			17:00			19		23		
05:15			0		3			17:15			24		21		
05:30			1		4			17:30			29		18		
05:45			0	1	7	14	15	17:45			20	92	22	84	176
06:00			0		8			18:00			29		11		
06:15			1		10			18:15			24		12		
06:30			3		11			18:30			24		14		
06:45			1	5	17	46	51	18:45			25	102	11	48	150
07:00			4		7			19:00			17		28		
07:15			6		18			19:15			18		17		
07:30			6		19			19:30			18		19		
07:45			6	22	30	74	96	19:45			11	64	24	88	152
08:00			7		24			20:00			10		22		
08:15			13		19			20:15			7		18		
08:30			8		19			20:30			2		17		
08:45			8	36	28	90	126	20:45			10	29	11	68	97
09:00			5		22			21:00			9		18		
09:15			4		24			21:15			8		11		
09:30			5		20			21:30			7		2		
09:45			9	23	12	78	101	21:45			3	27	7	38	65
10:00			6		19			22:00			6		11		
10:15			16		22			22:15			3		10		
10:30			1		37			22:30			5		9		
10:45			12	35	23	101	136	22:45			2	16	4	34	50
11:00			25		18			23:00			2		6		
11:15			12		22			23:15			0		3		
11:30			21		18			23:30			3		2		
11:45			24	82	22	80	162	23:45			2	7	2	13	20
Total Vol.				216		510	**726**					740		888	**1628**

Daily Totals

NB	SB	EB	WB	Combined
		956	1398	**2354**

	AM			PM		
Split %	29.8%	70.2%	**30.8%**	45.5%	54.5%	**69.2%**
Peak Hour	11:30	10:00	**11:45**	16:45	14:45	**14:45**
Volume	97	101	**173**	102	138	**199**
P.H.F.	0.71	0.68	**0.92**	0.85	0.78	**0.79**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-104

Location: Old Town Ave. btwn. I-5 SB Ramps & I-5 NB Ramps

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		14			12:00			147		97		
00:15			4		4			12:15			109		64		
00:30			9		9			12:30			131		102		
00:45			10	35	16	43	78	12:45			133	520	112	375	895
01:00			7		4			13:00			129		113		
01:15			6		4			13:15			135		102		
01:30			6		1			13:30			118		105		
01:45			4	23	1	10	33	13:45			117	499	71	391	890
02:00			9		5			14:00			120		97		
02:15			8		4			14:15			142		98		
02:30			1		2			14:30			119		99		
02:45			4	22	2	13	35	14:45			123	504	91	385	889
03:00			8		4			15:00			162		95		
03:15			3		8			15:15			140		111		
03:30			4		4			15:30			153		122		
03:45			3	18	4	20	38	15:45			162	617	107	435	1052
04:00			7		7			16:00			168		144		
04:15			2		6			16:15			149		101		
04:30			7		7			16:30			179		106		
04:45			8	24	12	32	56	16:45			169	665	102	453	1118
05:00			10		10			17:00			158		121		
05:15			10		14			17:15			180		74		
05:30			9		6			17:30			145		92		
05:45			27	56	8	38	94	17:45			153	636	78	365	1001
06:00			25		22			18:00			132		84		
06:15			20		24			18:15			122		71		
06:30			34		10			18:30			106		50		
06:45			44	123	38	94	217	18:45			104	464	56	261	725
07:00			51		30			19:00			100		49		
07:15			71		26			19:15			83		59		
07:30			83		50			19:30			85		54		
07:45			91	296	33	139	435	19:45			66	334	58	220	554
08:00			88		44			20:00			69		54		
08:15			90		40			20:15			53		39		
08:30			76		48			20:30			53		41		
08:45			91	345	52	184	529	20:45			48	223	51	185	408
09:00			84		58			21:00			44		50		
09:15			91		63			21:15			47		52		
09:30			105		47			21:30			39		38		
09:45			99	379	63	231	610	21:45			33	163	35	175	338
10:00			89		67			22:00			37		39		
10:15			83		56			22:15			30		27		
10:30			120		60			22:30			24		35		
10:45			118	410	53	236	646	22:45			27	118	21	122	240
11:00			115		53			23:00			25		15		
11:15			123		56			23:15			18		25		
11:30			113		69			23:30			18		30		
11:45			113	464	75	253	717	23:45			9	70	8	78	148
Total Vol.				2195		1293	**3488**					4813		3445	**8258**

Daily Totals

NB	SB	EB	WB	Combined
		7008	4738	**11746**

	AM			PM		
Split %	62.9%	37.1%	**29.7%**	58.3%	41.7%	**70.3%**
Peak Hour	11:45	11:45	**11:45**	16:30	15:15	**16:00**
Volume	500	338	**838**	686	484	**1118**
P.H.F.	0.85	0.83	**0.86**	0.95	0.84	**0.90**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-105

Location: Old Town Ave. btwn. I-5 NB Ramps & Jefferson St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		18			12:00			56		37		
00:15			4		11			12:15			36		61		
00:30			8		14			12:30			56		29		
00:45			4	24	9	52	76	12:45			44	192	51	178	370
01:00			7		8			13:00			60		35		
01:15			5		9			13:15			58		34		
01:30			1		3			13:30			32		43		
01:45			1	14	4	24	38	13:45			58	208	33	145	353
02:00			2		4			14:00			47		36		
02:15			0		2			14:15			38		41		
02:30			1		1			14:30			46		42		
02:45			1	4	0	7	11	14:45			48	179	46	165	344
03:00			3		1			15:00			80		34		
03:15			0		0			15:15			84		37		
03:30			1		3			15:30			56		55		
03:45			1	5	0	4	9	15:45			52	272	53	179	451
04:00			2		3			16:00			55		53		
04:15			3		2			16:15			62		47		
04:30			2		5			16:30			47		58		
04:45			1	8	5	15	23	16:45			63	227	61	219	446
05:00			0		9			17:00			49		57		
05:15			2		7			17:15			39		61		
05:30			1		11			17:30			54		41		
05:45			1	4	16	43	47	17:45			65	207	50	209	416
06:00			6		12			18:00			41		67		
06:15			16		23			18:15			31		72		
06:30			16		27			18:30			39		42		
06:45			17	55	27	89	144	18:45			60	171	38	219	390
07:00			19		32			19:00			33		56		
07:15			33		42			19:15			30		58		
07:30			27		63			19:30			32		55		
07:45			42	121	63	200	321	19:45			28	123	63	232	355
08:00			51		47			20:00			24		49		
08:15			45		38			20:15			21		48		
08:30			45		40			20:30			24		58		
08:45			54	195	43	168	363	20:45			21	90	55	210	300
09:00			45		28			21:00			14		64		
09:15			41		33			21:15			19		58		
09:30			43		46			21:30			22		58		
09:45			75	204	42	149	353	21:45			20	75	43	223	298
10:00			43		38			22:00			21		36		
10:15			61		31			22:15			14		28		
10:30			43		38			22:30			8		27		
10:45			66	213	34	141	354	22:45			11	54	21	112	166
11:00			52		40			23:00			10		28		
11:15			58		38			23:15			8		12		
11:30			56		41			23:30			5		19		
11:45			70	236	45	164	400	23:45			3	26	11	70	96
Total Vol.				1083		1056	**2139**					1824		2161	**3985**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			2907	3217	**6124**

	AM			**PM**		
Split %	50.6%	49.4%	**34.9%**	45.8%	54.2%	**65.1%**
Peak Hour	11:15	07:15	**11:30**	15:00	16:30	**15:00**
Volume	240	215	**402**	272	237	**451**
P.H.F.	0.86	0.85	**0.87**	0.81	0.97	**0.93**

Appendix C
Peak Hour Arterial Analysis Worksheets – Existing Conditions

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	11.6	84.3	0.81	34.5	B
Total	II		72.7	11.6	84.3	0.81	34.5	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.1	34.5	0.17	17.6	D
Rosecrans St.	II	40	72.7	51.1	123.8	0.81	23.5	C
Total	II		92.1	66.2	158.3	0.98	22.2	C

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	31.3	97.6	0.55	20.4	C
Total	III		66.3	31.3	97.6	0.55	20.4	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	57.1	88.7	0.25	10.1	E
Total	III		31.6	57.1	88.7	0.25	10.1	E

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	46.2	106.0	0.50	16.9	D
East Dr	III	35	22.9	5.0	27.9	0.19	24.6	B
Kemper Street	III	35	39.9	21.5	61.4	0.33	19.5	C
Sports Arena	III	35	34.5	47.0	81.5	0.29	12.7	E
Total	III		157.1	119.7	276.8	1.31	17.0	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	21.7	56.2	0.29	18.4	C
East Drive	III	35	39.9	4.7	44.6	0.33	26.8	B
Rosecrans St.	III	35	22.9	43.2	66.1	0.19	10.4	E
Barnett Ave	III	35	59.8	25.2	85.0	0.50	21.1	C
Total	III		157.1	94.8	251.9	1.31	18.7	C

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	13.0	30.6	0.08	9.4	D
San Diego Ave	IV	25	25.0	24.3	49.3	0.11	8.3	E
Total	IV		42.6	37.3	79.9	0.19	8.7	E

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.6	26.3	0.07	9.7	D
Moore St	IV	25	25.0	5.9	30.9	0.11	13.2	C
Total	IV		43.7	13.5	57.2	0.18	11.6	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	12.4	29.5	0.13	16.3	D
Nimitz Blvd	III	35	22.4	42.3	64.7	0.19	10.4	E
Laning Rd	III	35	34.5	8.8	43.3	0.29	23.9	C
Barnett Ave	III	35	97.9	42.2	140.1	0.95	24.5	B
Midway Dr	III	35	58.8	23.7	82.5	0.49	21.4	C
Rosecrans St	III	35	16.7	17.3	34.0	0.13	13.8	E
Total	III		247.4	146.7	394.1	2.18	19.9	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	32.4	49.1	0.13	9.5	F
Lytton St	III	35	58.8	48.2	107.0	0.49	16.5	D
Laning Rd	III	35	97.9	7.9	105.8	0.95	32.4	A
Lowell St	III	35	34.5	35.2	69.7	0.29	14.8	D
Hugo St	III	35	22.4	5.5	27.9	0.19	24.1	B
Total	III		230.3	129.2	359.5	2.05	20.5	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	11.1	25.3	0.05	7.6	E
Total	IV		14.2	11.1	25.3	0.05	7.6	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	5.7	21.8	0.06	10.0	D
Total	IV		16.1	5.7	21.8	0.06	10.0	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	9.8	25.5	0.10	13.4	C
Juan St	IV	35	11.2	11.0	22.2	0.07	11.0	D
	IV	35	18.3	6.1	24.4	0.13	19.3	B
Total	IV		45.2	26.9	72.1	0.29	14.7	C

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	14.6	32.3	0.11	11.9	D
	IV	35	18.3	9.0	27.3	0.13	17.2	C
Congress St	IV	35	11.2	7.1	18.3	0.07	13.4	C
Pacific Highway	IV	35	15.7	20.1	35.8	0.10	9.6	D
Total	IV		62.9	50.8	113.7	0.40	12.7	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	9.8	45.9	0.30	23.6	C
Total	III		36.1	9.8	45.9	0.30	23.6	C

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	13.9	56.1	0.35	22.6	C
Sports Arena	III	35	36.1	46.0	82.1	0.30	13.2	E
Total	III		78.3	59.9	138.2	0.65	17.0	D

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	21.7	94.4	0.81	30.8	B
Total	II		72.7	21.7	94.4	0.81	30.8	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.9	35.3	0.17	17.2	D
Rosecrans St.	II	40	72.7	71.5	144.2	0.81	20.2	D
Total	II		92.1	87.4	179.5	0.98	19.6	D

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	16.7	83.0	0.55	24.0	C
Total	III		66.3	16.7	83.0	0.55	24.0	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	69.2	100.8	0.25	8.9	F
Total	III		31.6	69.2	100.8	0.25	8.9	F

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	71.5	131.3	0.50	13.7	E
East Dr	III	35	22.9	12.7	35.6	0.19	19.3	C
Kemper Street	III	35	39.9	28.0	67.9	0.33	17.6	D
Sport Arena Blvd	III	35	34.5	42.8	77.3	0.29	13.4	E
Total	III		157.1	155.0	312.1	1.31	15.1	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	16.0	50.5	0.29	20.5	C
East Drive	III	35	39.9	14.3	54.2	0.33	22.1	C
Rosecrans St.	III	35	22.9	62.4	85.3	0.19	8.0	F
Barnett Ave	III	35	59.8	32.4	92.2	0.50	19.5	C
Total	III		157.1	125.1	282.2	1.31	16.7	D

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	81.1	98.7	0.08	2.9	F
San Diego Ave	IV	25	25.0	13.9	38.9	0.11	10.5	D
Total	IV		42.6	95.0	137.6	0.19	5.1	F

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.9	26.6	0.07	9.6	D
Moore St	IV	25	25.0	5.3	30.3	0.11	13.5	C
Total	IV		43.7	13.2	56.9	0.18	11.7	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	15.4	32.5	0.13	14.8	D
Nimitz Blvd	III	35	22.4	46.5	68.9	0.19	9.8	F
Laning Rd	III	35	34.5	6.1	40.6	0.29	25.5	B
Barnett Ave	III	35	97.9	37.7	135.6	0.95	25.3	B
Midway Dr	III	35	58.8	20.1	78.9	0.49	22.3	C
Rosecrans St	III	35	16.7	30.8	47.5	0.13	9.9	F
Total	III		247.4	156.6	404.0	2.18	19.4	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	45.1	61.8	0.13	7.6	F
Lytton St	III	35	58.8	27.4	86.2	0.49	20.5	C
Laning Rd	III	35	97.9	5.7	103.6	0.95	33.1	A
Lowell St	III	35	34.5	62.9	97.4	0.29	10.6	E
Hugo St	III	35	22.4	4.1	26.5	0.19	25.4	B
Total	III		230.3	145.2	375.5	2.05	19.6	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	8.6	22.8	0.05	8.5	E
Total	IV		14.2	8.6	22.8	0.05	8.5	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	4.0	20.1	0.06	10.9	D
Total	IV		16.1	4.0	20.1	0.06	10.9	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	12.1	27.8	0.10	12.3	D
Juan St	IV	35	11.2	17.5	28.7	0.07	8.5	E
	IV	35	18.3	7.9	26.2	0.13	17.9	C
Total	IV		45.2	37.5	82.7	0.29	12.8	D

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	15.7	33.4	0.11	11.6	D
	IV	35	18.3	8.7	27.0	0.13	17.4	C
Congress St	IV	35	11.2	6.8	18.0	0.07	13.6	C
Pacific Highway	IV	35	15.7	24.8	40.5	0.10	8.5	E
Total	IV		62.9	56.0	118.9	0.40	12.1	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	34.0	70.1	0.30	15.5	D
Total	III		36.1	34.0	70.1	0.30	15.5	D

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	70.4	112.6	0.35	11.3	E
W Point Loma Blvd	III	35	36.1	65.8	101.9	0.30	10.6	E
Total	III		78.3	136.2	214.5	0.65	11.0	E

Appendix D
Peak Hour Intersection Counts

Vehicle Intersection Counts

(1)

10

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

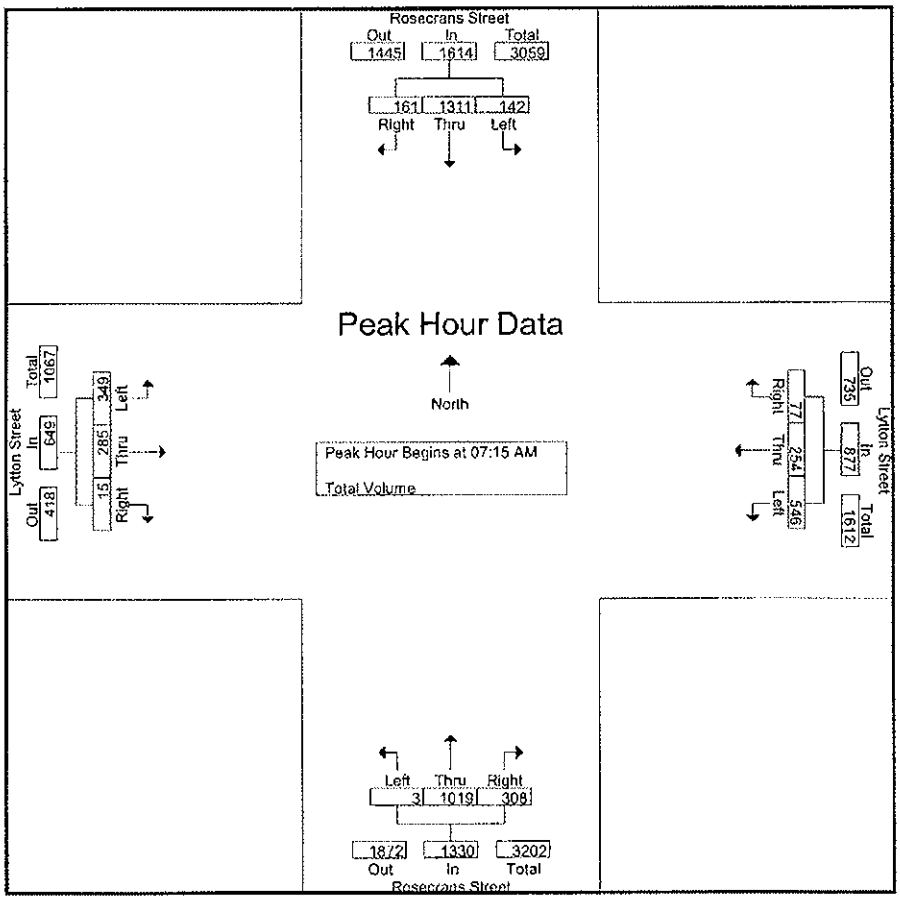
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
Total	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
07:00 AM	25	334	78	437	151	94	4	249	2	160	38	200	51	55	12	118	1004
07:15 AM	35	363	54	452	145	71	9	225	0	263	62	325	100	80	3	183	1185
07:30 AM	36	262	32	330	147	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	38	327	37	402	135	70	27	232	1	247	85	333	101	88	6	195	1162
Total	134	1286	201	1621	578	295	60	933	3	901	259	1163	336	284	23	643	4360
08:00 AM	33	359	38	430	119	53	21	193	2	278	87	367	64	56	4	124	1114
08:15 AM	35	349	60	444	103	72	25	200	3	285	77	365	55	59	1	115	1124
08:30 AM	20	269	46	335	96	52	20	168	1	321	88	410	69	49	1	119	1032
Grand Total	244	2561	409	3214	1059	533	131	1723	10	1976	532	2518	586	502	32	1120	8575
Apprch %	7.6	79.7	12.7		61.5	30.9	7.6		0.4	78.5	21.1		52.3	44.8	2.9		
Total %	2.8	29.9	4.8	37.5	12.3	6.2	1.5	20.1	0.1	23	6.2	29.4	6.8	5.9	0.4	13.1	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	**363**	**54**	**452**	145	71	9	225	0	263	62	325	100	80	3	183	**1185**
07:30 AM	36	262	32	330	**147**	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	**38**	327	37	402	135	70	**27**	**232**	1	247	85	333	**101**	**88**	**6**	**195**	1162
08:00 AM	33	359	38	430	119	53	21	193	**2**	**278**	**87**	**367**	64	56	4	124	1114
Total Volume	142	1311	161	1614	546	254	77	877	3	1019	308	1330	349	285	15	649	4470
% App. Total	8.8	81.2	10		62.3	29	8.8		0.2	76.6	23.2		53.8	43.9	2.3		
PHF	.934	.903	.745	.893	.929	.894	.713	.945	.375	.916	.885	.906	.864	.810	.625	.832	.943

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	25	334	78	437	151	94	4	249	1	247	85	333	100	80	3	183
+15 mins.	35	363	54	452	145	71	9	225	2	278	87	367	84	61	2	147
+30 mins.	36	262	32	330	147	60	20	227	3	285	77	365	101	88	6	195
+45 mins.	38	327	37	402	135	70	27	232	1	321	88	410	64	56	4	124
Total Volume	134	1286	201	1621	578	295	60	933	7	1131	337	1475	349	285	15	649
% App. Total	8.3	79.3	12.4		62	31.6	6.4		0.5	76.7	22.8		53.8	43.9	2.3	
PHF	.882	.886	.644	.897	.957	.785	.556	.937	.583	.881	.957	.899	.864	.810	.625	.832

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

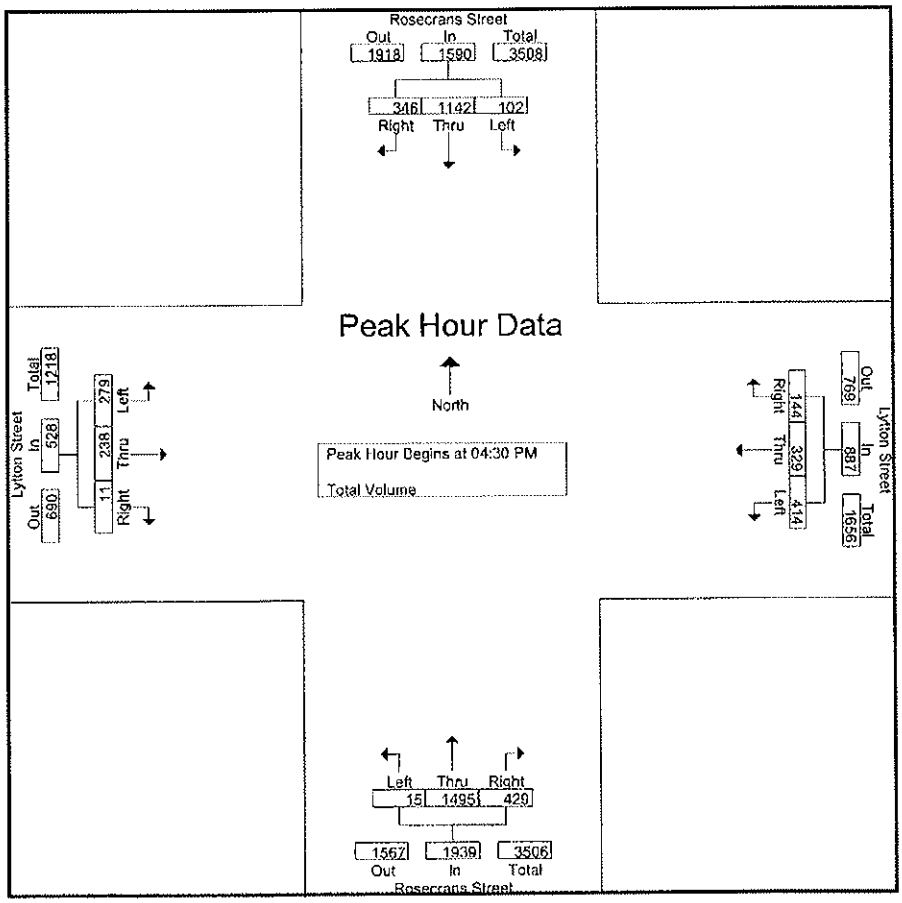
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	250	40	312	108	107	17	232	3	405	98	506	60	81	2	143	1193
04:15 PM	14	255	52	321	116	71	24	211	5	376	107	488	54	43	3	100	1120
04:30 PM	29	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	313	73	409	107	77	42	226	3	347	98	448	70	61	1	132	1215
Total	88	1088	240	1416	424	335	122	881	15	1470	411	1896	249	238	8	495	4688
05:00 PM	22	273	71	366	103	81	37	221	1	433	119	553	76	62	3	141	1281
05:15 PM	28	286	127	441	111	91	26	228	7	373	104	484	68	62	5	135	1288
05:30 PM	14	314	84	412	71	76	28	175	3	362	69	434	55	60	2	117	1138
05:45 PM	11	307	42	360	85	82	25	192	2	307	69	378	50	42	6	98	1028
Total	75	1180	324	1579	370	330	116	816	13	1475	361	1849	249	226	16	491	4735
Grand Total	163	2268	564	2995	794	665	238	1697	28	2945	772	3745	498	464	24	986	9423
Apprch %	5.4	75.7	18.8		46.8	39.2	14		0.7	78.6	20.6		50.5	47.1	2.4		
Total %	1.7	24.1	6	31.8	8.4	7.1	2.5	18	0.3	31.3	8.2	39.7	5.3	4.9	0.3	10.5	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**29**	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	**313**	73	409	107	77	**42**	226	3	347	98	448	70	61	1	132	1215
05:00 PM	22	273	71	366	103	81	37	221	1	**433**	**119**	**553**	**76**	**62**	3	**141**	1281
05:15 PM	28	286	**127**	**441**	**111**	**91**	26	**228**	7	373	104	484	68	62	**5**	135	**1288**
Total Volume	102	1142	346	1590	414	329	144	887	15	1495	429	1939	279	238	11	528	4944
% App. Total	6.4	71.8	21.8		46.7	37.1	16.2		0.8	77.1	22.1		52.8	45.1	2.1		
PHF	.879	.912	.681	.901	.932	.904	.857	.973	.536	.863	.901	.877	.918	.960	.550	.936	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	23	313	73	409	93	80	39	212	5	376	107	488	65	53	2	120
+15 mins.	22	273	71	366	107	77	42	226	4	342	108	454	70	61	1	132
+30 mins.	28	286	127	441	103	81	37	221	3	347	98	448	76	62	3	141
+45 mins.	14	314	84	412	111	91	26	228	1	433	119	553	68	62	5	135
Total Volume	87	1186	355	1628	414	329	144	887	13	1498	432	1943	279	238	11	528
% App. Total	5.3	72.9	21.8		46.7	37.1	16.2		0.7	77.1	22.2		52.8	45.1	2.1	
PHF	.777	.944	.699	.923	.932	.904	.857	.973	.650	.865	.908	.878	.918	.960	.550	.936

(2A)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		66								108		182	356
7:15 AM		59								91		196	346
7:30 AM		70								97		242	409
7:45 AM		73								124		289	486
8:00 AM		83								109		256	448
8:15 AM		80								122		267	469
8:30 AM		108								83		205	396
8:45 AM		97								86		215	398

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	636	0	0	0	0	0	0	0	820	0	1852	3308
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	30.69%	0.00%	69.31%	

[illegible]													
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

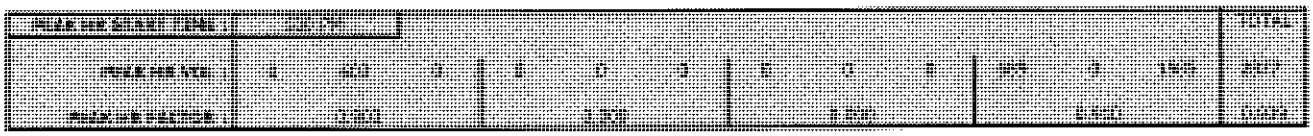
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SDUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		149								167		252	568
4:15 PM		150								176		297	623
4:30 PM		149								168		301	618
4:45 PM		144								157		363	664
5:00 PM		155								161		336	652
5:15 PM		141								180		445	766
5:30 PM		167								167		430	764
5:45 PM		140								181		374	695
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1195	0	0	0	0	0	0	0	1357	0	2798	5350
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	32.66%	0.00%	67.34%	



CONTROL :

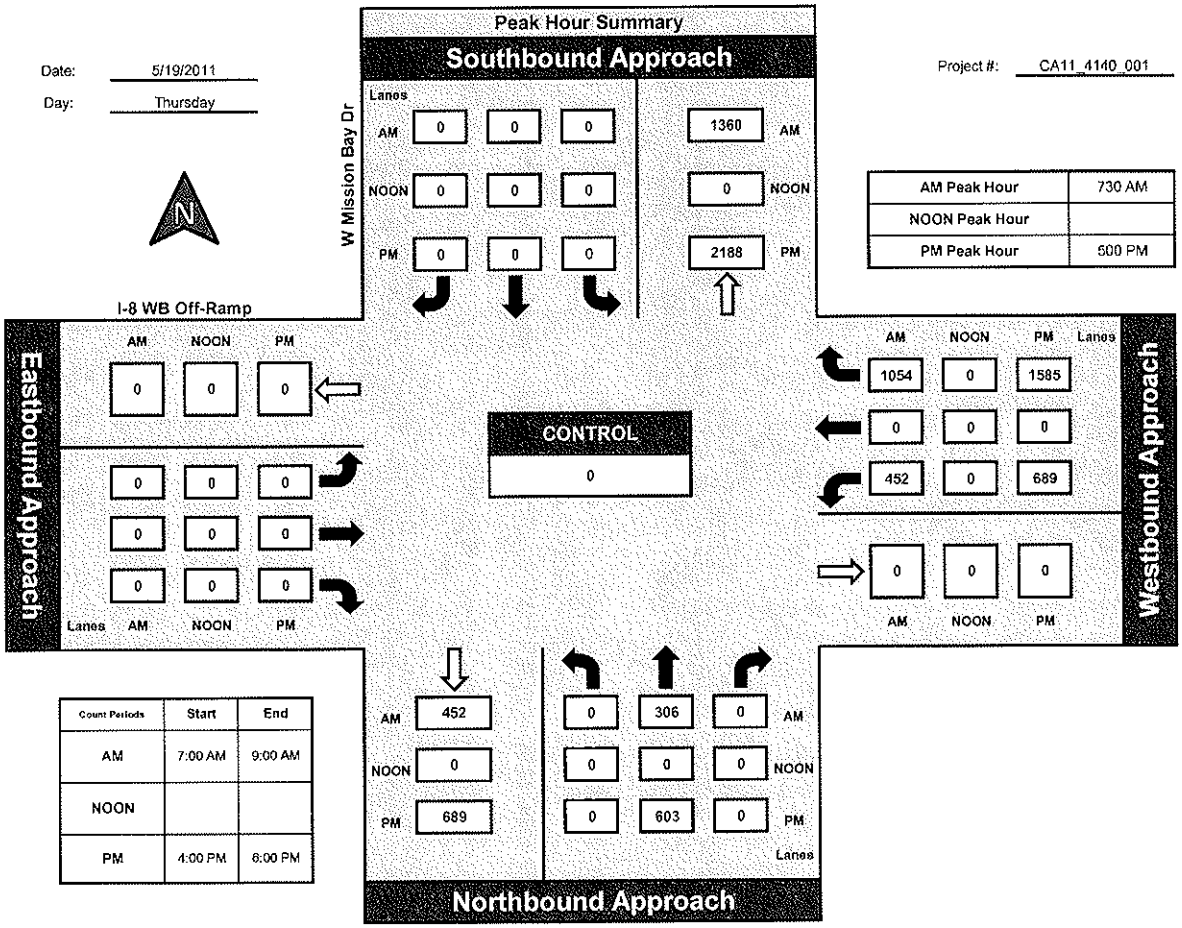
ITM Peak Hour Summary

Prepared by:

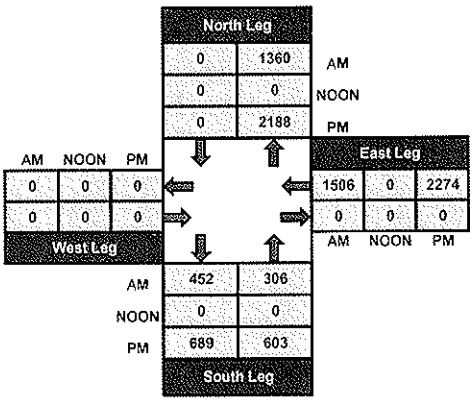
NDS

National Data & Surveying Services

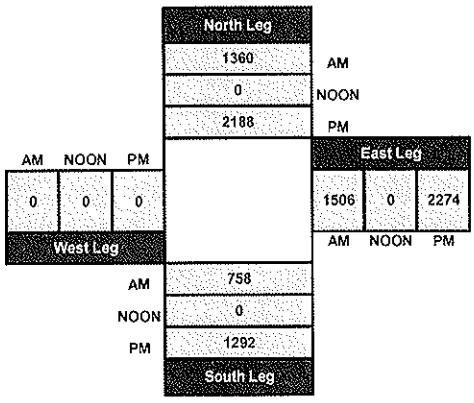
W Mission Bay Dr and I-8 WB Off-Ramp , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(2B)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	57	130		154	6			2				349
7:15 AM	0	67	130		163	2			3				365
7:30 AM	2	63	167		199	3			2				436
7:45 AM	2	80	166		211	9			3				471
8:00 AM	7	76	131		218	4			4				440
8:15 AM	1	86	163		225	1			4				480
8:30 AM	6	103	158		205	7			4				483
8:45 AM	3	101	145		220	0			4				473
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	633	1190	0	1595	32	0	0	26	0	0	0	3497
APPROACH %'s :	1.14%	34.33%	64.53%	0.00%	98.03%	1.97%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	6	152	187		252	9			6				612
4:15 PM	1	146	184		274	10			5				620
4:30 PM	7	154	174		280	16			4				635
4:45 PM	3	152	147		277	13			3				595
5:00 PM	5	147	174		310	15			5				656
5:15 PM	5	145	126		278	16			8				578
5:30 PM	3	164	154		314	10			0				645
5:45 PM	4	141	161		306	13			7				632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	1201	1307	0	2291	102	0	0	38	0	0	0	4973
APPROACH %'s :	1.34%	47.25%	51.42%	0.00%	95.74%	4.26%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sport Arena Blvd and I-8 EB On-Ramp , City of San Diego

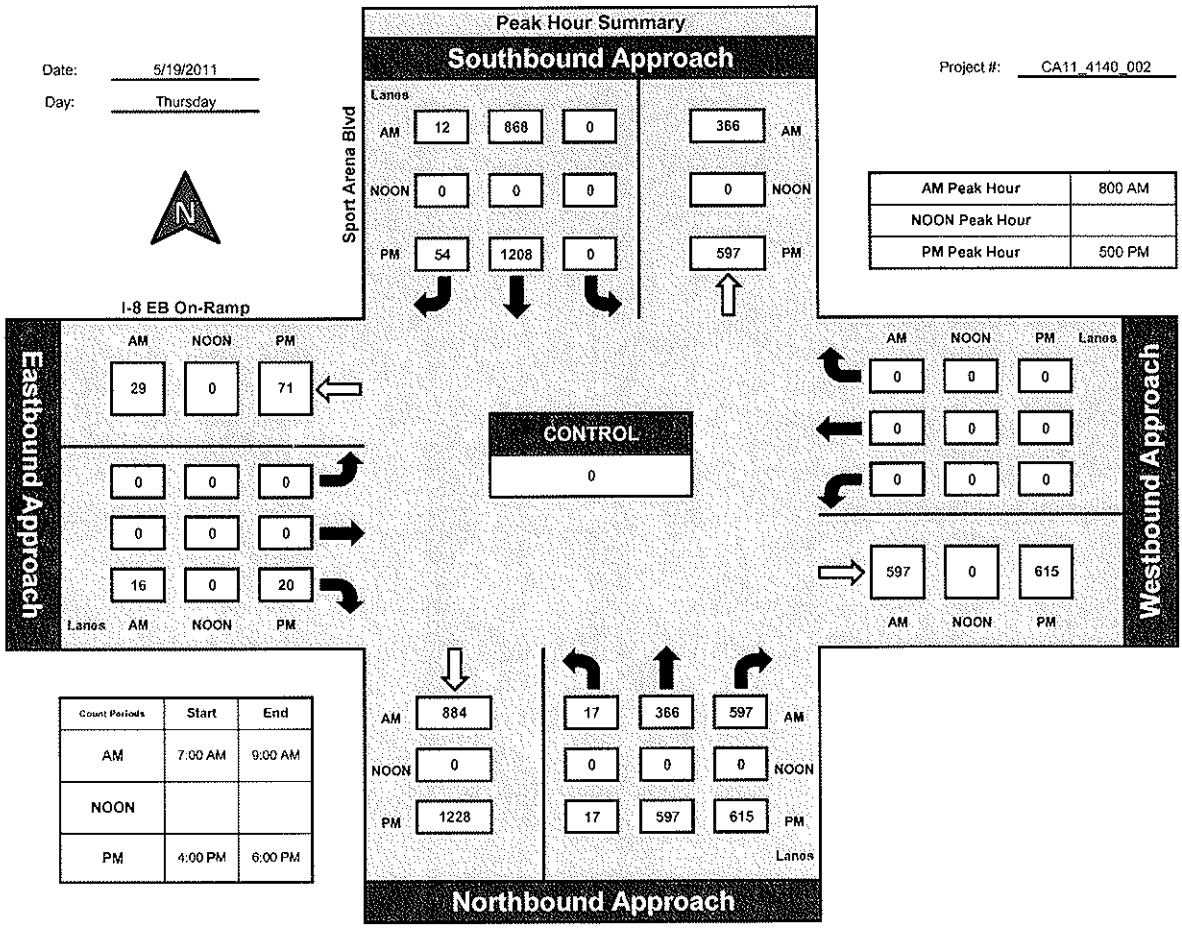
Date: 5/19/2011

Day: Thursday

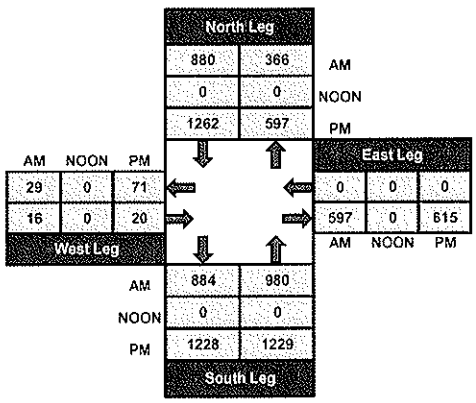
Project #: CA11_4140_002

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

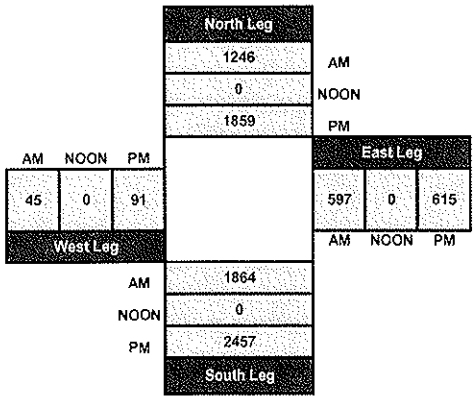
Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Total Ins & Outs



Total Volume Per Leg



③

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001

Day: THURSDAY

City: City of San Diego

Date: 6/9/2011

AM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
7:00 AM						3		137			157	2	299
7:15 AM						6		178			220	0	404
7:30 AM						4		164			250	3	421
7:45 AM						5		217			216	3	441
8:00 AM						8		204			214	1	427
8:15 AM						8		231			245	3	487
8:30 AM						13		190			226	3	432
8:45 AM						7		200			184	5	396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	54	0	1521	0	0	1712	20	3307
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	98.85%	1.15%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001 **Day:** THURSDAY

City: City of San Diego **Date:** 6/9/2011

PM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
4:00 PM						29		266			334	6	635
4:15 PM						21		321			283	10	635
4:30 PM						35		287			319	5	646
4:45 PM						26		291			308	4	629
5:00 PM						36		324			306	9	675
5:15 PM						39		348			308	7	702
5:30 PM						17		334			246	3	600
5:45 PM						16		306			300	10	632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	219	0	2477	0	0	2404	54	5154
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	97.80%	2.20%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

ITM Peak Hour Summary

Prepared by:

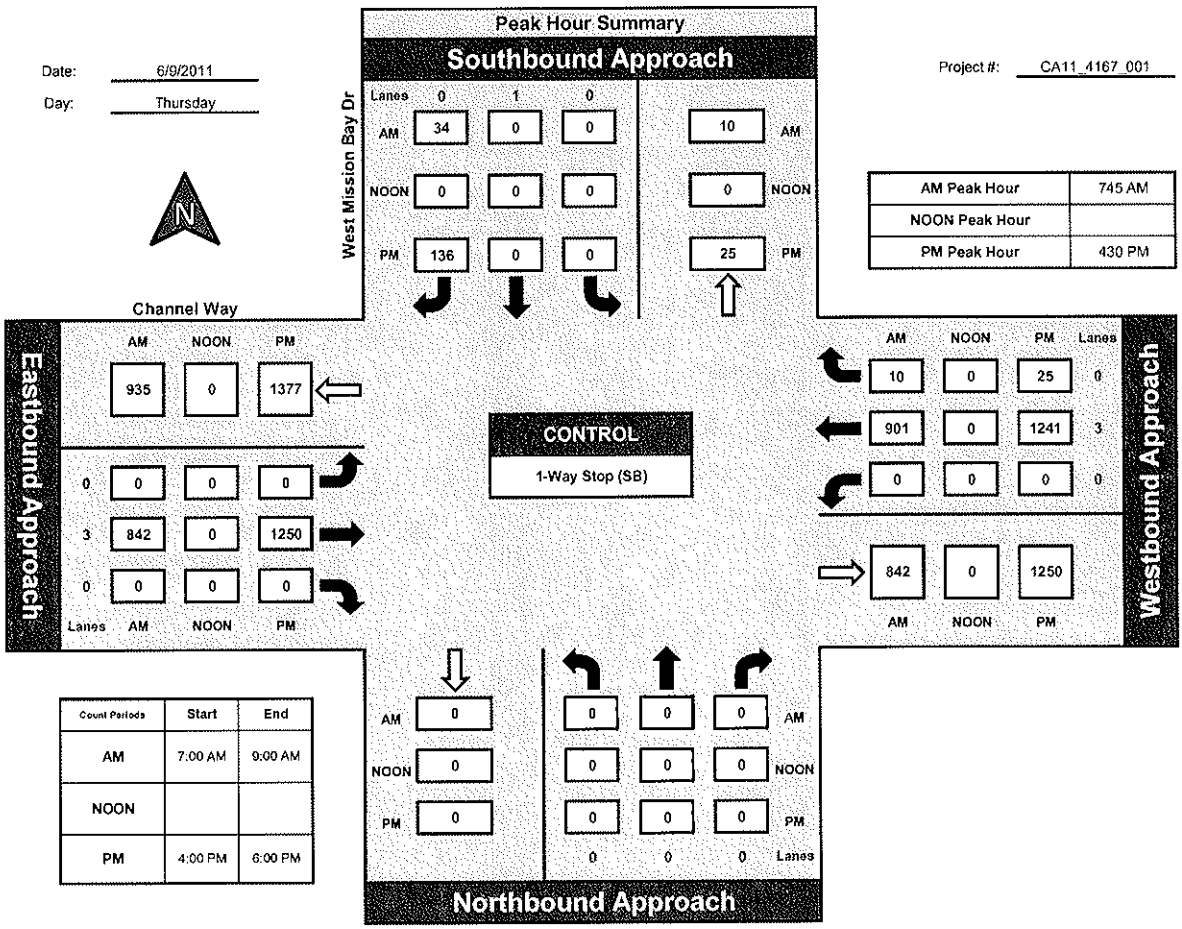
National Data & Surveying Services

West Mission Bay Dr and Channel Way , City of San Diego

Date: 6/9/2011

Day: Thursday

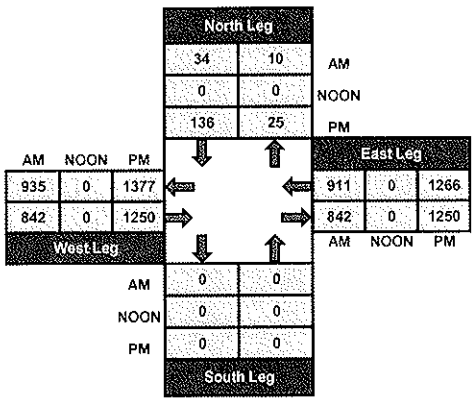
Project #: CA11_4167_001



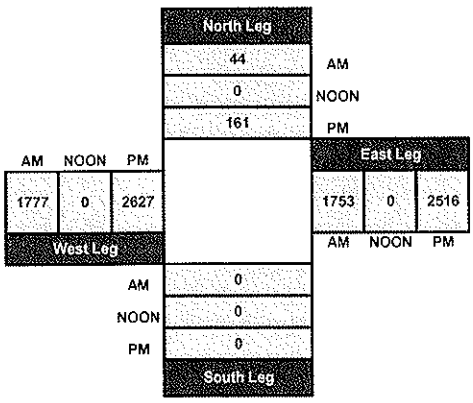
AM Peak Hour	7:45 AM
NOON Peak Hour	
PM Peak Hour	4:30 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(4)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	22	53	0	55	61	34	88	34	48	3	20	38	456
7:15 AM	29	62	1	61	81	49	135	50	57	2	20	45	592
7:30 AM	29	99	1	71	81	68	146	50	62	2	12	47	668
7:45 AM	29	67	2	79	97	54	121	73	62	3	23	47	657
8:00 AM	36	82	4	68	92	44	103	45	66	5	21	46	612
8:15 AM	25	70	8	79	118	36	98	42	51	3	36	52	618
8:30 AM	36	73	4	72	99	51	121	41	60	3	35	56	651
8:45 AM	52	102	3	79	119	40	90	49	67	5	33	69	708
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	258	608	23	564	748	376	902	384	473	26	200	400	4962
APPROACH %'s :	29.02%	68.39%	2.59%	33.41%	44.31%	22.27%	51.28%	21.83%	26.89%	4.15%	31.95%	63.90%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	76	141	4	45	135	46	84	56	86	8	47	103	831
4:15 PM	90	140	2	61	142	54	73	54	76	10	62	97	861
4:30 PM	79	110	6	67	126	62	84	52	66	6	79	133	870
4:45 PM	73	107	4	65	136	52	85	60	59	7	74	98	820
5:00 PM	77	118	7	77	184	74	85	56	70	9	81	134	972
5:15 PM	94	114	3	62	113	65	92	46	75	11	88	104	867
5:30 PM	102	123	10	87	161	79	92	54	68	7	51	82	916
5:45 PM	86	81	10	86	136	76	81	50	74	12	83	90	865
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	677	934	46	550	1133	508	676	428	574	70	565	841	7002
APPROACH %'s :	40.86%	56.37%	2.78%	25.10%	51.71%	23.19%	40.29%	25.51%	34.21%	4.74%	38.28%	56.98%	
[illegible]													

CONTROL :

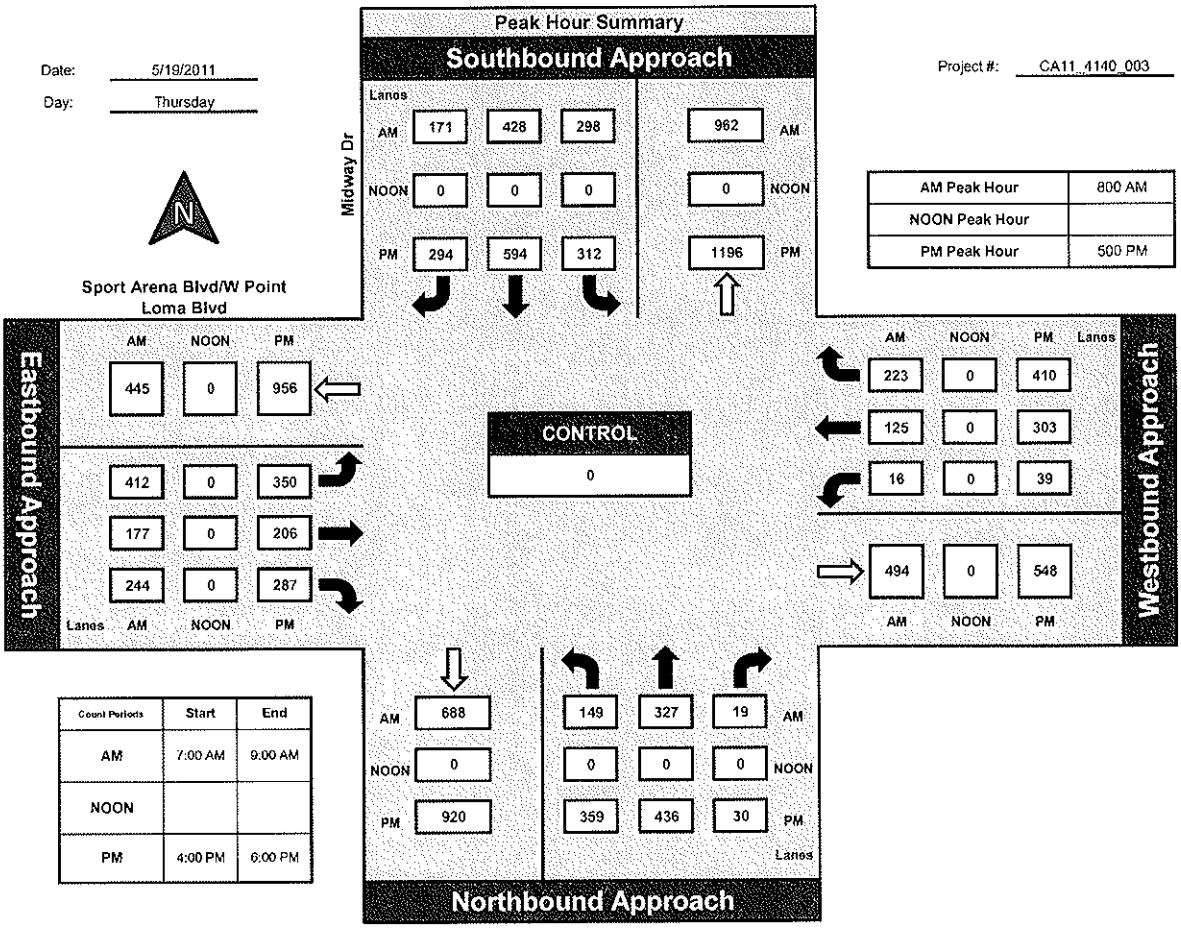
ITM Peak Hour Summary

Prepared by:

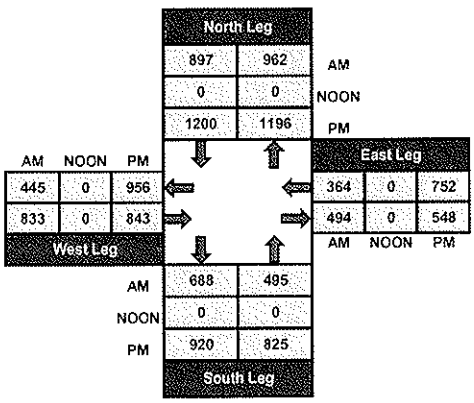
NDS

National Data & Surveying Services

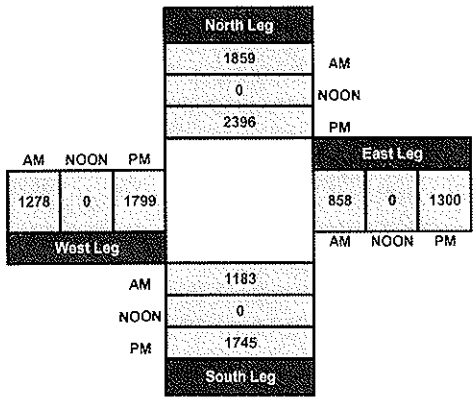
Midway Dr and Sport Arena Blvd/W Point Loma Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(5)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	18	23	3	9	3	3	57	13	9	56	10	224
7:15 AM	28	16	20	4	6	6	12	69	17	6	33	6	223
7:30 AM	26	20	28	5	9	5	18	86	16	11	56	9	289
7:45 AM	29	30	23	8	7	13	14	87	13	10	53	11	298
8:00 AM	19	22	14	6	11	12	16	91	21	21	68	7	308
8:15 AM	29	21	21	5	17	13	14	105	15	9	68	11	328
8:30 AM	24	30	34	8	10	11	18	103	20	18	84	6	366
8:45 AM	25	22	22	6	11	17	14	91	14	16	89	11	338
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	200	179	185	45	80	80	109	689	129	100	507	71	2374
APPROACH %'s :	35.46%	31.74%	32.80%	21.95%	39.02%	39.02%	11.76%	74.33%	13.92%	14.75%	74.78%	10.47%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	47	28	38	12	31	12	34	140	26	62	158	15	603
4:15 PM	26	38	35	9	34	19	32	118	24	70	140	16	561
4:30 PM	26	32	39	9	28	26	37	130	25	55	175	16	598
4:45 PM	41	29	47	15	42	10	23	91	53	49	138	11	549
5:00 PM	56	33	41	19	26	22	33	130	29	59	142	14	604
5:15 PM	47	31	31	9	35	28	34	151	27	59	174	17	643
5:30 PM	42	29	38	10	38	14	32	128	31	58	167	17	604
5:45 PM	49	15	28	9	39	18	29	122	29	47	146	9	540
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	334	235	297	92	273	149	254	1010	244	459	1240	115	4702
APPROACH %'s :	38.57%	27.14%	34.30%	17.90%	53.11%	28.99%	16.84%	66.98%	16.18%	25.30%	68.36%	6.34%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

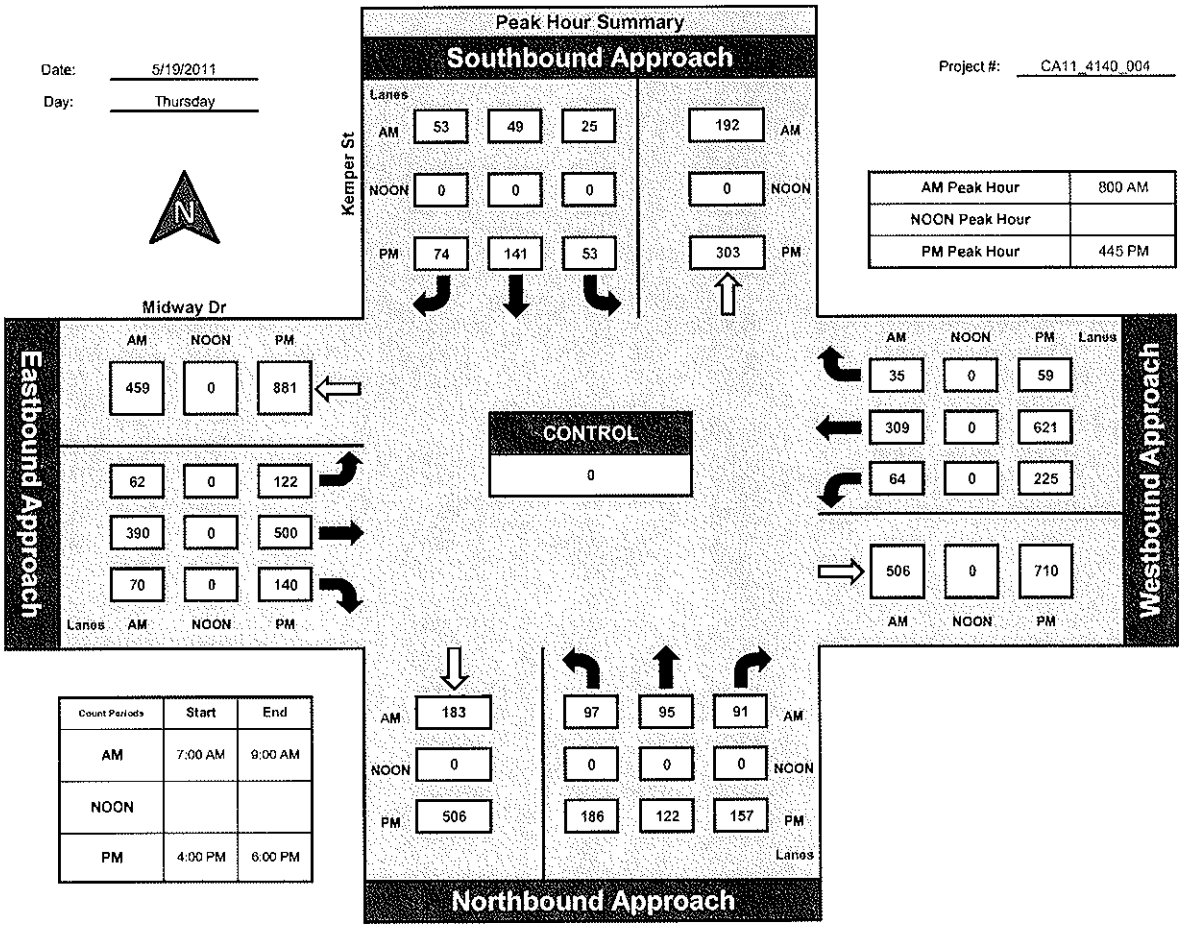
National Data & Surveying Services

Kemper St and Midway Dr , City of San Diego

Date: 5/19/2011

Day: Thursday

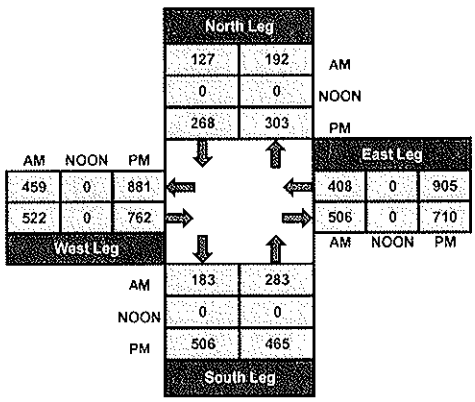
Project #: CA11_4140_004



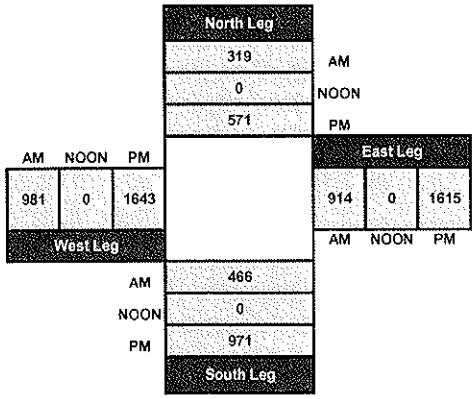
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(6)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	4	0	3	4	0	1	4	106	3	4	81	2	212
7:15 AM	1	2	1	1	0	2	3	102	2	2	90	4	210
7:30 AM	4	0	1	1	0	4	1	132	1	5	126	7	282
7:45 AM	3	0	1	1	1	4	1	114	2	7	132	11	277
8:00 AM	6	1	0	2	0	3	1	131	3	7	148	13	315
8:15 AM	7	1	3	4	1	3	4	139	5	6	158	12	343
8:30 AM	3	0	1	7	0	4	5	148	2	6	183	23	382
8:45 AM	3	1	1	3	1	5	6	119	0	6	140	20	305
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	5	11	23	3	26	25	991	18	43	1058	92	2326
APPROACH %'s :	65.96%	10.64%	23.40%	44.23%	5.77%	50.00%	2.42%	95.84%	1.74%	3.60%	88.68%	7.71%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	3	4	1	12	1	10	19	203	1	8	273	39	574
4:15 PM	4	2	1	12	4	13	11	205	4	6	242	34	538
4:30 PM	7	4	2	20	2	20	14	221	4	8	267	35	604
4:45 PM	3	1	3	16	2	16	11	170	5	6	240	34	507
5:00 PM	6	0	4	11	0	10	7	217	2	7	284	44	592
5:15 PM	8	1	5	22	0	6	14	197	5	6	246	51	561
5:30 PM	1	3	2	14	3	19	23	219	4	5	278	27	598
5:45 PM	4	0	5	14	1	7	9	186	9	1	242	27	505
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	36	15	23	121	13	101	108	1618	34	47	2072	291	4479
APPROACH %'s :	48.65%	20.27%	31.08%	51.49%	5.53%	42.98%	6.14%	91.93%	1.93%	1.95%	85.98%	12.07%	



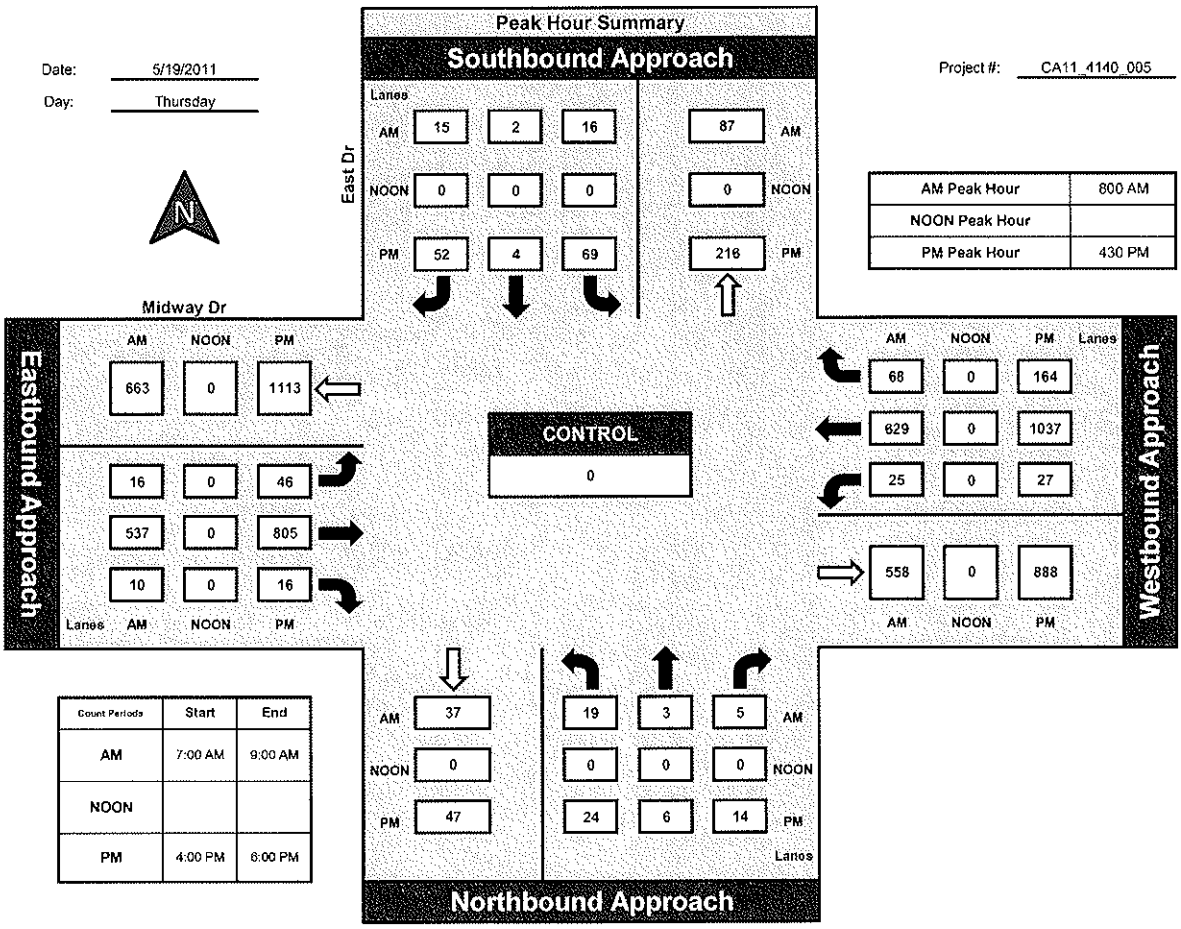
CONTROL :

ITM Peak Hour Summary

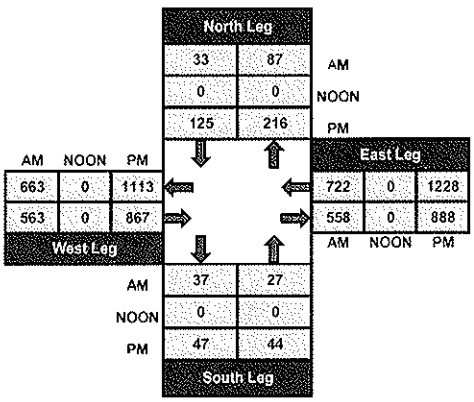
Prepared by:

National Data & Surveying Services

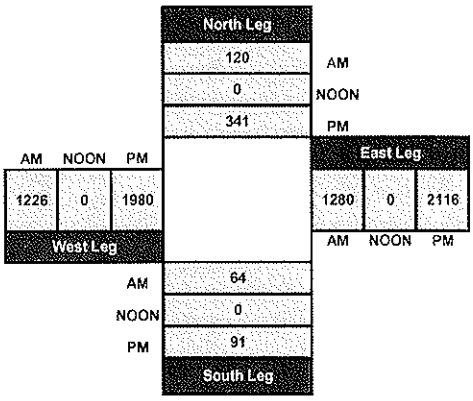
East Dr and Midway Dr , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(7)

8

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

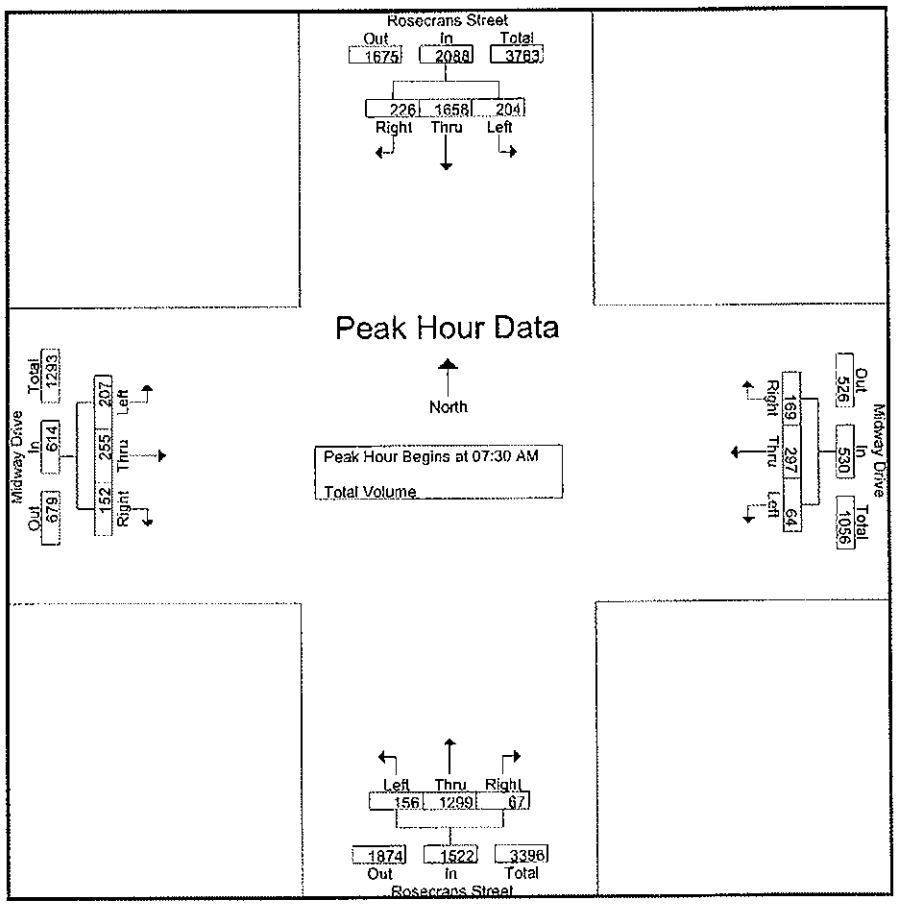
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
Total	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
07:00 AM	78	384	31	493	14	44	32	90	24	246	17	287	27	46	28	101	971
07:15 AM	67	472	45	584	18	54	25	97	17	283	13	313	45	59	16	120	1114
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
Total	259	1695	192	2146	62	240	127	429	104	1196	51	1351	165	238	115	518	4444
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
08:30 AM	58	310	55	423	15	88	45	148	33	332	20	385	55	77	35	167	1123
Grand Total	467	3165	378	4010	121	525	296	942	245	2328	131	2704	376	483	253	1112	8768
Apprch %	11.6	78.9	9.4		12.8	55.7	31.4		9.1	86.1	4.8		33.8	43.4	22.8		
Total %	5.3	36.1	4.3	45.7	1.4	6	3.4	10.7	2.8	26.6	1.5	30.8	4.3	5.5	2.9	12.7	

	Rosecrans Street Southbound				Midwny Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
Total Volume	204	1658	226	2088	64	297	169	530	156	1299	67	1522	207	255	152	614	4754
% App. Total	9.8	79.4	10.8		12.1	56	31.9		10.2	85.3	4.4		33.7	41.5	24.8		
PHF	.718	.856	.831	.877	.762	.773	.716	.844	.780	.931	.698	.926	.772	.951	.905	.914	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	67	472	45	584	20	72	36	128	34	**349**	11	394	44	67	33	144
+15 mins.	**71**	355	48	474	13	59	**59**	131	29	318	10	357	**67**	62	39	**168**
+30 mins.	43	**484**	**68**	**595**	**21**	**96**	40	**157**	**50**	286	**24**	360	47	60	**42**	149
+45 mins.	48	417	57	522	15	88	45	148	43	346	22	**411**	55	77	35	167
Total Volume	229	1728	218	2175	69	315	180	564	156	1299	67	1522	213	266	149	628
% App. Total	10.5	79.4	10		12.2	55.9	31.9		10.2	85.3	4.4		33.9	42.4	23.7	
PHF	.806	.893	.801	.914	.821	.820	.763	.898	.780	.931	.698	.926	.795	.864	.887	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

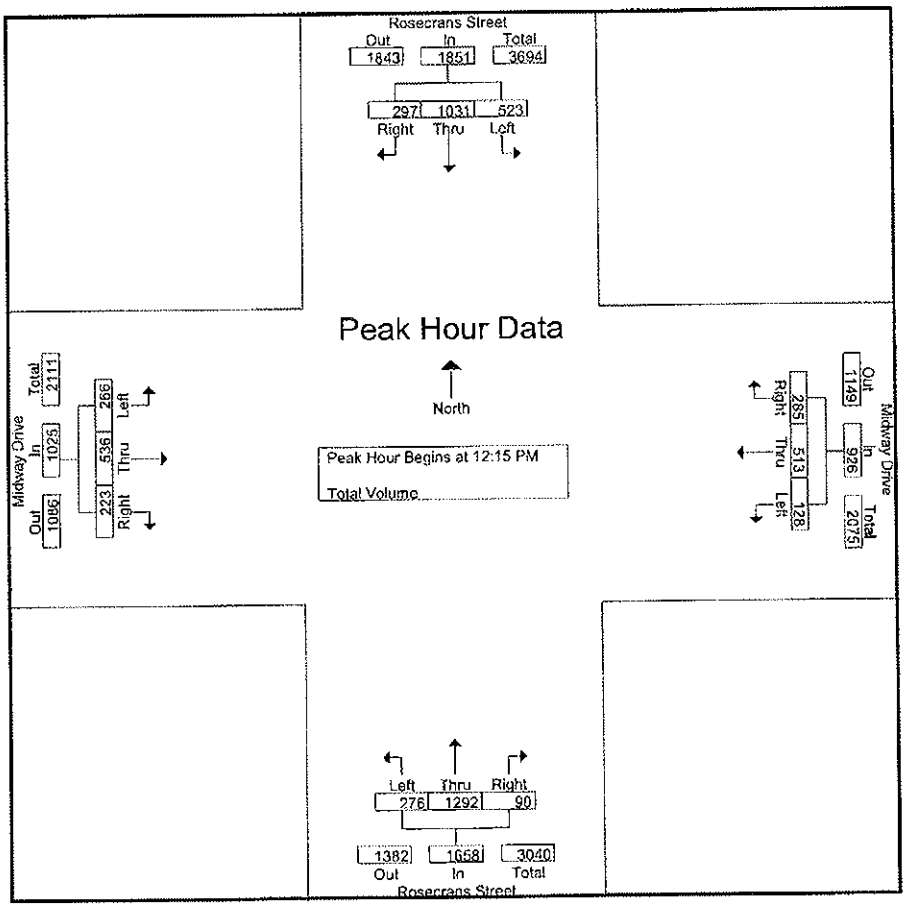
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	123	255	86	464	28	107	62	197	76	270	16	362	90	110	46	246	1269
11:45 AM	131	222	49	402	34	145	55	234	89	319	20	428	50	108	43	201	1265
Total	254	477	135	866	62	252	117	431	165	589	36	790	140	218	89	447	2534
12:00 PM	152	299	69	520	46	120	68	234	49	287	22	358	56	102	42	200	1312
12:15 PM	120	237	76	433	34	143	77	254	73	282	24	379	72	144	68	284	1350
12:30 PM	120	288	84	492	37	120	77	234	76	377	22	475	56	126	55	237	1438
12:45 PM	131	233	68	432	27	144	76	247	63	308	19	390	69	130	58	257	1326
Total	523	1057	297	1877	144	527	298	969	261	1254	87	1602	253	502	223	978	5426
01:00 PM	152	273	69	494	30	106	55	191	64	325	25	414	69	136	42	247	1346
01:15 PM	135	211	73	419	35	102	43	180	72	288	24	384	51	107	36	194	1177
Grand Total	1064	2018	574	3656	271	987	513	1771	562	2456	172	3190	513	963	390	1866	10483
Apprch %	29.1	55.2	15.7		15.3	55.7	29		17.6	77	5.4		27.5	51.6	20.9		
Total %	10.1	19.3	5.5	34.9	2.6	9.4	4.9	16.9	5.4	23.4	1.6	30.4	4.9	9.2	3.7	17.8	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	120	237	76	433	34	143	77	**254**	73	282	24	379	**72**	**144**	**68**	**284**	1350
12:30 PM	120	**288**	**84**	492	**37**	120	77	234	**76**	**377**	**22**	**475**	56	126	55	237	**1438**
12:45 PM	131	233	68	432	27	**144**	76	247	63	308	19	390	69	130	58	257	1326
01:00 PM	**152**	273	69	**494**	30	106	55	191	64	325	**25**	414	69	136	42	247	1346
Total Volume	523	1031	297	1851	128	513	285	926	276	1292	90	1658	266	536	223	1025	5460
% App. Total	28.3	55.7	16		13.8	55.4	30.8		16.6	77.9	5.4		26	52.3	21.8		
PHF	.860	.895	.884	.937	.865	.891	.925	.911	.908	.857	.900	.873	.924	.931	.820	.902	.949

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

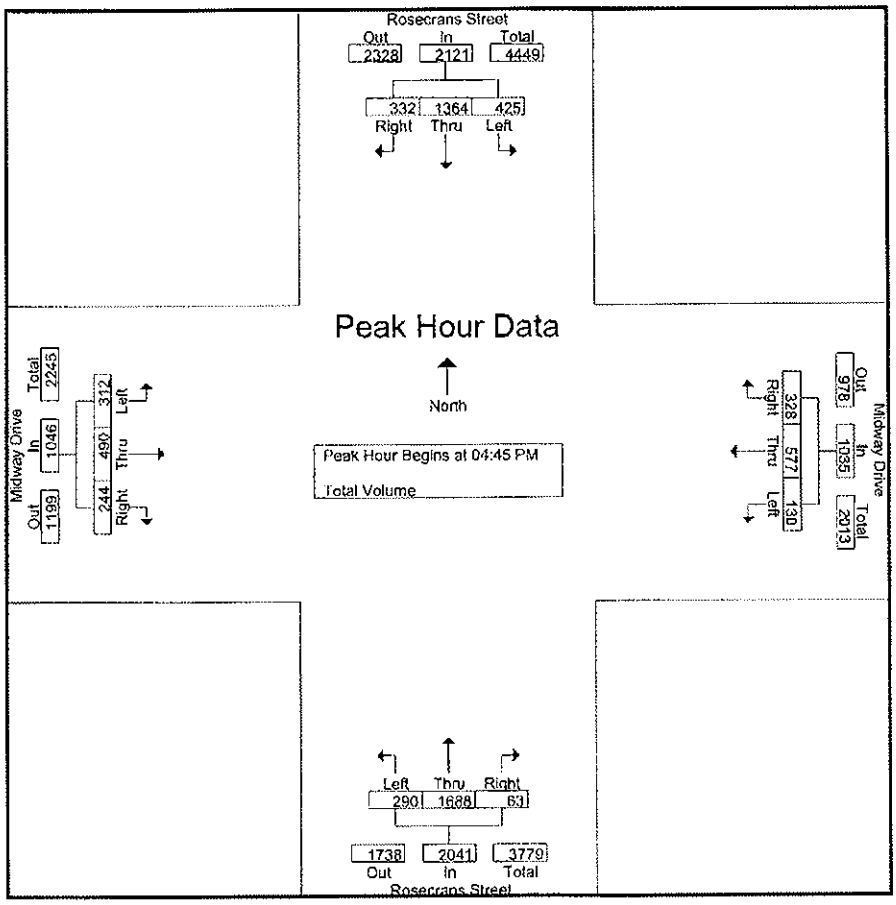
Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				12:30 PM				12:15 PM			
+0 mins.	**152**	**299**	69	**520**	**46**	120	68	234	**76**	**377**	22	**475**	**72**	**144**	**68**	**284**
+15 mins.	120	237	76	433	34	143	77	**254**	63	308	19	390	56	126	55	237
+30 mins.	120	288	**84**	492	37	120	77	234	64	325	**25**	414	69	130	58	257
+45 mins.	131	233	68	432	27	**144**	76	247	72	288	24	384	69	136	42	247
Total Volume	523	1057	297	1877	144	527	298	969	275	1298	90	1663	266	536	223	1025
% App. Total	27.9	56.3	15.8		14.9	54.4	30.8		16.5	78.1	5.4		26	52.3	21.8	
PHF	.860	.884	.884	.902	.783	.915	.968	.954	.905	.861	.900	.875	.924	.931	.820	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	116	330	90	536	40	133	95	268	62	427	17	506	60	109	80	249
+15 mins.	120	332	81	533	23	129	90	242	69	455	14	538	84	108	52	244
+30 mins.	99	344	89	532	38	154	84	276	67	424	13	504	86	129	46	261
+45 mins.	90	358	72	520	39	152	83	274	75	434	14	523	82	144	66	292
Total Volume	425	1364	332	2121	140	568	352	1060	273	1740	58	2071	312	490	244	1046
% App. Total	20	64.3	15.7		13.2	53.6	33.2		13.2	84	2.8		29.8	46.8	23.3	
PHF	.885	.953	.922	.989	.875	.922	.926	.960	.910	.956	.853	.962	.907	.851	.763	.896

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	106	301	72	479	34	138	80	252	62	427	17	506	75	117	42	234	1471
04:15 PM	107	324	78	509	33	128	96	257	69	455	14	538	77	111	52	240	1544
04:30 PM	103	285	80	468	40	133	95	268	67	424	13	504	72	131	56	259	1499
04:45 PM	116	330	90	536	23	129	90	242	75	434	14	523	60	109	80	249	1550
Total	432	1240	320	1992	130	528	361	1019	273	1740	58	2071	284	468	230	982	6064
05:00 PM	120	332	81	533	38	154	84	276	69	398	20	487	84	108	52	244	1540
05:15 PM	99	344	89	532	39	152	83	274	71	432	14	517	86	129	46	261	1584
05:30 PM	90	358	72	520	30	142	71	243	75	424	15	514	82	144	66	292	1569
05:45 PM	121	327	67	515	37	119	62	218	71	350	20	441	64	119	52	235	1409
Total	430	1361	309	2100	144	567	300	1011	286	1604	69	1959	316	500	216	1032	6102
Grand Total	862	2601	629	4092	274	1095	661	2030	559	3344	127	4030	600	968	446	2014	12166
Apprch %	21.1	63.6	15.4		13.5	53.9	32.6		13.9	83	3.2		29.8	48.1	22.1		
Total %	7.1	21.4	5.2	33.6	2.3	9	5.4	16.7	4.6	27.5	1	33.1	4.9	8	3.7	16.6	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	116	330	**90**	**536**	23	129	**90**	242	**75**	**434**	14	**523**	60	109	**80**	249	1550
05:00 PM	**120**	332	81	533	38	**154**	84	**276**	69	398	**20**	487	84	108	52	244	1540
05:15 PM	99	344	89	532	**39**	152	83	274	71	432	14	517	**86**	129	46	261	**1584**
05:30 PM	90	**358**	72	520	30	142	71	243	75	424	15	514	82	**144**	66	**292**	1569
Total Volume	425	1364	332	2121	130	577	328	1035	290	1688	63	2041	312	490	244	1046	6243
% App. Total	20	64.3	15.7		12.6	55.7	31.7		14.2	82.7	3.1		29.8	46.8	23.3		
PHF	.885	.953	.922	.989	.833	.937	.911	.938	.967	.972	.788	.976	.907	.851	.763	.896	.985

(9)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		85	4		87							17	193
7:15 AM		92	8		75							14	189
7:30 AM		118	2		117							10	247
7:45 AM		118	6		99							20	243
8:00 AM		114	8		112							21	255
8:15 AM		129	4		118							20	271
8:30 AM		149	7		150							24	330
8:45 AM		141	6		130							17	294

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	946	45	0	888	0	0	0	0	0	0	143	2022
APPROACH %'s :	0.00%	95.46%	4.54%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		172	4		203							63	442
4:15 PM		185	4		182							44	415
4:30 PM		169	1		228							71	469
4:45 PM		186	2		222							52	462
5:00 PM		220	1		232							53	506
5:15 PM		190	2		183							52	427
5:30 PM		164	1		206							43	414
5:45 PM		151	1		170							30	352
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1437	16	0	1626	0	0	0	0	0	0	408	3487
APPROACH %'s :	0.00%	98.90%	1.10%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
[illegible]													
[illegible]													

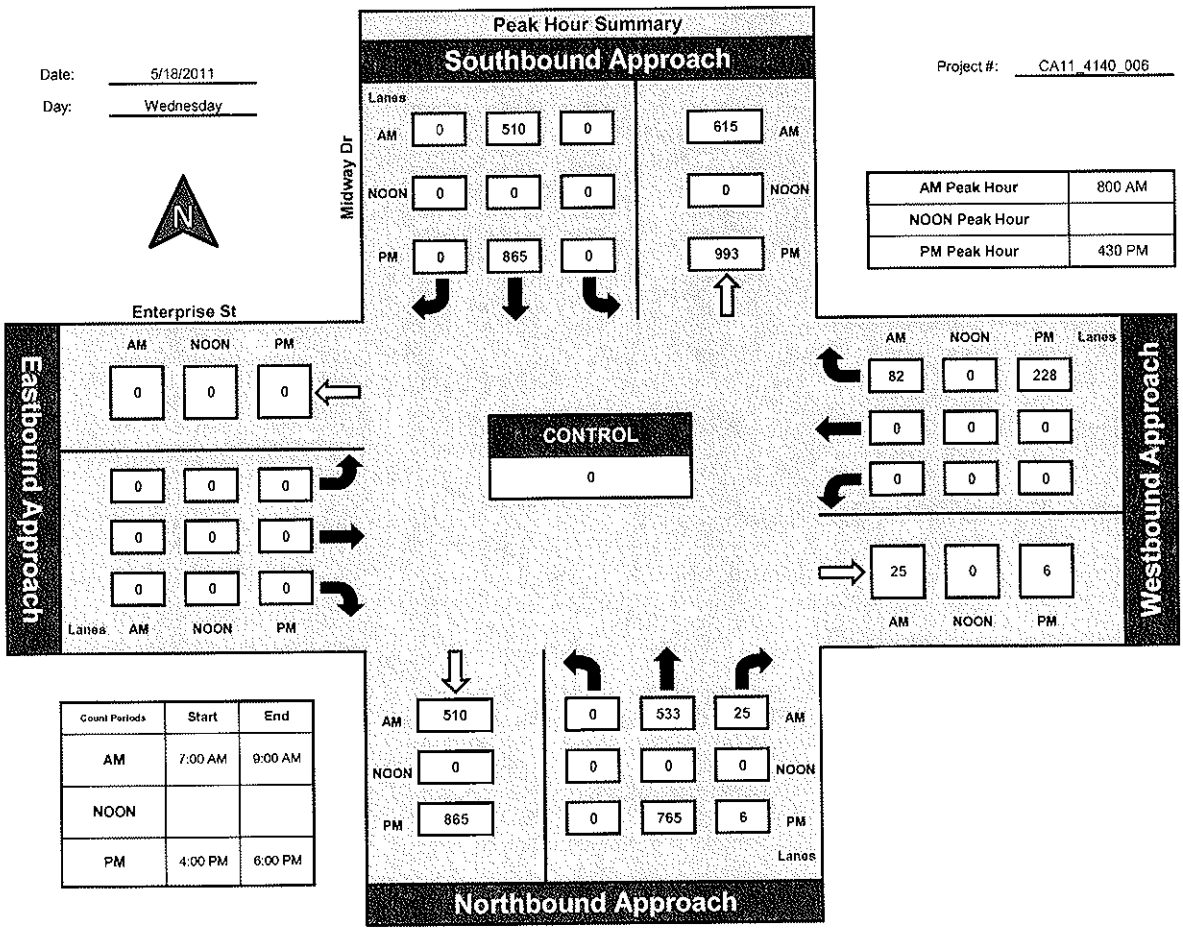
CONTROL :

ITM Peak Hour Summary

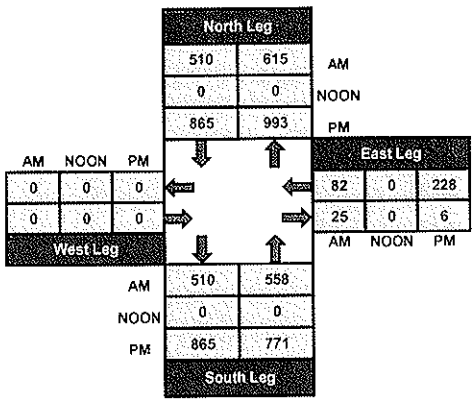
Prepared by:

National Data & Surveying Services

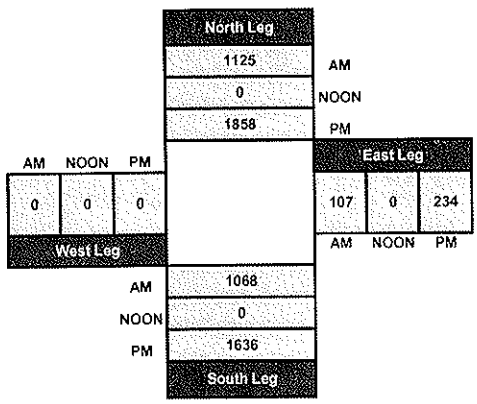
Midway Dr and Enterprise St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(10)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				65		21		160			380	84	710
7:15 AM				55		21		210			329	105	720
7:30 AM				95		21		186			248	115	665
7:45 AM				87		13		189			338	129	756
8:00 AM				89		19		210			314	119	751
8:15 AM				102		19		227			306	132	786
8:30 AM				119		28		210			253	152	762
8:45 AM				108		25		170			204	151	658

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	720	0	167	0	1562	0	0	2372	987	5808
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	81.17%	0.00%	18.83%	0.00%	100.00%	0.00%	0.00%	70.62%	29.38%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

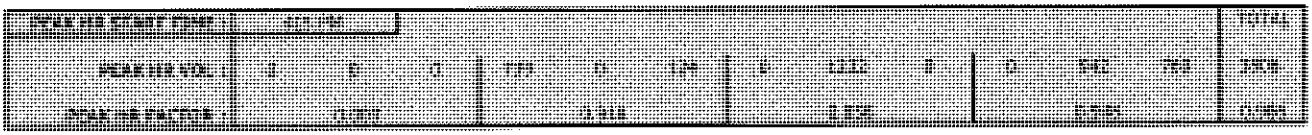
City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				172		27		333			223	175	930
4:15 PM				159		27		359			230	190	965
4:30 PM				192		32		310			227	170	931
4:45 PM				187		31		293			255	188	954
5:00 PM				201		34		270			230	221	956
5:15 PM				157		25		278			211	189	860
5:30 PM				175		31		216			206	169	797
5:45 PM				148		17		180			193	149	687

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	1391	0	224	0	2239	0	0	1775	1451	7080
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	86.13%	0.00%	13.87%	0.00%	100.00%	0.00%	0.00%	55.02%	44.98%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

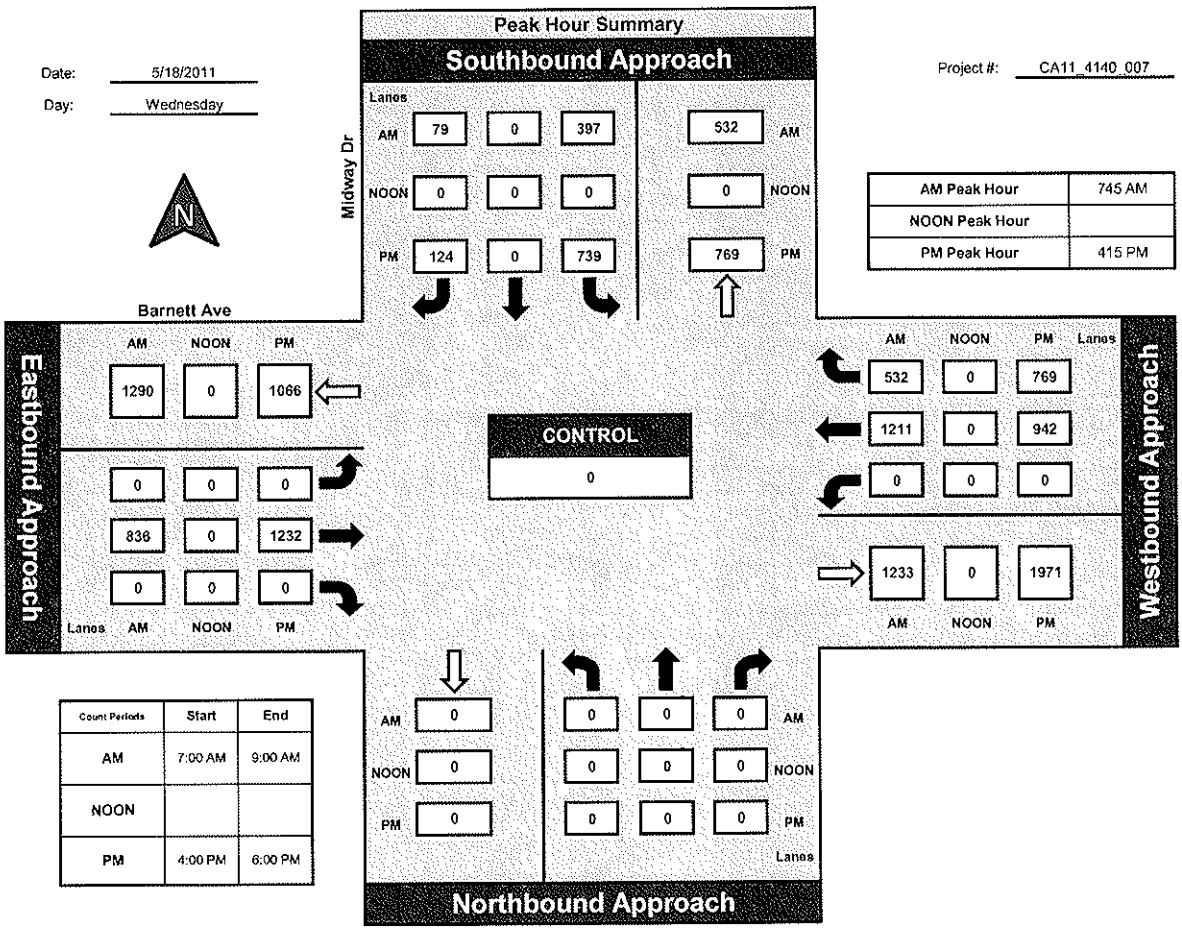
National Data & Surveying Services

Midway Dr and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

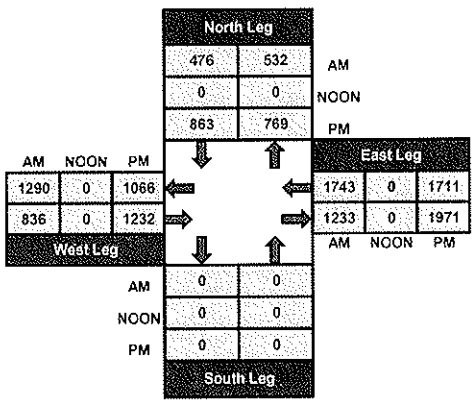
Project #: CA11_4140_007



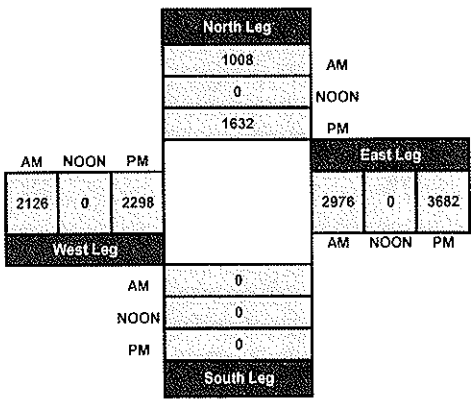
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

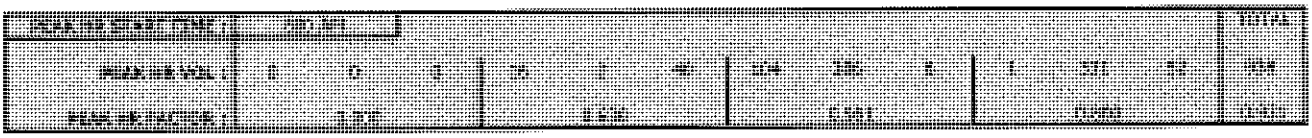
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				7	0	11	24	66	1	0	47	9	165
7:15 AM				7	1	18	30	83	0	0	36	6	181
7:30 AM				8	0	8	36	74	1	0	54	18	199
7:45 AM				3	0	16	32	99	2	0	68	15	235
8:00 AM				1	0	13	33	95	1	1	69	12	225
8:15 AM				8	1	14	25	99	0	0	78	14	239
8:30 AM				3	0	8	25	93	3	0	80	10	222
8:45 AM				4	1	5	21	99	2	0	104	16	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	41	3	93	226	708	10	1	536	100	1718
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	29.93%	2.19%	67.88%	23.94%	75.00%	1.06%	0.16%	84.14%	15.70%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

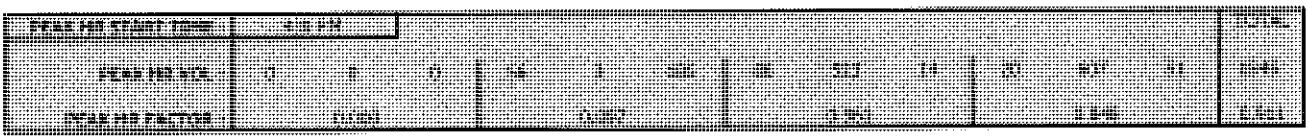
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				9	0	24	13	83	0	1	109	9	248
4:15 PM				12	0	36	13	105	2	4	121	11	304
4:30 PM				15	1	43	21	131	4	7	150	16	388
4:45 PM				14	0	48	25	130	7	5	177	18	424
5:00 PM				13	2	53	22	127	3	2	128	8	358
5:15 PM				14	0	41	18	135	0	6	152	9	375
5:30 PM				11	0	27	23	123	2	2	137	9	334
5:45 PM				12	2	35	28	136	5	3	149	8	378
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	100	5	307	163	970	23	30	1123	88	2809
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	24.27%	1.21%	74.51%	14.10%	83.91%	1.99%	2.42%	90.49%	7.09%	



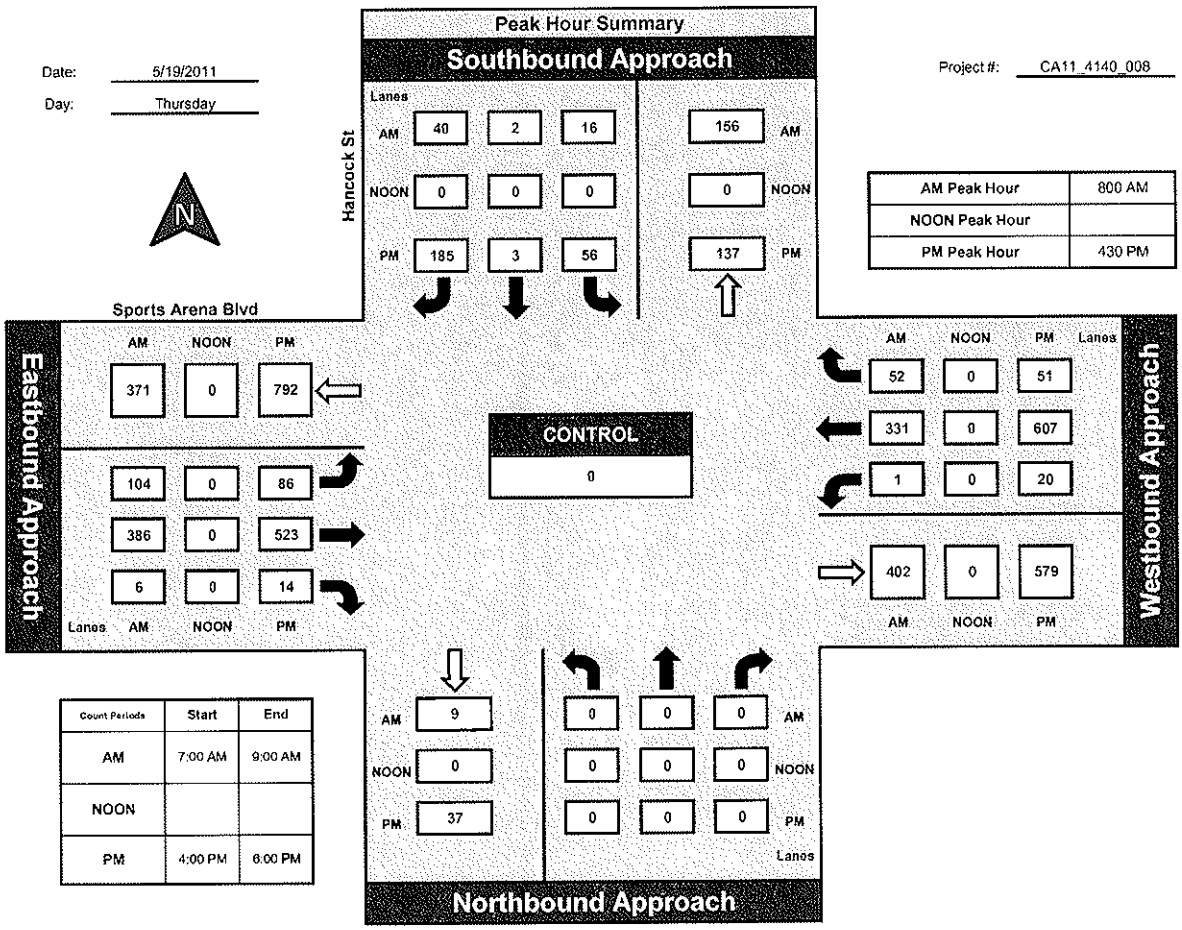
CONTROL :

ITM Peak Hour Summary

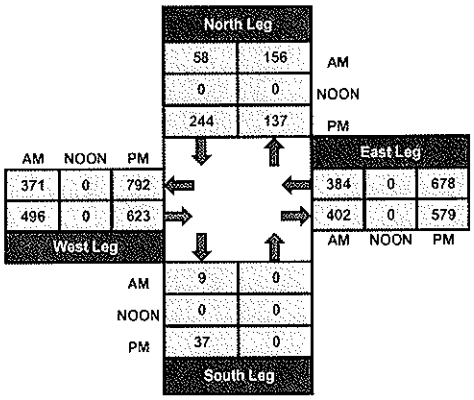
Prepared by:

National Data & Surveying Services

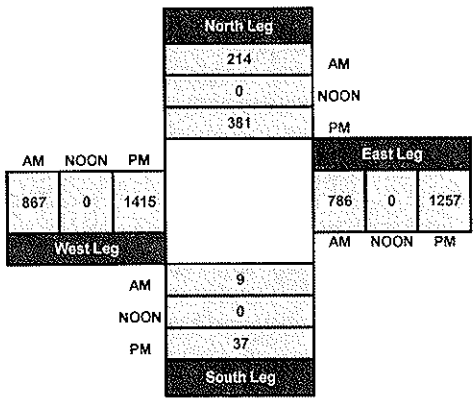
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		1		0				0	0			1
7:15 AM	0		1		0				0	0			1
7:30 AM	1		2		1				0	0			4
7:45 AM	0		1		0				0	0			1
8:00 AM	0		0		1				0	1			2
8:15 AM	0		2		1				1	0			4
8:30 AM	2		0		1				1	1			5
8:45 AM	0		0		0				0	0			

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	7	0	4	0	0	0	2	2	0	0	18
APPROACH %'s :	30.00%	0.00%	70.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

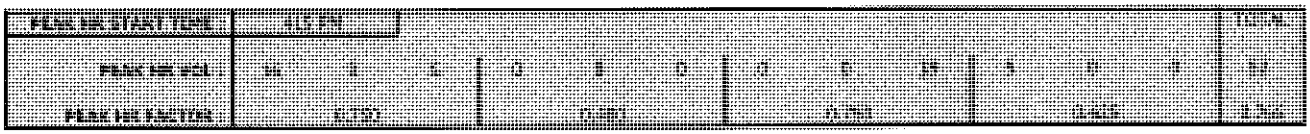
Project ID: CA11_4140_008 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		1		1				2	0			4
4:15 PM	5		2		0				2	2			11
4:30 PM	4		1		5				6	1			17
4:45 PM	4		2		0				5	2			13
5:00 PM	3		0		3				5	0			11
5:15 PM	2		0		0				1	1			4
5:30 PM	1		2		1				2	1			7
5:45 PM	3		2		2				3	2			12

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	0	10	0	12	0	0	0	26	9	0	0	79
APPROACH %'s :	68.75%	0.00%	31.25%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



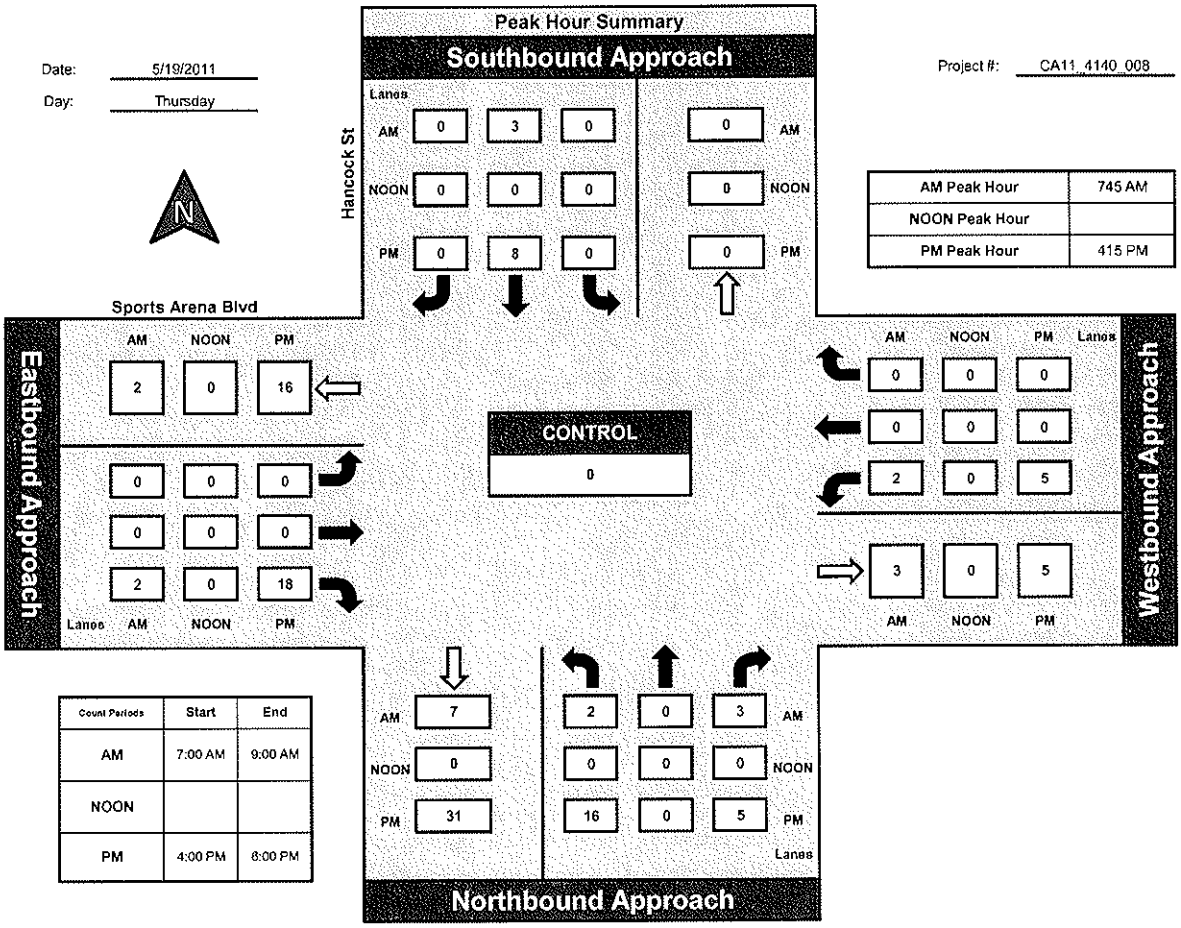
CONTROL :

ITM Peak Hour Summary

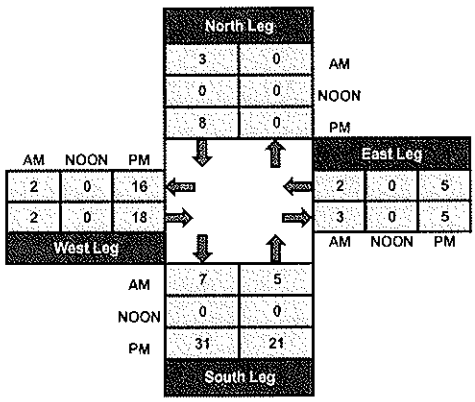
Prepared by:

National Data & Surveying Services

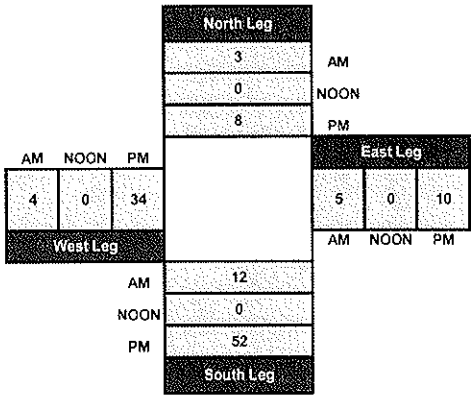
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(12)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	1	30	1	2	5	7	79	6	20	57	6	229
7:15 AM	13	2	20	3	5	3	4	90	15	14	49	9	227
7:30 AM	17	6	39	4	3	6	9	74	7	29	74	11	279
7:45 AM	12	10	22	7	4	13	9	68	16	27	57	10	255
8:00 AM	12	6	15	11	4	15	19	64	17	28	50	22	263
8:15 AM	23	8	19	10	6	23	20	71	11	24	44	20	279
8:30 AM	16	15	34	8	6	32	17	65	28	34	51	23	329
8:45 AM	23	11	27	17	7	30	12	81	20	30	82	15	355
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	131	59	206	61	37	127	97	592	120	206	464	116	2216
APPROACH %'s :	33.08%	14.90%	52.02%	27.11%	16.44%	56.44%	11.99%	73.18%	14.83%	26.21%	59.03%	14.76%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	74	40	110	36	20	83	65	290	72	116	279	76	1261
PEAK HR FACTOR :	0.803			0.782			0.906			0.906			0.907

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

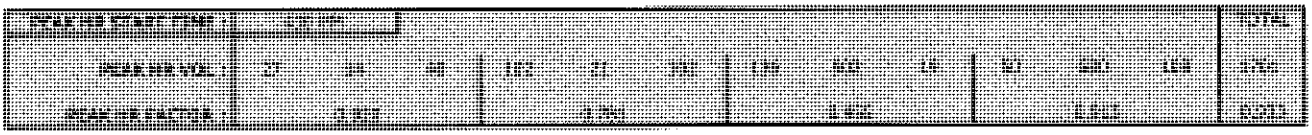
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	2	10	33	2	23	27	95	2	18	135	29	377
4:15 PM	6	3	8	28	5	23	35	106	10	8	139	29	400
4:30 PM	10	3	9	33	6	33	44	112	4	19	150	33	456
4:45 PM	6	5	10	22	5	19	25	125	6	9	158	18	408
5:00 PM	8	3	11	24	4	23	34	130	8	11	137	25	418
5:15 PM	3	3	10	23	6	27	33	135	1	11	135	32	419
5:30 PM	8	0	9	22	3	22	27	123	5	13	140	21	393
5:45 PM	5	5	8	28	6	21	21	136	5	10	119	35	399
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	47	24	75	213	37	191	246	962	41	99	1113	222	3270
APPROACH %'s :	32.19%	16.44%	51.37%	48.30%	8.39%	43.31%	19.70%	77.02%	3.28%	6.90%	77.62%	15.48%	



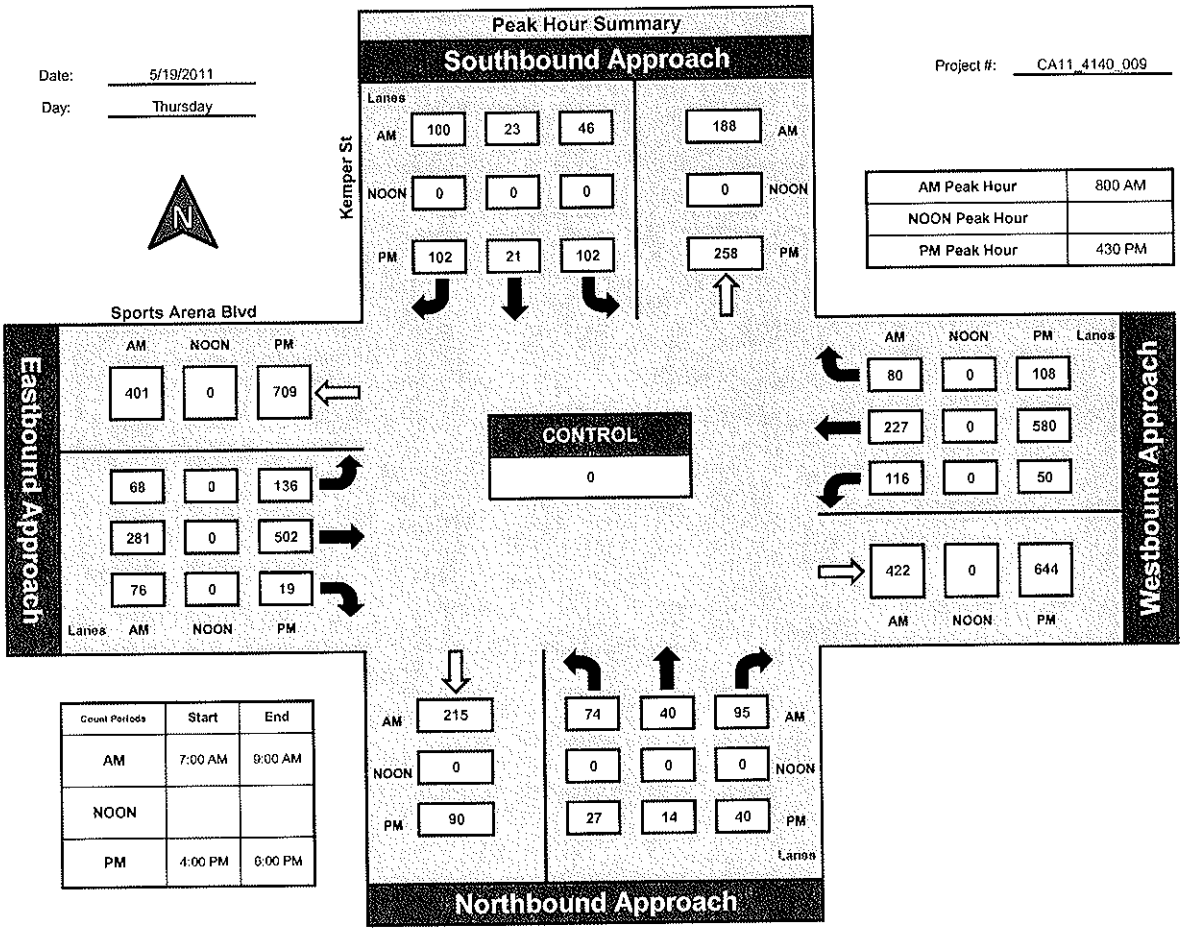
CONTROL :

ITM Peak Hour Summary

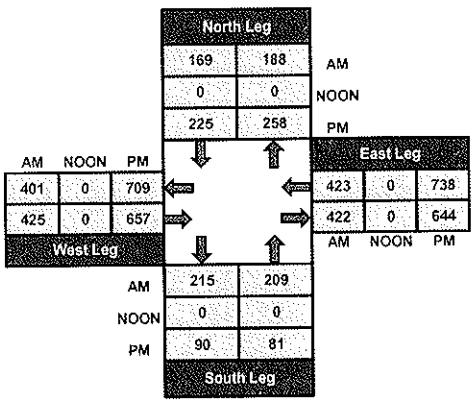
Prepared by:

National Data & Surveying Services

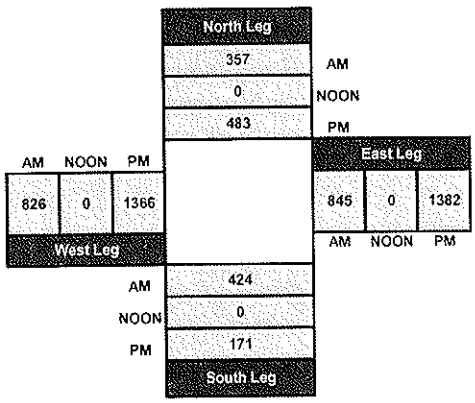
Kemper St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(13)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_010

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	0	1	2	0	4	11	69	12	1	63	1	171
7:15 AM	4	0	4	2	2	4	16	74	11	2	73	5	197
7:30 AM	5	0	1	7	0	5	14	87	15	1	96	2	233
7:45 AM	7	0	3	1	0	8	12	81	10	2	87	3	214
8:00 AM	7	1	0	5	0	7	20	65	11	4	78	2	200
8:15 AM	4	0	3	4	1	10	23	75	7	2	82	5	216
8:30 AM	6	3	2	5	1	11	16	66	9	2	92	11	224
8:45 AM	9	1	3	11	1	12	13	76	12	2	106	7	253
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	49	5	17	37	5	61	125	593	87	16	677	36	1708
APPROACH %'s :	69.01%	7.04%	23.94%	35.92%	4.85%	59.22%	15.53%	73.66%	10.81%	2.19%	92.87%	4.94%	
PEAK HR START TIME	[illegible]												
PEAK HR VOL	[illegible]												
PEAK HR FACTOR	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

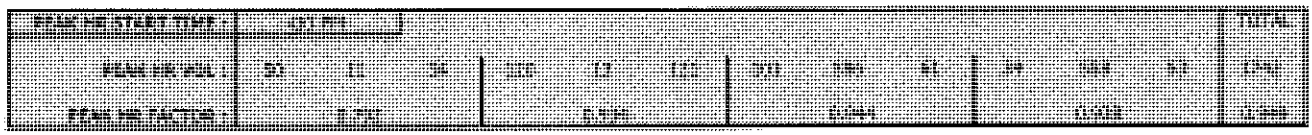
National Data & Surveying Services

Project ID: CA11_4140_010 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	12	3	7	18	3	37	35	146	10	4	136	13	424
4:15 PM	8	9	8	22	3	40	25	139	17	9	131	14	425
4:30 PM	17	4	9	25	2	36	25	152	17	8	146	18	459
4:45 PM	7	2	4	33	3	32	24	129	15	7	138	8	402
5:00 PM	15	3	9	33	5	24	24	162	12	6	143	11	447
5:15 PM	11	2	12	29	3	29	28	143	17	13	131	16	434
5:30 PM	11	2	9	20	0	24	13	149	19	10	130	13	400
5:45 PM	13	0	10	33	3	23	25	131	21	9	131	17	416
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	94	25	68	213	22	245	199	1151	128	66	1086	110	3407
APPROACH %'s :	50.27%	13.37%	36.36%	44.38%	4.58%	51.04%	13.46%	77.88%	8.66%	5.23%	86.05%	8.72%	



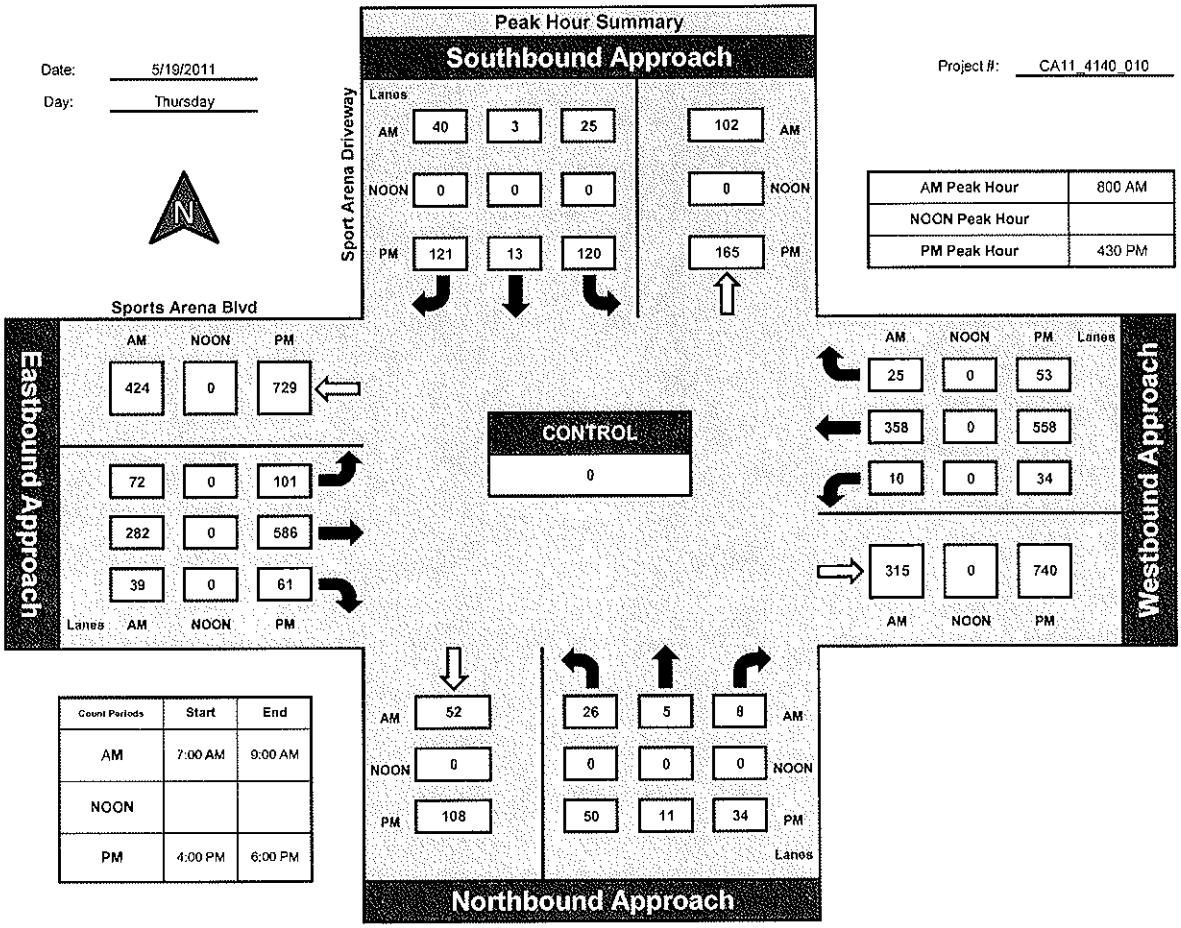
CONTROL :

ITM Peak Hour Summary

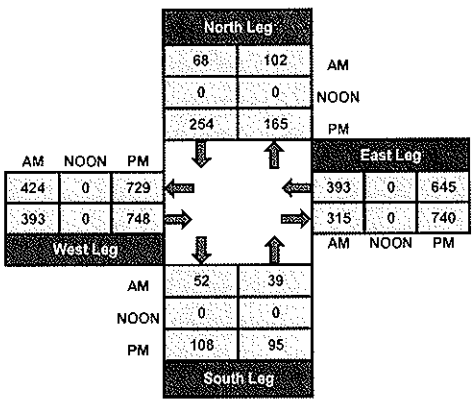
Prepared by:

National Data & Surveying Services

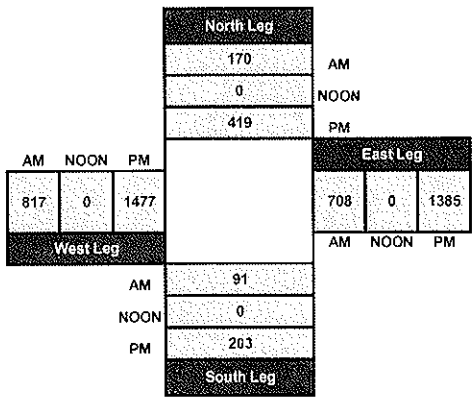
Sport Arena Driveway and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(14)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	0	5			0	3	77	1	7	98	10	203
7:15 AM	2	0	6			0	7	83	5	5	117	8	233
7:30 AM	1	0	2			0	7	122	9	8	121	9	279
7:45 AM	1	1	9			0	6	105	9	11	139	5	286
8:00 AM	3	0	10			1	5	108	6	6	135	10	284
8:15 AM	3	0	8			0	8	146	5	9	144	8	331
8:30 AM	3	0	5			0	11	131	6	8	161	9	334
8:45 AM	4	0	11			1	6	139	9	18	149	9	346
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	1	56	0	0	2	53	911	50	72	1064	68	2296
APPROACH %'s :	25.00%	1.32%	73.68%	0.00%	0.00%	100.00%	5.23%	89.84%	4.93%	5.98%	88.37%	5.65%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]			[illegible]			[illegible]			[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	5	1	21			1	11	196	23	26	179	5	468
4:15 PM	8	1	14			4	5	183	25	26	198	3	467
4:30 PM	3	1	11			0	5	202	33	30	217	2	504
4:45 PM	8	2	10			0	1	193	29	41	177	1	462
5:00 PM	6	1	20			1	0	189	24	18	190	0	449
5:15 PM	7	0	19			0	1	175	22	25	221	0	470
5:30 PM	8	1	24			1	3	181	20	30	194	0	462
5:45 PM	12	1	20			3	0	193	15	24	194	1	463
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	57	8	139	0	0	10	26	1512	191	220	1570	12	3745
APPROACH %'s :	27.94%	3.92%	68.14%	0.00%	0.00%	100.00%	1.50%	87.45%	11.05%	12.21%	87.13%	0.67%	
PEAK HR START TIME :	4:0 PM												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

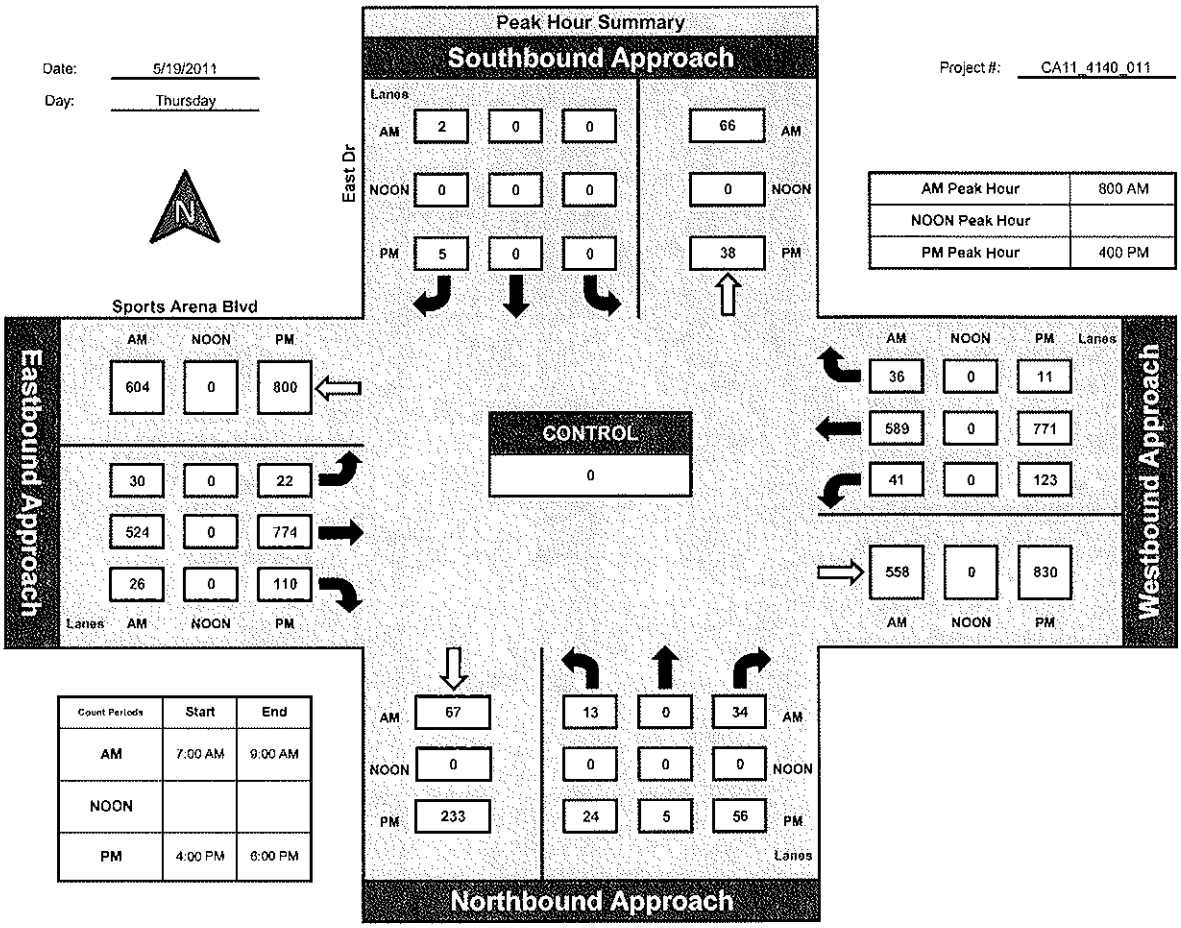
National Data & Surveying Services

East Dr and Sports Arena Blvd , City of San Diego

Date: 5/19/2011

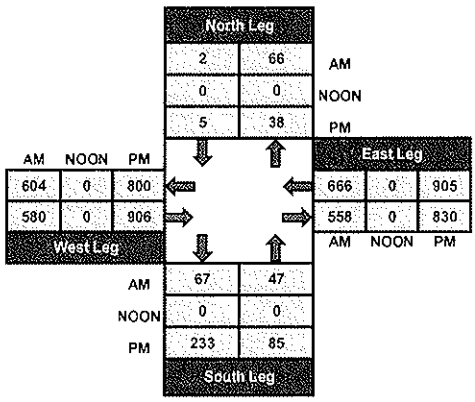
Day: Thursday

Project #: CA11_4140_011

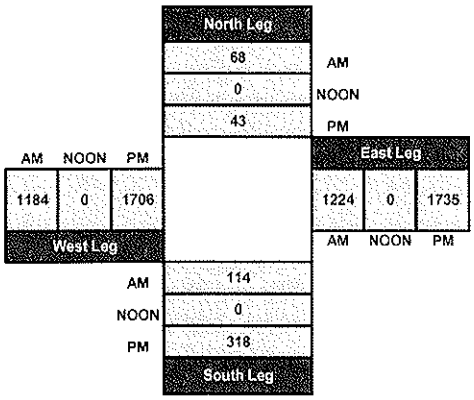


AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Total Ins & Outs



Total Volume Per Leg



(15)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

(15)

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

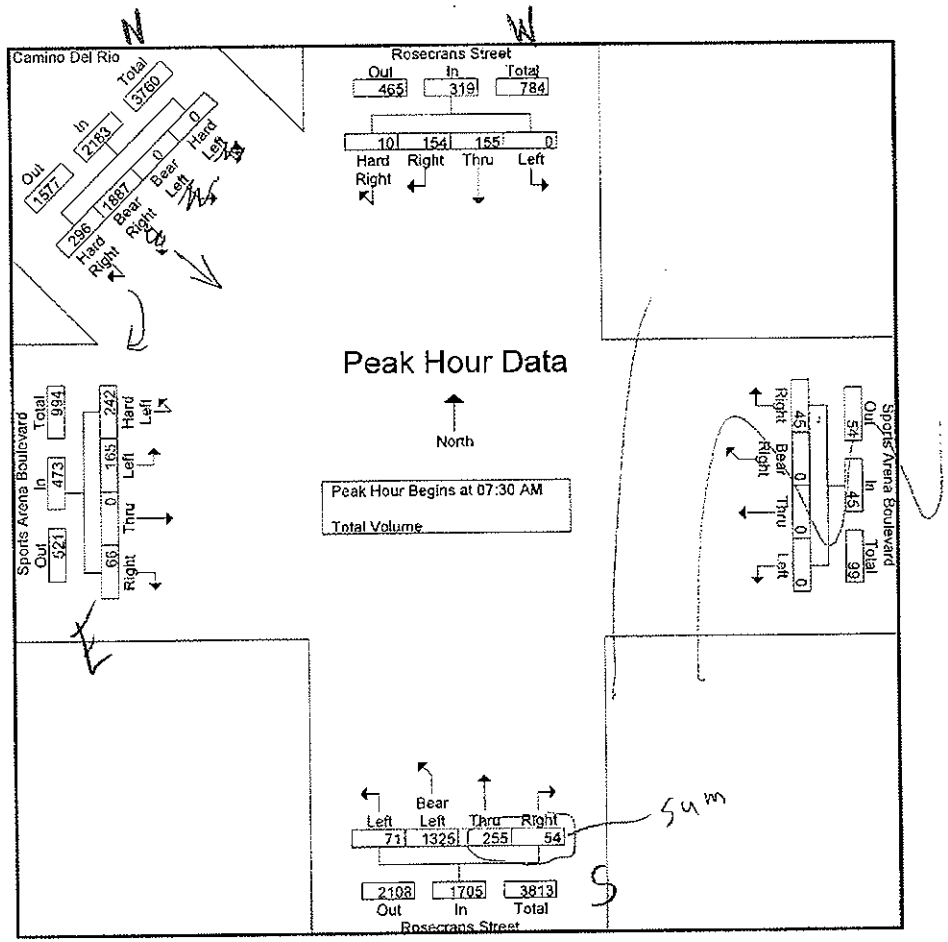
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
06:45 AM	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
Total	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
07:00 AM	0	25	23	1	49	0	0	0	8	8	20	227	39	4	290	42	30	0	15	87	0	0	504	54	558	992
07:15 AM	0	31	36	1	68	0	0	0	13	13	15	292	57	8	372	53	33	0	9	95	0	0	495	65	560	1108
07:30 AM	0	36	28	2	66	0	0	0	10	10	25	343	56	9	433	80	51	0	17	148	0	0	419	54	473	1130
07:45 AM	0	47	48	3	98	0	0	0	9	9	14	310	67	21	412	54	41	0	18	113	0	0	525	80	605	1237
Total	0	139	135	7	281	0	0	0	40	40	74	1172	219	42	1507	229	155	0	59	443	0	0	1943	253	2196	4467
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	74	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	15	15	23	351	58	13	445	50	43	0	18	111	0	0	454	88	542	1202
08:30 AM	0	45	44	4	93	0	0	0	18	18	27	322	64	9	422	62	37	0	16	115	0	0	352	67	419	1067
Grand Total	0	278	283	16	577	0	0	0	88	88	151	2378	457	85	3071	432	295	0	118	845	0	0	3653	542	4195	8776
Apprch %	0	48.2	49	2.8		0	0	0	100		4.9	77.4	14.9	2.8		51.1	34.9	0	14		0	0	87.1	12.9		
Total %	0	3.2	3.2	0.2	6.6	0	0	0	1	1	1.7	27.1	5.2	1	35	4.9	3.4	0	1.3	9.6	0	0	41.6	6.2	47.8	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:30 AM																										
07:30 AM	0	36	28	2	66	0	0	0	10	10	**25**	343	56	9	433	**80**	**51**	0	17	**148**	0	0	419	54	473	1130
07:45 AM	0	**47**	**48**	3	**98**	0	0	0	9	9	14	310	67	**21**	412	54	41	0	**18**	113	0	0	**525**	80	**605**	**1237**
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	**74**	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	**15**	**15**	23	**351**	58	13	445	50	43	0	18	111	0	0	454	**88**	542	1202
Total Volume	0	155	154	10	319	0	0	0	45	45	71	1325	255	54	1705	242	165	0	66	473	0	0	1887	296	2183	4725
% App. Total	0	48.6	48.3	3.1		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	86.4	13.6		
PHF	.000	.824	.802	.625	.814	.000	.000	.000	.750	.750	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.899	.841	.902	.955

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					07:45 AM					07:30 AM					07:30 AM					07:15 AM				
+0 mins.	0	47	48	3	98	0	0	0	9	9	25	343	56	9	433	80	51	0	17	148	0	0	495	65	560
+15 mins.	0	34	31	1	66	0	0	0	11	11	14	310	67	21	412	54	41	0	18	113	0	0	419	54	473
+30 mins.	0	38	47	4	89	0	0	0	15	15	9	321	74	11	415	58	30	0	13	101	0	0	525	80	605
+45 mins.	0	45	44	4	93	0	0	0	18	18	23	351	58	13	445	50	43	0	18	111	0	0	489	74	563
Total Volume	0	164	170	12	346	0	0	0	53	53	71	1325	255	54	1705	242	165	0	66	473	0	0	1928	273	2201
% App. Total	0	47.4	49.1	3.5		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	87.6	12.4	
PHF	.000	.872	.885	.750	.883	.000	.000	.000	.736	.736	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.918	.853	.910

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

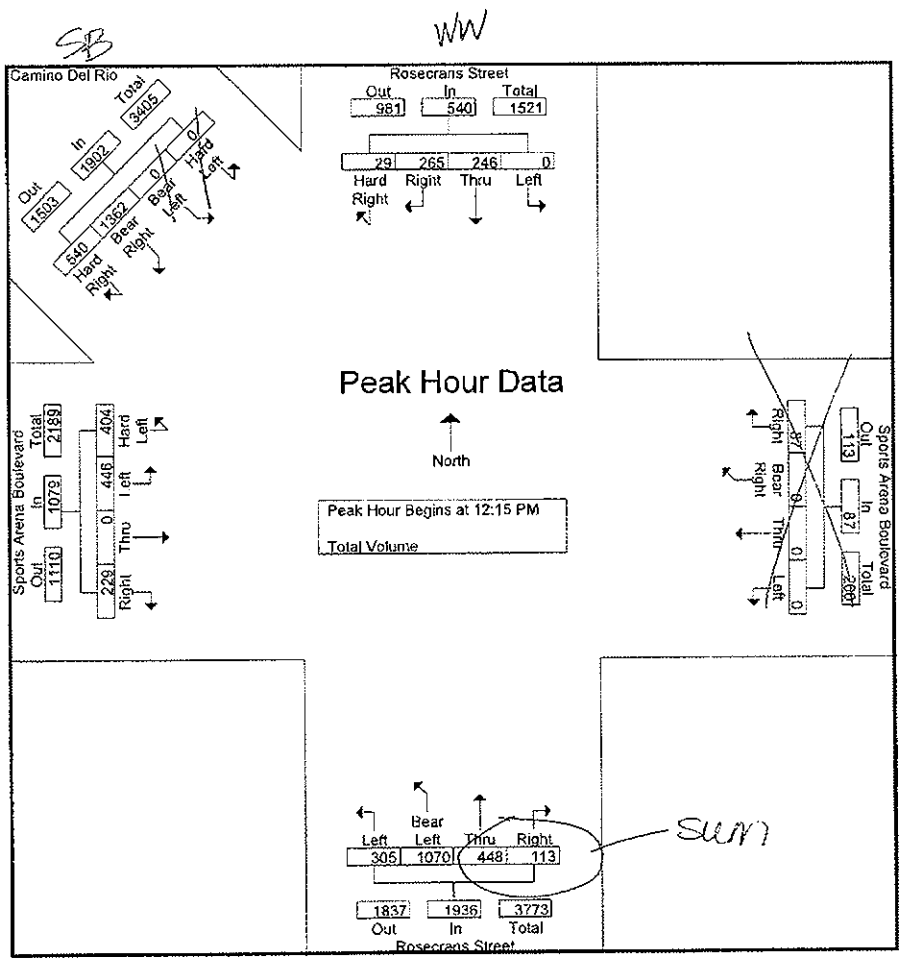
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
11:30 AM	0	55	87	6	148	0	0	0	25	25	81	228	100	26	435	86	79	0	48	213	0	0	328	132	460	1281
11:45 AM	0	47	93	7	147	0	0	0	23	23	79	246	104	18	447	84	86	0	53	223	0	0	377	161	538	1378
Total	0	102	180	13	295	0	0	0	48	48	160	474	204	44	882	170	165	0	101	436	0	0	705	293	998	2659
12:00 PM	0	73	90	2	165	0	0	0	19	19	71	252	99	9	431	93	105	0	59	257	0	0	328	146	474	1346
12:15 PM	0	66	70	7	143	0	0	0	17	17	93	231	105	23	452	78	93	0	68	239	0	0	353	159	512	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	299	122	27	525	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	10	118	0	0	0	23	23	75	241	116	38	470	95	105	0	43	243	0	0	339	119	458	1312
Total	0	245	284	21	550	0	0	0	81	81	316	1023	442	97	1878	376	418	0	224	1018	0	0	1364	556	1920	5447
01:00 PM	0	74	71	10	155	0	0	0	25	25	60	299	105	25	489	121	133	0	64	318	0	0	326	130	456	1443
01:15 PM	0	51	61	5	117	0	0	0	21	21	48	221	94	18	381	87	122	0	41	250	0	0	330	119	449	1218
Grand Total	0	472	596	49	1117	0	0	0	175	175	584	2017	845	184	3630	754	838	0	430	2022	0	0	2725	1098	3823	10767
Apprch %	0	42.3	53.4	4.4		0	0	0	100		16.1	55.6	23.3	5.1		37.3	41.4	0	21.3		0	0	71.3	28.7		
Total %	0	4.4	5.5	0.5	10.4	0	0	0	1.6	1.6	5.4	18.7	7.8	1.7	33.7	7	7.8	0	4	18.8	0	0	25.3	10.2	35.5	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 12:15 PM																										
12:15 PM	0	66	70	7	143	0	0	0	17	17	**93**	231	105	23	452	78	93	0	**68**	239	0	0	**353**	**159**	**512**	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	**299**	**122**	27	**525**	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	**10**	118	0	0	0	23	23	75	241	116	**38**	470	95	105	0	43	243	0	0	339	119	458	1312
01:00 PM	0	**74**	**71**	10	**155**	0	0	0	**25**	**25**	60	299	105	25	489	**121**	**133**	0	64	**318**	0	0	326	130	456	**1443**
Total Volume	0	246	265	29	540	0	0	0	87	87	305	1070	448	113	1936	404	446	0	229	1079	0	0	1362	540	1902	5544
% App. Total	0	45.6	49.1	5.4		0	0	0	100		15.8	55.3	23.1	5.8		37.4	41.3	0	21.2		0	0	71.6	28.4		
PHF	.000	.831	.933	.725	.871	.000	.000	.000	.870	.870	.820	.895	.918	.743	.922	.835	.838	.000	.842	.848	.000	.000	.965	.849	.929	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:30 AM					12:30 PM					12:15 PM					12:30 PM					11:45 AM				
+0 mins.	0	55	87	6	148	0	0	0	22	22	**93**	231	105	23	452	110	115	0	54	279	0	0	377	**161**	**538**
+15 mins.	0	47	**93**	7	147	0	0	0	23	23	77	**299**	**122**	27	**525**	95	105	0	43	243	0	0	328	146	474
+30 mins.	0	**73**	90	2	**165**	0	0	0	**25**	**25**	75	241	116	38	470	**121**	**133**	0	**64**	**318**	0	0	353	159	512
+45 mins.	0	66	70	7	143	0	0	0	21	21	60	299	105	25	489	87	122	0	41	250	0	0	344	132	476
Total Volume	0	241	340	22	603	0	0	0	91	91	305	1070	448	113	1936	413	475	0	202	1090	0	0	1402	598	2000
% App. Total	0	40	56.4	3.6		0	0	0	100		15.8	55.3	23.1	5.8		37.9	43.6	0	18.5		0	0	70.1	29.9	
PHF	.000	.825	.914	.786	.914	.000	.000	.000	.910	.910	.820	.895	.918	.743	.922	.853	.893	.000	.789	.857	.000	.000	.930	.929	.929

Counts Unlimited Inc.
25286 Jadyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

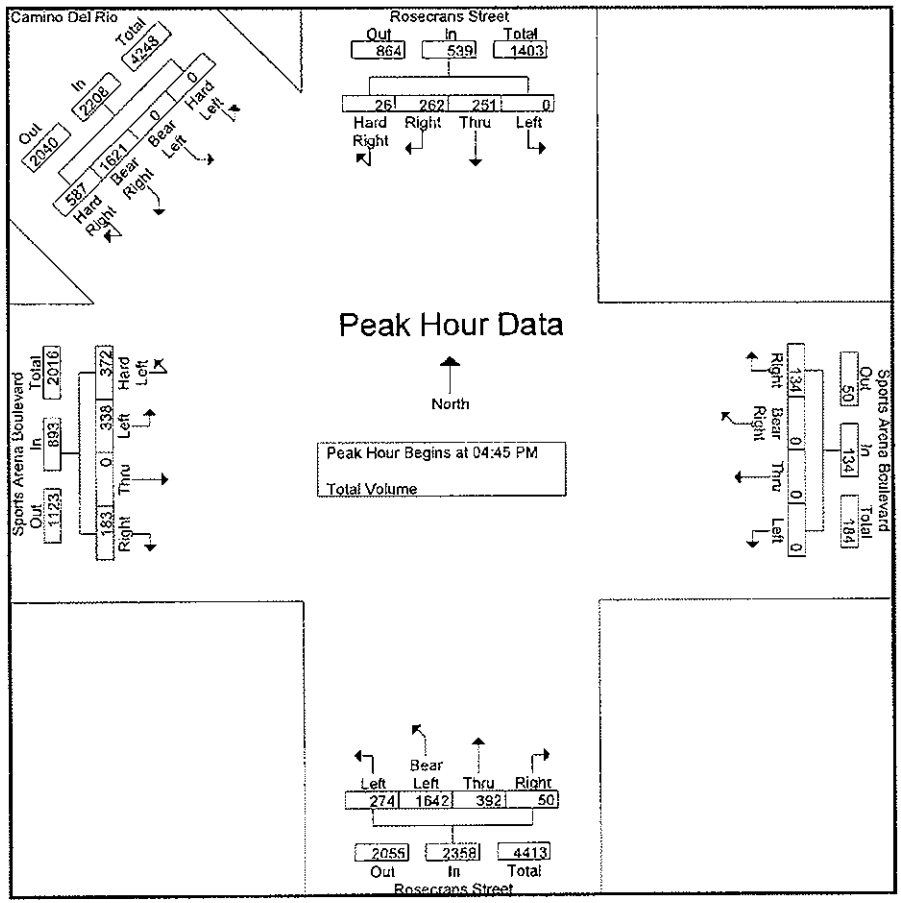
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
04:00 PM	0	47	67	9	123	0	0	0	29	29	50	417	101	17	585	117	81	0	46	244	0	0	384	134	518	1499
04:15 PM	0	60	83	5	148	0	0	0	45	45	60	488	90	21	659	82	84	0	34	200	0	0	403	104	507	1559
04:30 PM	0	51	87	7	145	0	0	0	47	47	54	407	106	18	585	85	78	0	30	193	0	0	368	129	497	1467
04:45 PM	0	55	53	8	116	0	0	0	35	35	58	430	98	19	605	100	90	0	48	238	0	0	425	136	561	1555
Total	0	213	290	29	532	0	0	0	156	156	222	1742	395	75	2434	384	333	0	158	875	0	0	1580	503	2083	6080
05:00 PM	0	61	62	7	130	0	0	0	38	38	62	387	109	12	570	92	78	0	49	219	0	0	397	165	562	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	74	433	92	12	611	87	81	0	40	208	0	0	407	148	555	1557
05:30 PM	0	61	80	6	147	0	0	0	24	24	80	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
05:45 PM	0	62	74	9	145	0	0	0	24	24	63	338	83	16	500	87	85	0	51	223	0	0	381	134	515	1407
Total	0	258	283	27	568	0	0	0	123	123	279	1550	377	47	2253	359	333	0	186	878	0	0	1577	585	2162	5984
Grand Total	0	471	573	56	1100	0	0	0	279	279	501	3292	772	122	4687	743	666	0	344	1753	0	0	3157	1088	4245	12064
Apprch %	0	42.8	52.1	5.1		0	0	0	100		10.7	70.2	16.5	2.6		42.4	38	0	19.6		0	0	74.4	25.6		
Total %	0	3.9	4.7	0.5	9.1	0	0	0	2.3	2.3	4.2	27.3	6.4	1	38.9	6.2	5.5	0	2.9	14.5	0	0	26.2	9	35.2	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 04:45 PM																										
04:45 PM	0	55	53	**8**	116	0	0	0	35	35	58	430	98	**19**	605	**100**	**90**	0	48	**238**	0	0	**425**	136	561	1555
05:00 PM	0	61	62	7	130	0	0	0	**38**	**38**	62	387	**109**	12	570	92	78	0	**49**	219	0	0	397	**165**	**562**	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	**74**	**433**	92	12	**611**	87	81	0	40	208	0	0	407	148	555	**1557**
05:30 PM	0	61	**80**	6	**147**	0	0	0	24	24	**80**	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
Total Volume	0	251	262	26	539	0	0	0	134	134	274	1642	392	50	2358	372	338	0	183	893	0	0	1621	587	2208	6132
% App. Total	0	46.6	48.6	4.8		0	0	0	100		11.6	69.6	16.6	2.1		41.7	37.8	0	20.5		0	0	73.4	26.6		
PHF	.000	.848	.819	.813	.917	.000	.000	.000	.882	.882	.856	.948	.899	.658	.965	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982	.985

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					04:15 PM					04:00 PM					04:45 PM					04:45 PM				
+0 mins.	0	61	62	7	130	0	0	0	45	45	50	417	101	17	585	**100**	**90**	0	48	**238**	0	0	425	136	561
+15 mins.	0	**74**	67	5	146	0	0	0	**47**	**47**	**60**	**488**	90	**21**	**659**	92	78	0	**49**	219	0	0	397	**165**	**562**
+30 mins.	0	61	**80**	6	**147**	0	0	0	35	35	54	407	**106**	18	585	87	81	0	40	208	0	0	407	148	555
+45 mins.	0	62	74	9	145	0	0	0	38	38	58	430	98	19	605	93	89	0	46	228	0	0	392	138	530
Total Volume	0	258	283	27	568	0	0	0	165	165	222	1742	395	75	2434	372	338	0	183	893	0	0	1621	587	2208
% App. Total	0	45.4	49.8	4.8		0	0	0	100		9.1	71.6	16.2	3.1		41.7	37.8	0	20.5		0	0	73.4	26.6	
PHF	.000	.872	.884	.750	.966	.000	.000	.000	.878	.878	.925	.892	.932	.893	.923	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982

(17)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		134			120	3			2				259
7:15 AM		137			103	5			7				252
7:30 AM		130			110	3			3				246
7:45 AM		182			135	5			10				332
8:00 AM		183			156	4			10				353
8:15 AM		175			134	6			7				322
8:30 AM		138			143	9			10				300
8:45 AM		147			130	6			14				297

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1226	0	0	1031	41	0	0	63	0	0	0	2361
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	96.18%	3.82%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		228			224	4			32				488
4:15 PM		210			202	6			26				444
4:30 PM		211			222	3			30				466
4:45 PM		203			196	6			29				434
5:00 PM		206			234	7			33				480
5:15 PM		190			181	1			32				404
5:30 PM		142			171	3			22				338
5:45 PM		125			180	2			13				320

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1515	0	0	1610	32	0	0	217	0	0	0	3374
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	98.05%	1.95%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[illegible]													
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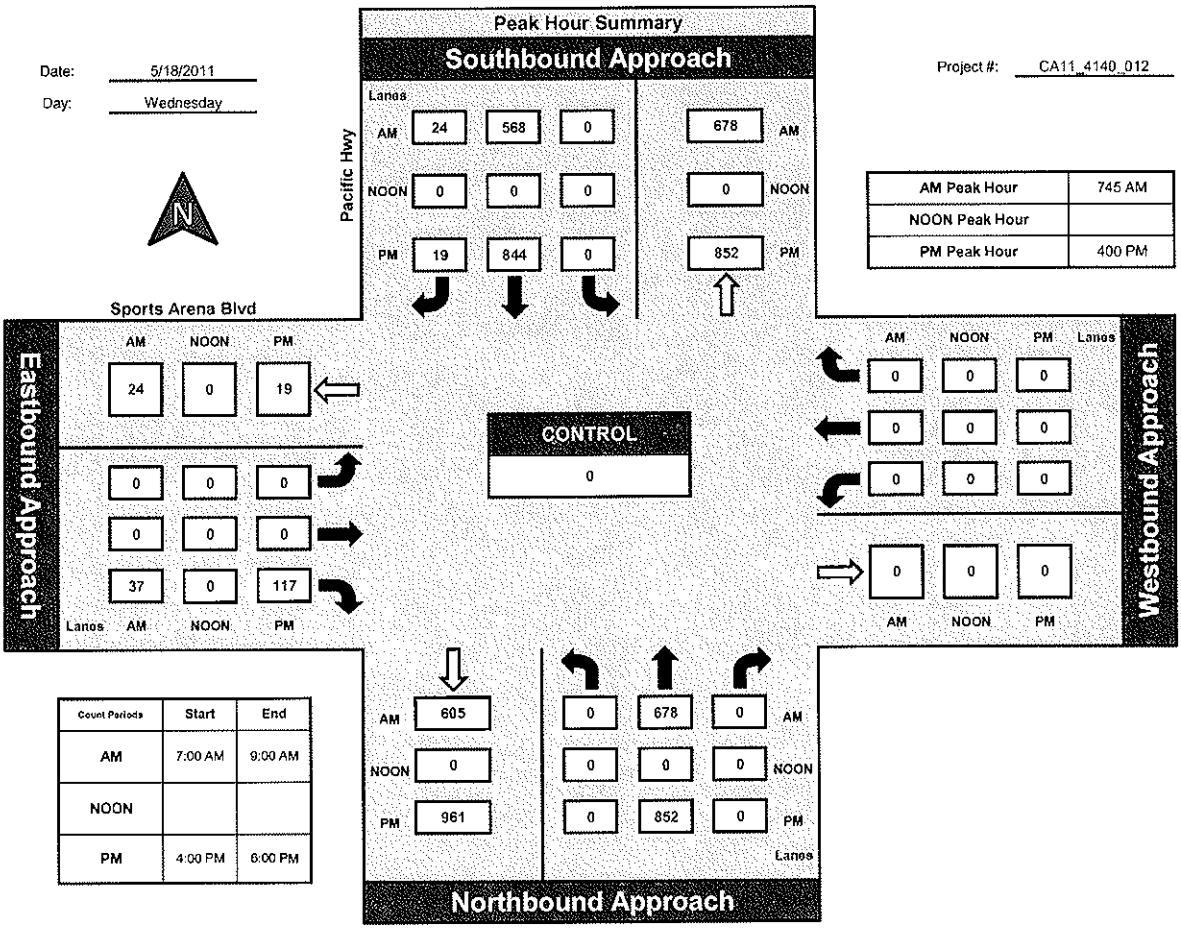
CONTROL :

ITM Peak Hour Summary

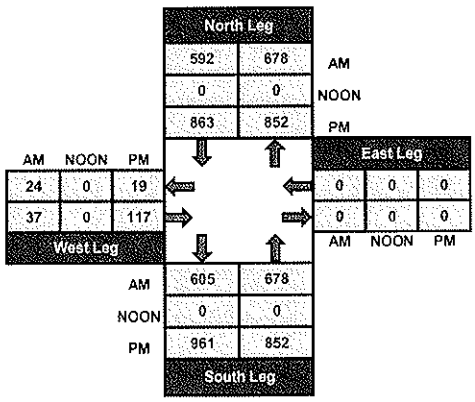
Prepared by:

National Data & Surveying Services

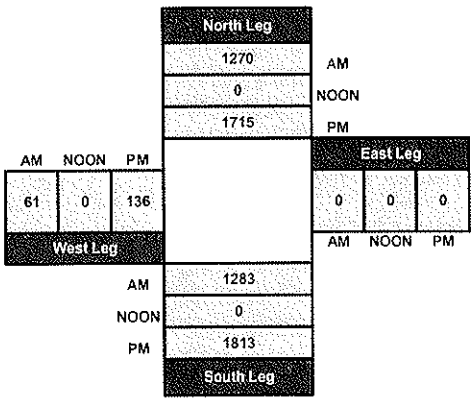
Pacific Hwy and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(18)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

Day: THURSDAY

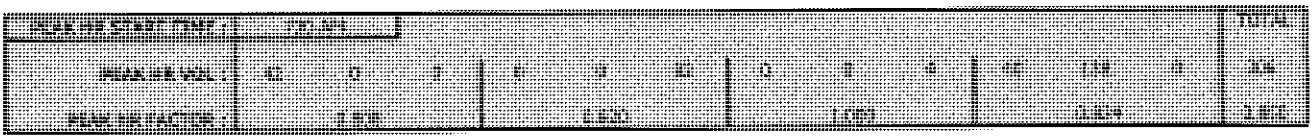
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0					5	0		0	0	6		11
7:15 AM	1					18	0		1	10	28		58
7:30 AM	13					18	0		1	13	32		77
7:45 AM	10					19	0		1	5	32		67
8:00 AM	10					25	0		1	16	38		90
8:15 AM	9					20	0		1	6	36		72
8:30 AM	17					14	1		2	12	30		76
8:45 AM	9					18	0		0	13	26		66

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	69	0	0	0	0	137	1	0	7	75	228	0	517
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	12.50%	0.00%	87.50%	24.75%	75.25%	0.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

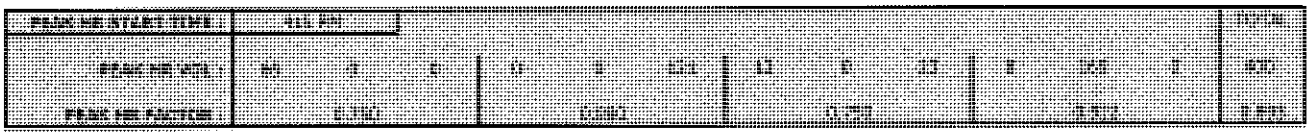
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	8					13	1		0	0	21		43
4:15 PM	22					32	5		7	3	42		111
4:30 PM	22					34	2		6	2	46		112
4:45 PM	9					23	3		3	3	41		82
5:00 PM	13					32	3		7	0	40		95
5:15 PM	11					22	1		10	0	43		87
5:30 PM	10					16	2		8	1	26		63
5:45 PM	11					13	2		12	0	32		70
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	106	0	0	0	0	185	19	0	53	9	291	0	663
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	26.39%	0.00%	73.61%	3.00%	97.00%	0.00%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

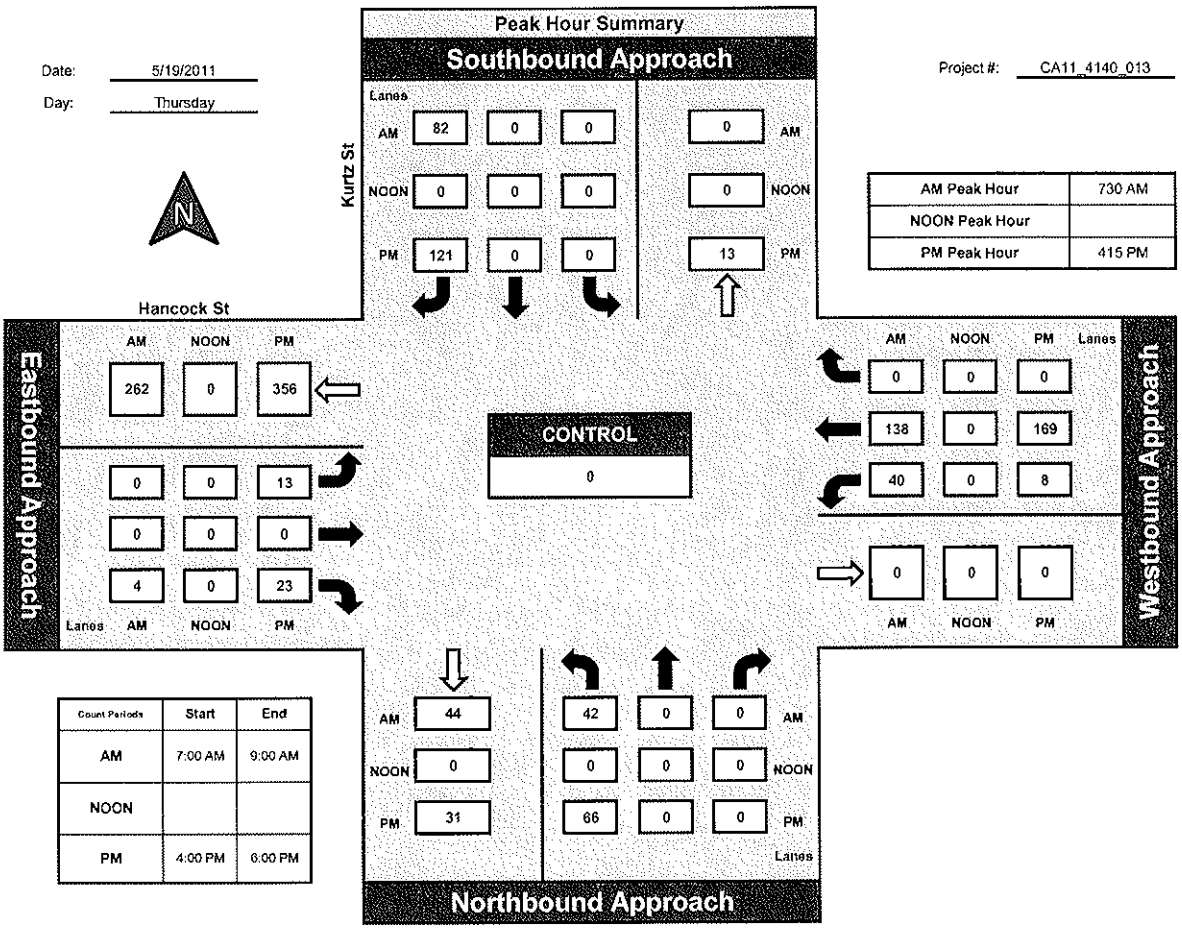
National Data & Surveying Services

Kurtz St and Hancock St , City of San Diego

Date: 5/19/2011

Day: Thursday

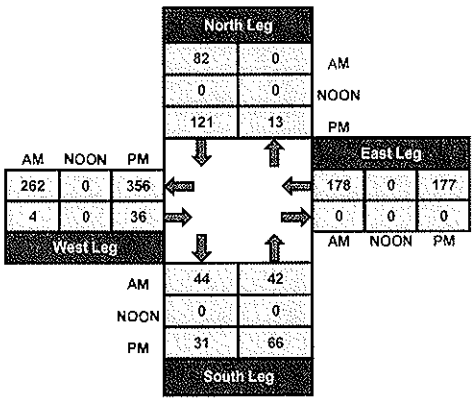
Project #: CA11_4140_013



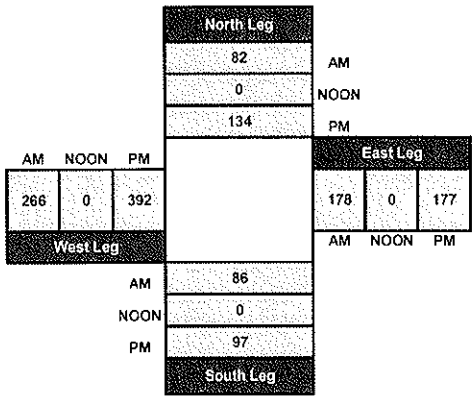
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

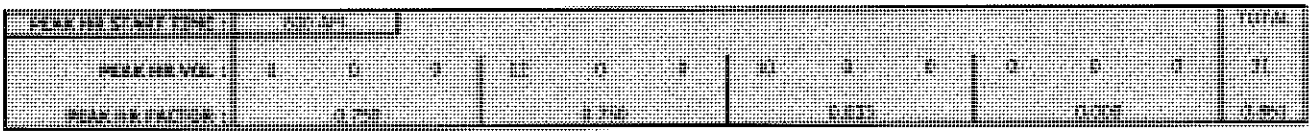
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM			3	0			1						4
7:15 AM			2	3			0						5
7:30 AM			1	1			3						5
7:45 AM			2	1			3						6
8:00 AM			1	4			1						6
8:15 AM			2	3			3						8
8:30 AM			3	3			3						9
8:45 AM			3	2			3						8

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	17	17	0	0	17	0	0	0	0	0	51
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM			4	2			3						9
4:15 PM			0	3			2						5
4:30 PM			2	1			1						4
4:45 PM			3	0			3						6
5:00 PM			2	1			2						5
5:15 PM			2	0			0						2
5:30 PM			2	1			0						3
5:45 PM			1	0			1						2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	16	8	0	0	12	0	0	0	0	0	36
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

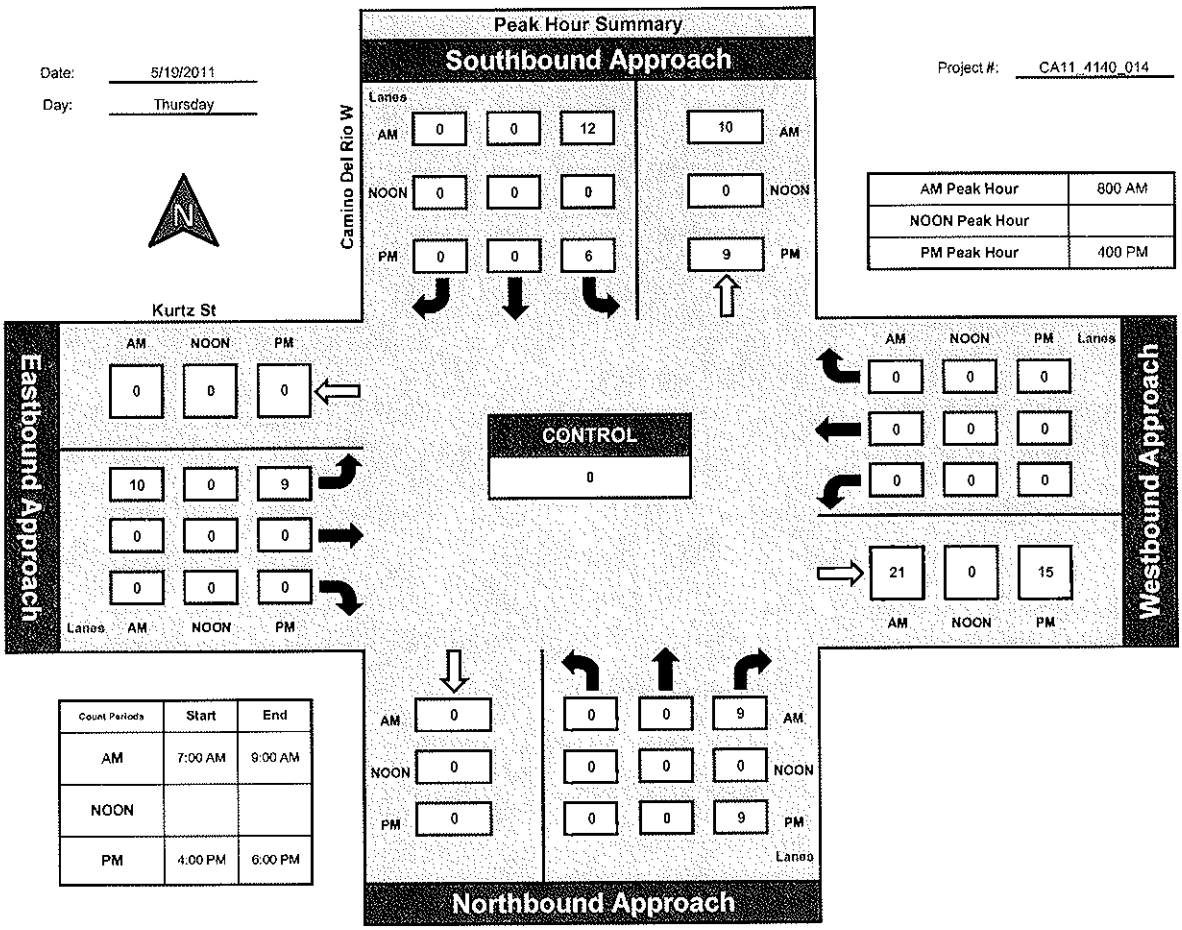
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

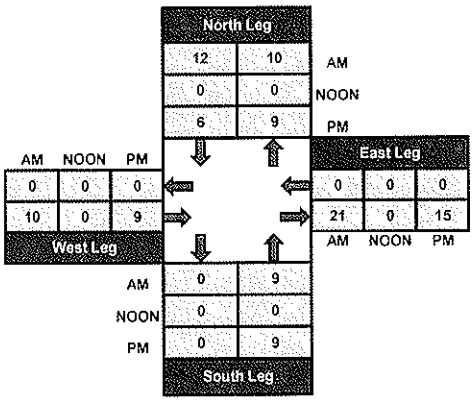
Project #: CA11_4140_014



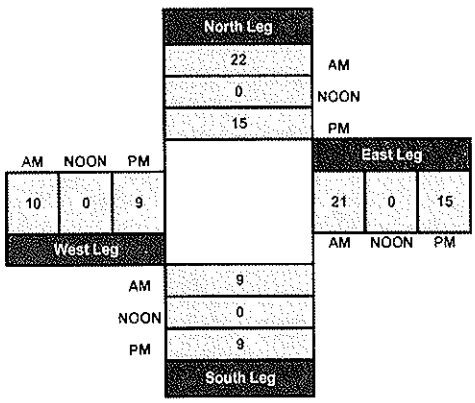
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				2									2
7:15 AM				1									1
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				2									2
8:15 AM				4									4
8:30 AM				2									2
8:45 AM				3									3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	17	0	0	0	0	0	0	0	0	17
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				5									5
4:15 PM				2									2
4:30 PM				3									3
4:45 PM				6									6
5:00 PM				0									
5:15 PM				3									3
5:30 PM				5									5
5:45 PM				4									4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	28	0	0	0	0	0	0	0	0	28
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

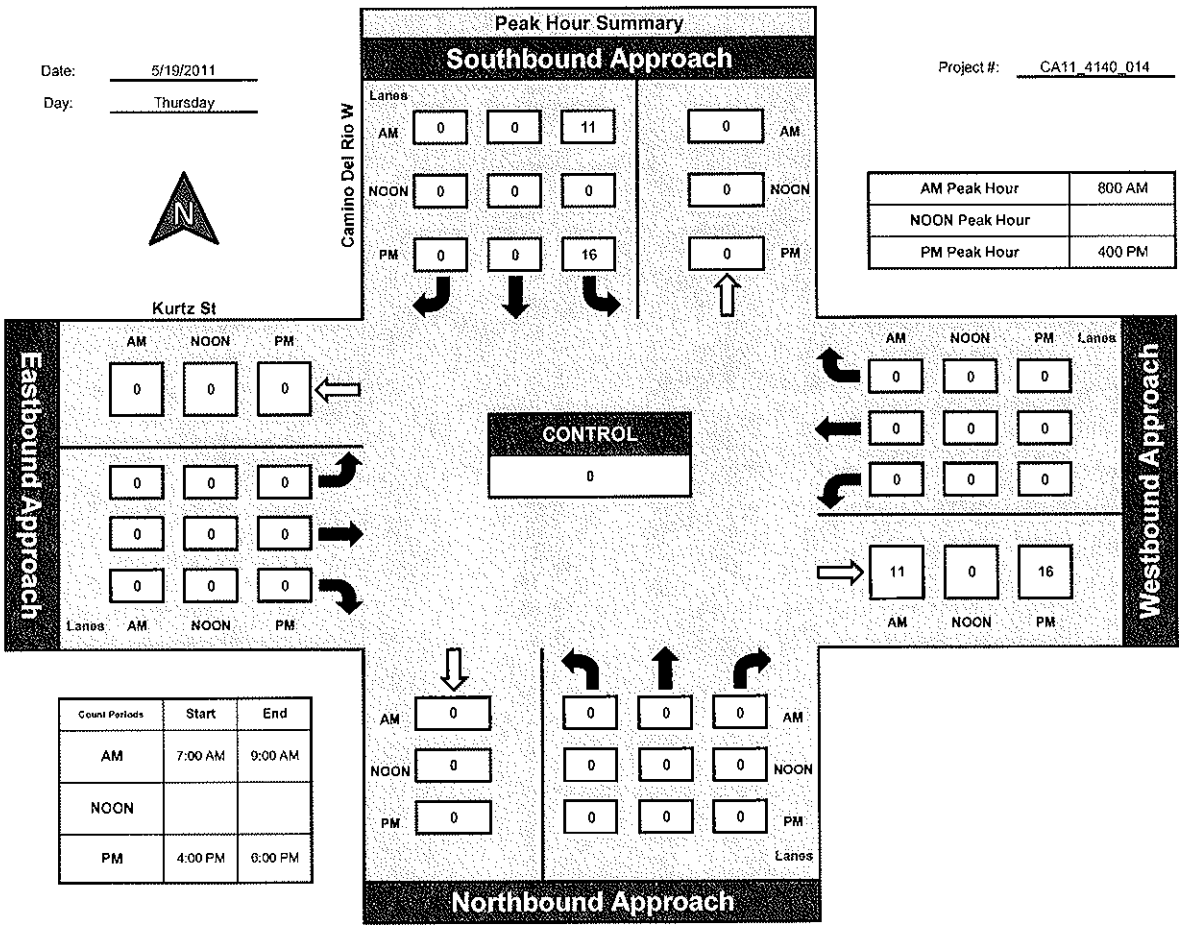
CONTROL :

ITM Peak Hour Summary

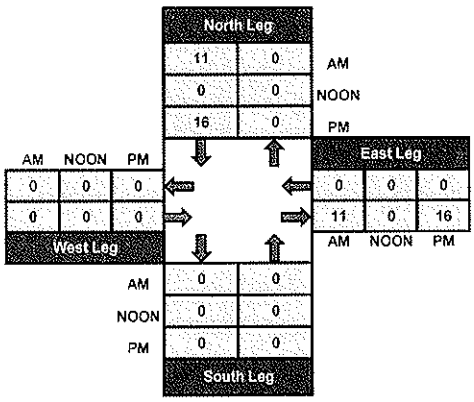
Prepared by:

National Data & Surveying Services

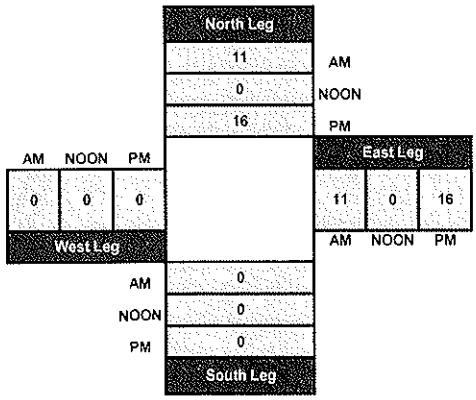
Camino Del Rio W and Kurtz St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

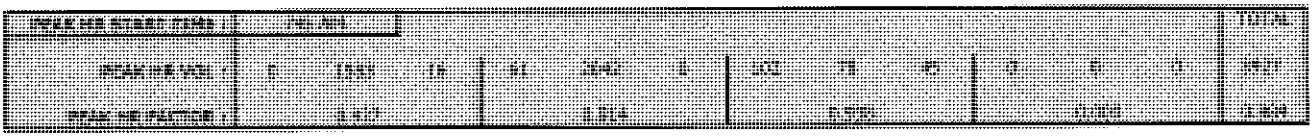
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		217	1	12	475		26	6	6				743
7:15 AM		330	2	8	521		18	13	9				901
7:30 AM		425	1	17	498		28	17	5				991
7:45 AM		386	5	5	524		22	15	17				974
8:00 AM		348	2	13	562		23	26	11				985
8:15 AM		427	4	18	468		25	20	8				970
8:30 AM		422	5	25	488		32	17	9				998
8:45 AM		368	4	23	479		38	23	18				953

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2923	24	121	4015	0	212	137	83	0	0	0	7515
APPROACH %'s :	0.00%	99.19%	0.81%	2.93%	97.07%	0.00%	49.07%	31.71%	19.21%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

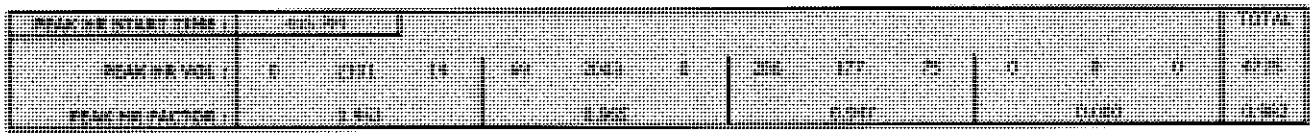
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		500	3	22	447		68	36	14				1090
4:15 PM		547	2	22	510		67	34	21				1203
4:30 PM		553	2	19	466		82	41	16				1179
4:45 PM		495	8	20	498		63	51	21				1156
5:00 PM		506	2	8	529		74	51	17				1187
5:15 PM		489	2	9	531		67	36	20				1154
5:30 PM		417	11	9	507		62	23	12				1041
5:45 PM		438	2	13	563		42	31	12				1101

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3945	32	122	4051	0	525	303	133	0	0	0	9111
APPROACH %'s :	0.00%	99.20%	0.80%	2.92%	97.08%	0.00%	54.63%	31.53%	13.84%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

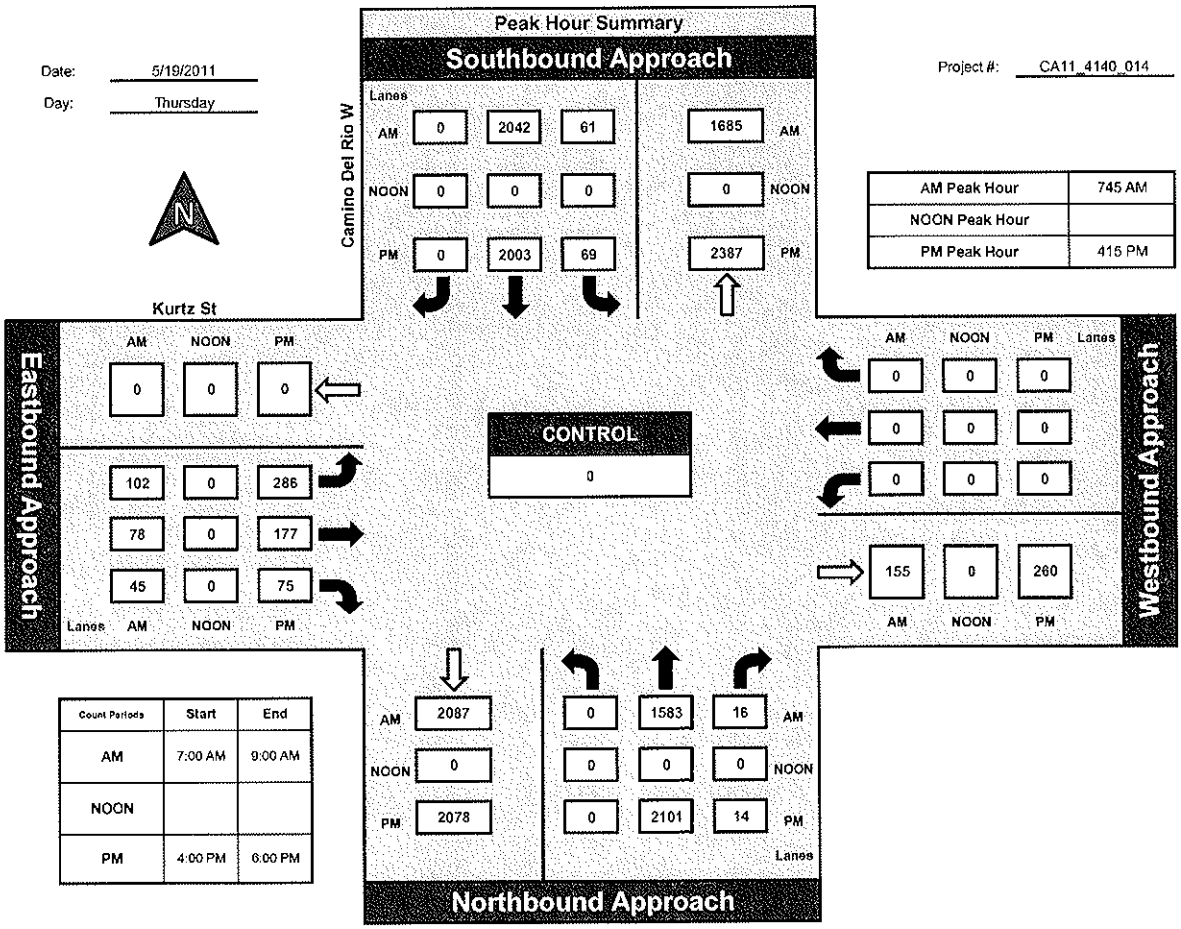
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

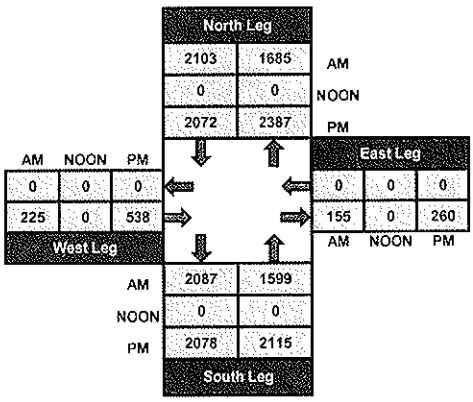
Project #: CA11_4140_014



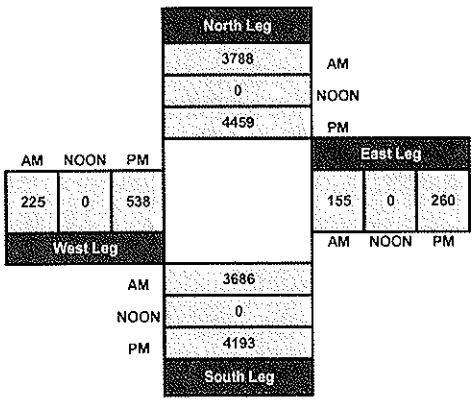
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(20)

6

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

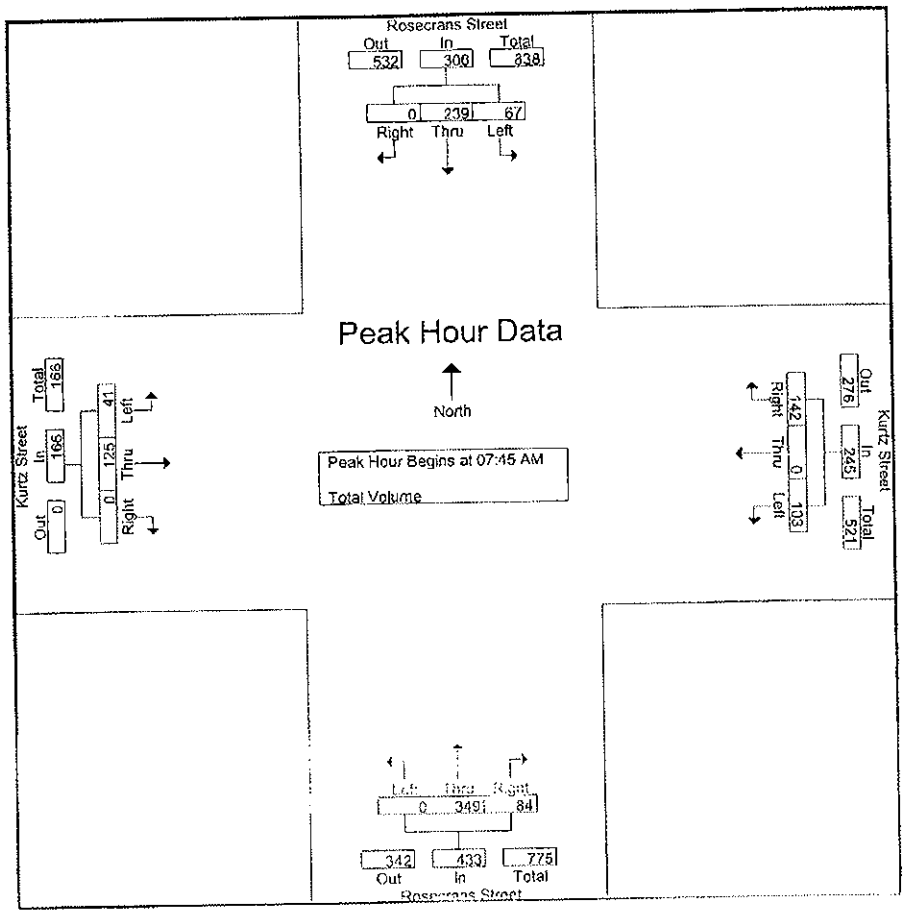
	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
Total	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
07:00 AM	18	36	0	54	17	0	28	45	0	50	23	73	6	26	0	32	204
07:15 AM	28	42	0	70	19	0	33	52	0	68	22	90	4	31	0	35	247
07:30 AM	19	58	0	77	16	0	35	51	0	77	29	106	10	35	0	45	279
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
Total	85	206	0	291	73	0	131	204	0	287	93	380	30	118	0	148	1023
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Grand Total	153	399	0	552	178	0	276	454	0	601	178	779	69	244	0	313	2098
Apprch %	27.7	72.3	0		39.2	0	60.8		0	77.2	22.8		22	78	0		
Total %	7.3	19	0	26.3	8.5	0	13.2	21.6	0	28.6	8.5	37.1	3.3	11.6	0	14.9	

	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	41	125	0	166	1150
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		24.7	75.3	0		
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.946	.913	.975	.854	.744	.000	.767	.913

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	20	70	0	90	21	0	35	56	0	92	19	111	10	35	0	45
+15 mins.	18	44	0	62	18	0	38	56	0	80	23	103	10	26	0	36
+30 mins.	15	61	0	76	36	0	38	74	0	91	20	111	11	26	0	37
+45 mins.	14	64	0	78	28	0	31	59	0	86	22	108	12	42	0	54
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	43	129	0	172
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		25	75	0	
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.948	.913	.975	.896	.768	.000	.796

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

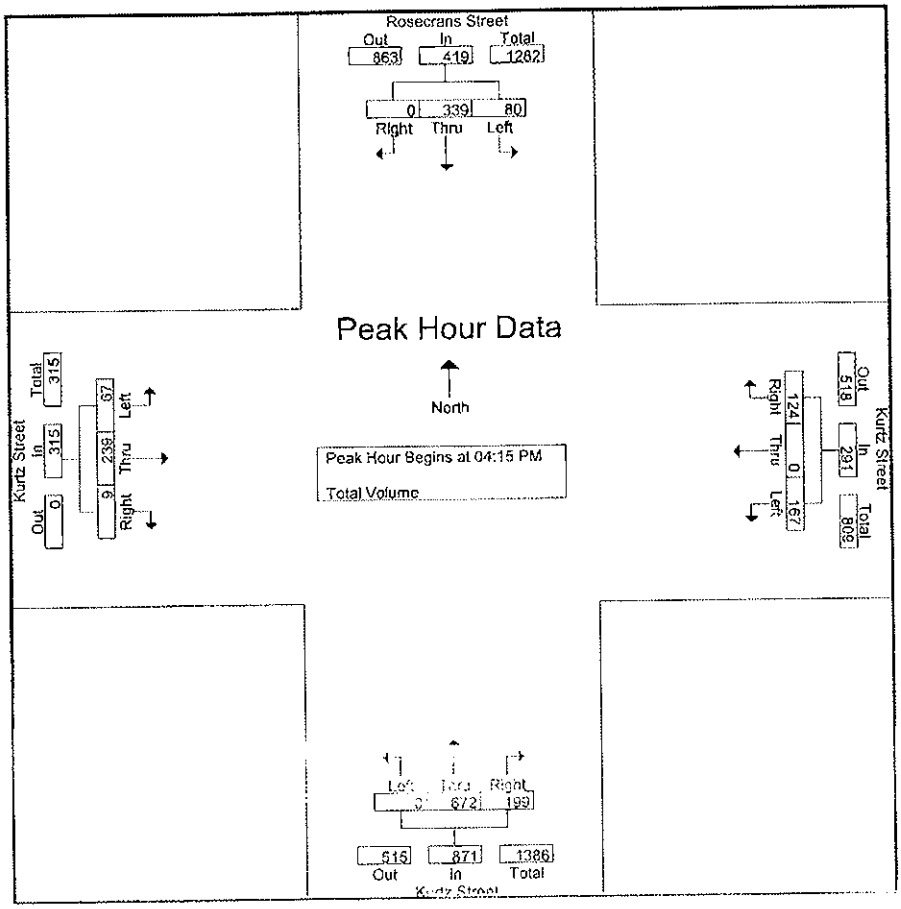
	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	19	88	0	107	34	0	32	66	0	167	48	215	12	60	3	75	463
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
Total	85	342	0	427	170	0	132	302	0	660	205	865	60	228	8	296	1890
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
05:15 PM	10	93	0	103	40	0	35	75	0	150	47	197	15	44	4	63	438
05:30 PM	17	100	0	117	36	0	27	63	0	151	49	200	23	40	2	65	445
05:45 PM	11	105	0	116	45	0	20	65	0	133	45	178	12	35	3	50	409
Total	52	383	0	435	152	0	106	258	0	613	183	796	69	190	13	272	1761
Grand Total	137	725	0	862	322	0	238	560	0	1273	388	1661	129	418	21	568	3651
Apprch %	15.9	84.1	0		57.5	0	42.5		0	76.6	23.4		22.7	73.6	3.7		
Total %	3.8	19.9	0	23.6	8.8	0	6.5	15.3	0	34.9	10.6	45.5	3.5	11.4	0.6	15.6	

	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
Total Volume	80	339	0	419	167	0	124	291	0	672	199	871	67	239	9	315	1896
% App. Total	19.1	80.9	0		57.4	0	42.6		0	77.2	22.8		21.3	75.9	2.9		
PHF	.714	.808	.000	.927	.819	.000	.800	.856	.000	.938	.843	.976	.698	.841	.563	.838	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM								04:15 PM							
+0 mins.	14	85	0	99	34	0	32	66	0	165	51	216	12	60	2	74
+15 mins.	10	93	0	103	49	0	36	85	0	152	59	211	13	53	2	68
+30 mins.	17	100	0	117	51	2	25	76	0	174	47	221	21	55	1	77
+45 mins.	11	105	0	116	36	0	39	75	0	179	42	221	19	71	4	94
Total Volume	52	383	0	435	170	0	132	302	0	672	199	871	67	239	9	315
% App. Total	12	88	0		56.3	0	43.7		0	77.2	22.8		21.3	75.9	2.9	
PHF	.765	.912	.000	.929	.833	.000	.846	.888	.000	.939	.843	.976	.698	.842	.563	.838

(21)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	54	78			77	3			43				255
7:15 AM	57	76			71	2			42				248
7:30 AM	55	84			69	1			44				253
7:45 AM	78	101			91	1			58				329
8:00 AM	68	107			95	1			67				338
8:15 AM	89	99			80	4			65				337
8:30 AM	59	84			87	3			57				290
8:45 AM	56	80			66	2			73				277

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	516	709	0	0	636	17	0	0	449	0	0	0	2327
APPROACH %'s :	42.12%	57.88%	0.00%	0.00%	97.40%	2.60%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

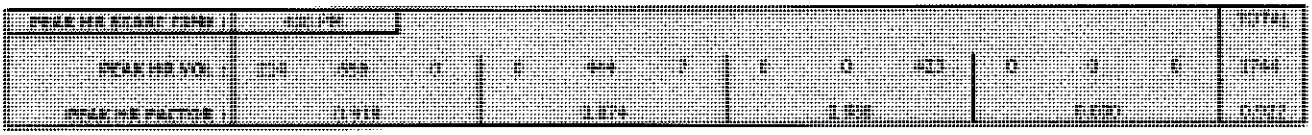
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	59	178			127	2			107				473
4:15 PM	38	185			100	3			106				432
4:30 PM	67	146			123	1			104				441
4:45 PM	50	147			94	1			106				398
5:00 PM	36	176			120	2			125				459
5:15 PM	47	137			69	3			110				366
5:30 PM	44	96			83	5			91				319
5:45 PM	39	90			86	1			103				319
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	380	1155	0	0	802	18	0	0	852	0	0	0	3207
APPROACH %'s :	24.76%	75.24%	0.00%	0.00%	97.80%	2.20%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

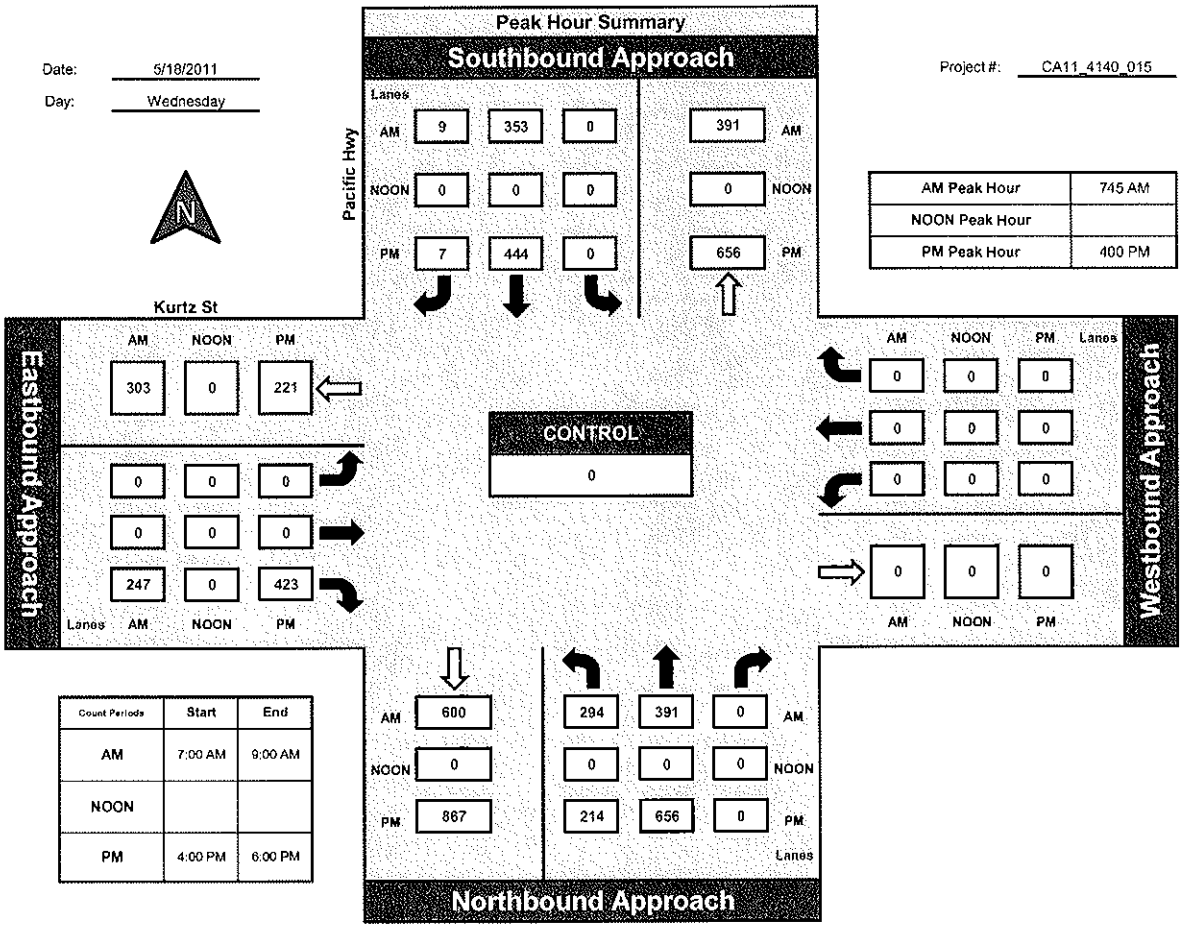
National Data & Surveying Services

Pacific Hwy and Kurtz St , City of San Diego

Date: 5/18/2011

Day: Wednesday

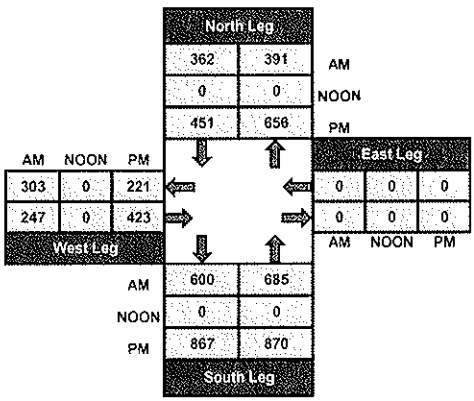
Project #: CA11_4140_015



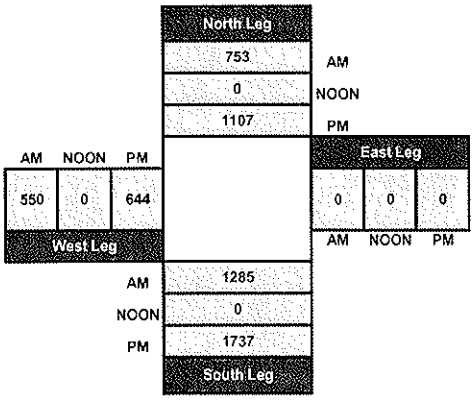
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(23)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

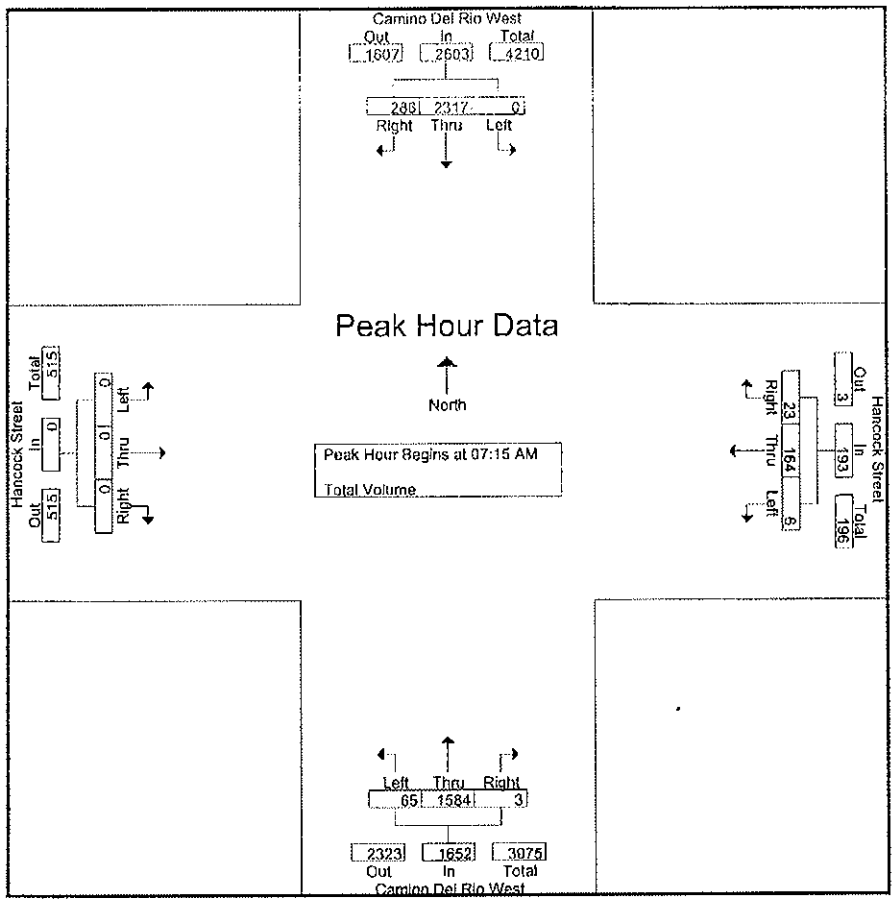
	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
Total	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
07:00 AM	0	589	35	624	9	12	8	29	15	279	9	303	0	0	0	0	956
07:15 AM	0	618	39	657	0	30	11	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	3	41	3	47	10	455	0	465	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	3	443	0	0	0	0	1146
Total	0	2311	214	2525	14	122	25	161	56	1498	12	1566	0	0	0	0	4252
08:00 AM	0	595	107	702	1	54	6	61	24	365	0	389	0	0	0	0	1152
08:15 AM	0	515	70	585	2	47	7	56	14	389	1	404	0	0	0	0	1045
08:30 AM	0	425	94	519	6	54	17	77	16	411	0	427	0	0	0	0	1023
Grand Total	0	4371	517	4888	32	289	63	384	124	2888	22	3034	0	0	0	0	8306
Apprch %	0	89.4	10.6		8.3	75.3	16.4		4.1	95.2	0.7		0	0	0		
Total %	0	52.6	6.2	58.8	0.4	3.5	0.8	4.6	1.5	34.8	0.3	36.5	0	0	0	0	

	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**618**	39	657	0	30	**11**	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	**3**	41	3	47	10	**455**	0	**465**	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	**3**	443	0	0	0	0	1146
08:00 AM	0	595	**107**	**702**	1	**54**	6	**61**	**24**	365	0	389	0	0	0	0	**1152**
Total Volume	0	2317	286	2603	6	164	23	193	65	1584	3	1652	0	0	0	0	4448
% App. Total	0	89	11		3.1	85	11.9		3.9	95.9	0.2		0	0	0		
PHF	.000	.937	.668	.927	.500	.759	.523	.791	.677	.870	.250	.888	.000	.000	.000	.000	.965

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				06:45 AM			
+0 mins.	0	618	39	657	2	39	3	44	10	455	0	465	0	0	0	0
+15 mins.	0	525	60	585	1	54	6	61	15	425	3	443	0	0	0	0
+30 mins.	0	579	80	659	2	47	7	56	24	365	0	389	0	0	0	0
+45 mins.	0	595	107	702	6	54	17	77	14	389	1	404	0	0	0	0
Total Volume	0	2317	286	2603	11	194	33	238	63	1634	4	1701	0	0	0	0
% App. Total	0	89	11		4.6	81.5	13.9		3.7	96.1	0.2		0	0	0	
PHF	.000	.937	.668	.927	.458	.898	.485	.773	.656	.898	.333	.915	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

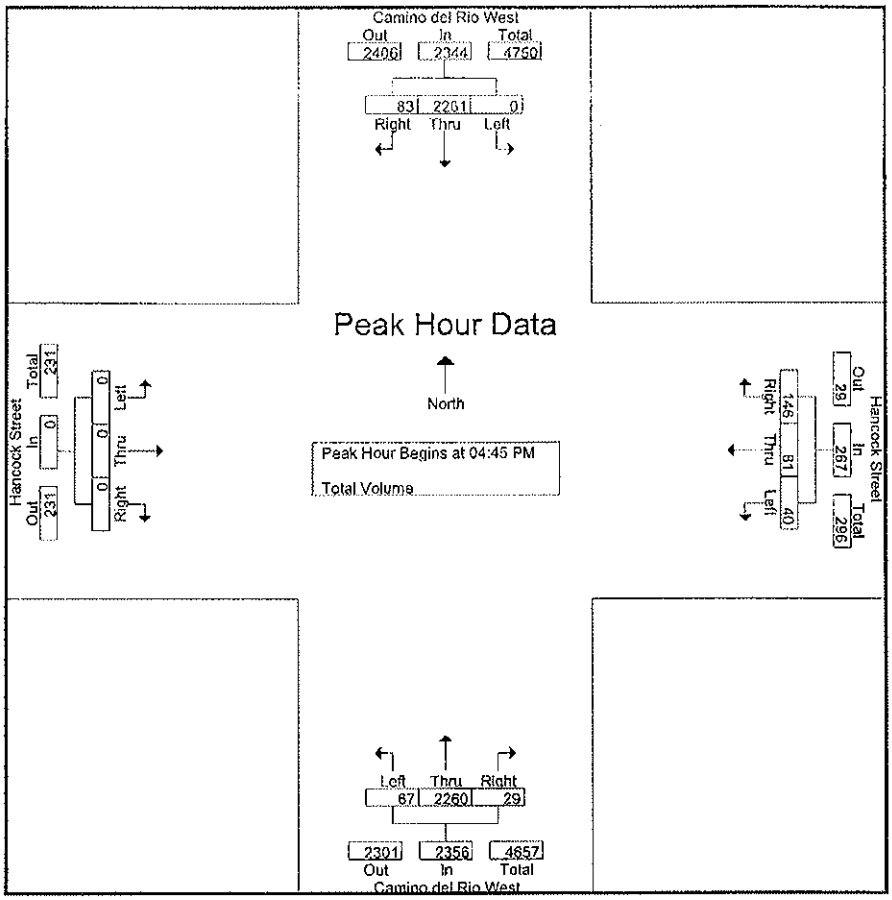
	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	476	31	507	1	34	14	49	17	585	5	607	0	0	0	0	1163
04:15 PM	0	523	30	553	5	23	34	62	11	525	5	541	0	0	0	0	1156
04:30 PM	0	532	25	557	9	21	33	63	11	569	2	582	0	0	0	0	1202
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
Total	0	2061	112	2173	29	97	118	244	68	2264	21	2353	0	0	0	0	4770
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
05:45 PM	0	538	23	561	8	21	27	56	15	489	7	511	0	0	0	0	1128
Total	0	2269	80	2349	34	83	136	253	53	2164	27	2244	0	0	0	0	4846
Grand Total	0	4330	192	4522	63	180	254	497	121	4428	48	4597	0	0	0	0	9616
Apprch %	0	95.8	4.2		12.7	36.2	51.1		2.6	96.3	1		0	0	0		
Total %	0	45	2	47	0.7	1.9	2.6	5.2	1.3	46	0.5	47.8	0	0	0	0	

	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
Total Volume	0	2261	83	2344	40	81	146	267	67	2260	29	2356	0	0	0	0	4967
% App. Total	0	96.5	3.5		15	30.3	54.7		2.8	95.9	1.2		0	0	0		
PHF	.000	.971	.798	.975	.714	.653	.869	.845	.578	.959	.518	.945	.000	.000	.000	.000	.983

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	0	570	20	590	5	23	34	62	11	569	2	582	0	0	0	0
+15 mins.	0	579	18	597	9	21	33	63	29	585	9	623	0	0	0	0
+30 mins.	0	582	19	601	14	19	37	70	11	525	14	550	0	0	0	0
+45 mins.	0	538	23	561	6	31	42	79	19	589	4	612	0	0	0	0
Total Volume	0	2269	80	2349	34	94	146	274	70	2268	29	2367	0	0	0	0
% App. Total	0	96.6	3.4		12.4	34.3	53.3		3	95.8	1.2		0	0	0	
PHF	.000	.975	.870	.977	.607	.758	.869	.867	.603	.963	.518	.950	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

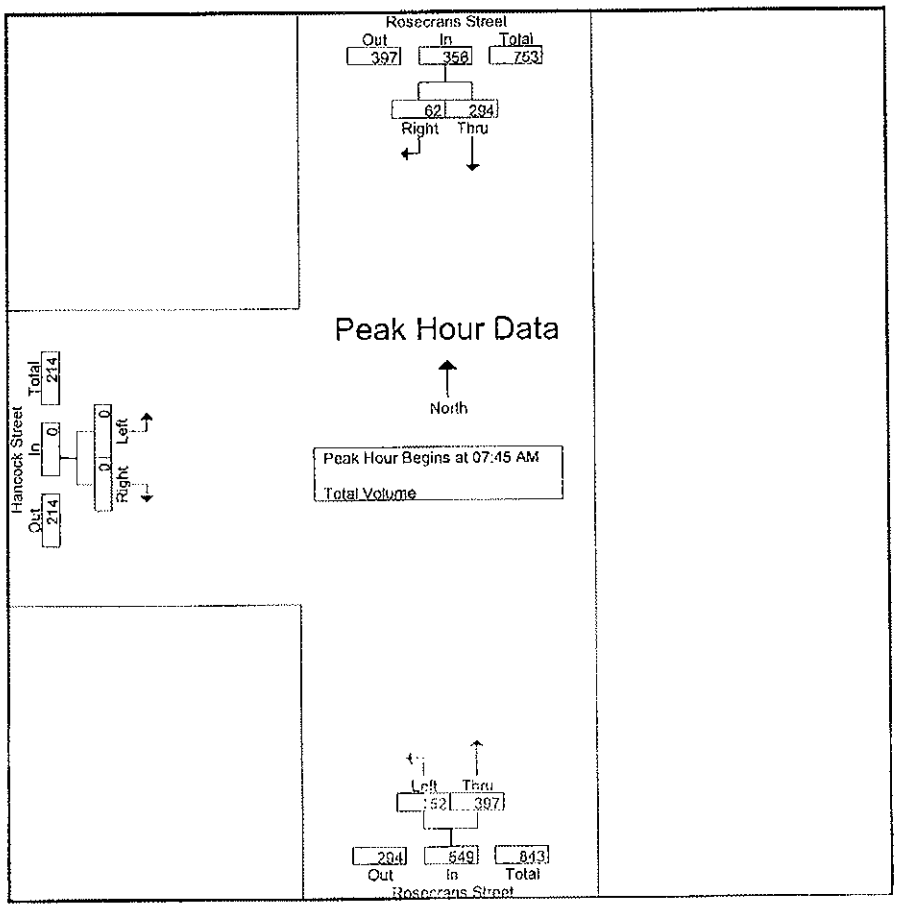
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:45 AM	46	6	52	40	70	110	0	0	0	162
Total	46	6	52	40	70	110	0	0	0	162
07:00 AM	50	5	55	23	59	82	0	0	0	137
07:15 AM	66	13	79	25	93	118	0	0	0	197
07:30 AM	72	19	91	27	101	128	0	0	0	219
07:45 AM	87	14	101	27	116	143	0	0	0	244
Total	275	51	326	102	369	471	0	0	0	797
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Grand Total	528	105	633	267	720	987	0	0	0	1620
Apprch %	83.4	16.6		27.1	72.9		0	0		
Total %	32.6	6.5	39.1	16.5	44.4	60.9	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	87	14	101	27	116	143	0	0	0	244
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Total Volume	294	62	356	152	397	549	0	0	0	905
% App. Total	82.6	17.4		27.7	72.3		0	0		
PHF	.845	.861	.881	.844	.856	.960	.000	.000	.000	.927

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:45 AM			06:45 AM		
+0 mins.	72	19	91	27	116	143	0	0	0
+15 mins.	87	14	101	45	85	130	0	0	0
+30 mins.	60	18	78	44	99	143	0	0	0
+45 mins.	70	16	86	36	97	133	0	0	0
Total Volume	289	67	356	152	397	549	0	0	0
% App. Total	81.2	18.8		27.7	72.3		0	0	
PHF	.830	.882	.881	.844	.856	.960	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

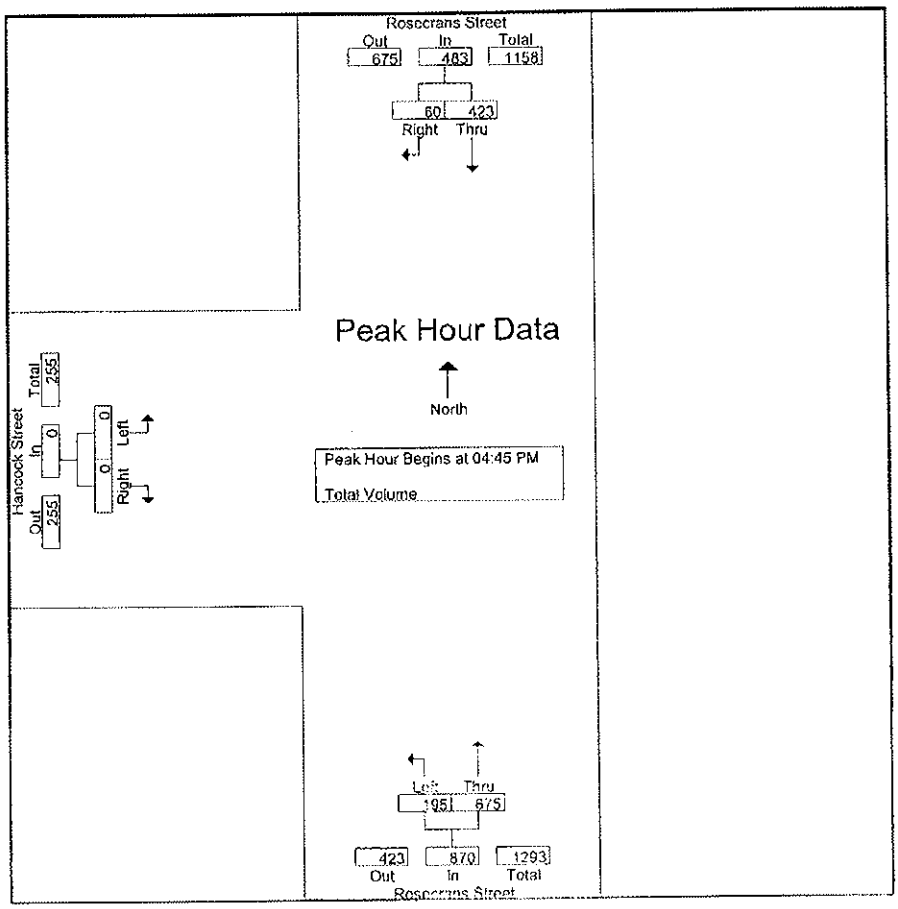
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	104	18	122	48	157	205	0	0	0	327
04:15 PM	109	17	126	53	153	206	0	0	0	332
04:30 PM	106	20	126	44	158	202	0	0	0	328
04:45 PM	89	14	103	51	187	238	0	0	0	341
Total	408	69	477	196	655	851	0	0	0	1328
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
05:45 PM	117	12	129	31	138	169	0	0	0	298
Total	451	58	509	175	626	801	0	0	0	1310
Grand Total	859	127	986	371	1281	1652	0	0	0	2638
Apprch %	87.1	12.9		22.5	77.5		0	0		
Total %	32.6	4.8	37.4	14.1	48.6	62.6	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	89	14	103	51	187	238	0	0	0	341
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
Total Volume	423	60	483	195	675	870	0	0	0	1353
% App. Total	87.6	12.4		22.4	77.6		0	0		
PHF	.896	.882	.901	.956	.902	.914	.000	.000	.00	.990

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			04:00 PM		
+0 mins.	107	17	124	44	158	202	0	0	0
+15 mins.	109	13	122	51	187	238	0	0	0
+30 mins.	118	16	134	51	167	218	0	0	0
+45 mins.	117	12	129	48	168	216	0	0	0
Total Volume	451	58	509	194	680	874	0	0	0
% App. Total	88.6	11.4		22.2	77.8		0	0	
PHF	.956	.853	.950	.951	.909	.918	.000	.000	.000

(25)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				12			37	101				14	164
7:15 AM				16			46	158				24	244
7:30 AM				15			58	111				31	215
7:45 AM				17			60	103				32	212
8:00 AM				12			86	117				23	238
8:15 AM				10			66	76				18	170
8:30 AM				14			43	62				37	156
8:45 AM				22			58	66				27	173
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	118	0	0	454	794	0	0	0	206	1572
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	36.38%	63.62%	0.00%	0.00%	0.00%	100.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021

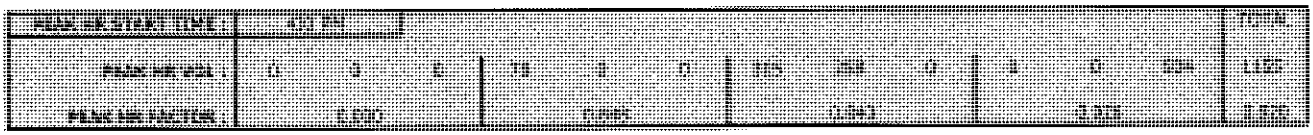
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				11			54	46				124	235
4:15 PM				18			66	63				107	254
4:30 PM				15			66	68				136	285
4:45 PM				17			78	58				116	269
5:00 PM				23			83	50				131	287
5:15 PM				23			88	82				121	314
5:30 PM				14			79	45				54	192
5:45 PM				23			124	38				75	260
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	144	0	0	638	450	0	0	0	864	2096
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	58.64%	41.36%	0.00%	0.00%	0.00%	100.00%	



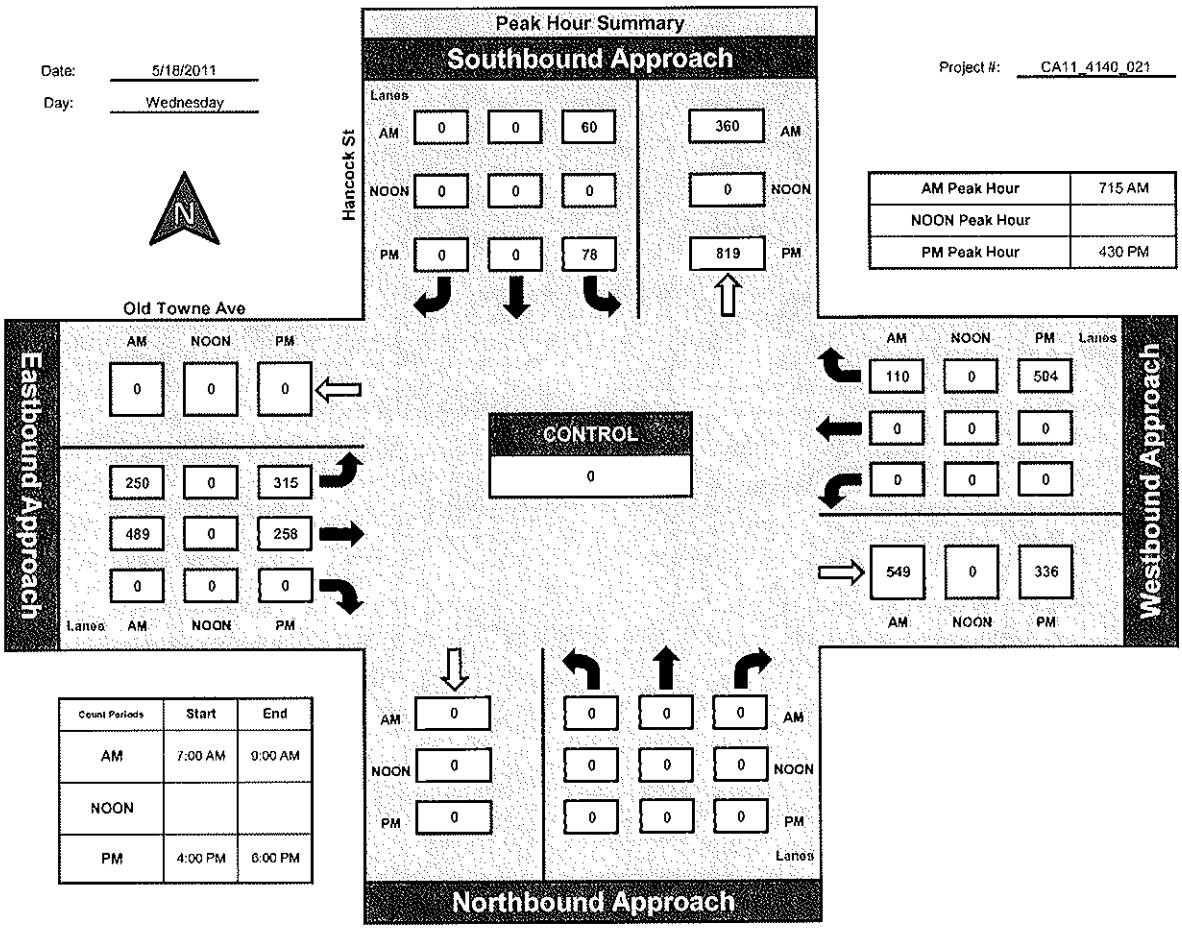
CONTROL :

ITM Peak Hour Summary

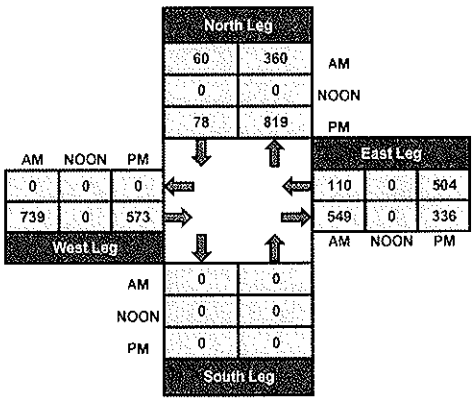
Prepared by:

National Data & Surveying Services

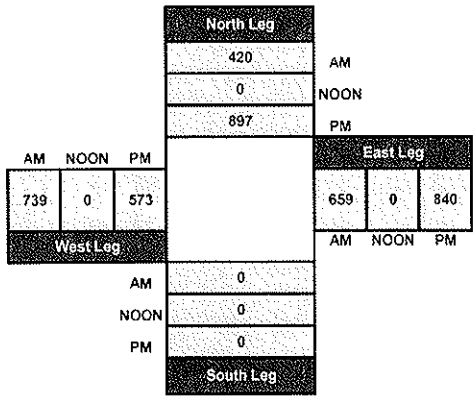
Hancock St and Old Towne Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(26)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	13	2	7	1	0	1	5	21	91	2	2	0	145
7:15 AM	19	1	9	0	1	0	1	21	141	2	3	2	200
7:30 AM	35	0	5	0	0	0	1	24	110	0	1	0	176
7:45 AM	23	1	8	0	0	1	2	33	81	0	3	1	153
8:00 AM	16	0	13	0	0	0	3	45	79	5	12	0	173
8:15 AM	9	0	10	0	1	0	0	21	67	4	4	0	116
8:30 AM	28	1	7	0	1	1	0	27	55	0	12	0	132
8:45 AM	14	1	7	0	2	2	1	33	47	1	7	0	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	6	66	1	5	5	13	225	671	14	44	3	1210
APPROACH %'s :	68.56%	2.62%	28.82%	9.09%	45.45%	45.45%	1.43%	24.75%	73.82%	22.95%	72.13%	4.92%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	120	0	18	0	0	0	2	27	31	1	8	0	207
4:15 PM	79	0	19	0	1	5	2	43	32	2	19	1	203
4:30 PM	116	1	14	0	1	5	1	42	39	4	19	0	242
4:45 PM	97	2	12	1	2	5	1	32	44	2	12	0	210
5:00 PM	100	2	7	1	1	3	1	33	41	2	26	0	217
5:15 PM	109	2	17	2	2	0	5	47	48	2	18	0	252
5:30 PM	42	0	11	0	1	1	1	30	28	2	5	0	121
5:45 PM	60	1	11	1	0	1	0	36	27	1	20	0	158
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	723	8	109	5	8	20	13	290	290	16	127	1	1610
APPROACH %'s :	86.07%	0.95%	12.98%	15.15%	24.24%	60.61%	2.19%	48.90%	48.90%	11.11%	88.19%	0.69%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

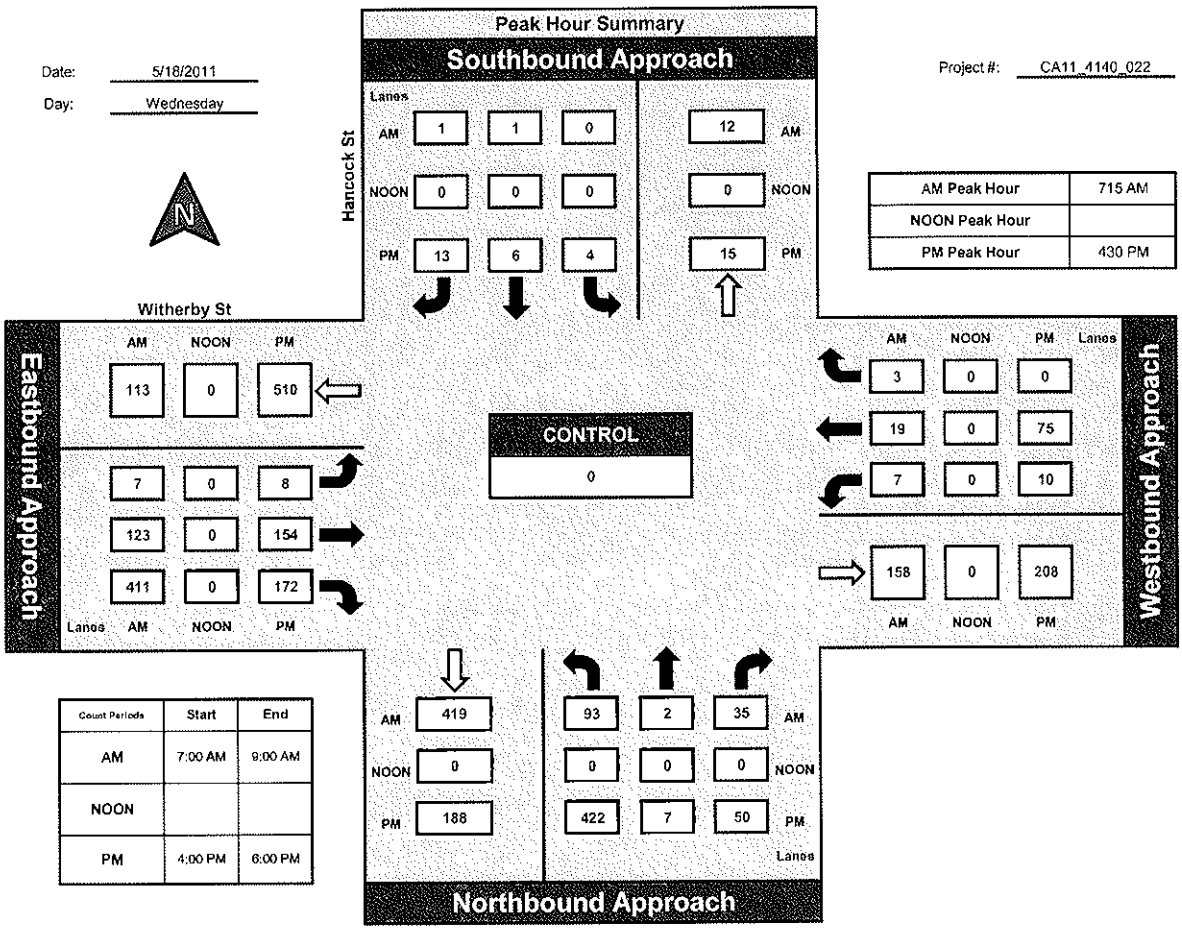
National Data & Surveying Services

Hancock St and Witherby St , City of San Diego

Date: 5/18/2011

Day: Wednesday

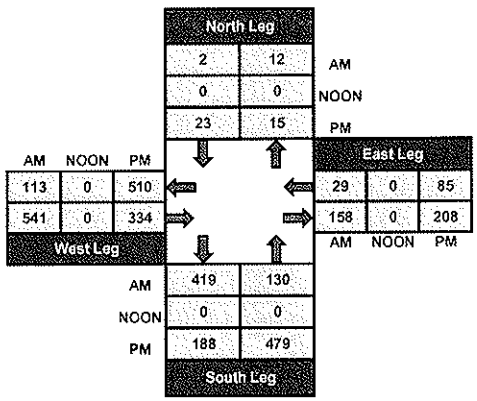
Project #: CA11_4140_022



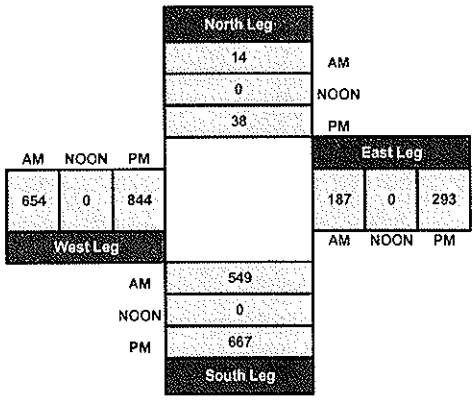
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(28)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					235	2			1	6			244
7:15 AM					216	4			1	3			224
7:30 AM					268	1			4	5			278
7:45 AM					355	7			2	6			370
8:00 AM					323	1			2	5			331
8:15 AM					367	5			5	7			384
8:30 AM					359	1			1	10			371
8:45 AM					346	1			2	12			361

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	2469	22	0	0	18	54	0	0	2563
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.12%	0.88%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

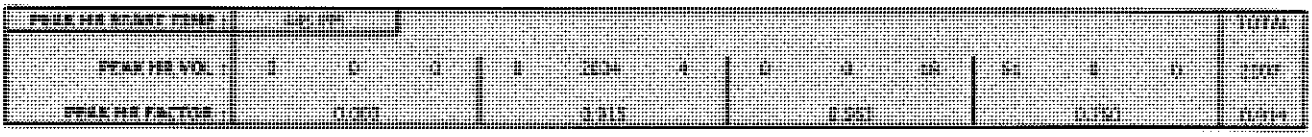
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					291	1			1	9			302
4:15 PM					344	4			7	6			361
4:30 PM					388	2			7	10			407
4:45 PM					477	0			7	17			501
5:00 PM					556	1			8	11			576
5:15 PM					536	1			3	7			547
5:30 PM					465	2			0	16			483
5:45 PM					381	2			0	13			396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3438	13	0	0	33	89	0	0	3573
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.62%	0.38%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



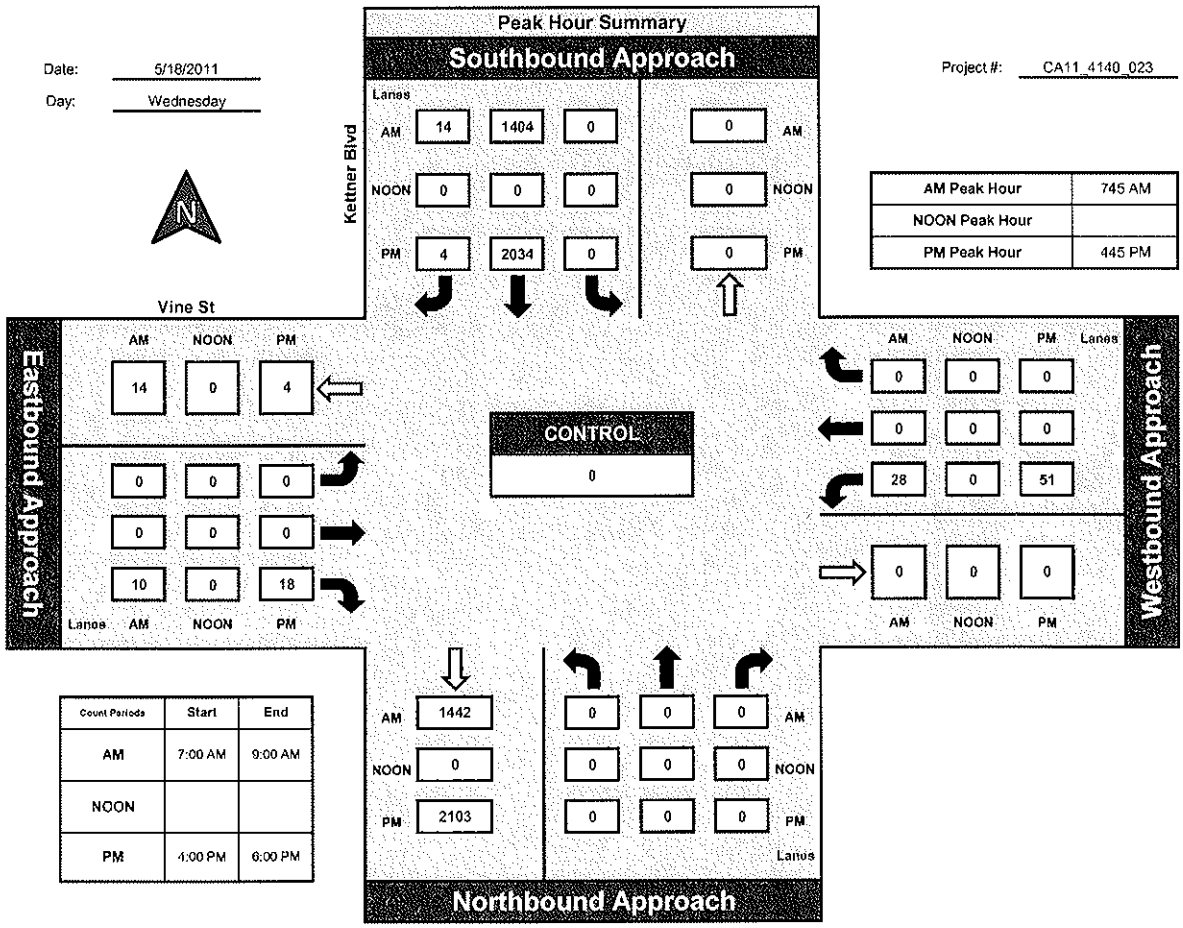
CONTROL :

ITM Peak Hour Summary

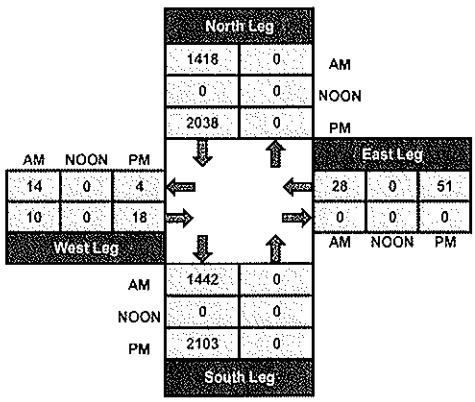
Prepared by:

National Data & Surveying Services

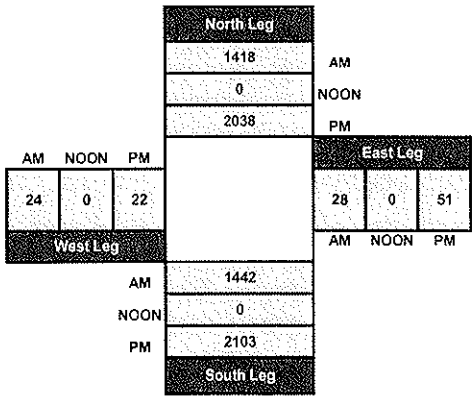
Kettner Blvd and Vine St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(31)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_018

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	450					19			222				691
7:15 AM	410					7			265				682
7:30 AM	358					15			272				645
7:45 AM	444					22			274				740
8:00 AM	413					18			286				717
8:15 AM	418					17			312				747
8:30 AM	390					16			309				715
8:45 AM	341					15			274				630

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3224	0	0	0	0	129	0	0	2214	0	0	0	5567
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]													
[redacted]													
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

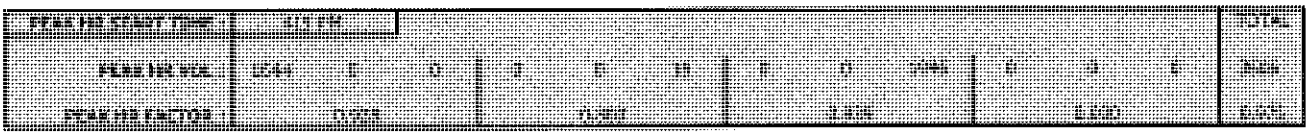
Project ID: CA11_4140_018 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	376					1			501				878
4:15 PM	404					3			518				925
4:30 PM	371					4			498				873
4:45 PM	426					5			470				901
5:00 PM	443					4			460				907
5:15 PM	405					2			436				843
5:30 PM	351					2			384				737
5:45 PM	333					2			309				644

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3109	0	0	0	0	23	0	0	3576	0	0	0	6708
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_018

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
	73	0	AM
	0	0	NOON
	16	0	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
1738	0	1660		0	0	0
1181	0	1946		0	0	0

	South Leg	
AM	1181	1665
NOON	0	0
PM	1946	1644

Total Volume Per Leg

	North Leg	
	73	AM
	0	NOON
	16	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
2919	0	3606		0	0	0

	South Leg
AM	2846
NOON	0
PM	3590

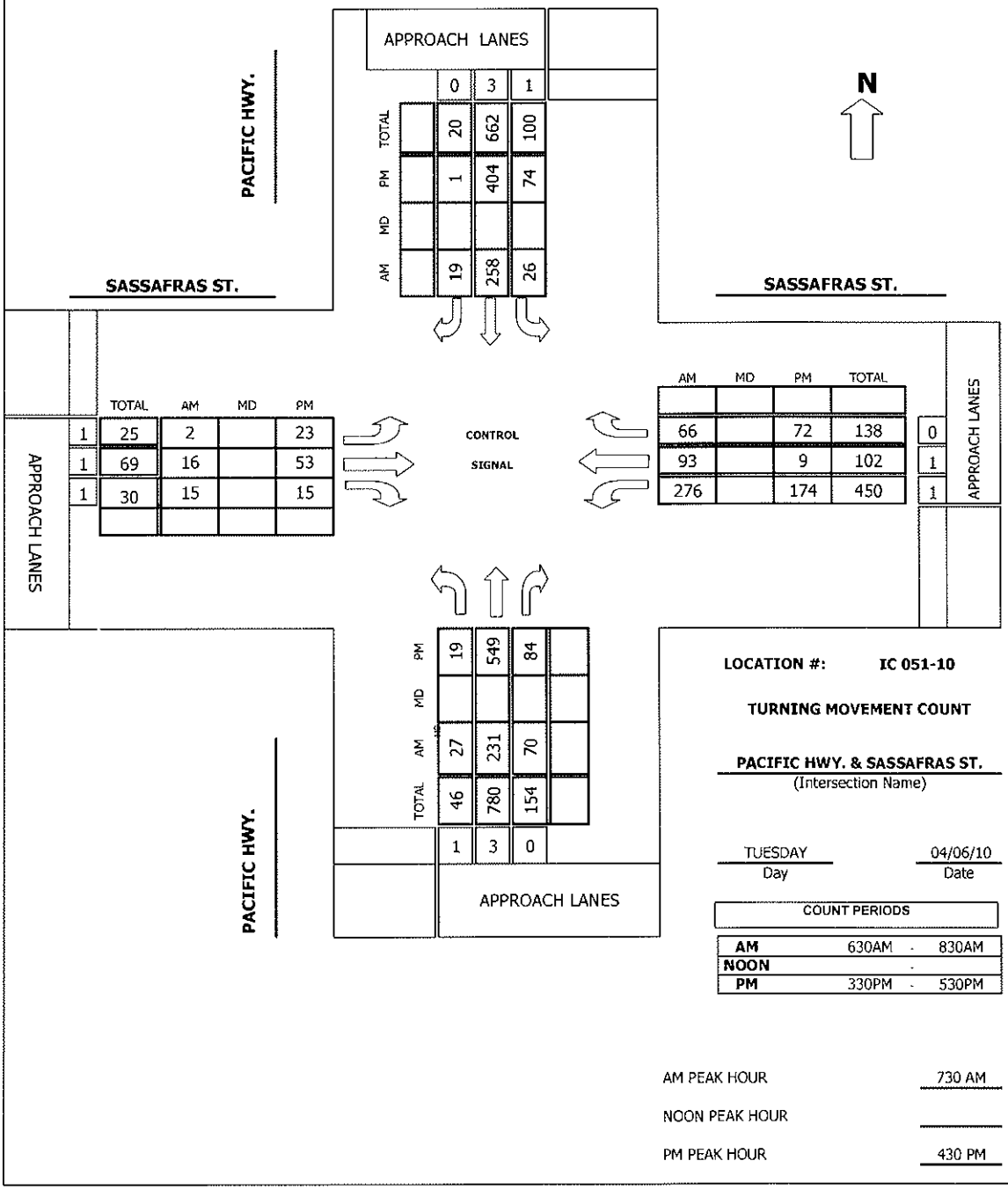
(34)

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: IC 051-10

TMC SUMMARY OF PACIFIC HWY. & SASSAFRAS ST.



LOCATION #: IC 051-10

TURNING MOVEMENT COUNT

PACIFIC HWY. & SASSAFRAS ST.
(Intersection Name)

TUESDAY (Day) 04/06/10 (Date)

COUNT PERIODS			
AM	630AM	-	830AM
NOON		-	
PM	330PM	-	530PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM	5	39	19	3	38	2	1	0	2	75	32	5	221
6:45 AM	6	47	9	4	63	1	1	1	1	104	15	7	259
7:00 AM	7	45	15	5	45	2	0	0	4	73	18	13	227
7:15 AM	8	55	16	4	67	3	0	0	1	50	21	8	233
7:30 AM	6	35	13	4	65	6	0	1	2	68	30	13	243
7:45 AM	7	72	12	7	69	4	0	3	2	77	20	19	292
8:00 AM	5	71	16	6	68	6	1	3	6	64	19	17	282
8:15 AM	9	53	29	9	56	3	1	9	5	67	24	17	282
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	53	417	129	42	471	27	4	17	23	578	179	99	2039
Approach %	8.85	69.62	21.54	7.78	87.22	5.00	9.09	38.64	52.27	67.52	20.91	11.57	
App/Depart	599	/	520	540	/	1072	44	/	188	856	/	259	

AM Peak Hr Begins at: 730 AM

PEAK													
Volumes	27	231	70	26	258	19	2	16	15	276	93	66	1099
Approach %	8.23	70.43	21.34	8.58	85.15	6.27	6.06	48.48	45.45	63.45	21.38	15.17	
PEAK HR. FACTOR:		0.891			0.947			0.550			0.938		0.941

CONTROL: SIGNAL
COMMENT 1:
COMMENT 2:

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	5	115	37	20	89	1	1	8	4	50	2	15	347
3:45 PM	6	127	26	16	90	1	2	2	3	42	1	19	335
4:00 PM	7	126	23	13	105	1	1	12	7	46	5	16	362
4:15 PM	5	98	23	18	105	1	2	11	4	59	4	17	347
4:30 PM	3	117	23	20	105	1	5	16	2	44	4	18	358
4:45 PM	6	130	19	17	99	0	3	7	3	42	1	17	344
5:00 PM	8	138	25	19	104	0	8	23	6	44	1	21	397
5:15 PM	2	164	17	18	96	0	7	7	4	44	3	16	378
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	42	1015	193	141	793	5	29	86	33	371	21	139	2868
Approach %	3.36	81.20	15.44	15.02	84.45	0.53	19.59	58.11	22.30	69.87	3.95	26.18	
App/Depart	1250	/	1183	939	/	1197	148	/	420	531	/	68	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	19	549	84	74	404	1	23	53	15	174	9	72	1477
Approach %	2.91	84.20	12.88	15.45	84.34	0.21	25.27	58.24	16.48	68.24	3.53	28.24	
PEAK HR. FACTOR:		0.891			0.950			0.615			0.966		0.930

CONTROL: SIGNAL
COMMENT 1: 0
COMMENT 2: 0

FIELD DATA SERVICES OF ARIZONA, INC.

520.316.6745

Pedestrian & Bicycle Study

Location: PACIFIC HWY. & SASSAFRAS ST.

Date: 04/06/10
Day: TUESDAY

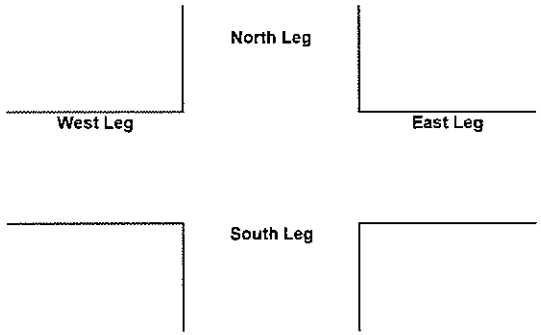
City: SAN DIEGO
Project #: IC 051-10

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	2	2	0
6:45 AM	0	1	0	0
7:00 AM	0	1	1	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	0
7:45 AM	0	1	0	0
8:00 AM	0	1	0	1
8:15 AM	0	1	0	0
TOTAL	0	8	3	1

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	0	1	2
6:45 AM	0	0	0	4
7:00 AM	0	0	0	2
7:15 AM	0	0	1	0
7:30 AM	0	0	1	0
7:45 AM	0	0	0	1
8:00 AM	0	0	0	2
8:15 AM	0	0	1	2
TOTAL	0	0	4	13

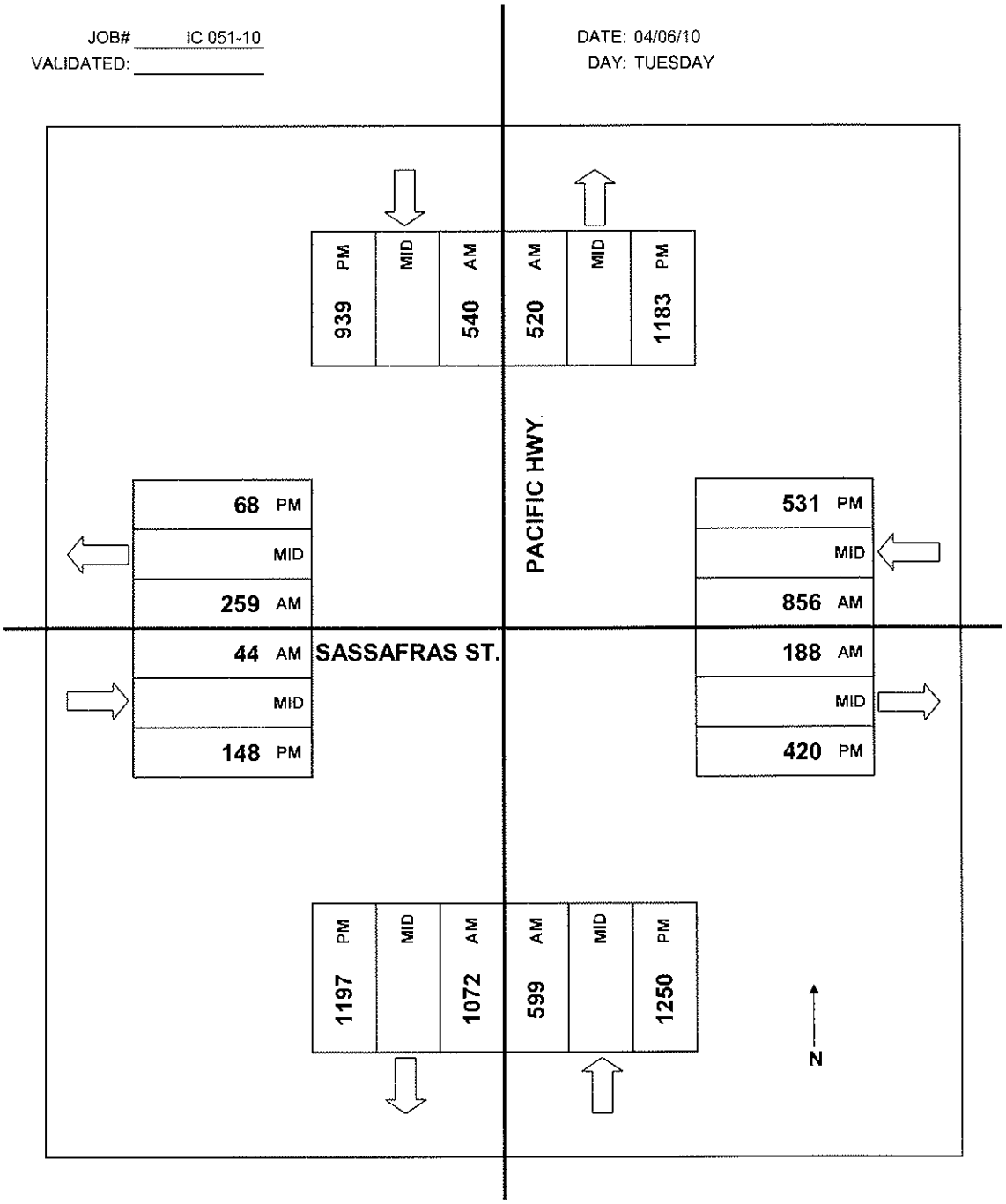
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	0	1
3:45 PM	0	0	0	0
4:00 PM	0	3	0	0
4:15 PM	0	1	0	2
4:30 PM	0	6	0	0
4:45 PM	0	1	0	2
5:00 PM	0	2	0	0
5:15 PM	0	0	0	0
TOTAL	0	13	0	5

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	2	0
3:45 PM	0	0	4	1
4:00 PM	0	0	2	2
4:15 PM	0	0	3	1
4:30 PM	0	0	1	2
4:45 PM	0	0	0	1
5:00 PM	0	0	2	1
5:15 PM	0	0	0	1
TOTAL	0	0	14	9



JOB# IC 051-10
VALIDATED: _____

DATE: 04/06/10
DAY: TUESDAY



(36)

2

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

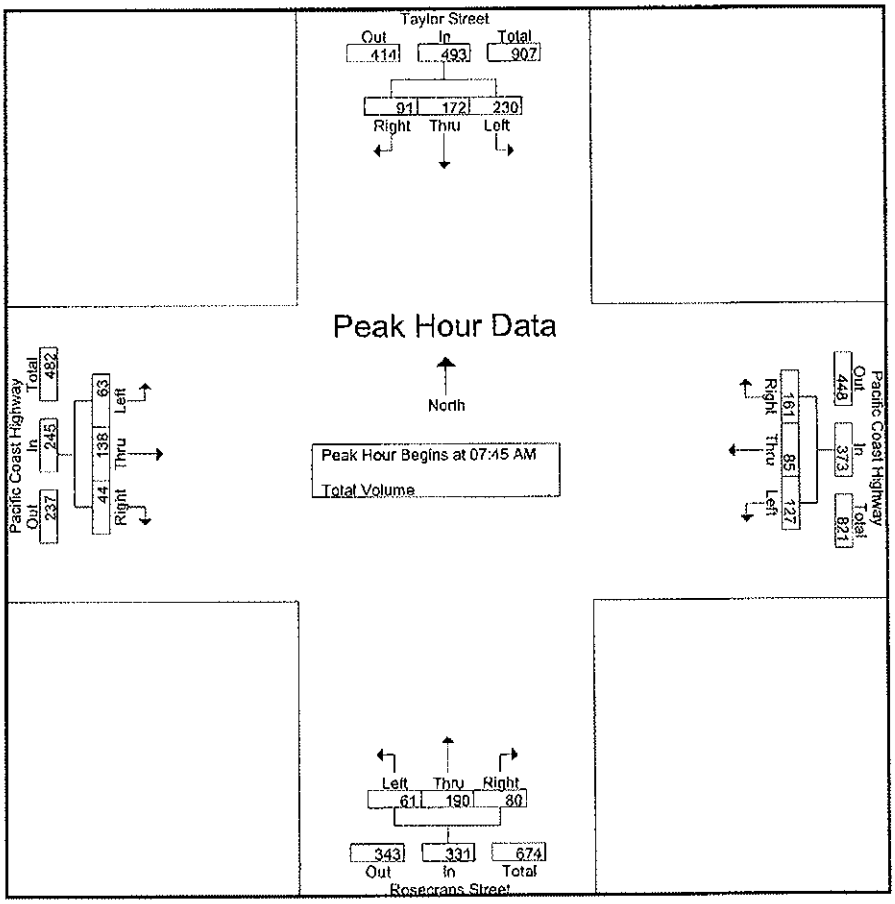
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
Total	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
07:00 AM	76	19	16	111	23	11	18	52	10	23	27	60	15	26	12	53	276
07:15 AM	92	21	11	124	43	18	21	82	13	29	21	63	12	21	6	39	308
07:30 AM	65	44	24	133	37	19	31	87	10	41	30	81	8	30	14	52	353
07:45 AM	66	53	20	139	37	20	41	98	11	51	18	80	22	50	15	87	404
Total	299	137	71	507	140	68	111	319	44	144	96	284	57	127	47	231	1341
08:00 AM	58	31	19	108	36	21	45	102	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	29	118	24	20	33	77	19	68	19	106	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Grand Total	533	268	162	963	250	146	261	657	101	304	186	591	114	236	82	432	2643
Apprch %	55.3	27.8	16.8		38.1	22.2	39.7		17.1	51.4	31.5		26.4	54.6	19		
Total %	20.2	10.1	6.1	36.4	9.5	5.5	9.9	24.9	3.8	11.5	7	22.4	4.3	8.9	3.1	16.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**66**	**53**	20	**139**	37	20	41	98	11	51	18	80	**22**	**50**	**15**	**87**	**404**
08:00 AM	58	31	19	108	36	21	**45**	**102**	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	**29**	118	24	20	33	77	**19**	**68**	19	**106**	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Total Volume	230	172	91	493	127	85	161	373	61	190	80	331	63	138	44	245	1442
% App. Total	46.7	34.9	18.5		34	22.8	43.2		18.4	57.4	24.2		25.7	56.3	18		
PHF	.871	.811	.784	.887	.858	.885	.894	.914	.803	.699	.870	.781	.716	.690	.733	.704	.892

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	76	19	16	111	37	20	41	98	10	41	**30**	81	**22**	**50**	**15**	**87**
+15 mins.	**92**	21	11	124	36	21	**45**	**102**	11	51	18	80	9	27	12	48
+30 mins.	65	44	**24**	133	24	20	33	77	13	31	23	67	13	31	7	51
+45 mins.	66	**53**	20	**139**	30	**24**	42	96	**19**	**68**	19	**106**	19	30	10	59
Total Volume	299	137	71	507	127	85	161	373	53	191	90	334	63	138	44	245
% App. Total	59	27	14		34	22.8	43.2		15.9	57.2	26.9		25.7	56.3	18	
PHF	.813	.646	.740	.912	.858	.885	.894	.914	.697	.702	.750	.788	.716	.690	.733	.704

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009

Groups Printed- Total Volume

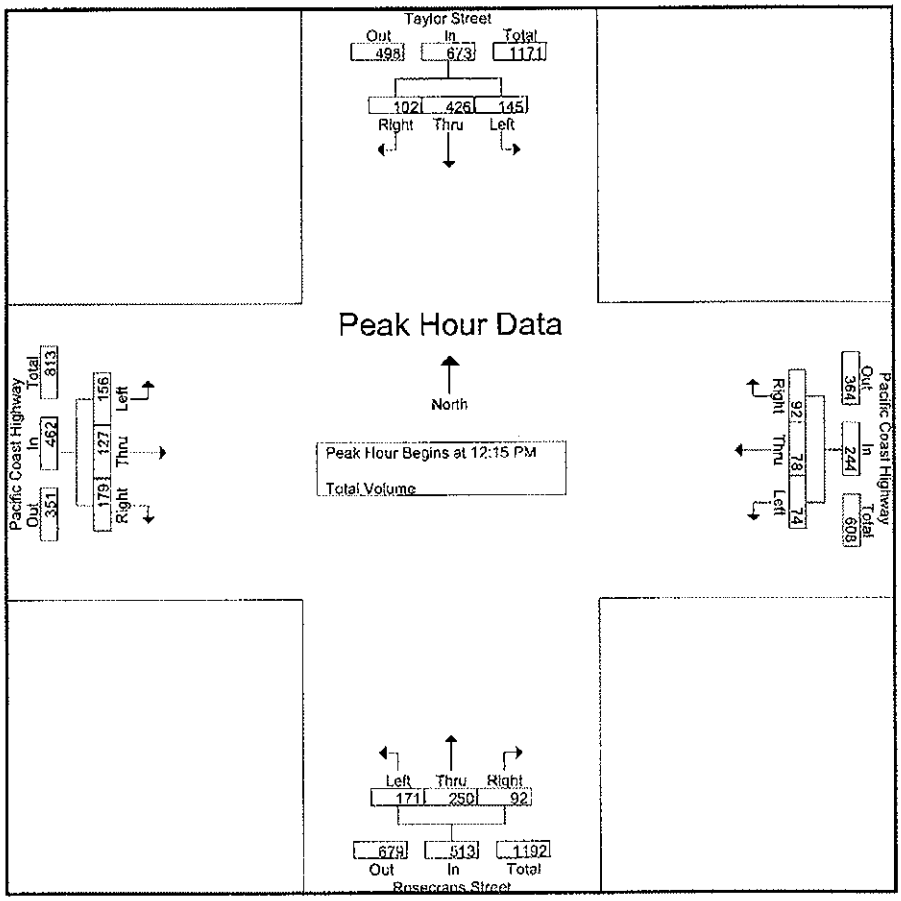
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	23	86	27	136	16	17	27	60	42	60	13	115	46	24	48	118	429
11:45 AM	21	94	29	144	16	23	13	52	27	77	21	125	45	28	54	127	448
Total	44	180	56	280	32	40	40	112	69	137	34	240	91	52	102	245	877
12:00 PM	30	70	19	119	13	28	32	73	33	62	12	107	41	32	41	114	413
12:15 PM	34	116	22	172	29	13	26	68	33	66	31	130	47	36	39	122	492
12:30 PM	34	110	33	177	14	20	18	52	45	58	25	128	38	26	54	118	475
12:45 PM	31	118	32	181	13	17	20	50	45	63	15	123	47	39	43	129	483
Total	129	414	106	649	69	78	96	243	156	249	83	488	173	133	177	483	1863
01:00 PM	46	82	15	143	18	28	28	74	48	63	21	132	24	26	43	93	442
01:15 PM	28	85	10	123	24	24	15	63	19	50	15	84	61	40	65	166	436
Grand Total	247	761	187	1195	143	170	179	492	292	499	153	944	349	251	387	987	3618
Apprch %	20.7	63.7	15.6		29.1	34.6	36.4		30.9	52.9	16.2		35.4	25.4	39.2		
Total %	6.8	21	5.2	33	4	4.7	4.9	13.6	8.1	13.8	4.2	26.1	9.6	6.9	10.7	27.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	34	116	22	172	**29**	13	26	68	33	**66**	**31**	130	**47**	36	39	122	**492**
12:30 PM	34	110	**33**	177	14	20	18	52	45	58	25	128	38	26	**54**	118	475
12:45 PM	31	**118**	32	**181**	13	17	20	50	45	63	15	123	47	**39**	43	**129**	483
01:00 PM	**46**	82	15	143	18	**28**	**28**	**74**	**48**	63	21	**132**	24	26	43	93	442
Total Volume	145	426	102	673	74	78	92	244	171	250	92	513	156	127	179	462	1892
% App. Total	21.5	63.3	15.2		30.3	32	37.7		33.3	48.7	17.9		33.8	27.5	38.7		
PHF	.788	.903	.773	.930	.638	.696	.821	.824	.891	.947	.742	.972	.830	.814	.829	.895	.961

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				12:15 PM				12:30 PM			
+0 mins.	34	116	22	172	16	17	27	60	33	**66**	31	130	38	26	54	118
+15 mins.	34	110	**33**	177	16	23	13	52	45	58	25	128	47	39	43	129
+30 mins.	31	**118**	32	**181**	13	**28**	**32**	**73**	45	63	15	123	24	26	43	93
+45 mins.	**46**	82	15	143	**29**	13	26	68	**48**	63	21	**132**	**61**	**40**	**65**	**166**
Total Volume	145	426	102	673	74	81	98	253	171	250	92	513	170	131	205	506
% App. Total	21.5	63.3	15.2		29.2	32	38.7		33.3	48.7	17.9		33.6	25.9	40.5	
PHF	.788	.903	.773	.930	.638	.723	.766	.866	.891	.947	.742	.972	.697	.819	.788	.762

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

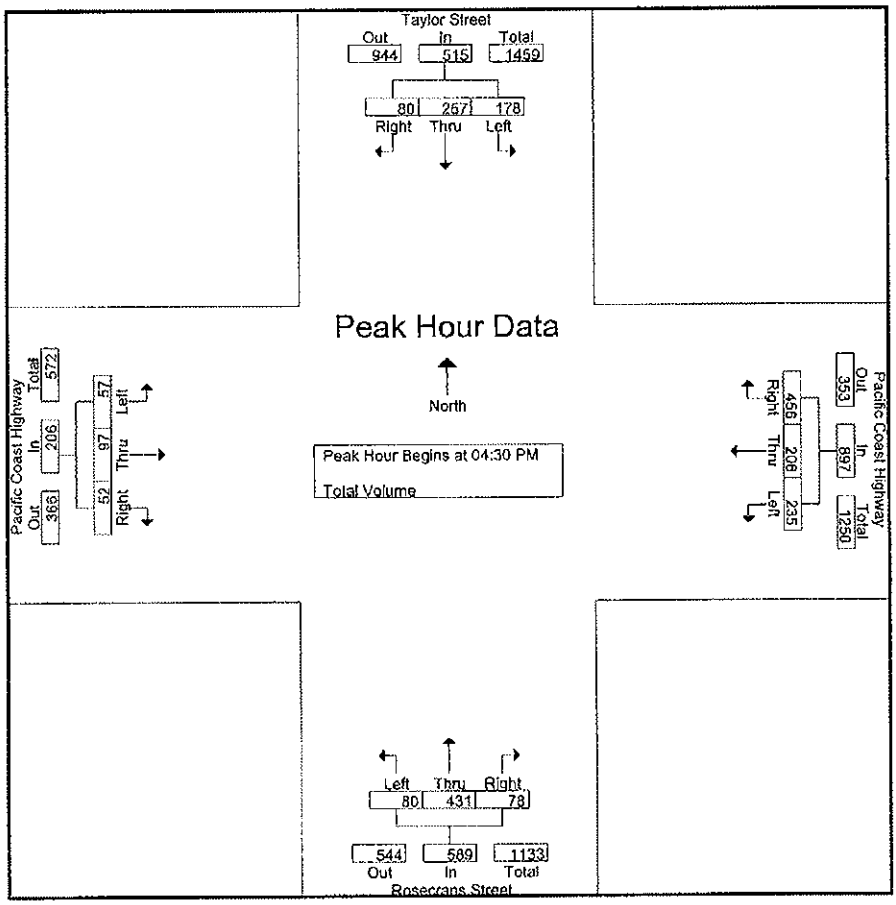
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	57	49	27	133	70	65	123	258	19	87	19	125	22	23	17	62	578
04:15 PM	32	54	20	106	83	46	103	232	22	64	32	118	11	27	12	50	506
04:30 PM	51	56	15	122	60	48	127	235	25	113	30	168	19	27	13	59	584
04:45 PM	40	57	16	113	62	38	107	207	18	90	10	118	14	13	7	34	472
Total	180	216	78	474	275	197	460	932	84	354	91	529	66	90	49	205	2140
05:00 PM	46	79	21	146	57	61	115	233	20	133	16	169	16	27	14	57	605
05:15 PM	41	65	28	134	56	59	107	222	17	95	22	134	8	30	18	56	546
05:30 PM	42	78	17	137	70	32	103	205	19	102	24	145	14	15	12	41	528
05:45 PM	42	80	20	142	42	36	92	170	18	90	22	130	12	24	15	51	493
Total	171	302	86	559	225	188	417	830	74	420	84	578	50	96	59	205	2172
Grand Total	351	518	164	1033	500	385	877	1762	158	774	175	1107	116	186	108	410	4312
Apprch %	34	50.1	15.9		28.4	21.9	49.8		14.3	69.9	15.8		28.3	45.4	26.3		
Total %	8.1	12	3.8	24	11.6	8.9	20.3	40.9	3.7	17.9	4.1	25.7	2.7	4.3	2.5	9.5	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**51**	56	15	122	60	48	**127**	**235**	**25**	113	**30**	168	**19**	27	13	**59**	584
04:45 PM	40	57	16	113	**62**	38	107	207	18	90	10	118	14	13	7	34	472
05:00 PM	46	**79**	21	**146**	57	**61**	115	233	20	**133**	16	**169**	16	27	14	57	**605**
05:15 PM	41	65	**28**	134	56	59	107	222	17	95	22	134	8	**30**	**18**	56	546
Total Volume	178	257	80	515	235	206	456	897	80	431	78	589	57	97	52	206	2207
% App. Total	34.6	49.9	15.5		26.2	23	50.8		13.6	73.2	13.2		27.7	47.1	25.2		
PHF	.873	.813	.714	.882	.948	.844	.898	.954	.800	.810	.650	.871	.750	.808	.722	.873	.912

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	**46**	79	21	**146**	70	**65**	123	**258**	**25**	113	**30**	168	**19**	27	13	**59**
+15 mins.	41	65	**28**	134	**83**	46	103	232	18	90	10	118	14	13	7	34
+30 mins.	42	78	17	137	60	48	**127**	235	20	**133**	16	**169**	16	27	14	57
+45 mins.	42	**80**	20	142	62	38	107	207	17	95	22	134	8	**30**	**18**	56
Total Volume	171	302	86	559	275	197	460	932	80	431	78	589	57	97	52	206
% App. Total	30.6	54	15.4		29.5	21.1	49.4		13.6	73.2	13.2		27.7	47.1	25.2	
PHF	.929	.944	.768	.957	.828	.758	.906	.903	.800	.810	.650	.871	.750	.808	.722	.873

(37)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	29	8	0	29	27	0	0	2	9	7	27	158
7:15 AM	27	35	2	0	32	33	1	0	0	7	11	31	179
7:30 AM	33	36	8	1	39	39	1	0	4	7	19	25	212
7:45 AM	37	43	9	1	31	38	1	0	6	9	35	45	255
8:00 AM	24	56	12	1	26	37	0	1	5	9	46	55	272
8:15 AM	27	37	7	0	21	69	1	0	3	7	51	42	265
8:30 AM	31	33	7	0	27	52	0	0	2	11	29	43	235
8:45 AM	24	43	5	5	28	61	1	0	5	11	28	41	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	223	312	58	8	233	356	5	1	27	70	226	309	1828
APPROACH %'s :	37.61%	52.61%	9.78%	1.34%	39.03%	59.63%	15.15%	3.03%	81.82%	11.57%	37.36%	51.07%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	91	46	3	1	42	31	0	0	1	15	16	34	280
4:15 PM	97	66	2	1	41	28	0	1	6	21	22	45	330
4:30 PM	96	70	4	0	52	39	0	1	6	17	26	38	349
4:45 PM	104	67	2	0	45	29	0	0	5	21	20	50	343
5:00 PM	107	54	1	0	53	46	0	0	9	24	26	50	370
5:15 PM	99	69	2	0	52	23	1	1	1	9	16	57	330
5:30 PM	76	52	3	0	47	36	1	0	4	16	25	53	313
5:45 PM	42	39	1	0	33	27	0	0	2	10	17	38	209
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	712	463	18	2	365	259	2	3	34	133	168	365	2524
APPROACH %'s :	59.68%	38.81%	1.51%	0.32%	58.31%	41.37%	5.13%	7.69%	87.18%	19.97%	25.23%	54.80%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

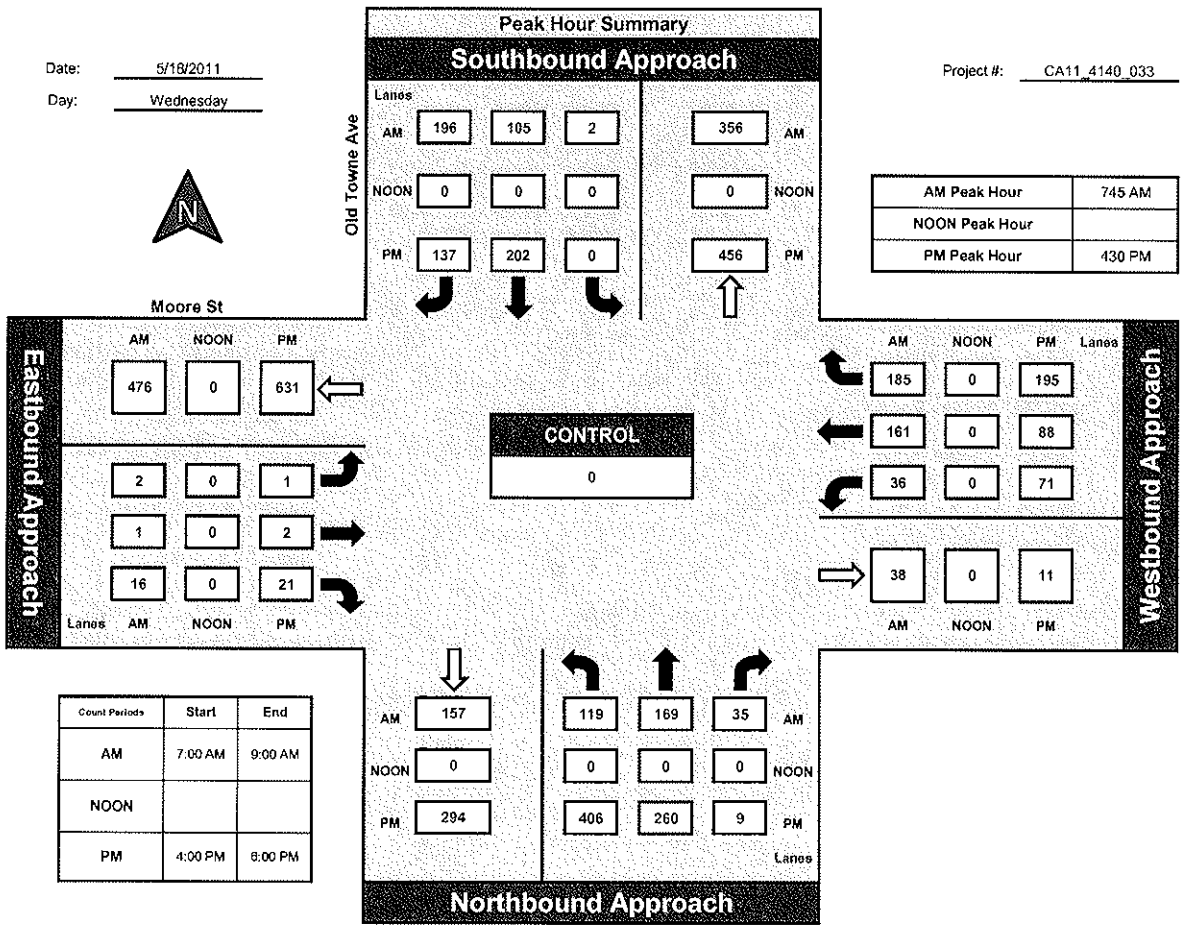
National Data & Surveying Services

Old Towne Ave and Moore St , City of San Diego

Date: 5/18/2011

Day: Wednesday

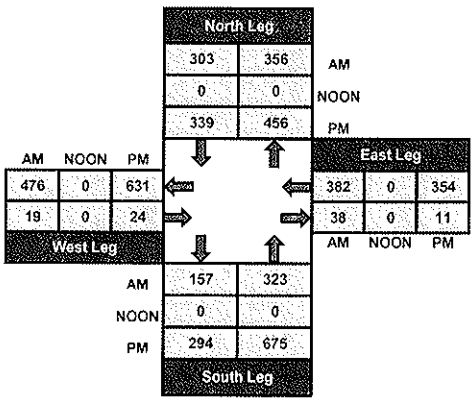
Project #: CA11_4140_033



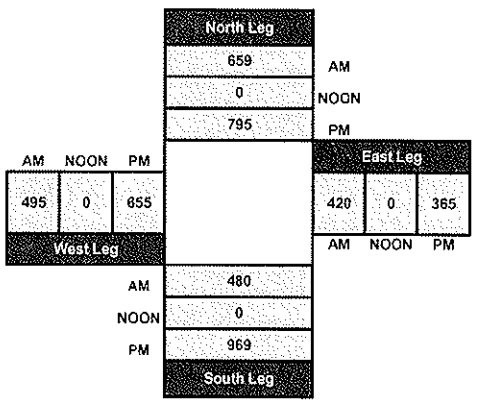
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(38)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

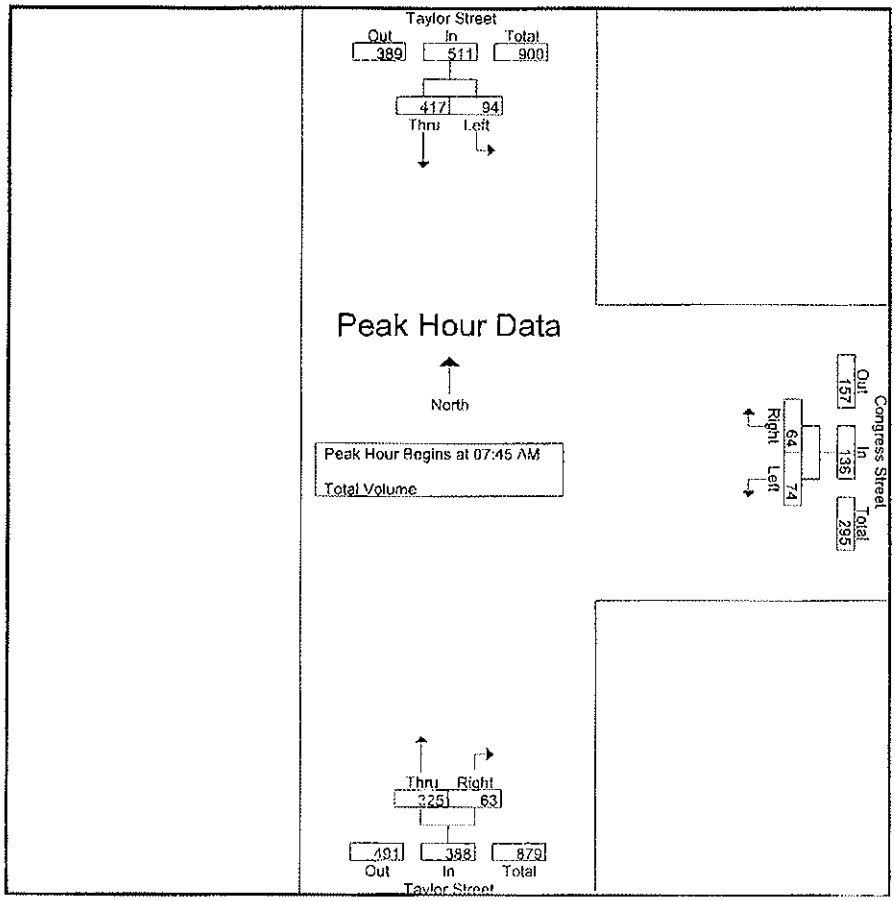
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:45 AM	10	92	102	13	4	17	42	11	53	172
Total	10	92	102	13	4	17	42	11	53	172
07:00 AM	14	108	122	7	11	18	58	6	64	204
07:15 AM	13	124	137	10	12	22	55	8	63	222
07:30 AM	21	121	142	9	17	26	63	8	71	239
07:45 AM	23	122	145	19	18	37	93	13	106	288
Total	71	475	546	45	58	103	269	35	304	953
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	19	32	80	18	98	252
08:30 AM	27	99	126	29	11	40	80	19	99	265
Grand Total	152	862	1014	113	108	221	543	96	639	1874
Apprch %	15	85		51.1	48.9		85	15		
Total %	8.1	46	54.1	6	5.8	11.8	29	5.1	34.1	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	23	**122**	**145**	19	18	37	**93**	13	**106**	**288**
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	**19**	32	80	18	98	252
08:30 AM	**27**	99	126	**29**	11	**40**	80	19	99	265
Total Volume	94	417	511	74	64	138	325	63	388	1037
% App. Total	18.4	81.6		53.6	46.4		83.8	16.2		
PHF	.870	.855	.881	.638	.842	.863	.874	.829	.915	.901

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:45 AM		
+0 mins.	14	108	122	19	18	37	93	13	106
+15 mins.	13	124	137	13	16	29	72	13	85
+30 mins.	21	121	142	13	19	32	80	18	98
+45 mins.	23	122	145	29	11	40	80	19	99
Total Volume	71	475	546	74	64	138	325	63	388
% App. Total	13	87		53.6	46.4		83.8	16.2	
PHF	.772	.958	.941	.638	.842	.863	.874	.82[illegible]	.915

Counts Unlimited Inc.
25286 Jaclyn Avenue
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951-485-7934

City of San Diego
N/S: Taylor Street
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File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

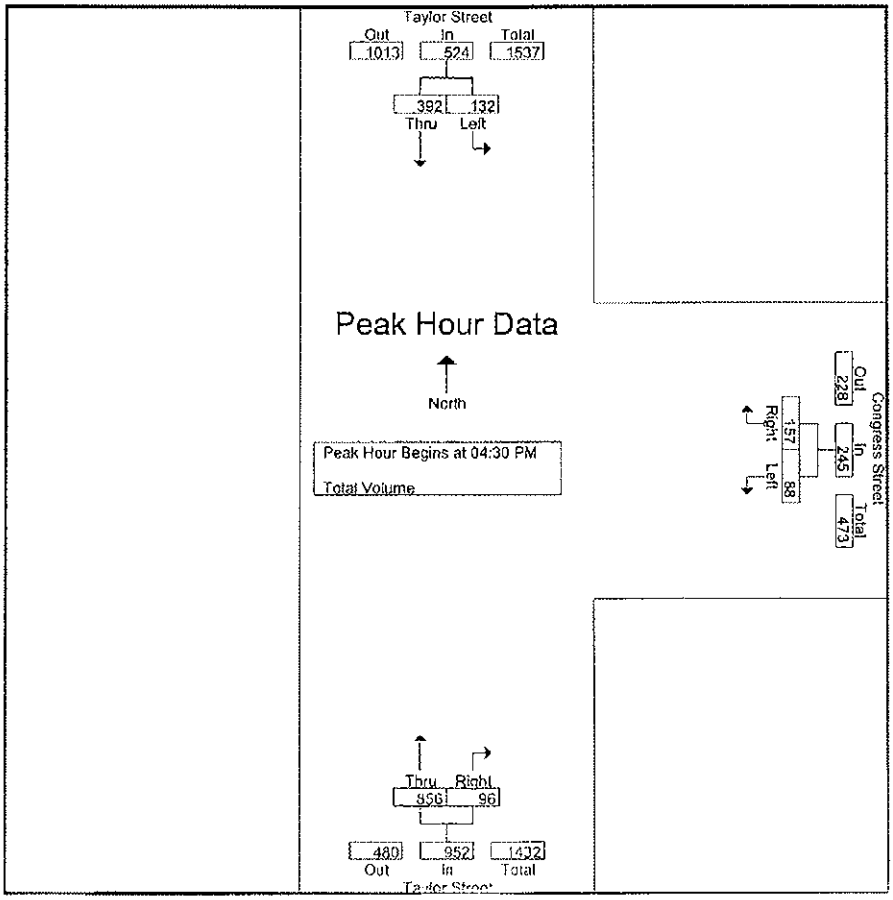
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	33	104	137	21	37	58	197	16	213	408
04:15 PM	29	85	114	12	25	37	182	12	194	345
04:30 PM	52	93	145	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
Total	135	368	503	71	133	204	795	72	867	1574
05:00 PM	26	111	137	24	36	60	240	20	260	457
05:15 PM	33	102	135	26	50	76	200	32	232	443
05:30 PM	28	101	129	24	33	57	194	26	220	406
05:45 PM	31	95	126	16	35	51	173	22	195	372
Total	118	409	527	90	154	244	807	100	907	1678
Grand Total	253	777	1030	161	287	448	1602	172	1774	3252
Apprch %	24.6	75.4		35.9	64.1		90.3	9.7		
Total %	7.8	23.9	31.7	5	8.8	13.8	49.3	5.3	54.6	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**52**	93	**145**	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
05:00 PM	26	111	137	24	36	60	**240**	20	**260**	**457**
05:15 PM	33	102	135	26	50	76	200	32	232	443
Total Volume	132	392	524	88	157	245	856	96	952	1721
% App. Total	25.2	74.8		35.9	64.1		89.9	10.1		
PHF	.635	.883	.903	.846	.785	.806	.892	.750	.915	.941

Counts Unlimited Inc.
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951-485-7934

City of San Diego
N/S: Taylor Street
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File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	26	111	137	20	38	58	224	25	249
+15 mins.	33	102	135	24	36	60	192	24	216
+30 mins.	28	101	129	26	50	76	240	20	260
+45 mins.	31	95	126	24	33	57	200	32	232
Total Volume	118	409	527	94	157	251	856	96	952
% App. Total	22.4	77.6		37.5	62.5		89.9	10.1	
PHF	.894	.921	.962	.904	.785	.826	.893	.75	.915

(39)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

Day: WEDNESDAY

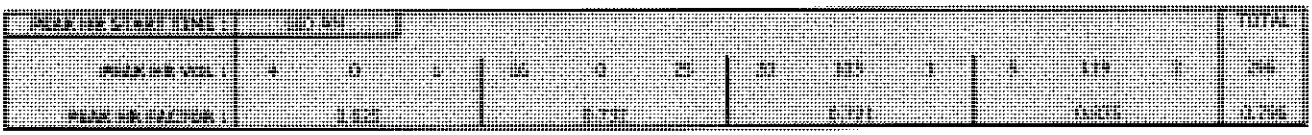
City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	2		2	2	12	1	0	12	1	32
7:15 AM	0	0	0	3		4	4	15	2	0	25	0	53
7:30 AM	2	0	1	4		4	2	25	0	0	21	0	59
7:45 AM	0	1	0	3		3	6	25	0	0	23	1	62
8:00 AM	1	0	0	3		3	2	24	0	2	23	1	59
8:15 AM	0	0	1	4		4	4	18	0	1	28	0	60
8:30 AM	1	0	0	3		11	5	28	0	1	35	0	84
8:45 AM	2	0	0	6		7	9	33	1	1	33	1	93

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	1	2	28	0	38	34	180	4	5	200	4	502
APPROACH %'s :	66.67%	11.11%	22.22%	42.42%	0.00%	57.58%	15.60%	82.57%	1.83%	2.39%	95.69%	1.91%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

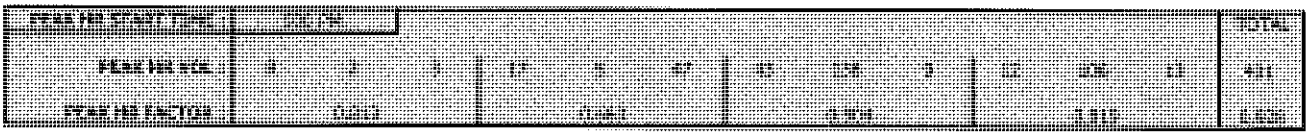
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	1	5	1	11	6	28	2	0	32	1	87
4:15 PM	0	2	1	7	0	5	6	28	2	0	34	4	89
4:30 PM	0	2	1	4	1	9	10	35	1	2	35	3	103
4:45 PM	1	0	2	3	0	6	10	26	0	1	27	4	80
5:00 PM	2	0	1	3	0	9	7	37	2	3	25	5	94
5:15 PM	2	0	0	2	0	11	10	32	2	4	31	5	99
5:30 PM	1	2	1	3	1	14	11	34	1	3	35	2	108
5:45 PM	3	0	1	9	4	13	15	33	4	2	15	1	100
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	6	8	36	7	78	75	253	14	15	234	25	760
APPROACH %'s :	39.13%	26.09%	34.78%	29.75%	5.79%	64.46%	21.93%	73.98%	4.09%	5.47%	85.40%	9.12%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

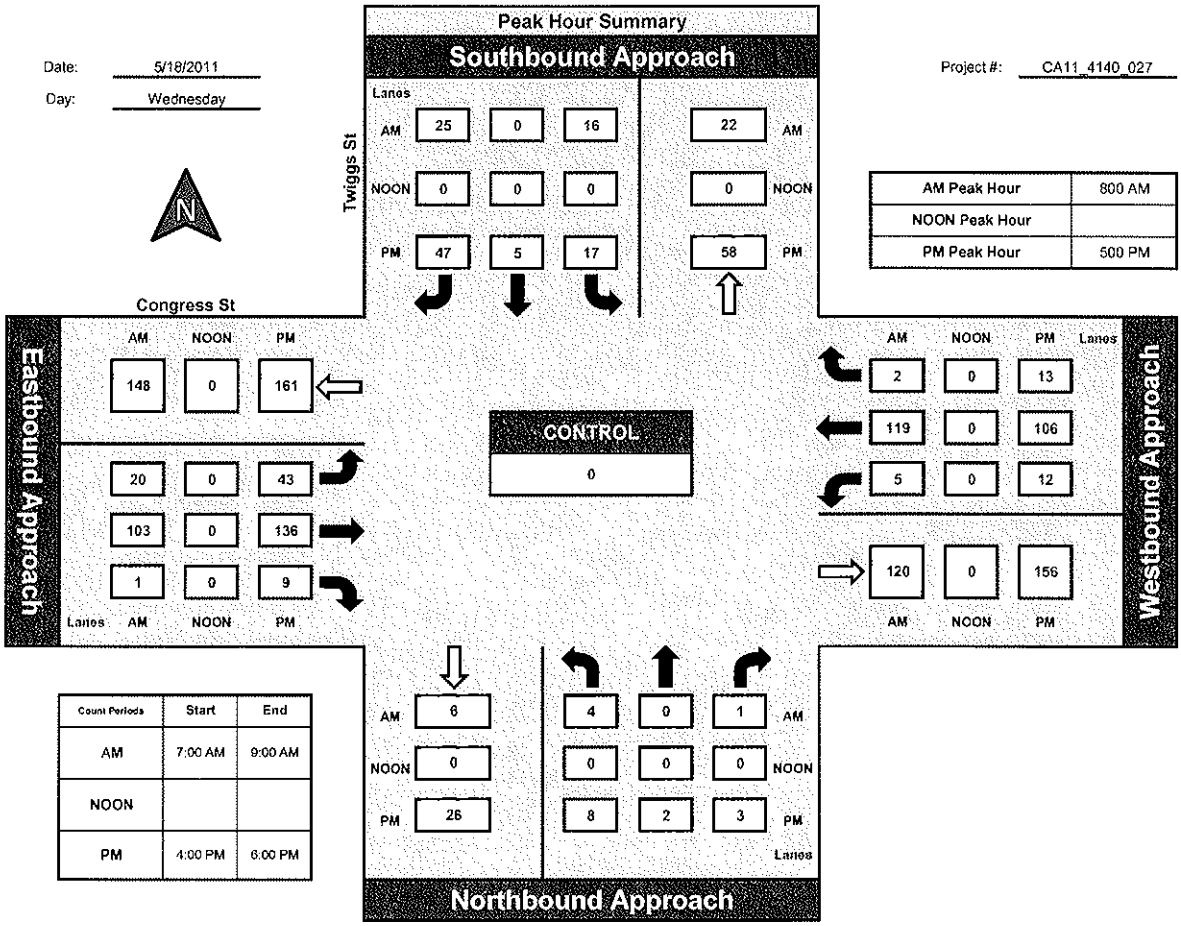
National Data & Surveying Services

Twiggs St and Congress St , City of San Diego

Date: 5/18/2011

Day: Wednesday

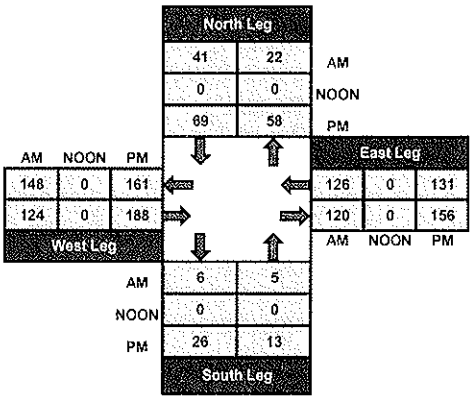
Project #: CA11_4140_027



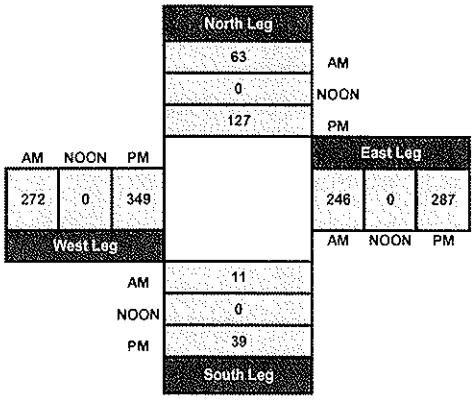
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(40)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	3	2	0	1	3	3	1	10	3	0	7	1	34
7:15 AM	7	1	0	3	3	1	0	12	6	1	17	0	51
7:30 AM	1	0	1	3	3	1	0	24	2	0	19	1	55
7:45 AM	2	2	1	2	3	0	2	27	1	0	19	0	59
8:00 AM	3	1	2	3	3	2	1	23	2	1	24	1	66
8:15 AM	0	0	0	2	3	1	1	19	1	0	27	4	58
8:30 AM	2	0	1	2	4	0	2	22	3	2	35	1	74
8:45 AM	3	1	0	3	4	2	1	27	12	2	30	2	87
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	7	5	19	26	10	8	164	30	6	178	10	484
APPROACH %'s :	63.64%	21.21%	15.15%	34.55%	47.27%	18.18%	3.96%	81.19%	14.85%	3.09%	91.75%	5.15%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

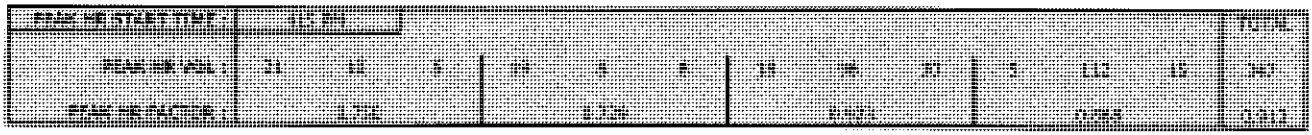
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	2	1	2	6	0	2	4	28	2	2	30	3	82
4:15 PM	5	2	1	7	2	3	5	26	6	1	33	4	95
4:30 PM	4	2	3	5	2	1	5	29	5	0	28	4	88
4:45 PM	6	5	1	5	0	1	2	20	7	3	26	5	81
5:00 PM	6	1	0	2	4	3	6	21	12	1	25	2	83
5:15 PM	4	1	2	4	3	7	2	24	7	2	30	1	87
5:30 PM	9	0	0	5	2	0	5	34	2	0	28	2	87
5:45 PM	6	3	3	9	1	2	3	27	10	0	16	6	86
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	42	15	12	43	14	19	32	209	51	9	216	27	689
APPROACH %'s :	60.87%	21.74%	17.39%	56.58%	18.42%	25.00%	10.96%	71.58%	17.47%	3.57%	85.71%	10.71%	



CONTROL :

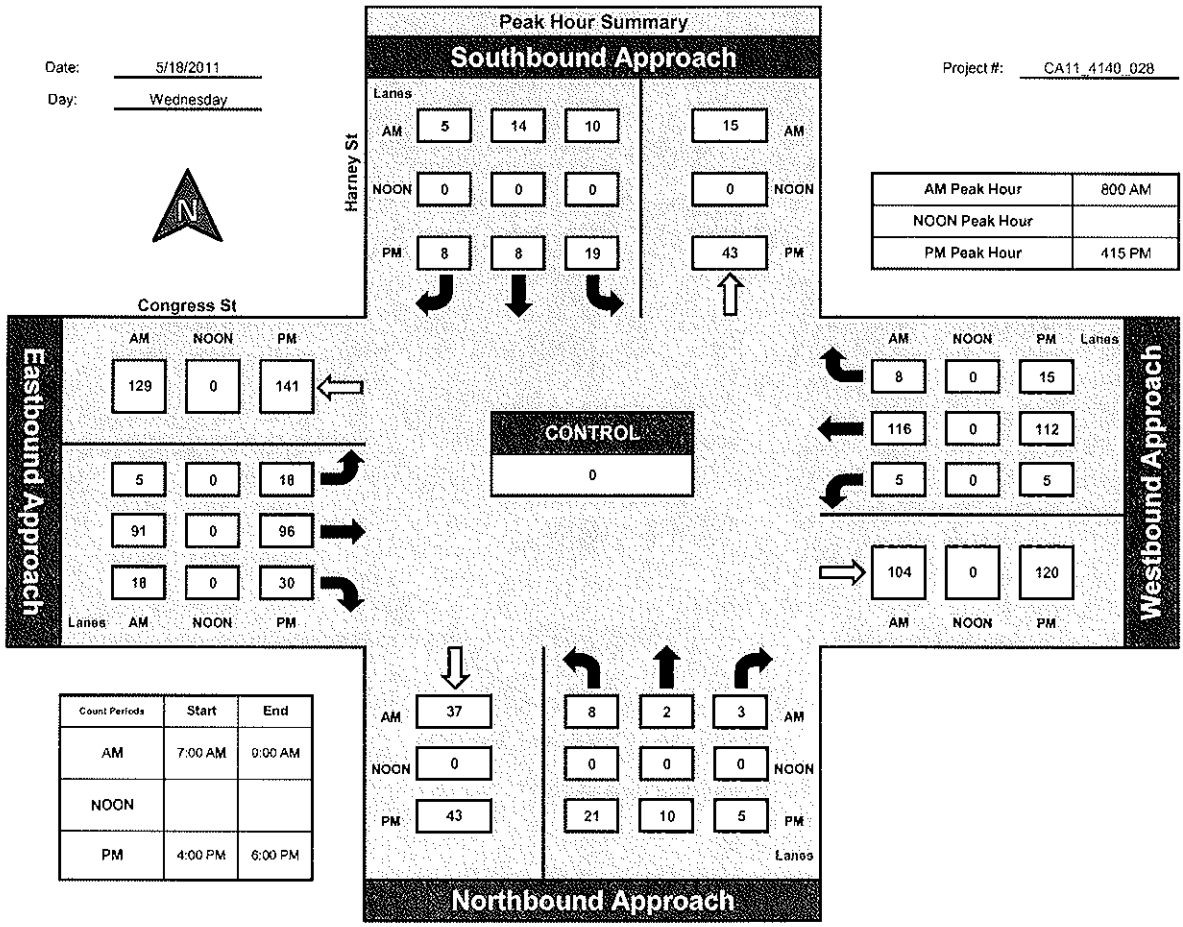
ITM Peak Hour Summary

Prepared by:

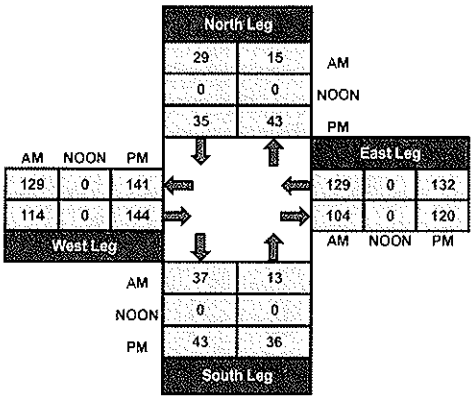
NDS

National Data & Surveying Services

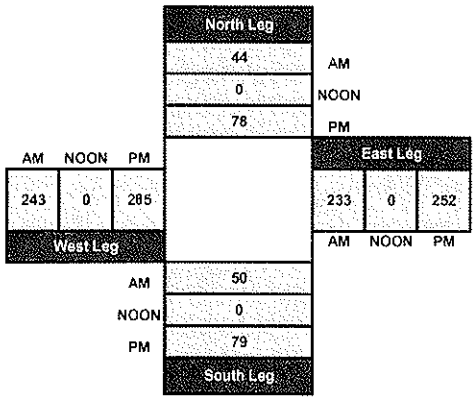
Harney St and Congress St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0			0			2	0			2
7:15 AM	1	0	1			0			2	1			5
7:30 AM	0	0	1			2			3	2			8
7:45 AM	0	0	1			4			1	1			7
8:00 AM	0	2	2			0			2	2			8
8:15 AM	2	3	3			2			3	6			19
8:30 AM	0	0	2			0			2	3			7
8:45 AM	0	3	2			5			1	4			15
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	8	12	0	0	13	0	0	16	19	0	0	71
APPROACH %'s :	13.04%	34.78%	52.17%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	
[illegible]	[illegible]												

CONTROL :

Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below **PM**

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	1	3			0			2	2			9
4:15 PM	2	2	1			3			4	1			13
4:30 PM	1	2	0			0			0	2			5
4:45 PM	1	1	0			2			5	0			9
5:00 PM	1	1	1			2			2	1			8
5:15 PM	0	1	1			3			1	3			9
5:30 PM	1	1	4			3			1	3			13
5:45 PM	2	2	0			2			3	2			11

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	11	10	0	0	15	0	0	18	14	0	0	77
APPROACH %'s :	30.00%	36.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

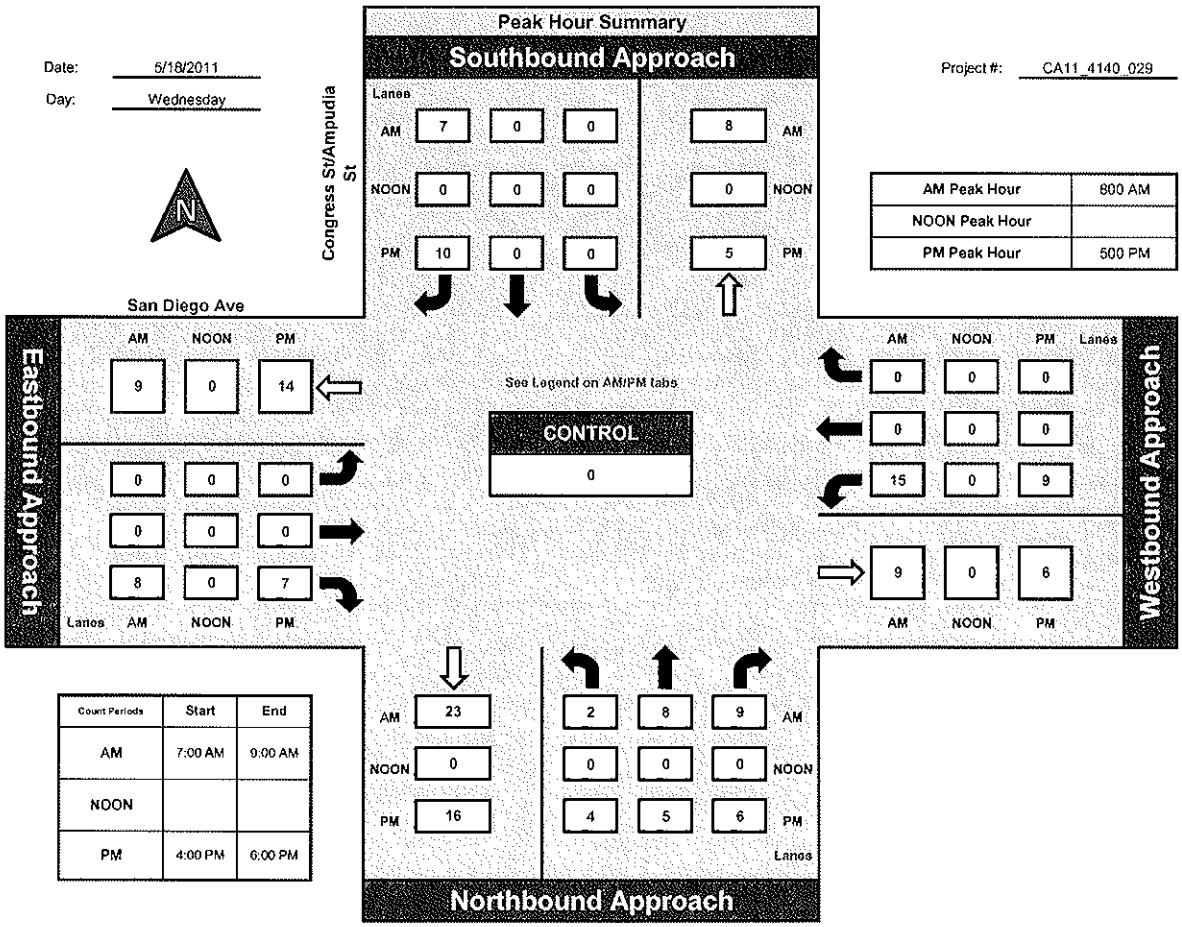
Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

ITM Peak Hour Summary

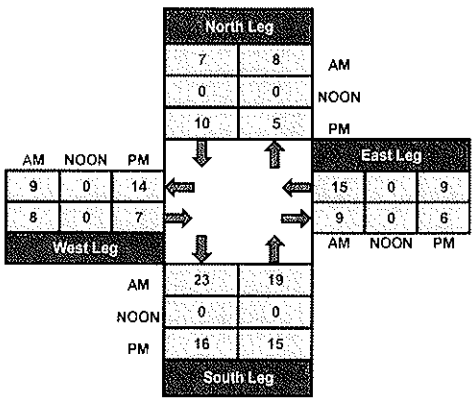
Prepared by:

National Data & Surveying Services

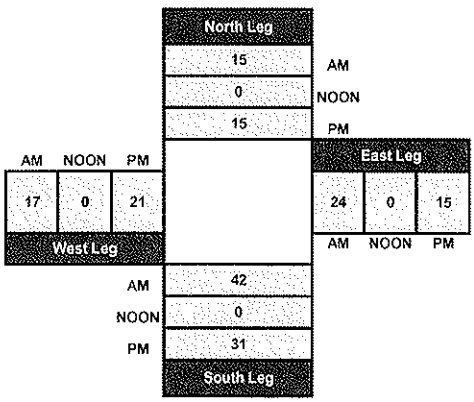
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		5	2	0			13	0	8	21	0	49
7:15 AM	0		6	0	0			8	3	17	22	1	57
7:30 AM	0		20	0	0			17	3	20	27	0	87
7:45 AM	0		18	0	1			16	0	30	33	2	100
8:00 AM	1		16	1	1			8	1	34	41	1	104
8:15 AM	1		14	1	0			14	0	27	63	0	120
8:30 AM	0		18	0	0			14	0	37	57	0	126
8:45 AM	0		19	0	0			13	0	30	61	0	123
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	116	4	2	0	0	103	7	203	325	4	766
APPROACH %'s :	1.69%	0.00%	98.31%	66.67%	33.33%	0.00%	0.00%	93.64%	6.36%	38.16%	61.09%	0.75%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029

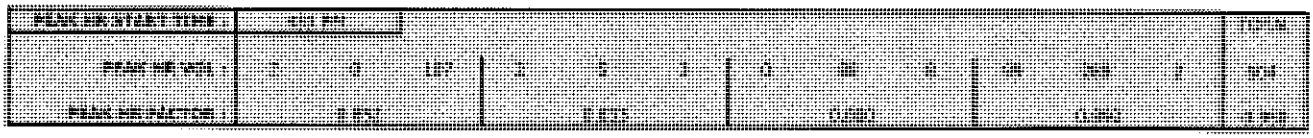
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		28	0	3	1		44	1	19	52	0	148
4:15 PM	1		24	0	1	0		22	1	20	49	1	119
4:30 PM	1		31	1	0	2		23	2	24	73	1	158
4:45 PM	0		24	0	2	0		19	2	22	69	0	138
5:00 PM	1		25	0	2	0		26	4	29	61	1	149
5:15 PM	0		27	1	1	1		20	0	24	85	0	159
5:30 PM	0		21	0	2	0		22	0	24	72	1	142
5:45 PM	0		31	0	0	0		25	2	16	76	0	150
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	211	2	11	4	0	201	12	178	537	4	1163
APPROACH %'s :	1.40%	0.00%	98.60%	11.76%	64.71%	23.53%	0.00%	94.37%	5.63%	24.76%	74.69%	0.56%	



CONTROL :

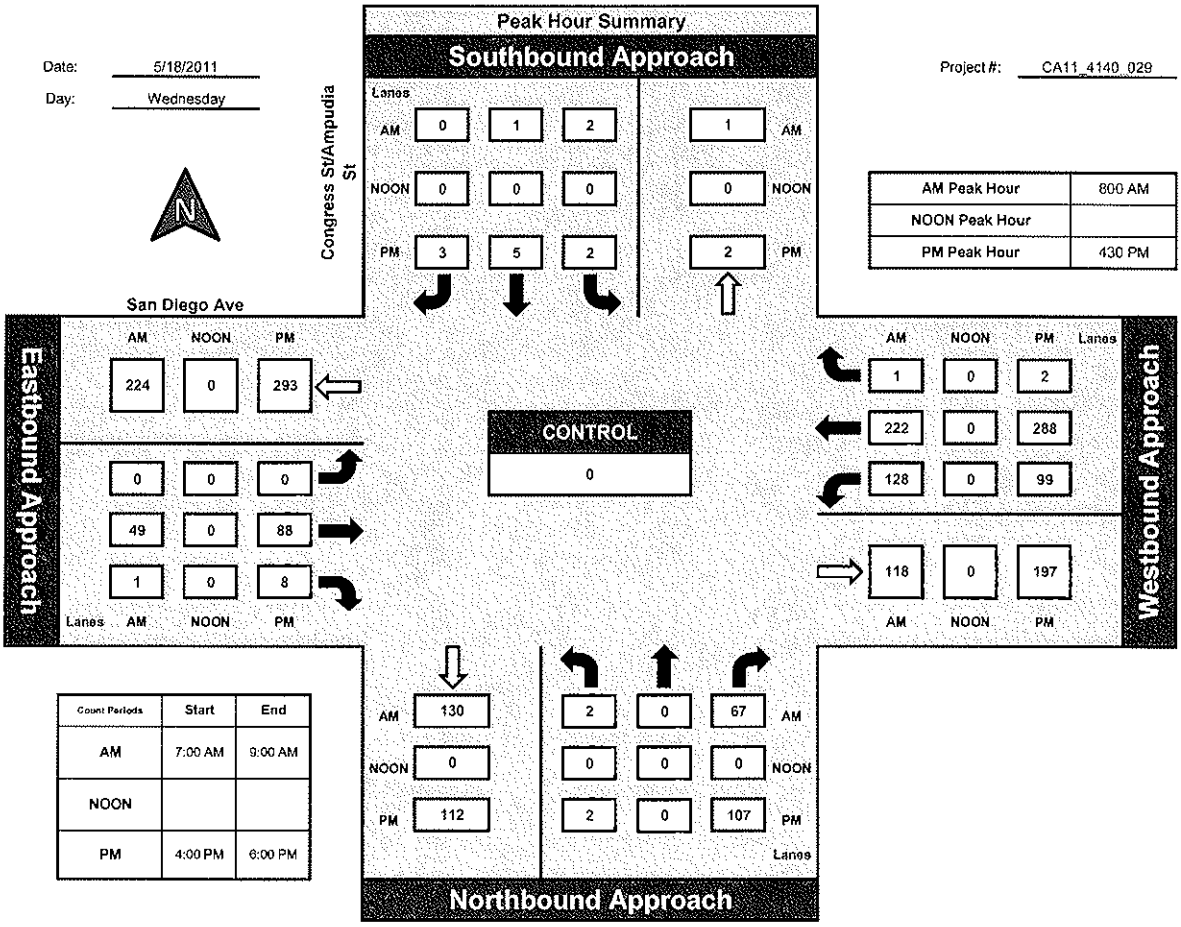
ITM Peak Hour Summary

Prepared by:

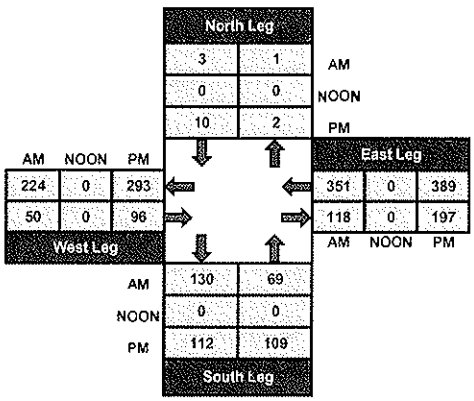
NDS

National Data & Surveying Services

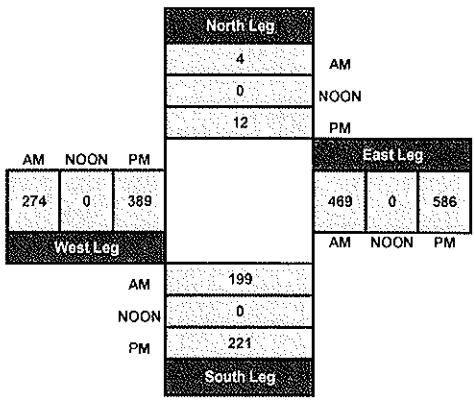
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(42)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		2	0	5	3					3		6	19
7:15 AM		3	2	4	6					2		8	25
7:30 AM		3	3	7	5					1		11	30
7:45 AM		3	3	10	4					3		19	42
8:00 AM		1	1	5	4					2		21	34
8:15 AM		4	0	3	8					2		35	52
8:30 AM		8	2	8	7					6		35	66
8:45 AM		6	1	9	10					8		37	71

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	30	12	51	47	0	0	0	0	27	0	172	339
APPROACH %'s :	0.00%	71.43%	28.57%	52.04%	47.96%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	13.57%	0.00%	86.43%	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		6	3	10	5					9		15	48
4:15 PM		9	5	12	7					8		16	57
4:30 PM		6	8	5	4					13		29	65
4:45 PM		7	6	10	2					9		21	55
5:00 PM		8	2	10	5					5		23	53
5:15 PM		9	4	14	4					8		31	70
5:30 PM		6	8	7	4					12		30	67
5:45 PM		7	6	10	2					9		20	54

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	58	42	78	33	0	0	0	0	73	0	185	469
APPROACH %'s :	0.00%	58.00%	42.00%	70.27%	29.73%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	28.29%	0.00%	71.71%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

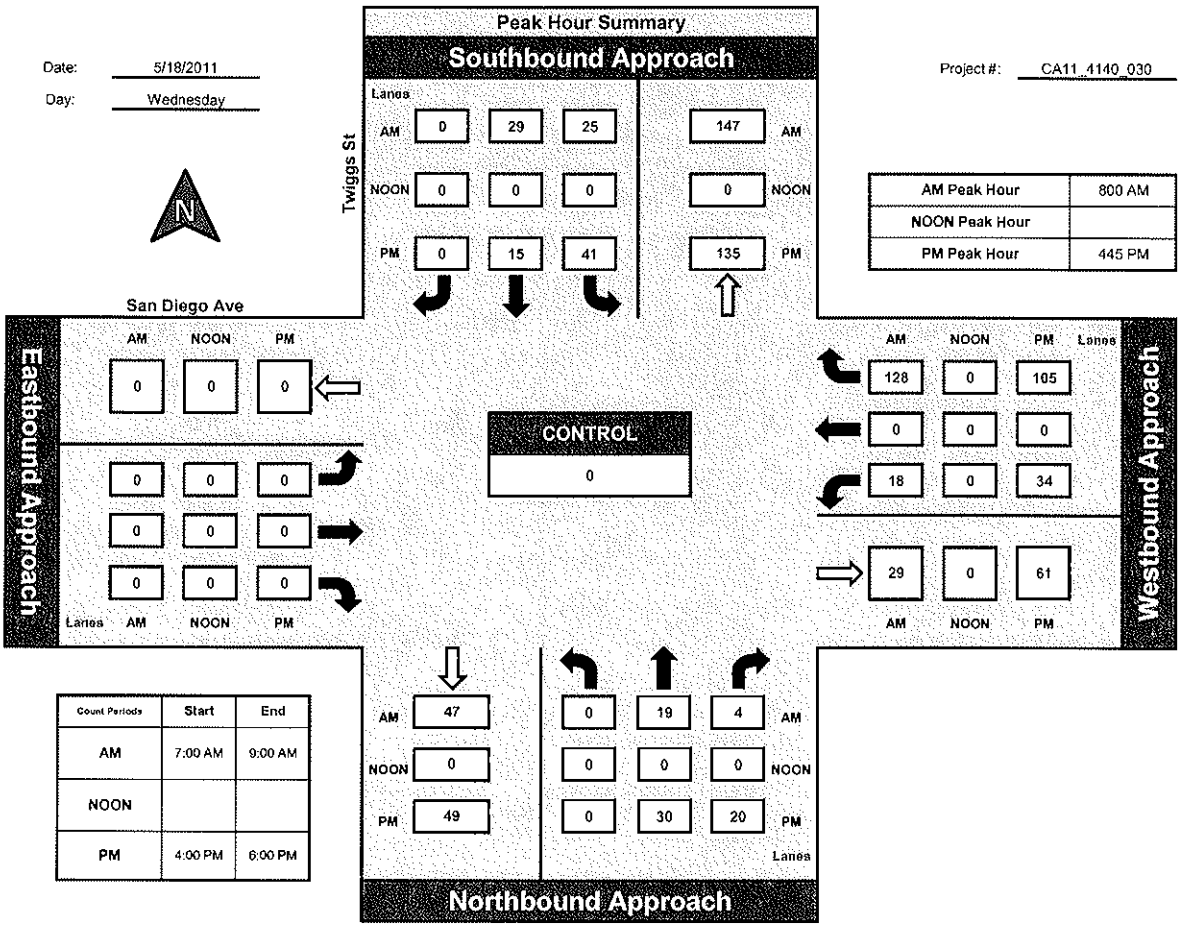
National Data & Surveying Services

Twiggs St and San Diego Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

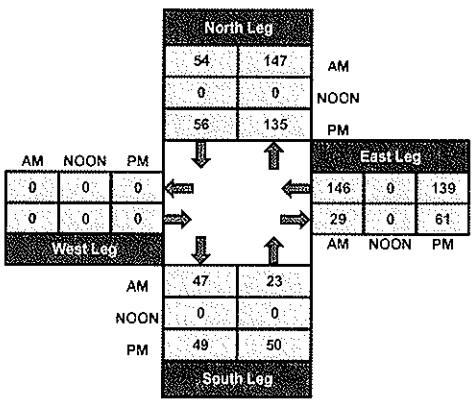
Project #: CA11_4140_030



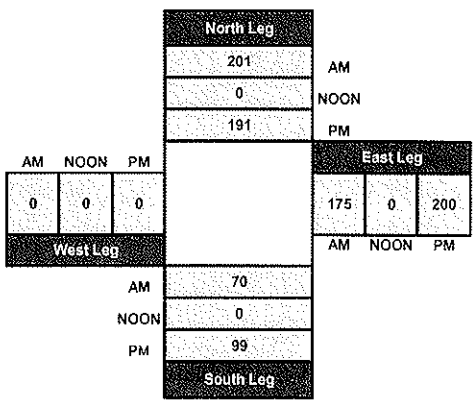
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(43)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	2	0	11	8	1	0	4	0	0	8	8	43
7:15 AM	1	0	0	8	5	1	0	6	1	1	6	9	38
7:30 AM	0	0	0	13	6	0	1	8	0	0	7	15	50
7:45 AM	1	3	0	15	6	2	1	7	1	0	26	13	75
8:00 AM	1	0	1	7	6	2	1	6	2	0	20	17	63
8:15 AM	1	3	0	14	5	2	0	1	0	2	31	26	85
8:30 AM	2	0	2	9	5	1	0	9	1	1	39	19	88
8:45 AM	1	0	0	7	2	7	0	8	1	0	35	21	82
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	8	3	84	43	16	3	49	6	4	172	128	524
APPROACH %'s :	42.11%	42.11%	15.79%	58.74%	30.07%	11.19%	5.17%	84.48%	10.34%	1.32%	56.58%	42.11%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	1	3	17	9	2	1	11	3	1	22	23	93
4:15 PM	0	4	1	15	6	1	0	15	3	3	29	22	99
4:30 PM	1	4	3	16	5	2	2	16	2	5	31	19	106
4:45 PM	0	4	2	14	1	1	1	14	0	5	29	27	98
5:00 PM	0	7	4	24	7	0	0	16	1	8	34	23	124
5:15 PM	3	3	5	21	7	1	0	19	5	6	39	25	134
5:30 PM	1	6	3	16	9	3	1	17	0	9	36	27	128
5:45 PM	1	2	1	29	5	2	2	15	2	7	28	21	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	31	22	152	49	12	7	123	16	44	248	187	897
APPROACH %'s :	10.17%	52.54%	37.29%	71.36%	23.00%	5.63%	4.79%	84.25%	10.96%	9.19%	51.77%	39.04%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

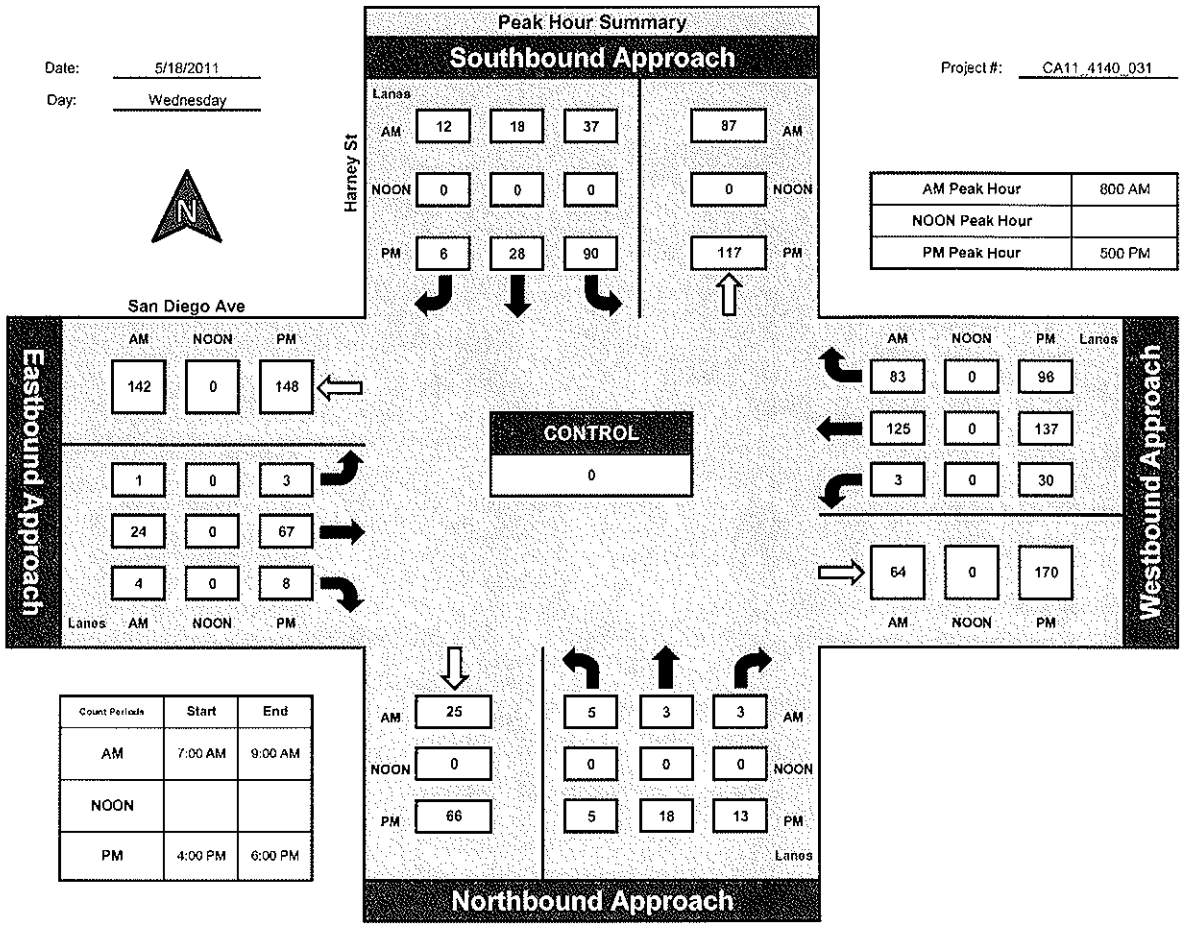
CONTROL :

ITM Peak Hour Summary

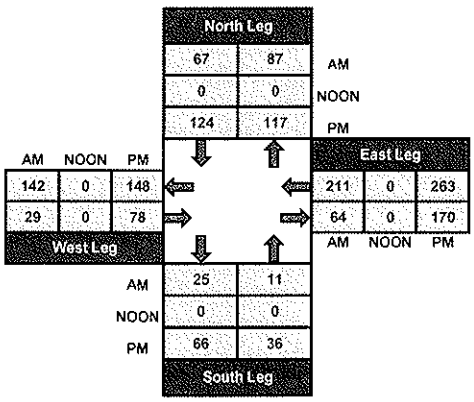
Prepared by:

National Data & Surveying Services

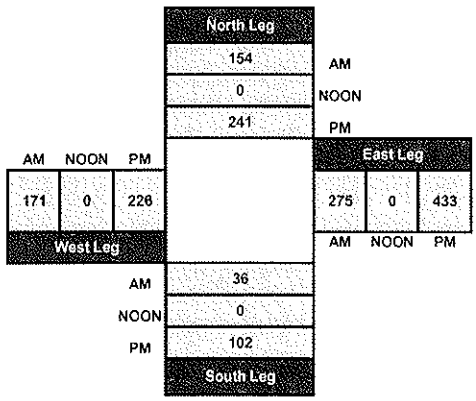
Harney St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(44)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	24	8	10	0	3	0	0	1	18	27	5	0	96
7:15 AM	31	7	11	0	8	2	0	6	14	30	9	0	118
7:30 AM	33	14	8	1	12	0	1	4	30	40	17	3	163
7:45 AM	51	4	10	1	4	1	4	5	24	38	12	0	154
8:00 AM	63	12	12	0	5	1	0	10	14	38	15	1	171
8:15 AM	53	8	7	0	5	1	2	7	22	55	42	1	203
8:30 AM	39	5	13	0	7	1	4	7	21	65	55	2	219
8:45 AM	43	2	13	0	5	1	3	16	16	63	47	2	211
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	337	60	84	2	49	7	14	56	159	356	202	9	1335
APPROACH %'s :	70.06%	12.47%	17.46%	3.45%	84.48%	12.07%	6.11%	24.45%	69.43%	62.79%	35.63%	1.59%	
[illegible]	[illegible]												TOTAL
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	46	3	15	1	18	1	2	7	63	32	28	1	217
4:15 PM	50	7	18	0	11	2	2	12	30	14	18	0	164
4:30 PM	55	7	22	1	10	3	0	15	40	24	38	4	219
4:45 PM	66	6	25	2	15	3	2	14	29	18	20	2	202
5:00 PM	62	11	18	0	12	2	0	11	44	28	30	3	221
5:15 PM	73	6	24	2	8	7	2	8	41	18	31	1	221
5:30 PM	64	2	30	3	16	5	2	13	27	21	32	0	215
5:45 PM	60	9	19	2	9	3	4	16	36	33	28	0	219
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	476	51	171	11	99	26	14	96	310	188	225	11	1678
APPROACH %'s :	68.19%	7.31%	24.50%	8.09%	72.79%	19.12%	3.33%	22.86%	73.81%	44.34%	53.07%	2.59%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

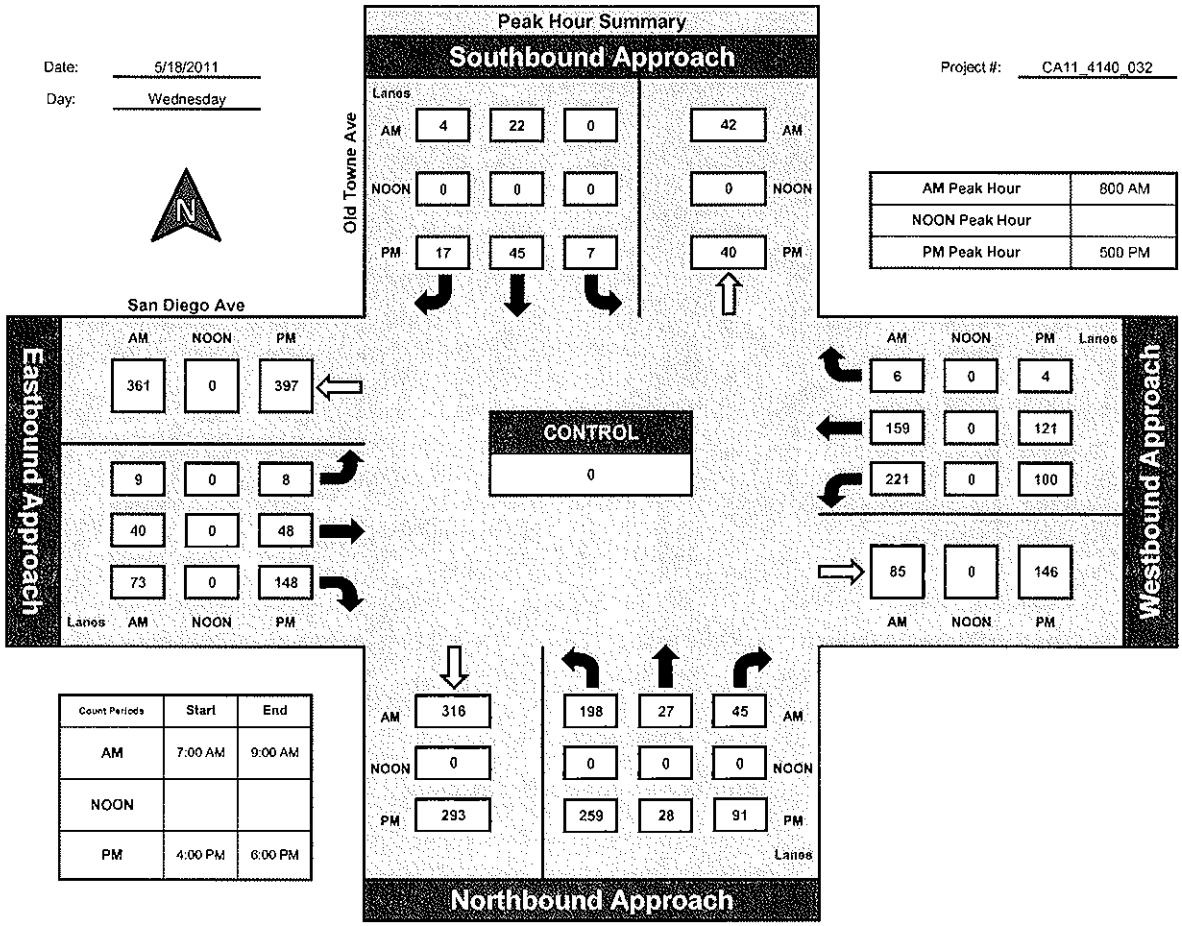
CONTROL :

ITM Peak Hour Summary

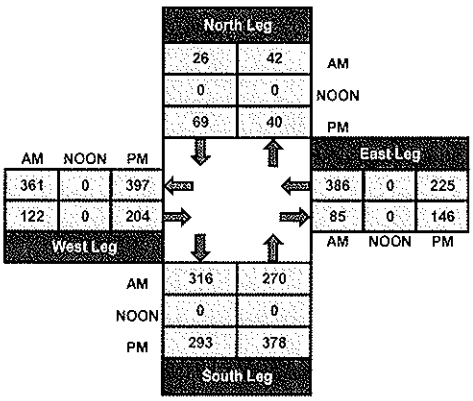
Prepared by:

National Data & Surveying Services

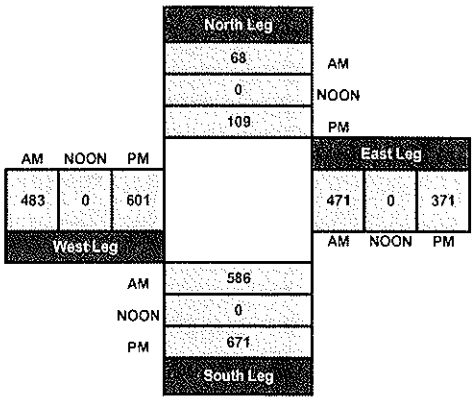
Old Towne Ave and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(45)

Intersection Turning Movement

Prepared by:

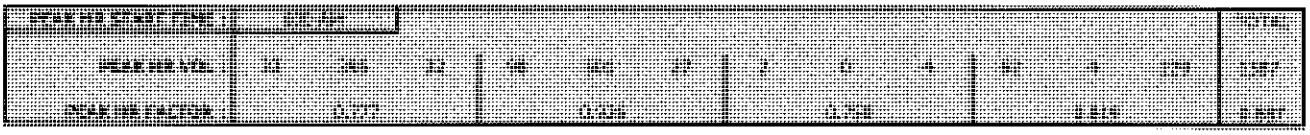
National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	5	44	6	16	108	3	1	1	2	10	2	14	212
7:15 AM	8	73	8	21	105	3	0	0	0	12	0	18	248
7:30 AM	12	81	6	18	131	3	0	0	1	14	0	38	304
7:45 AM	14	74	9	37	155	4	1	0	1	22	2	45	364
8:00 AM	15	63	11	25	134	9	0	0	2	16	2	38	315
8:15 AM	3	84	5	17	113	7	1	0	0	16	1	57	304
8:30 AM	9	128	11	23	125	4	0	0	2	11	1	63	377
8:45 AM	6	120	5	33	129	7	1	0	0	19	0	71	391
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	72	667	61	190	1000	40	4	1	8	120	8	344	2515
APPROACH %'s :	9.00%	83.38%	7.63%	15.45%	81.30%	3.25%	30.77%	7.69%	61.54%	25.42%	1.69%	72.88%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	206	24	32	66	3	5	0	3	23	0	31	394
4:15 PM	0	190	16	42	90	0	5	0	2	19	2	41	407
4:30 PM	4	211	27	49	98	2	5	0	1	20	0	38	455
4:45 PM	3	195	15	45	69	2	1	1	2	16	2	47	398
5:00 PM	5	214	22	42	84	1	3	1	1	15	0	43	431
5:15 PM	3	189	14	52	86	1	6	0	1	14	0	51	417
5:30 PM	1	175	24	39	81	2	3	0	3	17	1	31	377
5:45 PM	1	121	30	44	89	0	0	1	0	19	0	37	342
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	1501	172	345	663	11	28	3	13	143	5	319	3221
APPROACH %'s :	1.06%	88.76%	10.17%	33.86%	65.06%	1.08%	63.64%	6.82%	29.55%	30.62%	1.07%	68.31%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Taylor St and Juan St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_017

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	626	626	AM
NOON	0	0	NOON
PM	531	1003	PM

West Leg				East Leg			
AM	NOON	PM		AM	NOON	PM	
64	0	23		295	0	246	AM
6	0	22		130	0	268	NOON
							PM

	South Leg	
AM	567	460
NOON	0	0
PM	407	902

Total Volume Per Leg

	North Leg
AM	1252
NOON	0
PM	1534

West Leg			East Leg		
AM	NOON	PM			
70	0	45	425	0	514
			AM	NOON	PM

	South Leg
AM	1027
NOON	0
PM	1309

(46)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	1	1	0	0	0	0	14	5	0	19	0	47
7:15 AM	7	0	3	0	0	1	1	21	7	0	27	1	68
7:30 AM	8	0	1	0	0	0	0	20	9	1	34	1	74
7:45 AM	9	0	5	0	0	2	0	23	9	0	42	0	90
8:00 AM	6	1	0	1	1	0	0	29	18	0	24	0	80
8:15 AM	14	1	2	0	1	0	0	18	15	1	29	0	81
8:30 AM	11	1	2	1	0	1	0	20	7	0	26	0	69
8:45 AM	23	2	2	0	1	0	0	25	14	0	38	1	106
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	85	6	16	2	3	4	1	170	84	2	239	3	615
APPROACH %'s :	79.44%	5.61%	14.95%	22.22%	33.33%	44.44%	0.39%	66.67%	32.94%	0.82%	97.95%	1.23%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

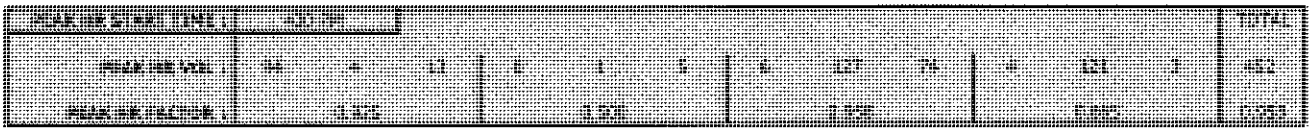
Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	23	0	3	0	0	0	1	36	15	2	23	0	103
4:15 PM	18	0	6	0	0	0	1	32	15	6	17	1	96
4:30 PM	23	3	4	0	1	2	1	37	13	1	26	1	112
4:45 PM	28	0	2	0	0	1	2	30	20	1	34	0	118
5:00 PM	22	1	3	0	0	1	0	31	23	0	26	2	109
5:15 PM	21	0	4	0	0	1	3	29	18	2	35	0	113
5:30 PM	20	1	2	1	1	1	0	33	15	1	32	0	107
5:45 PM	21	0	4	0	0	0	0	26	26	2	23	1	103

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	176	5	28	1	2	6	8	254	145	15	216	5	861
APPROACH %'s :	84.21%	2.39%	13.40%	11.11%	22.22%	66.67%	1.97%	62.41%	35.63%	6.36%	91.53%	2.12%	



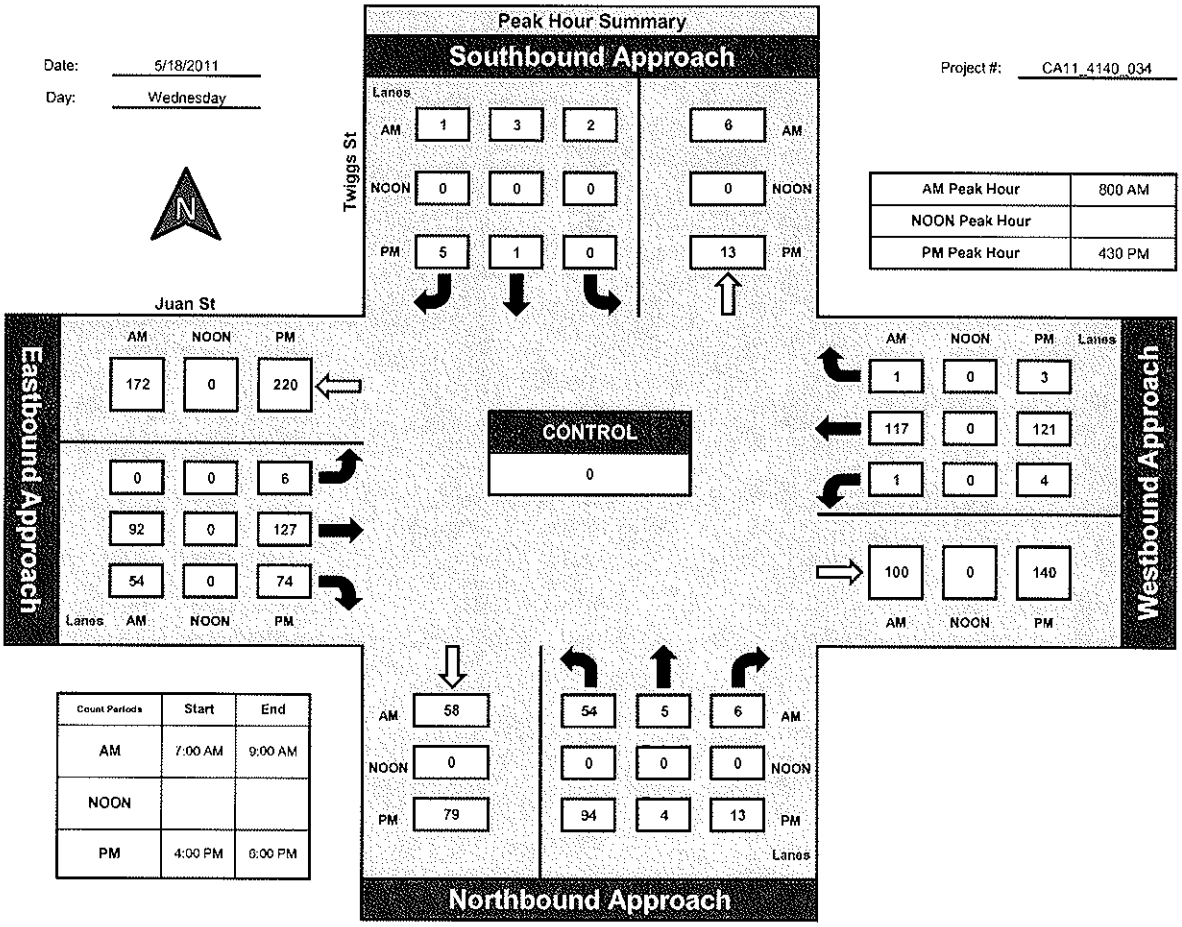
CONTROL :

ITM Peak Hour Summary

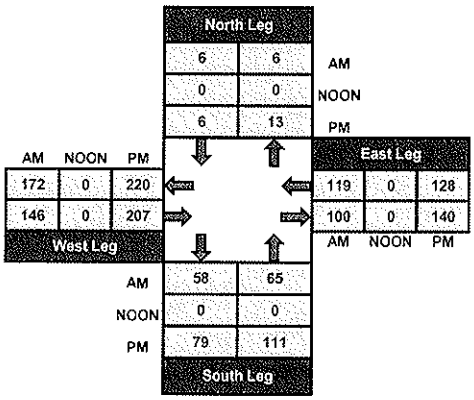
Prepared by:

National Data & Surveying Services

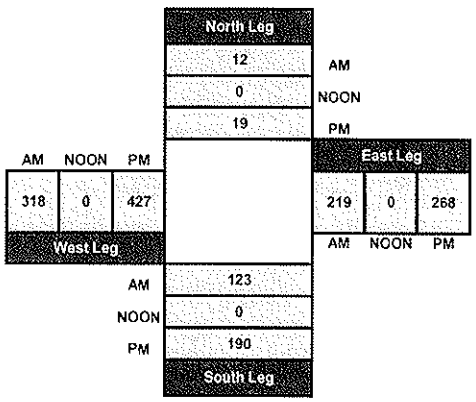
Twiggs St and Juan St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(47)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	6	1	6	0	1	1	1	10	0	9	15	0	50
7:15 AM	5	1	6	0	0	1	1	14	3	8	19	0	58
7:30 AM	8	1	6	0	0	3	1	9	6	15	38	0	87
7:45 AM	9	1	5	0	0	0	2	16	13	12	28	0	86
8:00 AM	4	1	9	0	0	1	4	15	11	6	24	0	75
8:15 AM	0	1	5	2	1	0	1	0	0	5	1	1	17
8:30 AM	13	0	4	0	0	1	0	17	8	8	23	0	74
8:45 AM	19	1	2	0	0	0	1	18	7	9	22	2	81

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	7	43	2	2	7	11	99	48	72	170	3	528
APPROACH %'s :	56.14%	6.14%	37.72%	18.18%	18.18%	63.64%	6.96%	62.66%	30.38%	29.39%	69.39%	1.22%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	11	0	3	0	0	0	0	26	10	10	23	0	83
4:15 PM	11	2	3	2	0	1	1	28	11	9	10	0	78
4:30 PM	11	1	11	0	0	2	1	30	9	4	16	1	86
4:45 PM	15	2	7	0	0	2	2	25	9	2	18	0	82
5:00 PM	14	0	13	0	0	2	1	22	13	3	16	2	86
5:15 PM	17	0	5	0	3	3	0	19	10	5	17	1	80
5:30 PM	24	2	8	0	1	0	3	18	12	4	11	0	83
5:45 PM	13	0	6	0	0	1	2	29	6	6	16	2	81
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	116	7	56	2	4	11	10	197	80	43	127	6	659
APPROACH %'s :	64.80%	3.91%	31.28%	11.76%	23.53%	64.71%	3.48%	68.64%	27.87%	24.43%	72.16%	3.41%	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harney St and Juan St , City of San Diego

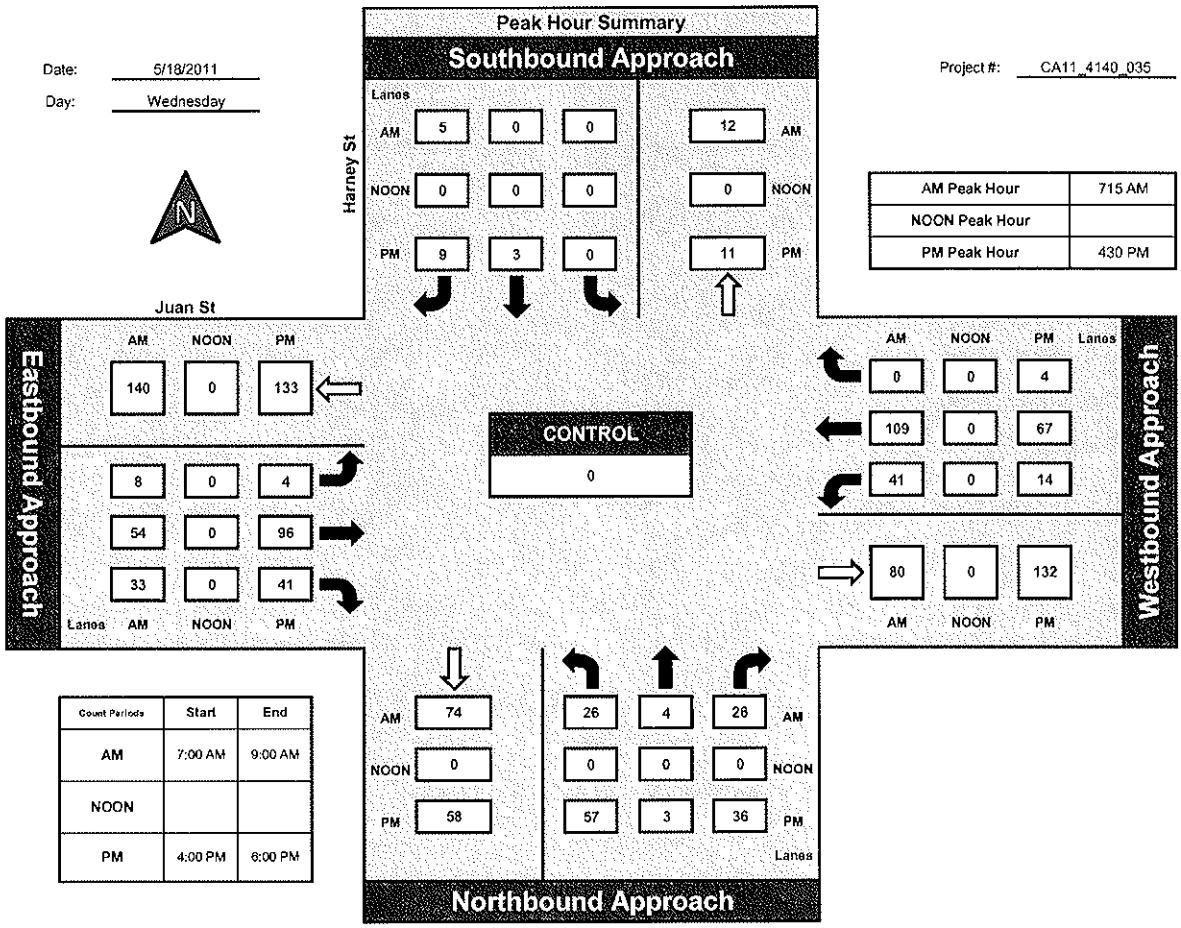
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

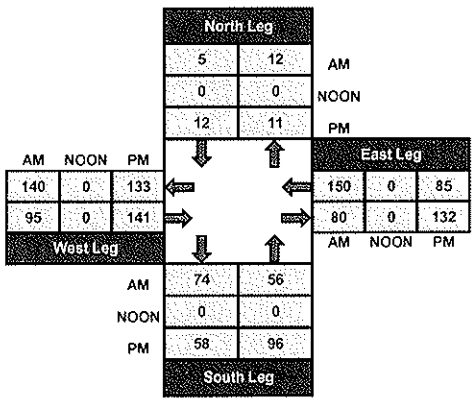
Project #: CA11_4140_035

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

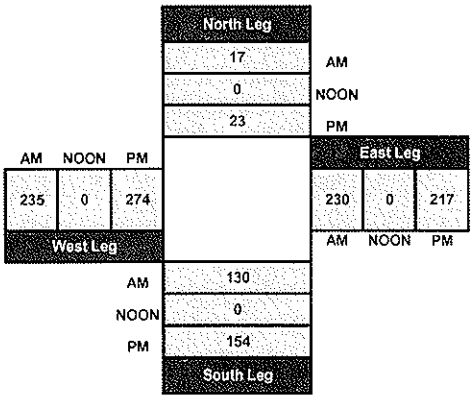


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(48)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	30	30	0	0	118	13	7	0	44			2	244
7:15 AM	49	34	0	0	100	18	9	0	46			0	256
7:30 AM	66	48	1	1	135	39	13	0	51			1	355
7:45 AM	73	38	1	0	152	64	18	0	74			2	422
8:00 AM	57	38	0	0	137	36	27	0	67			0	362
8:15 AM	77	56	0	0	119	50	17	0	36			0	355
8:30 AM	119	63	0	0	125	49	8	3	58			2	427
8:45 AM	111	76	0	0	141	57	7	2	53			2	449
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	582	383	2	1	1027	326	106	5	429	0	0	9	2870
APPROACH %'s :	60.19%	39.61%	0.21%	0.07%	75.85%	24.08%	19.63%	0.93%	79.44%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	364	233	1	1	533	199	65	3	274	0	0	5	1676
PEAK HR FACTOR :	0.788			0.250			0.778			0.000			0.945

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	104	167	2	0	57	37	16	0	36			3	422
4:15 PM	95	152	4	0	68	18	14	0	58			3	412
4:30 PM	120	164	1	2	70	32	20	4	56			4	473
4:45 PM	115	131	1	0	73	34	19	1	40			3	417
5:00 PM	120	165	4	1	68	23	23	2	48			3	457
5:15 PM	113	146	4	0	83	18	16	0	56			4	440
5:30 PM	103	114	1	0	74	16	18	0	57			1	384
5:45 PM	81	87	2	1	72	24	14	1	48			3	333
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	851	1126	19	4	565	202	140	8	399	0	0	24	3338
APPROACH %'s :	42.64%	56.41%	0.95%	0.52%	73.28%	26.20%	25.59%	1.46%	72.94%	0.00%	0.00%	100.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

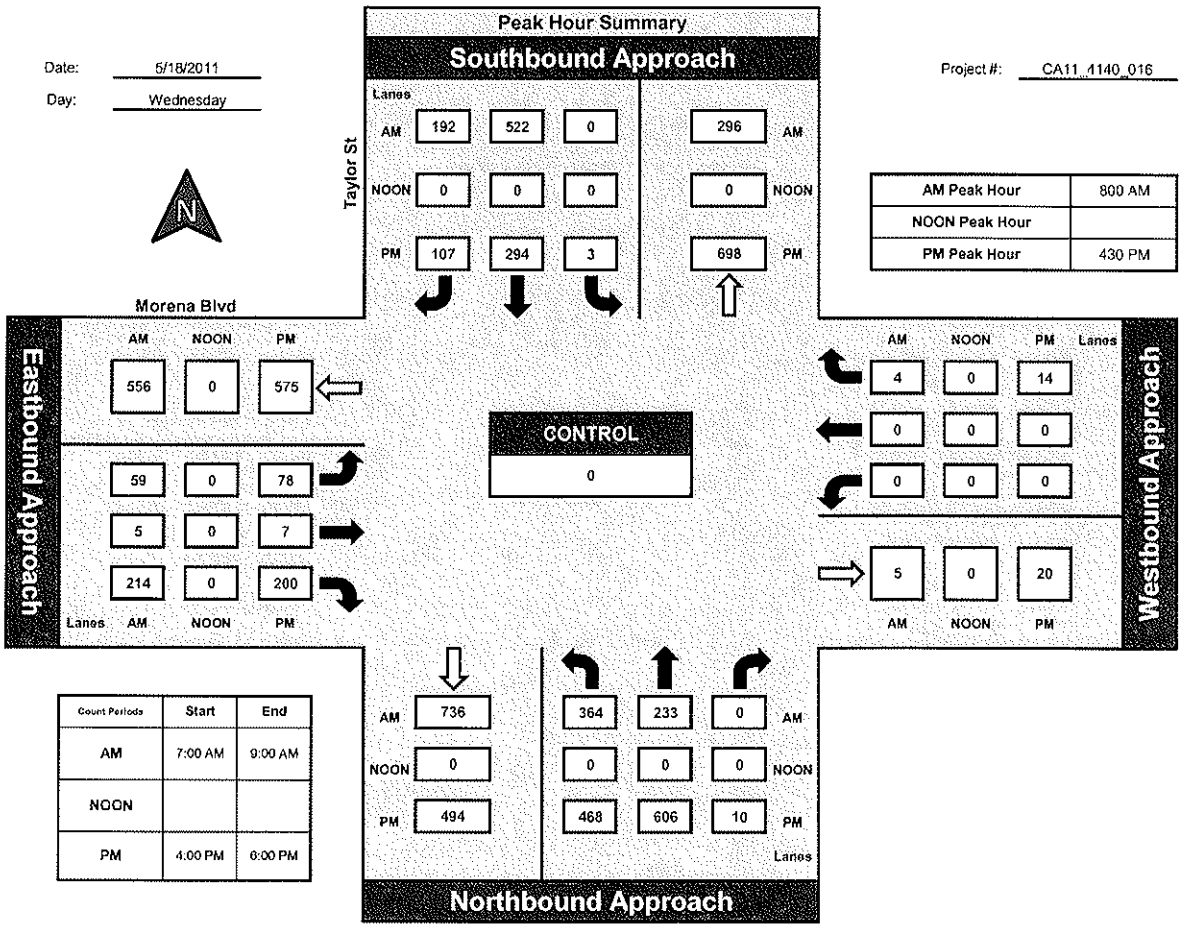
National Data & Surveying Services

Taylor St and Morena Blvd , City of San Diego

Date: 5/18/2011

Day: Wednesday

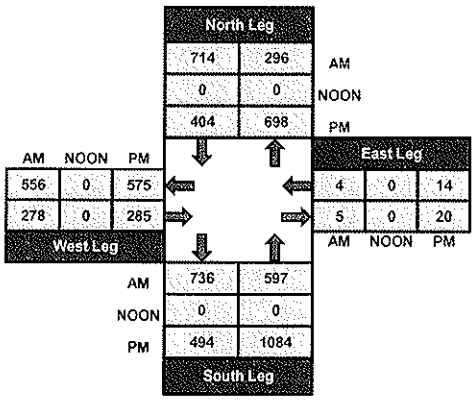
Project #: CA11_4140_016



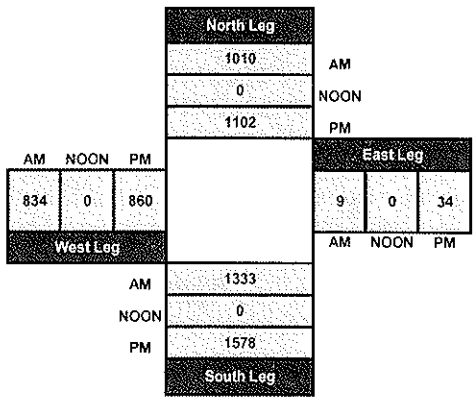
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

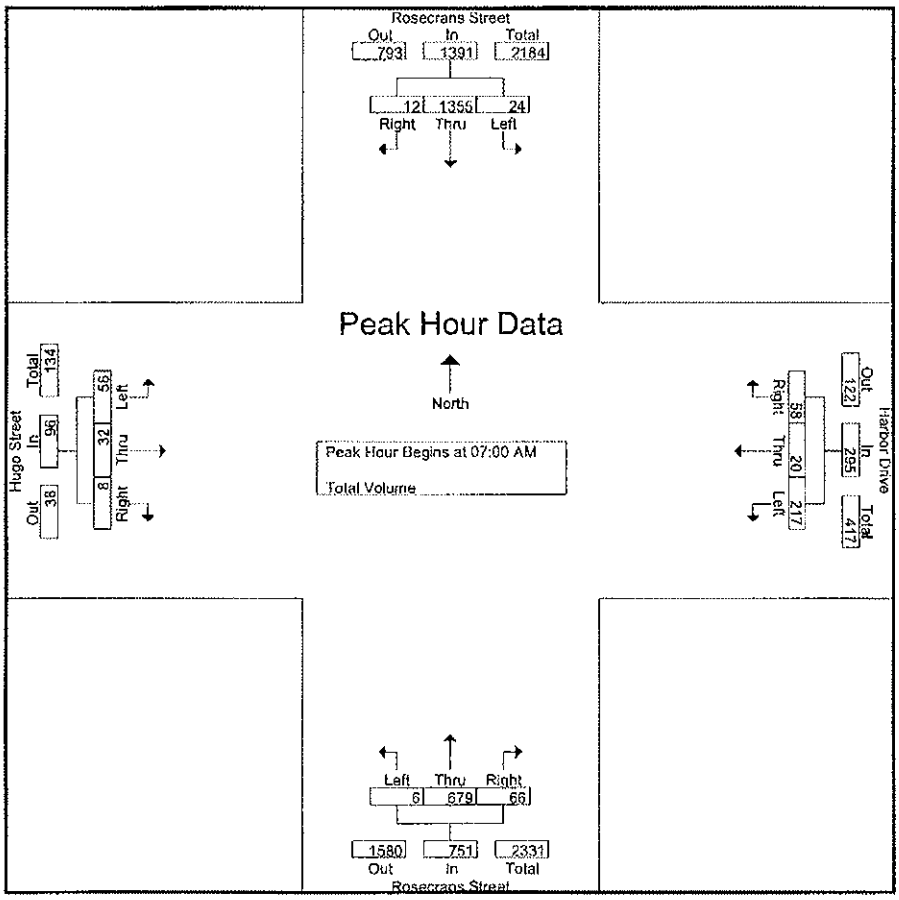
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	4	315	1	320	57	9	9	75	0	86	17	103	6	3	1	10	508
06:45 AM	3	387	5	395	43	7	9	59	0	101	9	110	10	5	3	18	582
Total	7	702	6	715	100	16	18	134	0	187	26	213	16	8	4	28	1090
07:00 AM	4	366	4	374	40	2	18	60	3	138	17	158	13	7	2	22	614
07:15 AM	4	340	1	345	74	12	15	101	1	181	21	203	14	11	2	27	676
07:30 AM	7	330	5	342	46	5	9	60	0	179	16	195	18	9	3	30	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
08:00 AM	5	277	1	283	40	16	11	67	0	183	18	201	15	14	1	30	581
08:15 AM	5	283	2	290	56	7	10	73	0	160	19	179	22	4	0	26	568
Grand Total	41	2617	21	2679	413	59	97	569	6	1209	129	1344	109	58	13	180	4772
Apprch %	1.5	97.7	0.8		72.6	10.4	17		0.4	90	9.6		60.6	32.2	7.2		
Total %	0.9	54.8	0.4	56.1	8.7	1.2	2	11.9	0.1	25.3	2.7	28.2	2.3	1.2	0.3	3.8	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	**366**	4	**374**	40	2	**18**	60	**3**	138	17	158	**13**	7	2	22	614
07:15 AM	4	340	1	345	74	**12**	15	**101**	1	**181**	**21**	**203**	14	**11**	2	27	**676**
07:30 AM	7	330	**5**	342	46	5	9	60	0	179	16	195	**18**	9	**3**	**30**	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total Volume	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
% App. Total	1.7	97.4	0.9		73.6	6.8	19.7		0.8	90.4	8.8		58.3	33.3	8.3		
PHF	.667	.926	.600	.930	.733	.417	.806	.730	.500	.938	.786	.925	.778	.727	.667	.800	.937

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	3	387	5	395	74	12	15	101	1	181	21	203	14	11	2	27
+15 mins.	4	366	4	374	46	5	9	60	0	179	16	195	18	9	3	30
+30 mins.	4	340	1	345	57	1	16	74	2	181	12	195	11	5	1	17
+45 mins.	7	330	5	342	40	16	11	67	0	183	18	201	15	14	1	30
Total Volume	18	1423	15	1456	217	34	51	302	3	724	67	794	58	39	7	104
% App. Total	1.2	97.7	1		71.9	11.3	16.9		0.4	91.2	8.4		55.8	37.5	6.7	
PHF	.643	.919	.750	.922	.733	.531	.797	.748	.375	.989	.798	.978	.806	.696	.583	.867

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

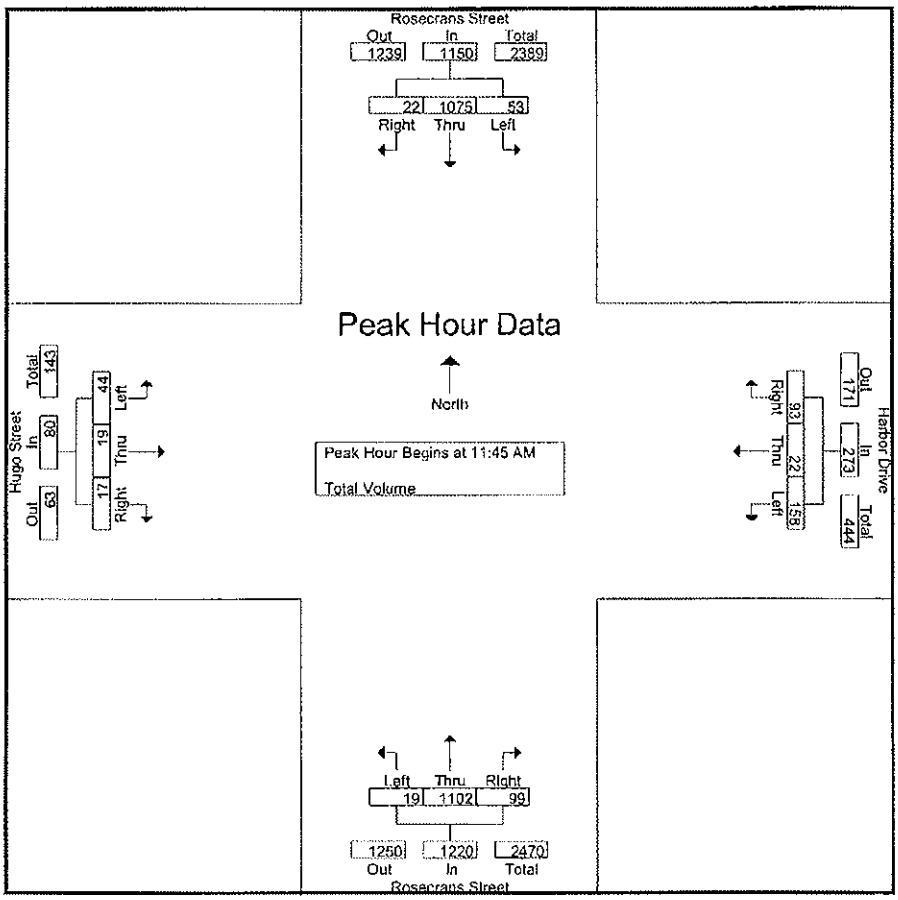
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	10	242	4	256	43	8	24	75	5	287	27	319	15	10	2	27	677
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
Total	21	521	10	552	71	12	43	126	10	597	54	661	29	14	7	50	1389
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
12:45 PM	12	280	8	300	37	7	27	71	4	264	24	292	13	9	6	28	691
Total	54	1076	24	1154	167	25	101	293	18	1056	96	1170	43	24	18	85	2702
01:00 PM	12	244	4	260	41	7	26	74	3	270	32	305	11	6	4	21	660
01:15 PM	10	214	5	229	36	5	19	60	2	280	29	311	13	6	0	19	619
Grand Total	97	2055	43	2195	315	49	189	553	33	2203	211	2447	96	50	29	175	5370
Apprch %	4.4	93.6	2		57	8.9	34.2		1.3	90	8.6		54.9	28.6	16.6		
Total %	1.8	38.3	0.8	40.9	5.9	0.9	3.5	10.3	0.6	41	3.9	45.6	1.8	0.9	0.5	3.3	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
Total Volume	53	1075	22	1150	158	22	93	273	19	1102	99	1220	44	19	17	80	2723
% App. Total	4.6	93.5	1.9		57.9	8.1	34.1		1.6	90.3	8.1		55	23.8	21.2		
PHF	.576	.873	.917	.893	.898	.786	.750	.875	.950	.889	.917	.892	.786	.679	.850	.870	.934

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				11:30 AM				12:15 PM			
+0 mins.	10	255	6	271	**44**	6	25	75	**5**	287	**27**	319	9	7	5	21
+15 mins.	**23**	233	5	261	44	**7**	18	69	5	**310**	27	**342**	11	4	4	19
+30 mins.	9	**308**	5	**322**	42	5	**31**	**78**	5	245	26	276	**13**	**9**	**6**	**28**
+45 mins.	12	280	**8**	300	37	7	27	71	5	262	25	292	11	6	4	21
Total Volume	54	1076	24	1154	167	25	101	293	20	1104	105	1229	44	26	19	89
% App. Total	4.7	93.2	2.1		57	8.5	34.5		1.6	89.8	8.5		49.4	29.2	21.3	
PHF	.587	.873	.750	.896	.949	.893	.815	.939	1.000	.890	.972	.898	.846	.722	.792	.795

Counts Unlimited Inc.
26286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

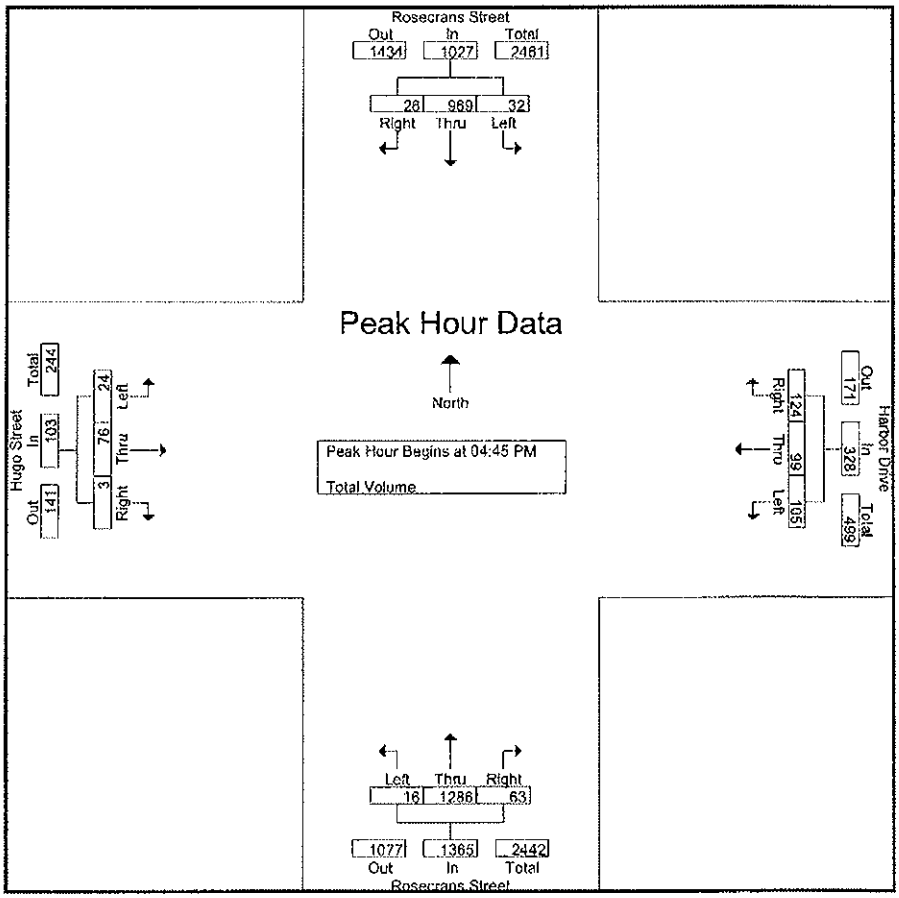
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	198	5	211	33	10	22	65	5	351	17	373	12	8	3	23	672
04:15 PM	3	200	11	214	37	12	27	76	8	319	9	336	13	9	2	24	650
04:30 PM	7	221	8	236	45	23	39	107	8	228	6	242	10	12	7	29	614
04:45 PM	9	241	4	254	28	21	37	86	7	251	12	270	9	13	0	22	632
Total	27	860	28	915	143	66	125	334	28	1149	44	1221	44	42	12	98	2568
05:00 PM	10	247	16	273	21	22	31	74	5	401	13	419	5	15	0	20	786
05:15 PM	5	251	5	261	29	27	29	85	2	322	28	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	29	27	83	2	312	10	324	2	27	2	31	677
05:45 PM	5	229	1	235	29	28	24	81	1	245	6	252	2	7	4	13	581
Total	28	957	23	1008	106	106	111	323	10	1280	57	1347	17	70	7	94	2772
Grand Total	55	1817	51	1923	249	172	236	657	38	2429	101	2568	61	112	19	192	5340
Apprch %	2.9	94.5	2.7		37.9	26.2	35.9		1.5	94.6	3.9		31.8	58.3	9.9		
Total %	1	34	1	36	4.7	3.2	4.4	12.3	0.7	45.5	1.9	48.1	1.1	2.1	0.4	3.6	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	9	241	4	254	28	21	**37**	**86**	**7**	251	12	270	9	13	0	22	632
05:00 PM	**10**	247	**16**	**273**	21	22	31	74	5	**401**	13	**419**	5	15	0	20	**786**
05:15 PM	5	**251**	5	261	**29**	27	29	85	2	322	**28**	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	**29**	27	83	2	312	10	324	2	**27**	2	**31**	677
Total Volume	32	969	26	1027	105	99	124	328	16	1286	63	1365	24	76	3	103	2823
% App. Total	3.1	94.4	2.5		32	30.2	37.8		1.2	94.2	4.6		23.3	73.8	2.9		
PHF	.800	.965	.406	.940	.905	.853	.838	.953	.571	.802	.563	.814	.667	.704	.375	.831	.898

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:45 PM				04:45 PM			
+0 mins.	9	241	4	254	**45**	23	**39**	**107**	7	251	12	270	9	13	0	22
+15 mins.	**10**	247	**16**	**273**	28	21	37	86	5	**401**	13	**419**	5	15	0	20
+30 mins.	5	**251**	5	261	21	22	31	74	2	322	28	352	8	21	1	30
+45 mins.	8	230	1	239	29	**27**	29	85	2	312	10	324	2	**27**	**2**	**31**
Total Volume	32	969	26	1027	123	93	136	352	16	1286	63	1365	24	76	3	103
% App. Total	3.1	94.4	2.5		34.9	26.4	38.6		1.2	94.2	4.6		23.3	73.8	2.9	
PHF	.800	.965	.406	.940	.683	.861	.872	.822	.571	.802	.563	.814	.667	.704	.375	.831

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

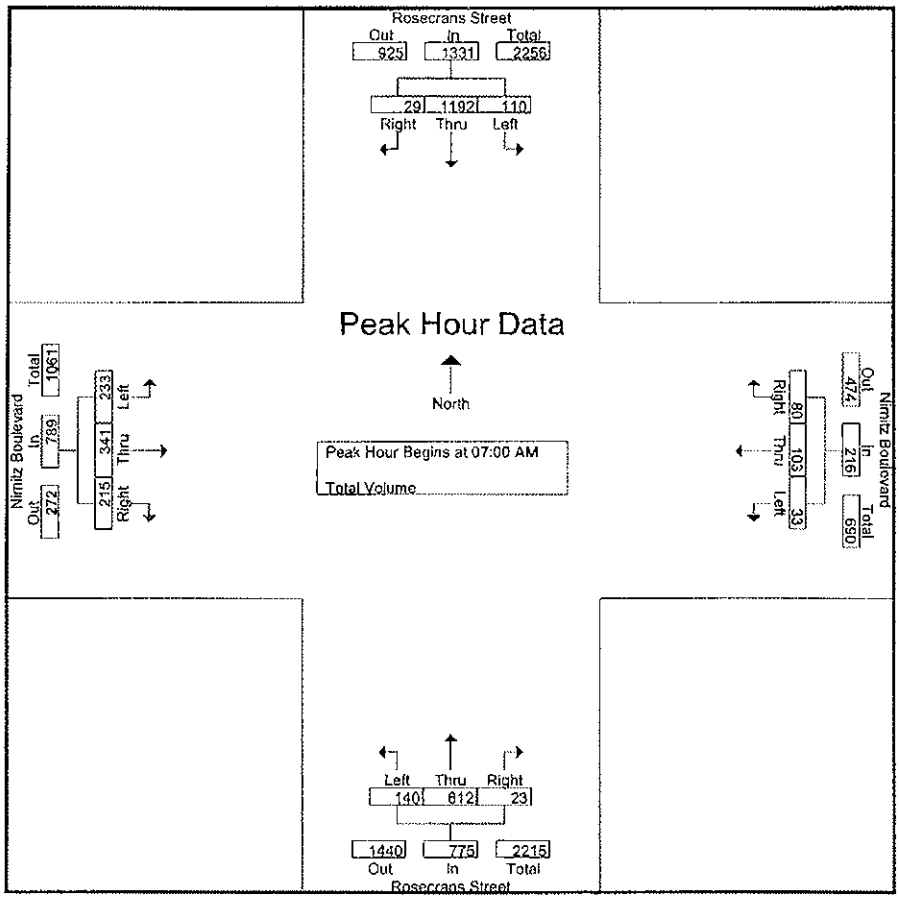
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	38	254	22	314	6	38	22	66	30	69	10	109	62	66	47	175	664
06:45 AM	28	322	19	369	5	33	24	62	45	89	3	137	62	71	60	193	761
Total	66	576	41	683	11	71	46	128	75	158	13	246	124	137	107	368	1425
07:00 AM	25	324	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	8	359	9	26	20	55	34	151	7	192	74	74	58	206	812
07:30 AM	28	272	8	308	13	29	23	65	37	158	6	201	49	103	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	39	166	8	213	66	100	49	215	782
Total	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
08:00 AM	34	230	8	272	4	27	12	43	38	161	8	207	85	54	43	182	704
08:15 AM	28	250	22	300	6	24	20	50	49	149	10	208	61	65	56	182	740
Grand Total	238	2248	100	2586	54	225	158	437	302	1080	54	1436	503	597	421	1521	5980
Apprch %	9.2	86.9	3.9		12.4	51.5	36.2		21	75.2	3.8		33.1	39.3	27.7		
Total %	4	37.6	1.7	43.2	0.9	3.8	2.6	7.3	5.1	18.1	0.9	24	8.4	10	7	25.4	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	25	**324**	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	**8**	**359**	9	26	20	55	34	151	7	192	**74**	74	**58**	206	**812**
07:30 AM	28	272	8	308	**13**	**29**	**23**	**65**	37	158	6	201	49	**103**	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	**39**	**166**	**8**	**213**	66	100	49	**215**	782
Total Volume	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
% App. Total	8.3	89.6	2.2		15.3	47.7	37		18.1	79	3		29.5	43.2	27.2		
PHF	.743	.920	.906	.927	.635	.888	.870	.831	.897	.922	.719	.910	.787	.828	.927	.917	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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File Name : SDCRONIAM
Site Code : 9102139
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Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				07:30 AM				07:15 AM			
+0 mins.	**38**	254	**22**	314	6	**38**	22	**66**	37	158	6	201	74	74	**58**	206
+15 mins.	28	322	19	**369**	5	33	**24**	62	39	**166**	8	**213**	49	**103**	53	205
+30 mins.	25	**324**	6	355	7	23	21	51	38	161	8	207	66	100	49	**215**
+45 mins.	37	314	8	359	9	26	20	55	**49**	149	**10**	208	**85**	54	43	182
Total Volume	128	1214	55	1397	27	120	87	234	163	634	32	829	274	331	203	808
% App. Total	9.2	86.9	3.9		11.5	51.3	37.2		19.7	76.5	3.9		33.9	41	25.1	
PHF	.842	.937	.625	.946	.750	.789	.906	.886	.832	.955	.800	.973	.806	.803	.875	.940

Counts Unlimited Inc.
25286 Jaclyn Avenue
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Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
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Groups Printed- Total Volume

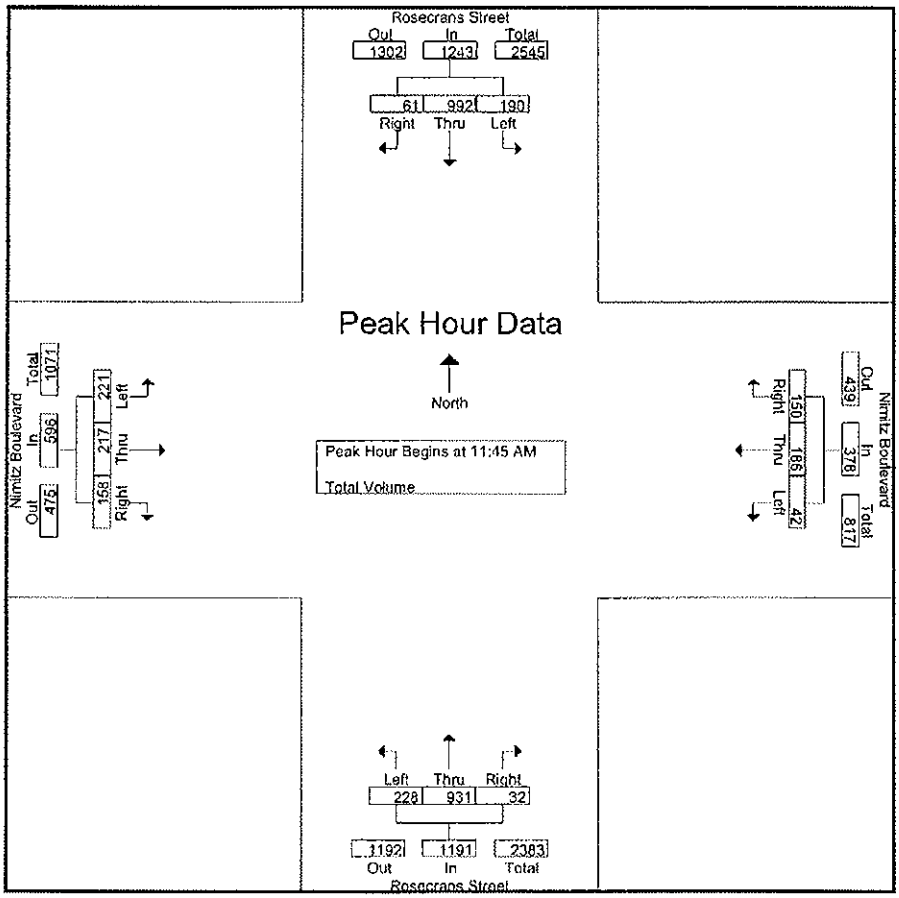
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	43	201	17	261	16	36	49	101	53	229	9	291	52	56	33	141	794
11:45 AM	43	272	15	330	13	51	43	107	62	266	11	339	64	45	37	146	922
Total	86	473	32	591	29	87	92	208	115	495	20	630	116	101	70	287	1716
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	63	46	163	766
12:15 PM	56	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	17	323	16	48	36	100	55	239	9	303	50	59	40	149	875
12:45 PM	42	249	22	313	11	41	35	87	62	258	10	330	37	45	62	144	874
Total	189	969	68	1226	40	176	142	358	228	923	31	1182	194	217	183	594	3360
01:00 PM	44	184	34	262	6	56	43	105	56	208	10	274	29	36	38	103	744
01:15 PM	35	195	25	255	6	59	36	101	69	230	11	310	36	45	34	115	781
Grand Total	354	1821	159	2334	81	378	313	772	468	1856	72	2396	375	399	325	1099	6601
Apprch %	15.2	78	6.8		10.5	49	40.5		19.5	77.5	3		34.1	36.3	29.6		
Total %	5.4	27.6	2.4	35.4	1.2	5.7	4.7	11.7	7.1	28.1	1.1	36.3	5.7	6	4.9	16.6	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	43	**272**	15	**330**	13	**51**	**43**	**107**	**62**	**266**	**11**	**339**	**64**	45	37	146	**922**
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	**63**	**46**	**163**	766
12:15 PM	**56**	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	**17**	323	**16**	48	36	100	55	239	9	303	50	59	40	149	875
Total Volume	190	992	61	1243	42	186	150	378	228	931	32	1191	221	217	158	596	3408
% App. Total	15.3	79.8	4.9		11.1	49.2	39.7		19.1	78.2	2.7		37.1	36.4	26.5		
PHF	.848	.912	.897	.942	.656	.912	.872	.883	.919	.875	.727	.878	.863	.861	.859	.914	.924

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:45 AM				12:30 PM				12:30 PM				11:45 AM			
+0 mins.	43	**272**	15	**330**	**16**	48	36	100	55	239	9	303	**64**	45	37	146
+15 mins.	45	214	13	272	11	41	35	87	62	**258**	10	**330**	54	**63**	**46**	**163**
+30 mins.	**56**	246	16	318	6	56	**43**	**105**	56	208	10	274	53	50	35	138
+45 mins.	46	260	**17**	323	6	59	36	101	69	230	**11**	310	50	59	40	149
Total Volume	190	992	61	1243	39	204	150	393	242	935	40	1217	221	217	158	596
% App. Total	15.3	79.8	4.9		9.9	51.9	38.2		19.9	76.8	3.3		37.1	36.4	26.5	
PHF	.848	.912	.897	.942	.609	.864	.872	.936	.877	.906	.909	.922	.863	.861	.859	.914

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIPM
Site Code : 9102139
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Groups Printed- Total Volume

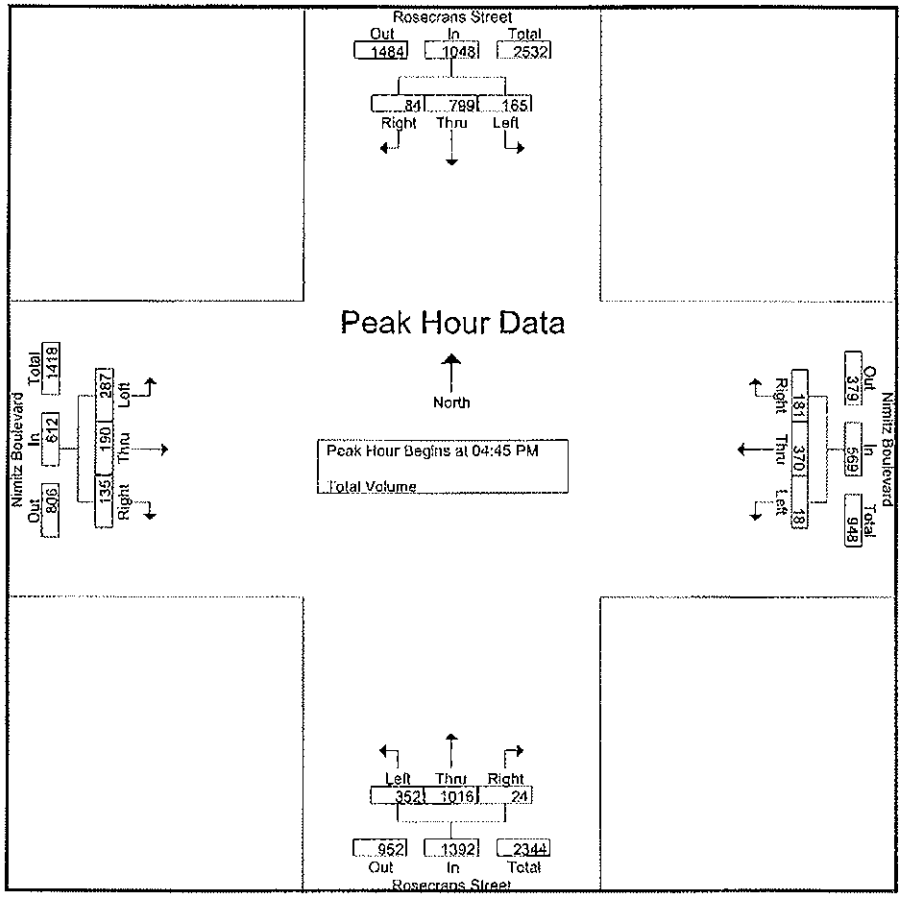
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	35	181	30	246	2	83	42	127	82	278	11	371	75	48	34	157	901
04:15 PM	45	199	25	269	3	92	42	137	67	259	7	333	61	67	37	165	904
04:30 PM	37	191	20	248	4	110	50	164	58	211	7	276	72	50	37	159	847
04:45 PM	47	216	22	285	6	92	56	154	79	205	6	290	81	51	37	169	898
Total	164	787	97	1048	15	377	190	582	286	953	31	1270	289	216	145	650	3550
05:00 PM	48	168	18	234	3	114	43	160	110	283	11	404	77	40	35	152	950
05:15 PM	38	208	23	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
05:45 PM	48	196	26	270	4	59	37	100	72	208	6	286	50	42	34	126	782
Total	166	779	88	1033	16	337	162	515	345	1019	24	1388	256	181	132	569	3505
Grand Total	330	1566	185	2081	31	714	352	1097	631	1972	55	2658	545	397	277	1219	7055
Apprch %	15.9	75.3	8.9		2.8	65.1	32.1		23.7	74.2	2.1		44.7	32.6	22.7		
Total %	4.7	22.2	2.6	29.5	0.4	10.1	5	15.5	8.9	28	0.8	37.7	7.7	5.6	3.9	17.3	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	47	**216**	22	**285**	**6**	92	**56**	154	79	205	6	290	**81**	**51**	37	**169**	898
05:00 PM	**48**	168	18	234	**3**	**114**	43	**160**	**110**	**283**	**11**	**404**	77	40	35	152	**950**
05:15 PM	38	208	**23**	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
Total Volume	165	799	84	1048	18	370	181	569	352	1016	24	1392	287	190	135	612	3621
% App. Total	15.7	76.2	8		3.2	65	31.8		25.3	73	1.7		46.9	31	22.1		
PHF	.859	.925	.913	.919	.750	.811	.808	.889	.800	.898	.545	.861	.886	.931	.912	.905	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Diego
N/S: Rosecrans Street
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File Name : SDCRONIPM
Site Code : 9102139
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	35	181	**30**	246	3	92	42	137	79	205	6	290	75	48	34	157
+15 mins.	45	199	25	269	4	110	50	**164**	**110**	**283**	11	**404**	61	**67**	**37**	165
+30 mins.	37	191	20	248	**6**	92	**56**	154	96	269	6	371	72	50	37	159
+45 mins.	**47**	**216**	22	**285**	3	**114**	43	160	67	259	1	327	**81**	51	37	**169**
Total Volume	164	787	97	1048	16	408	191	615	352	1016	24	1392	289	216	145	650
% App. Total	15.6	75.1	9.3		2.6	66.3	31.1		25.3	73	1.7		44.5	33.2	22.3	
PHF	.872	.911	.808	.919	.667	.895	.853	.938	.800	.898	.545	.861	.892	.806	.980	.962

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Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
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Groups Printed- Total Volume

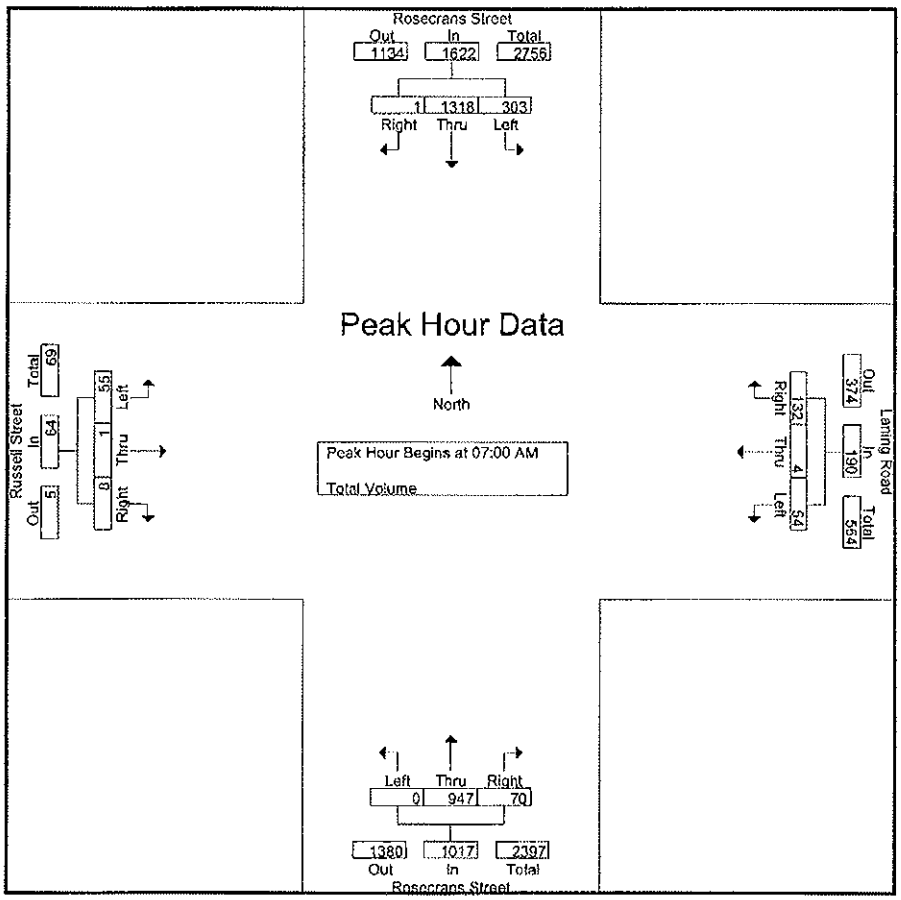
	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	46	248	0	294	15	0	34	49	0	127	1	128	14	2	0	16	487
06:45 AM	68	350	0	418	11	0	29	40	0	155	12	167	7	0	0	7	632
Total	114	598	0	712	26	0	63	89	0	282	13	295	21	2	0	23	1119
07:00 AM	58	411	1	470	13	1	42	56	0	227	10	237	16	0	7	23	786
07:15 AM	109	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	21	2	35	58	0	221	12	233	18	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	251	36	287	6	0	0	6	645
Total	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
08:00 AM	65	270	0	335	32	1	30	63	0	252	46	298	11	0	0	11	707
08:15 AM	53	371	0	424	32	0	32	64	0	243	20	263	10	2	0	12	763
Grand Total	535	2557	1	3093	144	5	257	406	0	1724	149	1873	97	5	8	110	5482
Apprch %	17.3	82.7	0		35.5	1.2	63.3		0	92	8		88.2	4.5	7.3		
Total %	9.8	46.6	0	56.4	2.6	0.1	4.7	7.4	0	31.4	2.7	34.2	1.8	0.1	0.1	2	

	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	58	**411**	**1**	**470**	13	1	**42**	56	**0**	227	10	237	16	0	**7**	**23**	**786**
07:15 AM	**109**	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	**21**	**2**	35	**58**	0	221	12	233	**18**	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	**251**	**36**	**287**	6	0	0	6	645
Total Volume	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
% App. Total	18.7	81.3	0.1		28.4	2.1	69.5		0	93.1	6.9		85.9	1.6	12.5		
PHF	.695	.802	.250	.863	.643	.500	.786	.819	.000	.943	.486	.886	.764	.250	.286	.696	.920

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Diego
N/S: Rosecrans Street
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File Name : SDCRORUAM
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Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:30 AM				07:30 AM				06:45 AM			
+0 mins.	68	350	0	418	21	2	35	58	0	221	12	233	7	0	0	7
+15 mins.	58	411	1	470	12	0	24	36	0	251	36	287	16	0	7	23
+30 mins.	109	356	0	465	32	1	30	63	0	252	46	298	15	1	0	16
+45 mins.	82	289	0	371	32	0	32	64	0	243	20	263	18	0	1	19
Total Volume	317	1406	1	1724	97	3	121	221	0	967	114	1081	56	1	8	65
% App. Total	18.4	81.6	0.1		43.9	1.4	54.8		0	89.5	10.5		86.2	1.5	12.3	
PHF	.727	.855	.250	.917	.758	.375	.864	.863	.000	.959	.620	.907	.778	.250	.286	.707

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Diego
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File Name : SDCRORUPM
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Groups Printed- Total Volume

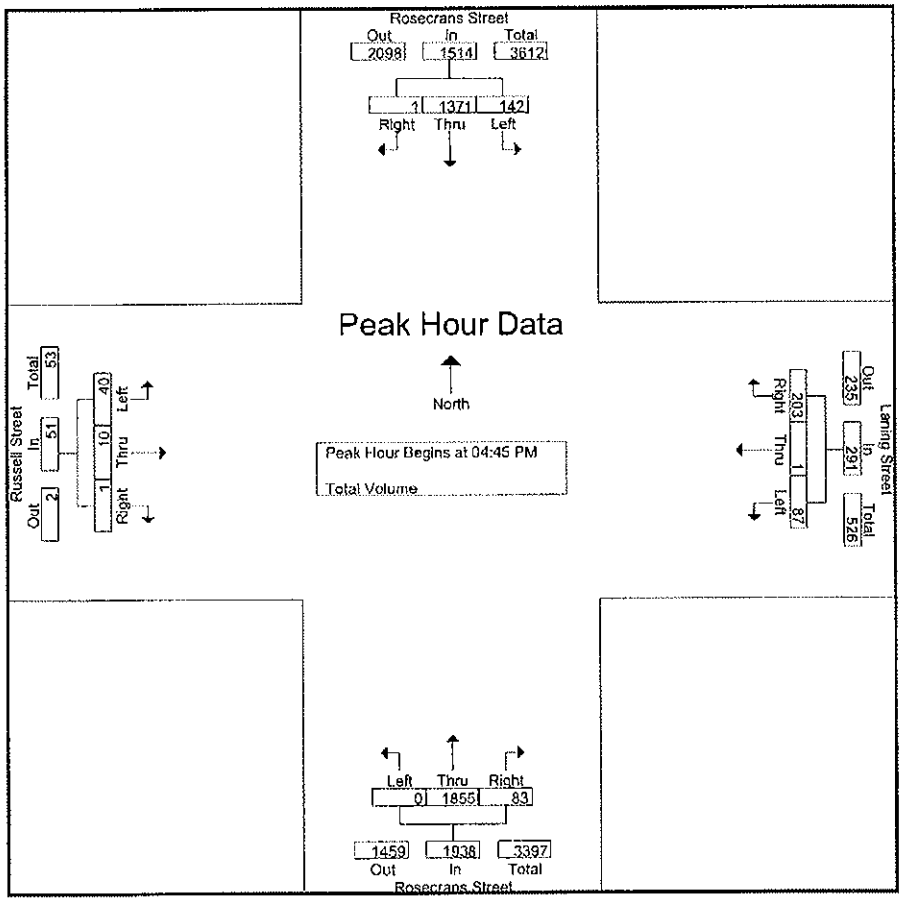
	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	280	0	308	21	4	56	81	1	374	26	401	11	0	0	11	801
04:15 PM	41	268	2	311	29	0	54	83	1	394	30	425	8	1	1	10	829
04:30 PM	38	266	1	305	22	0	63	85	0	404	14	418	8	1	1	10	818
04:45 PM	45	348	0	393	21	0	67	88	0	430	21	451	5	1	1	7	939
Total	152	1162	3	1317	93	4	240	337	2	1602	91	1695	32	3	3	38	3387
05:00 PM	39	310	1	350	15	0	71	86	0	528	22	550	8	1	0	9	995
05:15 PM	31	342	0	373	27	1	41	69	0	457	22	479	12	4	0	16	937
05:30 PM	27	371	0	398	24	0	24	48	0	440	18	458	15	4	0	19	923
05:45 PM	27	327	4	358	18	0	27	45	0	356	30	386	4	1	0	5	794
Total	124	1350	5	1479	84	1	163	248	0	1781	92	1873	39	10	0	49	3649
Grand Total	276	2512	8	2796	177	5	403	585	2	3383	183	3568	71	13	3	87	7036
Apprch %	9.9	89.8	0.3		30.3	0.9	68.9		0.1	94.8	5.1		81.6	14.9	3.4		
Total %	3.9	35.7	0.1	39.7	2.5	0.1	5.7	8.3	0	48.1	2.6	50.7	1	0.2	0	1.2	

	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**45**	348	0	393	21	0	67	**88**	0	430	21	451	5	1	**1**	7	939
05:00 PM	39	310	1	350	15	0	71	86	0	**528**	**22**	**550**	8	1	0	9	**995**
05:15 PM	31	342	0	373	**27**	1	41	69	0	457	22	479	12	**4**	0	16	937
05:30 PM	27	371	0	**398**	24	0	24	48	0	440	18	458	**15**	4	0	**19**	923
Total Volume	142	1371	1	1514	87	1	203	291	0	1855	83	1938	40	10	1	51	3794
% App. Total	9.4	90.6	0.1		29.9	0.3	69.8		0	95.7	4.3		78.4	19.6	2		
PHF	.789	.924	.250	.951	.806	.250	.715	.827	.000	.878	.943	.881	.667	.625	.250	.671	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Street
Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	**45**	348	0	393	29	0	54	83	0	430	21	451	5	1	1	7
+15 mins.	39	310	1	350	22	0	63	85	0	**528**	**22**	**550**	8	1	0	9
+30 mins.	31	342	0	373	21	0	67	**88**	0	457	22	479	12	4	0	16
+45 mins.	27	**371**	0	**398**	15	0	**71**	86	0	440	18	458	15	4	0	19
Total Volume	142	1371	1	1514	87	0	255	342	0	1855	83	1938	40	10	1	51
% App. Total	9.4	90.6	0.1		25.4	0	74.6		0	95.7	4.3		78.4	19.6	2	
PHF	.789	.924	.250	.951	.750	.000	.898	.972	.000	.878	.943	.881	.667	.625	.250	.671

(S2)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					28	20				26	447		521
7:15 AM					20	12				38	434		504
7:30 AM					30	11				42	382		465
7:45 AM					45	19				62	433		559
8:00 AM					33	20				51	378		482
8:15 AM					46	22				48	373		489
8:30 AM					42	17				66	351		476
8:45 AM					57	15				47	346		465
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	301	136	0	0	0	380	3144	0	3961
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	68.88%	31.12%	#DIV/0!	#DIV/0!	#DIV/0!	10.78%	89.22%	0.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					80	11				36	222		349
4:15 PM					82	12				39	221		354
4:30 PM					74	20				51	219		364
4:45 PM					95	17				43	256		411
5:00 PM					101	20				52	211		384
5:15 PM					97	14				50	223		384
5:30 PM					100	16				52	227		395
5:45 PM					89	20				45	250		404

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	718	130	0	0	0	368	1829	0	3045
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	84.67%	15.33%	#DIV/0!	#DIV/0!	#DIV/0!	16.75%	83.25%	0.00%	



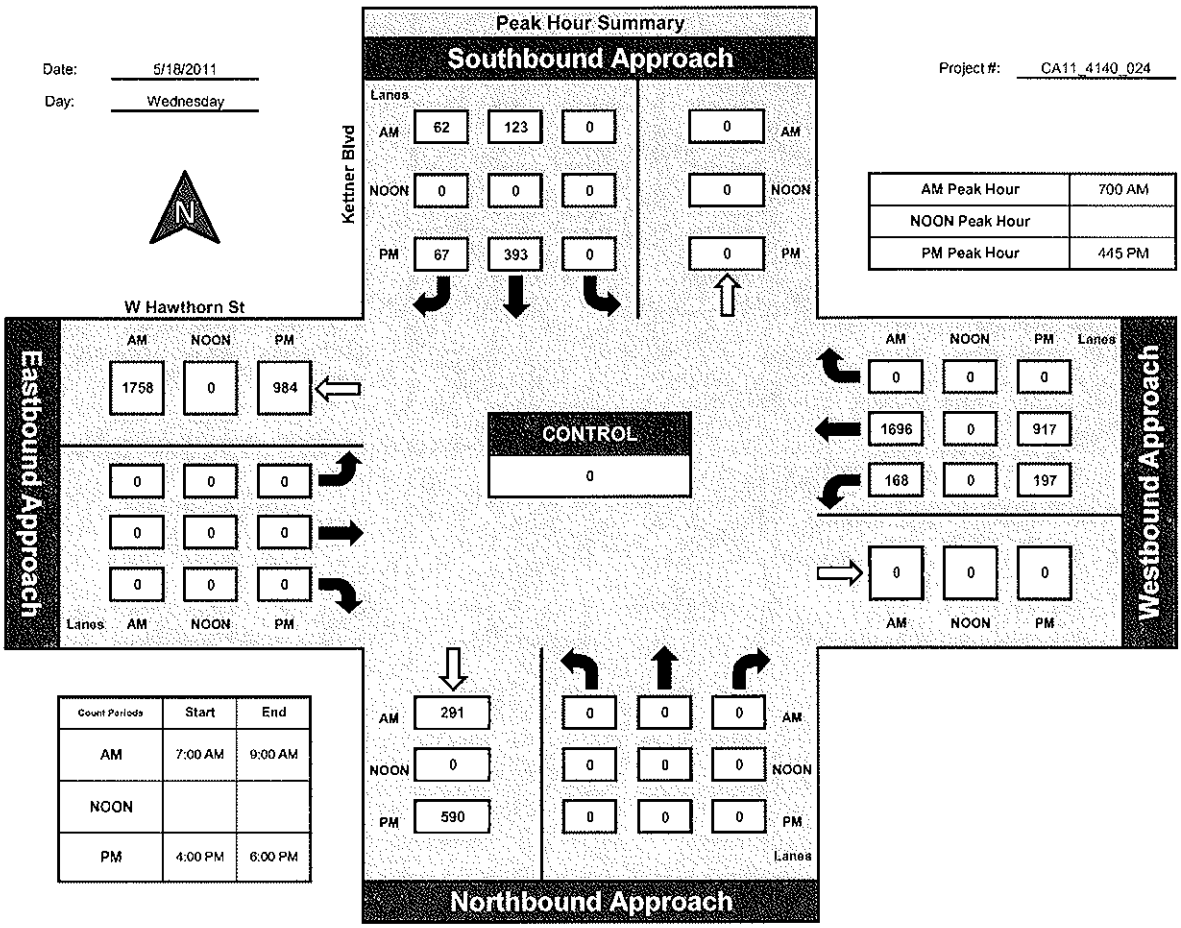
CONTROL :

ITM Peak Hour Summary

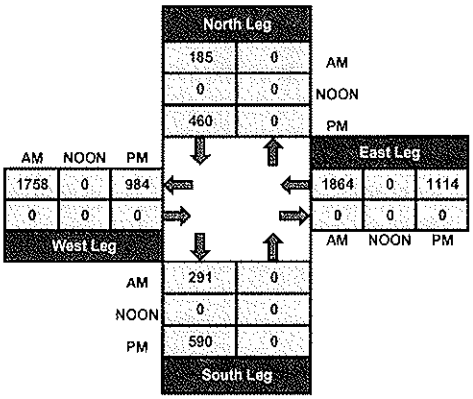
Prepared by:

National Data & Surveying Services

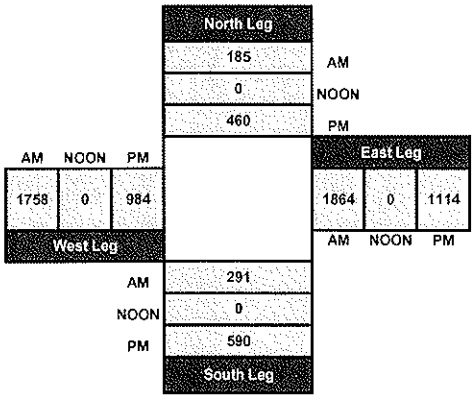
Kettner Blvd and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(53)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				20	31			201	5				257
7:15 AM				18	47			179	6				250
7:30 AM				24	47			200	5				276
7:45 AM				34	76			209	5				324
8:00 AM				24	61			199	5				289
8:15 AM				19	72			213	7				311
8:30 AM				31	77			220	8				336
8:45 AM				36	66			229	10				341
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	206	477	0	0	1650	51	0	0	0	2384
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	30.16%	69.84%	0.00%	0.00%	97.00%	3.00%	#DIV/0!	#DIV/0!	#DIV/0!	
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				54	63			362	4				483
4:15 PM				53	66			366	14				499
4:30 PM				53	74			428	4				559
4:45 PM				65	76			353	13				507
5:00 PM				70	79			385	7				541
5:15 PM				52	89			367	15				523
5:30 PM				69	85			326	14				494
5:45 PM				42	91			312	9				454
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	458	623	0	0	2899	80	0	0	0	4060
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	42.37%	57.63%	0.00%	0.00%	97.31%	2.69%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

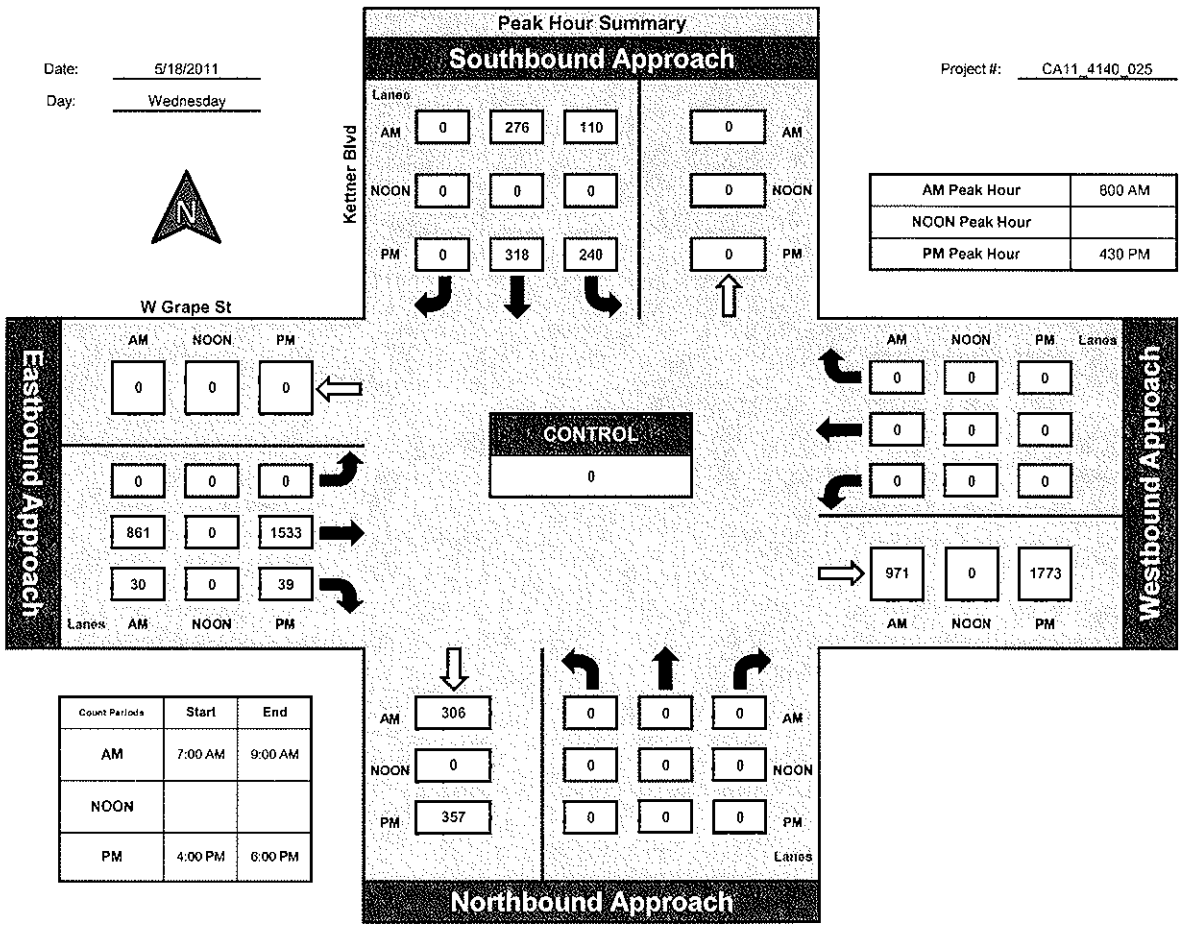
ITM Peak Hour Summary

Prepared by:

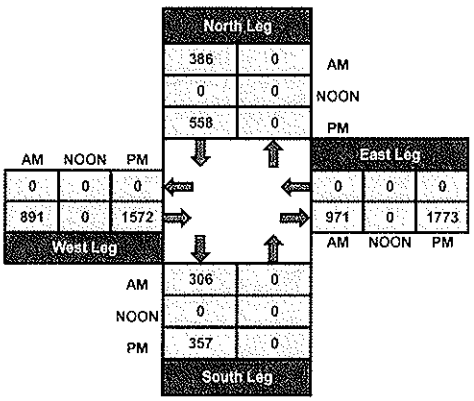
NDS

National Data & Surveying Services

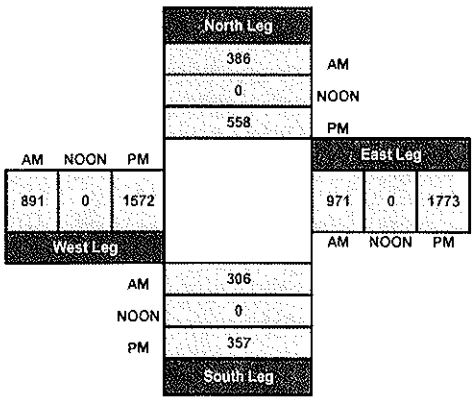
Kettner Blvd and W Grape St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(54)

Intersection Turning Movement

Prepared by:

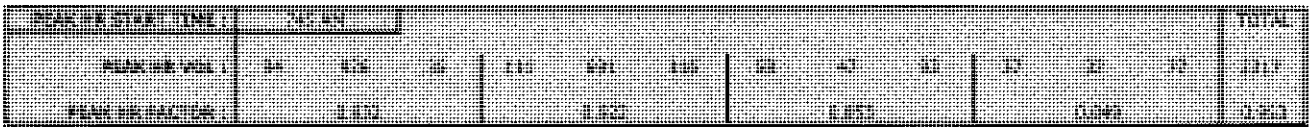
National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	189	8	29	120	16	7	8	15	4	5	8	424
7:15 AM	27	220	11	30	141	25	18	3	10	4	10	6	505
7:30 AM	21	228	15	34	167	29	12	9	15	8	5	20	563
7:45 AM	19	240	10	32	185	32	13	14	20	4	4	15	588
8:00 AM	32	209	12	28	160	31	11	11	22	11	10	19	556
8:15 AM	22	218	10	27	174	25	12	7	30	9	12	19	565
8:30 AM	21	259	3	24	172	28	22	15	21	13	6	24	608
8:45 AM	11	226	11	25	176	19	17	12	18	12	10	22	559
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	168	1789	80	229	1295	205	112	79	151	65	62	133	4368
APPRDACH %'s :	8.25%	87.83%	3.93%	13.24%	74.90%	11.86%	32.75%	23.10%	44.15%	25.00%	23.85%	51.15%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	19	291	21	28	313	3	13	13	32	19	5	21	778
4:15 PM	21	294	24	36	309	5	10	17	35	24	8	22	805
4:30 PM	28	261	36	38	327	1	10	11	38	17	8	19	794
4:45 PM	17	265	28	41	330	1	11	16	42	23	7	20	801
5:00 PM	19	267	25	26	313	2	17	25	51	34	11	43	833
5:15 PM	6	284	27	37	306	6	21	18	58	28	15	34	840
5:30 PM	17	245	36	37	301	9	11	11	39	31	14	26	777
5:45 PM	14	203	37	57	306	9	9	14	37	34	10	20	750
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	141	2110	234	300	2505	36	102	125	332	210	78	205	6378
APPROACH %'s :	5.67%	84.91%	9.42%	10.56%	88.17%	1.27%	18.25%	22.36%	59.39%	42.60%	15.82%	41.58%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]												

CONTROL :

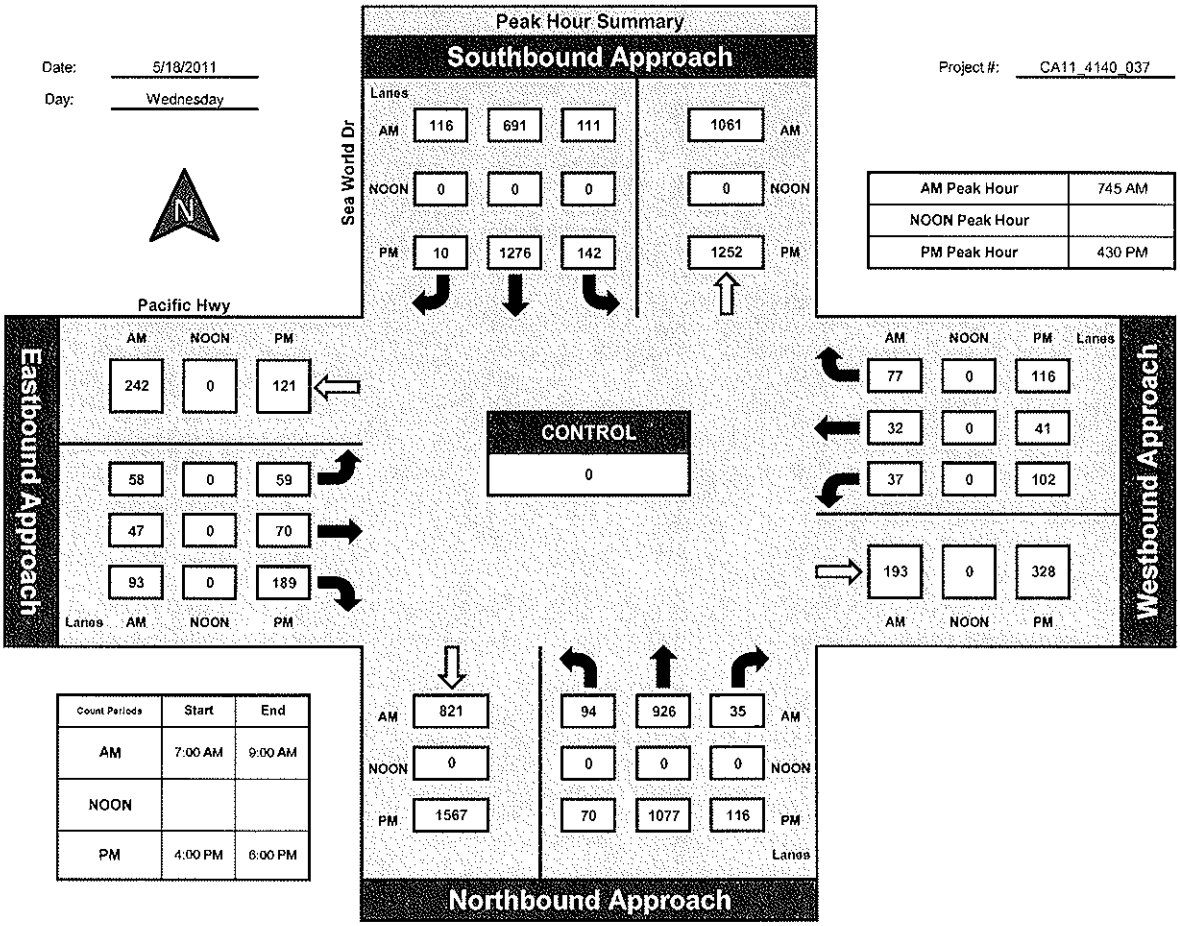
ITM Peak Hour Summary

Prepared by:

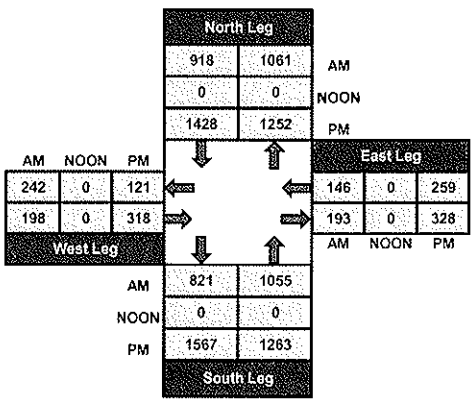
NDS

National Data & Surveying Services

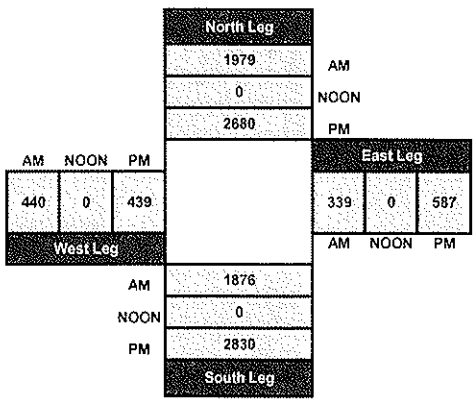
Sea World Dr and Pacific Hwy , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7												7
7:15 AM	12												12
7:30 AM	10												10
7:45 AM	15												15
8:00 AM	4												4
8:15 AM	7												7
8:30 AM	8												8
8:45 AM	13												13
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	76	0	0	0	0	0	0	0	0	0	0	0	76
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

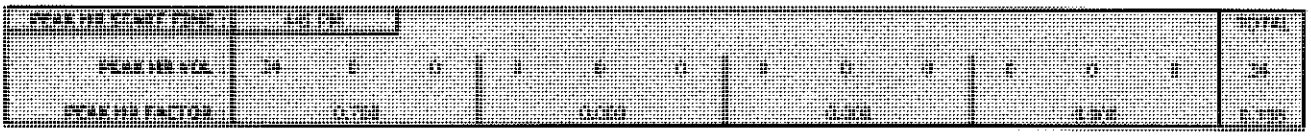
National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	9												9
4:15 PM	9												9
4:30 PM	7												7
4:45 PM	8												8
5:00 PM	7												7
5:15 PM	7												7
5:30 PM	12												12
5:45 PM	5												5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	0	0	0	0	0	0	0	0	0	0	0	64
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	



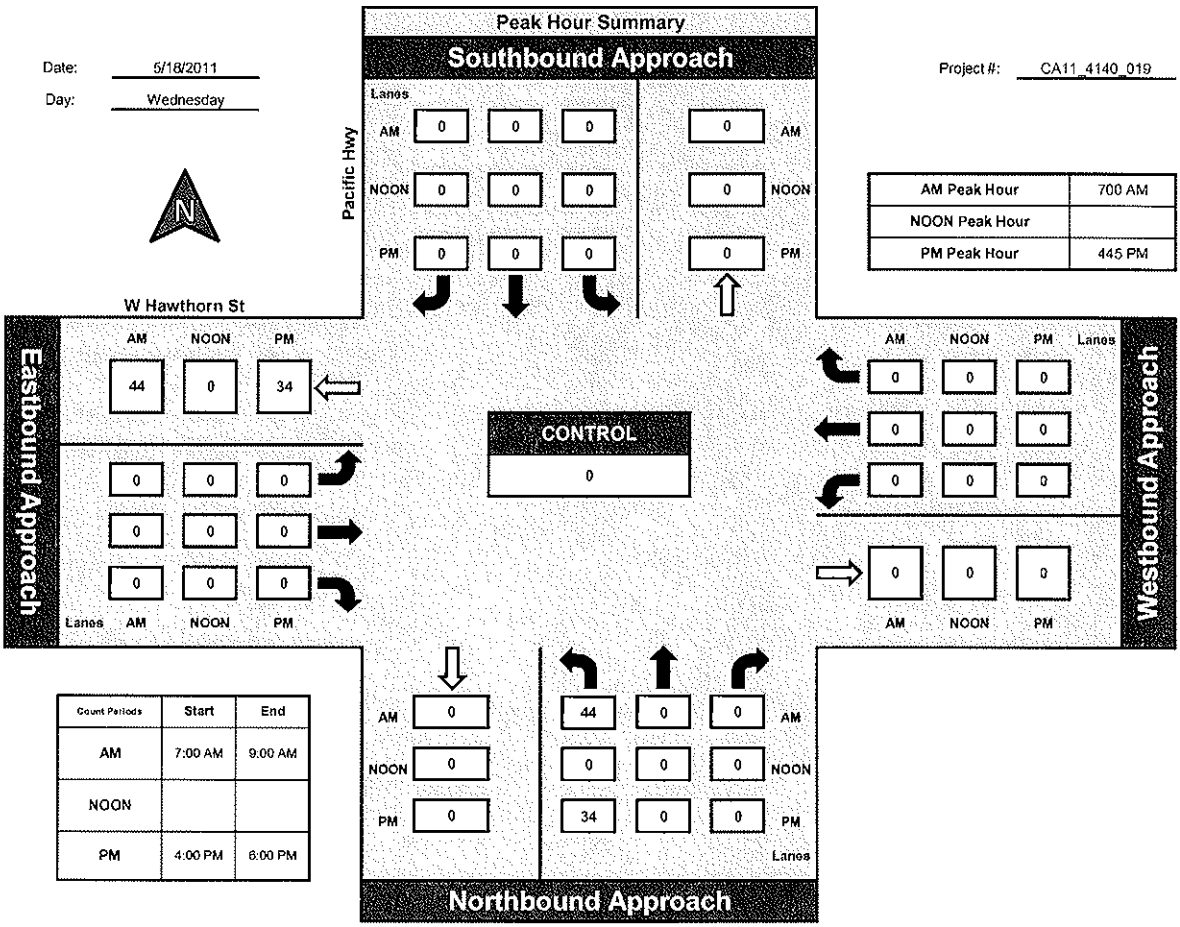
CONTROL :

ITM Peak Hour Summary

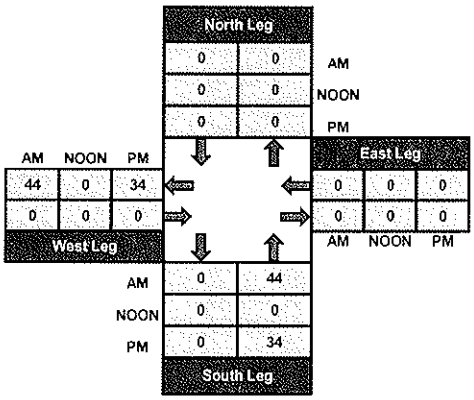
Prepared by:

National Data & Surveying Services

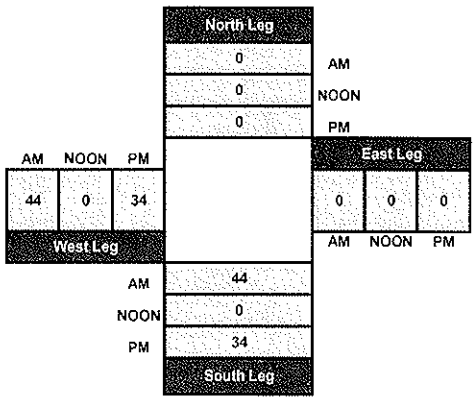
Pacific Hwy and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	36			24	7				86	360	12	545
7:15 AM	19	41			37	4				72	341	20	534
7:30 AM	13	45			35	5				90	284	18	490
7:45 AM	12	36			43	3				114	327	20	555
8:00 AM	12	41			35	7				83	294	15	487
8:15 AM	17	42			43	3				54	316	19	494
8:30 AM	13	47			52	9				70	269	16	476
8:45 AM	11	55			43	4				59	279	27	478
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	117	343	0	0	312	42	0	0	0	628	2470	147	4059
APPROACH %'s :	25.43%	74.57%	0.00%	0.00%	88.14%	11.86%	#DIV/0!	#DIV/0!	#DIV/0!	19.35%	76.12%	4.53%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	16	63			61	1				36	170	16	363
4:15 PM	23	70			61	5				34	173	22	388
4:30 PM	15	69			65	5				24	188	17	383
4:45 PM	21	70			54	5				30	222	17	419
5:00 PM	14	101			65	5				21	191	18	415
5:15 PM	13	108			51	3				26	190	20	411
5:30 PM	12	86			48	7				30	178	22	383
5:45 PM	13	80			53	3				33	216	22	420
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	127	647	0	0	458	34	0	0	0	234	1528	154	3182
APPROACH %'s :	16.41%	83.59%	0.00%	0.00%	93.09%	6.91%	#DIV/0!	#DIV/0!	#DIV/0!	12.21%	79.75%	8.04%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Hawthorn St , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_019

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Southbound Approach (Pacific Hwy)

Lanes				
AM	19	139	0	228 AM
NOON	0	0	0	0 NOON
PM	18	217	0	457 PM

Eastbound Approach (W Hawthorn St)

	AM	NOON	PM
	1395	0	845
	0	0	0
	0	0	0
	0	0	0
Lanes	AM	NOON	PM

CONTROL: 0

Westbound Approach

Lanes	AM	NOON	PM
	70	0	82
	1312	0	775
	362	0	110
	0	0	0
	AM	NOON	PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

AM	501	64	158	0 AM
NOON	0	0	0	0 NOON
PM	327	52	375	0 PM
				Lanes

Total Ins & Outs

	North Leg		
	158	228	AM
	0	0	NOON
	235	457	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
1395	0	845		1744	0	967
0	0	0		0	0	0

	South Leg	
AM	501	222
NOON	0	0
PM	327	427

Total Volume Per Leg

North Leg	
386	AM
0	NOON
692	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1395	0	845	1744	0	967

South Leg	
AM	723
NOON	0
PM	754

(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				0									
7:15 AM				4									4
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				0									
8:15 AM				1									1
8:30 AM				1									1
8:45 AM				5									5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	14	0	0	0	0	0	0	0	0	14
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				1									1
4:15 PM				3									3
4:30 PM				2									2
4:45 PM				0									
5:00 PM				3									3
5:15 PM				1									1
5:30 PM				4									4
5:45 PM				2									2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	16	0	0	0	0	0	0	0	0	16
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

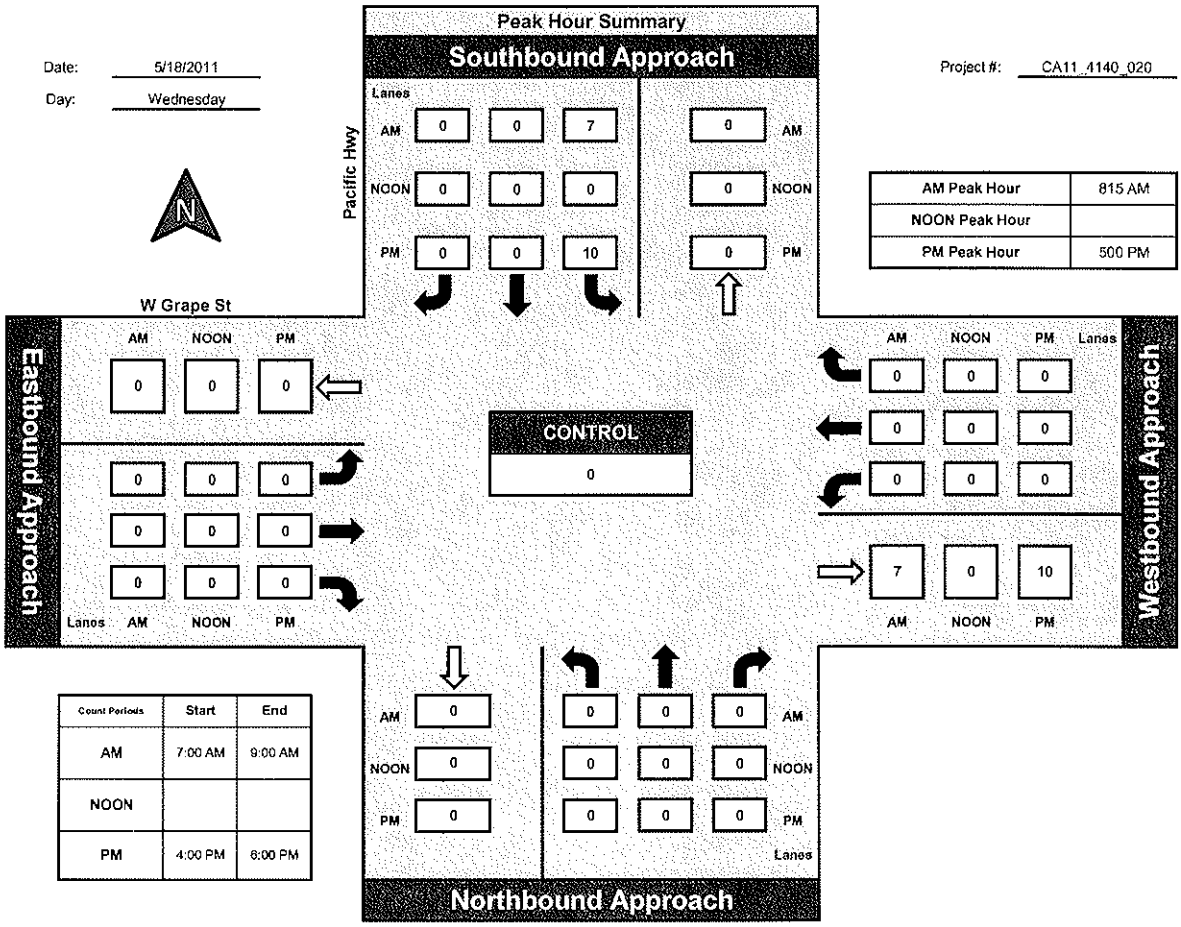
National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

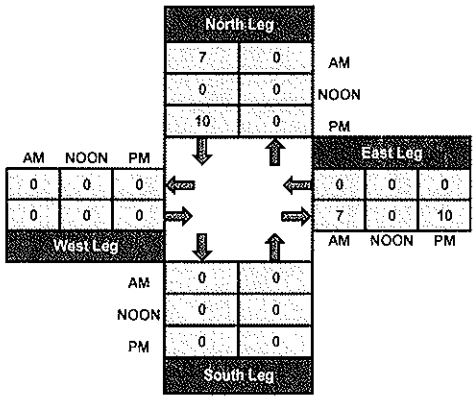
Project #: CA11_4140_020



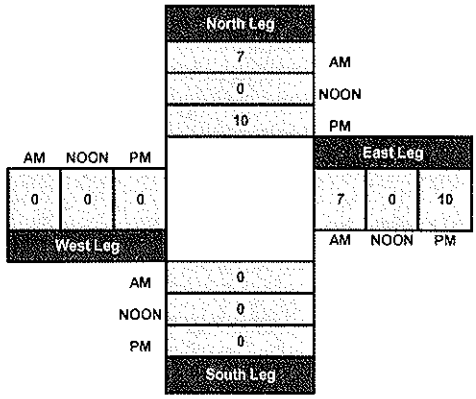
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

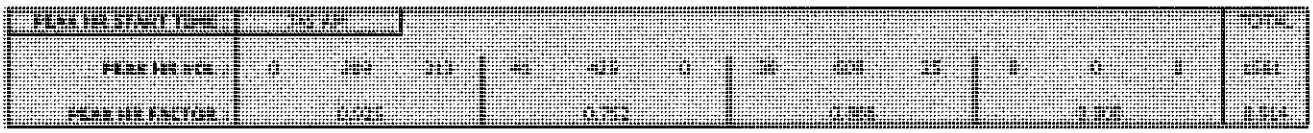
Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		51	41	6	79		15	166	7				365
7:15 AM		50	47	5	92		12	122	3				331
7:30 AM		56	51	11	112		8	137	5				380
7:45 AM		48	66	9	146		14	138	6				427
8:00 AM		55	42	8	107		8	148	8				376
8:15 AM		52	52	11	84		4	155	2				360
8:30 AM		54	53	13	88		13	168	9				398
8:45 AM		65	41	17	100		13	177	9				422

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	431	393	80	808	0	87	1211	49	0	0	0	3059
APPROACH %'s :	0.00%	52.31%	47.69%	9.01%	90.99%	0.00%	6.46%	89.90%	3.64%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		87	95	21	77		7	260	6				553
4:15 PM		95	87	29	76		5	243	9				544
4:30 PM		76	96	23	71		8	297	7				578
4:45 PM		86	79	23	69		6	257	6				526
5:00 PM		112	84	19	73		17	276	5				586
5:15 PM		113	73	17	63		12	311	6				595
5:30 PM		91	70	21	69		6	232	11				500
5:45 PM		85	57	19	69		10	242	10				492
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	745	641	172	567	0	71	2118	60	0	0	0	4374
APPROACH %'s :	0.00%	53.75%	46.25%	23.27%	76.73%	0.00%	3.16%	94.18%	2.67%	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_020

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach

Lanes					
AM	0	425	41	248	AM
NOON	0	0	0	0	NOON
PM	0	276	82	430	PM

Pacific Hwy

W Grape St

Eastbound Approach

Lanes	AM	NOON	PM
	0	0	0
	39	0	43
	609	0	1141
	25	0	24

Westbound Approach

Lanes	AM	NOON	PM
	0	0	0
	0	0	0
	0	0	0
	863	0	1555

CONTROL

0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	450	0	209	213	AM
NOON	0	0	0	0	NOON
PM	300	0	387	332	PM

Total Ins & Outs

	North Leg	
AM	466	248
NOON	0	0
PM	358	430

West Leg	AM	NOON	PM
AM	0	0	0
NOON	673	0	1208
PM			

East Leg	AM	NOON	PM
AM	0	0	0
NOON	863	0	1555
PM			

	South Leg	
AM	450	422
NOON	0	0
PM	300	719

Total Volume Per Leg

	North Leg
AM	714
NOON	0
PM	788

West Leg	AM	NOON	PM
AM	673	0	1208
NOON			
PM			

East Leg	AM	NOON	PM
AM	863	0	1555
NOON			
PM			

	South Leg
AM	872
NOON	0
PM	1019

(57)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		204	28	21	125					34		14	426
7:15 AM		234	55	33	116					38		19	495
7:30 AM		238	57	43	156					42		29	565
7:45 AM		240	74	56	145					40		25	580
8:00 AM		246	49	22	173					38		19	547
8:15 AM		211	59	29	183					59		28	569
8:30 AM		266	62	31	184					60		26	629
8:45 AM		214	67	26	171					51		25	554
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1853	451	261	1253	0	0	0	0	362	0	185	4365
APPROACH %'s :	0.00%	80.43%	19.57%	17.24%	82.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	66.18%	0.00%	33.82%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		296	82	64	304					74		36	856
4:15 PM		304	82	63	301					61		34	845
4:30 PM		295	82	67	319					72		31	866
4:45 PM		285	82	69	328					78		35	877
5:00 PM		275	122	80	316					72		25	890
5:15 PM		298	105	64	334					79		27	907
5:30 PM		256	78	63	302					74		34	807
5:45 PM		238	99	56	328					75		26	822
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2247	732	526	2532	0	0	0	0	585	0	248	6870
APPROACH %'s :	0.00%	75.43%	24.57%	17.20%	82.80%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	70.23%	0.00%	29.77%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and Friars Rd , City of San Diego

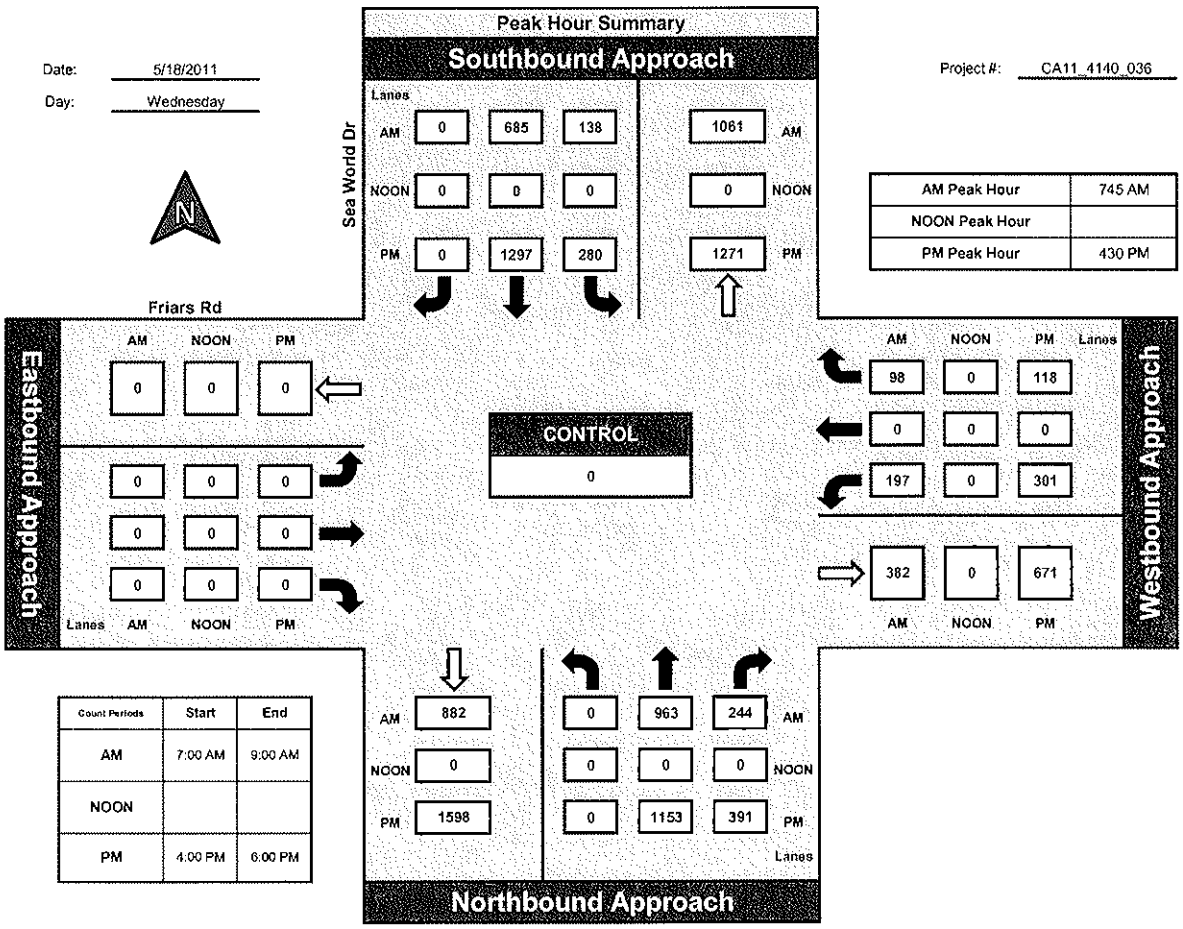
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

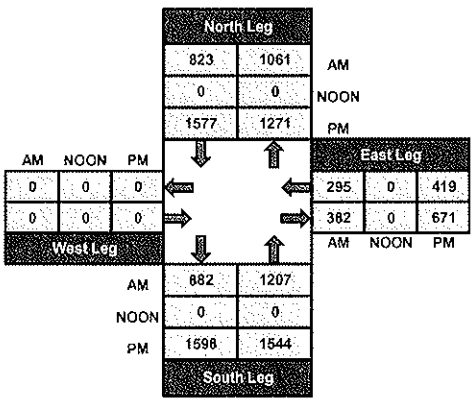
Project #: CA11_4140_036

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

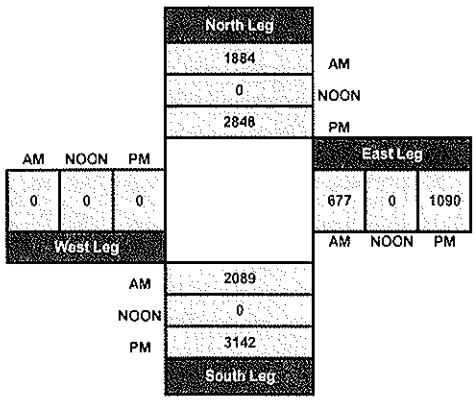


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(58)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		0	32	0	113		198	5	55	45		448
7:15 AM	0		0	48	0	153		226	19	57	50		553
7:30 AM	0		1	67	0	167		238	19	73	55		620
7:45 AM	0		0	75	1	183		258	13	78	57		665
8:00 AM	0		0	78	0	126		226	9	88	85		612
8:15 AM	0		0	68	1	178		235	18	79	57		636
8:30 AM	0		0	77	0	123		282	20	70	92		664
8:45 AM	1		0	68	0	162		249	19	61	67		627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	0	1	513	2	1205	0	1912	122	561	508	0	4825
APPROACH %'s :	50.00%	0.00%	50.00%	29.83%	0.12%	70.06%	0.00%	94.00%	6.00%	52.48%	47.52%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				65	1	257		270	51	76	76	1	797
4:15 PM				86	2	279		268	53	60	81	1	830
4:30 PM				85	0	272		239	47	90	83	1	817
4:45 PM				83	0	295		234	51	77	71	1	812
5:00 PM				76	1	279		275	63	65	69	0	828
5:15 PM				66	0	282		272	57	75	65	0	817
5:30 PM				74	0	282		239	53	53	68	0	769
5:45 PM				62	1	303		168	61	51	63	0	709
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	597	5	2249	0	1965	436	547	576	4	6379
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	20.94%	0.18%	78.88%	0.00%	81.84%	18.16%	48.54%	51.11%	0.35%	

[redacted]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 SB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_038

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach

Sea World Dr

Lanes					
AM	610	2	298	0	AM
NOON	0	0	0	0	NOON
PM	1125	3	330	3	PM

Eastbound Approach

I-5 SB Ramps

Lanes	AM	NOON	PM
	901	0	1429
	0	0	0
	1001	0	1016
	60	0	214

Westbound Approach

Lanes	AM	NOON	PM
	0	0	3
	291	0	304
	315	0	292
	1299	0	1346

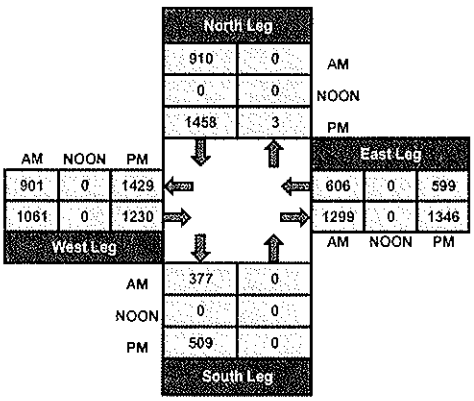
CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

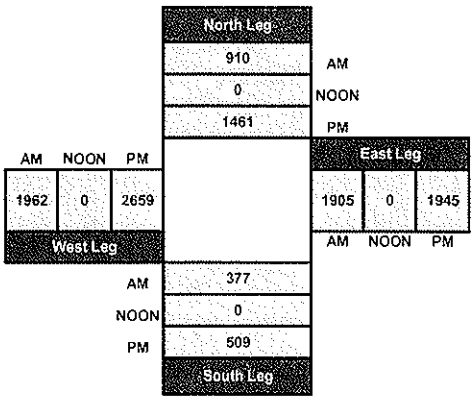
Northbound Approach

Lanes					
AM	377	0	0	0	AM
NOON	0	0	0	0	NOON
PM	509	0	0	0	PM

Total Ins & Outs



Total Volume Per Leg



(59)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

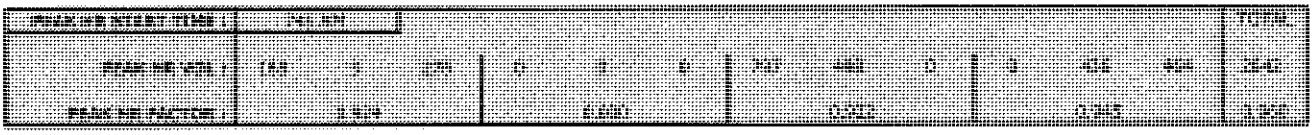
Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	21	0	45				174	50	0		72	77	439
7:15 AM	33	0	49				205	74	0		81	93	535
7:30 AM	31	0	65				193	108	0		92	117	606
7:45 AM	33	0	88				180	157	0		107	120	685
8:00 AM	44	0	67				186	113	0		122	116	648
8:15 AM	35	3	61				202	106	0		108	106	621
8:30 AM	56	0	60				229	122	0		99	122	688
8:45 AM	54	0	71				193	131	1		82	105	637

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	307	3	506	0	0	0	1562	861	1	0	763	856	4859
APPROACH %'s :	37.62%	0.37%	62.01%	#DIV/0!	#DIV/0!	#DIV/0!	64.44%	35.52%	0.04%	0.00%	47.13%	52.87%	



CONTROL :

Intersection Turning Movement

Prepared by:

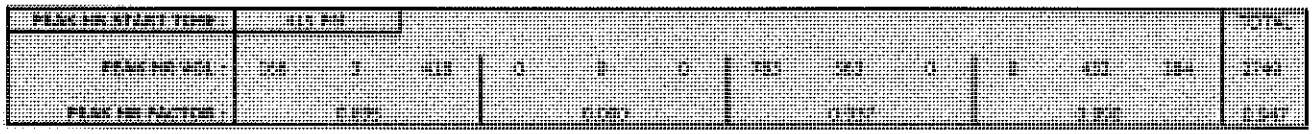
National Data & Surveying Services

Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	43	1	69				195	137			111	102	658
4:15 PM	44	0	120				208	149			100	105	726
4:30 PM	57	0	98				196	125			114	92	682
4:45 PM	31	0	96				183	126			110	96	642
5:00 PM	34	3	104				196	163			108	91	699
5:15 PM	36	0	109				210	127			99	90	671
5:30 PM	38	0	98				197	117			88	67	605
5:45 PM	37	1	69				144	79			70	61	461
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	320	5	763	0	0	0	1529	1023	0	0	800	704	5144
APPROACH %'s :	29.41%	0.46%	70.13%	#DIV/0!	#DIV/0!	#DIV/0!	59.91%	40.09%	0.00%	0.00%	53.19%	46.81%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 NB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_039

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach (Sea World Dr)

Lanes					
AM	0	0	0	1264	AM
NOON	0	0	0	0	NOON
PM	0	0	0	1170	PM

Eastbound Approach (I-5 NB Ramps)

Lanes	AM	NOON	PM
	604	0	598
	797	0	783
	498	0	563
	0	0	0

Westbound Approach

Lanes	AM	NOON	PM
	464	0	384
	436	0	432
	0	0	0
	774	0	981

CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	0	168	3	276	AM
NOON	0	0	0	0	NOON
PM	0	166	3	418	PM

Total Ins & Outs

North Leg		
0	1264	AM
0	0	NOON
0	1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
604	0	598	900	0	816
1295	0	1346	774	0	981

South Leg		
0	447	AM
0	0	NOON
0	587	PM

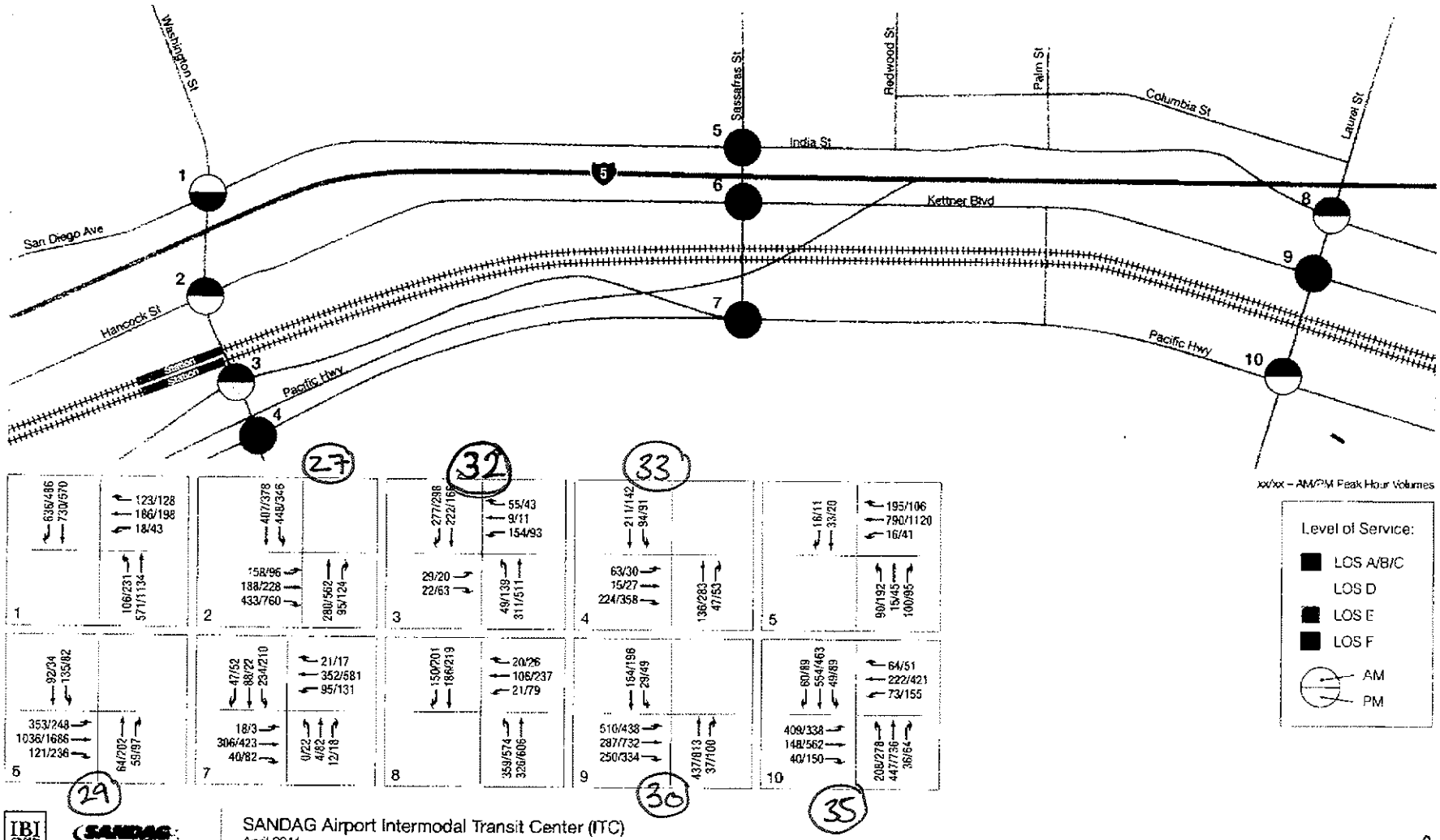
Total Volume Per Leg

North Leg	
1264	AM
0	NOON
1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1899	0	1944	1674	0	1797

South Leg	
447	AM
0	NOON
587	PM

Existing AM/PM Peak Hour Traffic Volumes and Level of Service



Cyclists and Pedestrian Counts

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

2

PROJECT#: 11-4140-001
N/S Street: W Mission Bay Dr
E/W Street: I-8 WB Off-Ramp
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	0	2	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0
7:45 AM	0	0	0	0	1	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	2	2	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	2	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4167-001
N/S Street: West Mission Bay Dr
E/W Street: Channel Way
DATE: 6/9/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0
TOTALS	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

4

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-003
N/S Street: Midway Dr
E/W Street: Sport Arena Blvd/W Point Loma Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	1	2	0	0	0
7:15 AM	4	3	0	1	0	1	1	0
7:30 AM	0	0	0	0	1	0	0	0
7:45 AM	0	0	1	1	2	0	0	1
8:00 AM	1	0	0	0	0	0	0	1
8:15 AM	2	2	3	0	0	1	1	0
8:30 AM	1	1	2	0	1	0	1	1
8:45 AM	0	1	0	0	1	0	0	0
TOTALS	**9**	**7**	**8**	**3**	**7**	**2**	**3**	**3**
	4	4	5	0	2	1	2	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	3
7:30 AM	0	0	0	1	3	0	0	2
7:45 AM	0	0	0	0	1	0	0	3
8:00 AM	0	0	2	2	0	0	0	5
8:15 AM	0	0	2	2	0	0	0	2
8:30 AM	0	0	1	2	0	0	0	6
8:45 AM	0	0	0	0	1	0	0	2
TOTALS	**0**	**1**	**5**	**7**	**5**	**0**	**0**	**23**
	0	0	5	6	1	0	0	15

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	3	0	0	0	0	2
4:15 PM	3	2	1	0	0	2	1	0
4:30 PM	0	2	2	0	0	0	1	0
4:45 PM	0	0	4	0	0	0	3	1
5:00 PM	1	2	2	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	1	2	0	0	0	0	1	1
5:45 PM	0	0	1	0	0	0	2	1
TOTALS	**5**	**9**	**13**	**0**	**0**	**2**	**9**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	3
4:15 PM	1	1	0	0	1	0	1	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	3	1	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	2	0	0	0	0	0
TOTALS	**1**	**5**	**5**	**1**	**1**	**0**	**2**	**4**

5

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-004
N/S Street: Kemper St
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	1
7:15 AM	0	0	1	0	0	1	1	2
7:30 AM	0	0	0	2	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	2	0	0	0	2
8:15 AM	0	0	0	1	0	2	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	0	1	1	5	5	3
TOTALS	**0**	**0**	**2**	**6**	**2**	**8**	**8**	**10**
	0	0	1	4	1	7	6	6

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	1	0	0	0	0
8:45 AM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**4**	**2**	**2**	**0**	**0**	**0**
	0	0	4	2	1	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	5	2	2	2	0	1	2
4:15 PM	0	5	5	5	1	1	1	1
4:30 PM	2	1	7	0	0	0	1	4
4:45 PM	0	4	2	4	3	6	0	1
5:00 PM	2	0	1	2	0	1	2	2
5:15 PM	3	2	2	3	0	2	2	0
5:30 PM	1	0	1	0	0	0	1	2
5:45 PM	0	0	2	2	0	0	1	1
TOTALS	**8**	**17**	**22**	**18**	**6**	**10**	**9**	**13**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**

6

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-005
N/S Street: East Dr
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	1	0	0	0	0
7:15 AM	0	0	1	0	0	0	2	1
7:30 AM	1	0	0	0	0	0	2	3
7:45 AM	0	0	1	0	0	0	0	1
8:00 AM	0	0	2	0	0	1	3	1
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	3	0
8:45 AM	0	0	1	0	0	0	2	1
TOTALS	**1**	**0**	**7**	**1**	**0**	**1**	**12**	**7**
	0	0	3	0	0	1	8	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**1**
	0	0	1	0	0	0	1	0

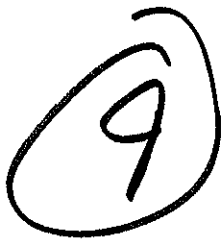
P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	9	3
4:15 PM	1	0	0	0	0	0	2	5
4:30 PM	1	0	0	0	0	0	5	3
4:45 PM	0	0	0	0	0	0	3	4
5:00 PM	1	0	0	0	0	0	7	2
5:15 PM	0	1	0	0	0	0	5	4
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	8	0	0	0	0	0	5	5
TOTALS	**11**	**1**	**0**	**0**	**0**	**1**	**38**	**28**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0
5:45 PM	0	0	1	1	0	0	0	0
TOTALS	**1**	**2**	**4**	**2**	**1**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-006
N/S Street: Midway Dr
E/W Street: Enterprise St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	3	0	0	0	0	0	0	0
TOTALS	**3**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
	3	0	0	0	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	1	1	0	0	0	0	0	0
8:15 AM	1	3	0	0	0	0	0	0
8:30 AM	0	4	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**12**	**0**	**0**	**0**	**0**	**0**	**0**
	2	8	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**3**	**1**	**0**	**0**

10

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-007
N/S Street: Midway Dr
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	2	0	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	0	0	0	0
8:30 AM	1	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**5**	**0**	**0**	**1**	**0**	**0**	**0**
	3	5	0	0	1	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	6	0	0	3	1	0	0
7:15 AM	4	2	0	0	2	2	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	2	3	0	0	0	2	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	3	5	0	0	1	3	0	0
8:30 AM	0	1	0	0	2	0	0	0
8:45 AM	1	2	0	0	1	1	0	0
TOTALS	**12**	**19**	**0**	**0**	**9**	**10**	**0**	**0**
	5	9	0	0	3	5	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	1	0	0	0	0	0	0
4:15 PM	1	2	0	0	1	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	1	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTALS	**7**	**4**	**0**	**0**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	1	0	0
4:15 PM	0	1	0	0	0	1	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	1	3	0	0	1	0	0	0
5:00 PM	2	1	0	0	1	0	0	0
5:15 PM	0	2	0	0	1	0	0	0
5:30 PM	0	1	0	0	1	1	0	0
5:45 PM	1	1	0	0	0	1	0	0
TOTALS	**5**	**10**	**0**	**0**	**4**	**4**	**0**	**0**

11

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-008
N/S Street: Hancock St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	2	0	0
7:15 AM	0	1	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	1	2
7:45 AM	2	2	1	1	0	2	1	2
8:00 AM	0	2	1	1	0	0	1	2
8:15 AM	2	2	2	5	0	1	0	3
8:30 AM	0	2	1	0	0	0	0	3
8:45 AM	0	1	1	3	0	3	2	0
TOTALS	**4**	**11**	**7**	**11**	**1**	**9**	**5**	**13**
	2	7	5	9	0	4	3	8

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0
8:00 AM	0	1	2	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**
	0	1	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	1	1	3	1	0	1
4:15 PM	1	1	1	3	1	2	2	4
4:30 PM	1	4	0	2	1	0	2	2
4:45 PM	3	1	2	1	2	2	2	3
5:00 PM	5	2	0	1	0	1	1	1
5:15 PM	0	2	0	4	1	4	0	5
5:30 PM	1	1	0	2	2	2	2	3
5:45 PM	0	4	1	3	0	1	1	1
TOTALS	**11**	**18**	**5**	**17**	**10**	**13**	**10**	**20**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**3**	**1**	**0**	**0**	**0**	**0**

12

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-009
N/S Street: Kemper St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	2	2	3	0	0	0
7:15 AM	1	0	0	0	1	2	0	0
7:30 AM	0	0	0	1	0	1	0	0
7:45 AM	3	0	1	1	3	2	0	1
8:00 AM	0	0	0	0	1	2	1	0
8:15 AM	2	0	2	1	4	2	0	1
8:30 AM	1	0	2	2	2	0	0	0
8:45 AM	1	1	2	1	2	1	0	1
TOTALS	**8**	**2**	**9**	**8**	**16**	**10**	**1**	**3**
	4	1	6	4	9	S	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	1	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0
7:30 AM	0	2	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	1	0	0
8:15 AM	0	0	2	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	3	0	1	1	0	0
TOTALS	**1**	**5**	**9**	**0**	**2**	**3**	**1**	**1**
	0	0	8	0	1	2	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	4	3	1	0	0	0	0
4:45 PM	1	2	2	2	3	0	1	0
5:00 PM	3	1	1	2	5	1	0	1
5:15 PM	2	0	3	0	0	0	1	0
5:30 PM	2	1	1	2	2	0	0	0
5:45 PM	1	0	0	1	0	0	0	0
TOTALS	**10**	**8**	**11**	**8**	**10**	**2**	**2**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	1	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**3**	**6**	**1**	**0**	**0**	**0**	**0**

13

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-010
N/S Street: Sport Arena Driveway
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	1	1	1	0	0	0
7:45 AM	1	0	0	0	1	0	0	0
8:00 AM	0	0	0	1	0	0	0	0
8:15 AM	1	0	0	2	3	0	0	0
8:30 AM	2	0	0	2	1	0	0	0
8:45 AM	1	0	2	2	1	2	0	0
TOTALS	**5**	**0**	**4**	**8**	**9**	**2**	**0**	**0**
	4	0	2	7	5	2	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	1	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**1**	**4**	**3**	**3**	**0**	**0**	**0**	**0**
	0	3	3	2	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	1	1	0	0	0
4:15 PM	3	1	1	0	0	1	0	0
4:30 PM	4	0	1	1	1	1	0	0
4:45 PM	4	1	0	0	0	2	0	0
5:00 PM	2	5	0	1	0	1	0	0
5:15 PM	1	2	3	1	0	1	0	0
5:30 PM	1	0	2	2	0	0	0	0
5:45 PM	1	0	2	1	1	0	0	0
TOTALS	**17**	**9**	**10**	**7**	**3**	**6**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	2	0	0	0	0	0
4:45 PM	0	0	3	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	3	0	0	0	0	0
5:45 PM	1	1	0	0	0	0	0	0
TOTALS	**1**	**3**	**10**	**0**	**0**	**0**	**0**	**0**

14

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-011
N/S Street: East Dr
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	3	3	0	1	1	2	0	0
7:15 AM	3	2	0	2	0	1	0	0
7:30 AM	2	1	2	0	0	1	0	0
7:45 AM	1	0	2	2	0	0	0	0
8:00 AM	0	2	1	0	1	1	0	0
8:15 AM	4	2	0	1	1	4	0	0
8:30 AM	5	3	3	4	1	4	0	0
8:45 AM	4	1	3	3	4	5	0	0
TOTALS	**22**	**14**	**11**	**13**	**8**	**18**	**0**	**0**
	13	8	7	8	7	14	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	1	0	0	0	0	0
7:15 AM	0	0	1	2	1	1	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	2	2	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	1	1	0	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**3**	**10**	**5**	**2**	**1**	**1**	**0**	**0**
	3	4	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	2	0	0	0	0	0	0
4:15 PM	3	1	3	1	0	0	0	0
4:30 PM	2	2	4	6	1	0	0	0
4:45 PM	1	2	3	2	0	0	0	0
5:00 PM	3	3	1	4	1	0	0	0
5:15 PM	2	5	0	3	0	2	0	0
5:30 PM	4	6	1	2	0	0	0	0
5:45 PM	3	2	0	5	0	0	0	0
TOTALS	**24**	**23**	**12**	**23**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	2	0	0	1	0	0	0	0
4:45 PM	3	1	0	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0
TOTALS	**7**	**1**	**1**	**6**	**0**	**0**	**0**	**0**

17

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-012
N/S Street: Pacific Hwy
E/W Street: Sports Arena Blvd
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	2	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**5**
	0	0	0	0	0	0	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	7
7:15 AM	0	0	0	0	0	0	0	8
7:30 AM	0	0	0	0	0	0	1	3
7:45 AM	0	0	0	0	0	0	1	8
8:00 AM	0	0	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	1	5
8:30 AM	0	0	0	0	0	0	1	9
8:45 AM	0	0	0	0	0	0	0	5
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**51**
	0	0	0	0	0	0	3	28

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**

18

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-013
N/S Street: Kurtz St
E/W Street: Hancock St
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**
	0	0	3	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
	0	0	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

19

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-014
N/S Street: Camino Del Rio W
E/W Street: Kurtz St
DATE: 5/19/2011
CITY: San Diego

DAY: Thursday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	2	0	0	0	0
7:15 AM	0	0	2	2	1	0	0	0	0	0
7:30 AM	0	0	2	3	2	1	1	0	1	1
7:45 AM	0	0	0	3	0	0	1	0	0	1
8:00 AM	0	0	1	3	0	0	0	0	0	0
8:15 AM	0	0	2	3	1	1	0	1	1	0
8:30 AM	0	0	0	1	1	1	1	0	1	0
8:45 AM	0	0	2	1	4	2	0	1	1	1
TOTALS	**0**	**0**	**9**	**21**	**9**	**7**	**3**	**2**	**4**	**3**
	0	0	5	8	6	4	1	2	3	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	2	1	0	0	0	0
8:15 AM	0	0	2	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	1	2	0	0	0	1
TOTALS	**0**	**0**	**8**	**3**	**1**	**0**	**0**	**2**
	0	0	6	3	0	0	0	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	1	5	0	1	0	0	0	0
4:15 PM	0	0	4	6	0	2	0	0	0	0
4:30 PM	0	0	2	2	2	0	1	5	0	0
4:45 PM	0	0	1	3	2	2	0	0	1	1
5:00 PM	0	0	3	3	7	3	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	7	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0
4:45 PM	0	0	2	2	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	2	1	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

21

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-015
N/S Street: Pacific Hwy
E/W Street: Kurtz St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
	0	0	0	0	0	0	0	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	8
7:15 AM	0	0	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	11
8:15 AM	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**51**
	0	0	0	0	0	0	1	27

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

22

PROJECT#: 11-4167-002
N/S Street: Hancock St
E/W Street: Channel Way
DATE: 6/9/2011
DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	1	0
TOTALS	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

25

PROJECT#: 11-4140-021
N/S Street: Hancock St
E/W Street: Old Towne Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
	2	1	0	0	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	2	0	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-022
N/S Street: Hancock St
E/W Street: Witherby St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	0	0	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	0	0	1	0	1	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	1	1	0	0
TOTALS	**0**	**0**	**6**	**1**	**2**	**2**	**0**	**1**
	0	0	6	0	1	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**
	0	0	0	1	0	2	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	2	0
4:30 PM	0	0	1	1	0	0	2	1
4:45 PM	0	0	0	1	0	0	2	0
5:00 PM	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	2	1	1	0	1	4
TOTALS	**0**	**0**	**4**	**3**	**2**	**0**	**9**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	2	0	2	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	2	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

28

PROJECT#: 11-4140-023
N/S Street: Kettner Blvd
E/W Street: Vine St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
	0	0	0	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
	0	0	0	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**

31

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-018
N/S Street: Pacific Hwy
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**
	0	0	0	0	0	0	2	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
	0	0	0	0	0	0	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-016
N/S Street: Taylor St
E/W Street: Morena Blvd
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	1	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	1	0	0
8:30 AM	0	0	0	0	3	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**4**	**2**	**1**	**0**
	0	0	1	0	3	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	1	5
7:30 AM	0	0	1	1	2	0	1	0
7:45 AM	0	0	2	1	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	1	1	0	1	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**5**	**3**	**3**	**0**	**5**	**11**
	0	0	1	1	1	0	1	4

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	1	0	0	1	0
4:45 PM	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	2	0	0	0
5:15 PM	0	0	0	1	1	0	2	2
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**1**	**2**	**4**	**2**	**5**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	1	2	0	1	1
4:30 PM	0	0	1	0	2	0	1	1
4:45 PM	0	0	1	0	2	0	1	0
5:00 PM	0	0	1	1	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	2	3	0	0	1
5:45 PM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**3**	**5**	**12**	**0**	**4**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

37

PROJECT#: 11-4140-033
N/S Street: Old Towne Ave
E/W Street: Moore St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	2	0	0	0	0	2	0	0
8:00 AM	2	1	0	0	0	0	0	0
8:15 AM	2	1	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**6**	**5**	**0**	**0**	**1**	**3**	**0**	**0**
	6	2	0	0	0	3	0	0

0 1.3541667

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
	0	0	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	2	0	0	0
4:15 PM	1	1	0	0	1	1	0	0
4:30 PM	0	1	0	0	2	0	0	0
4:45 PM	0	1	0	0	1	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	1	0	1	0	0	1	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**4**	**5**	**2**	**0**	**6**	**2**	**1**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-027
N/S Street: Twiggs St
E/W Street: Congress St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	2	7	0	0	0	0
7:15 AM	0	1	2	1	0	1	0	0
7:30 AM	1	1	3	1	0	0	0	0
7:45 AM	1	0	2	0	0	0	0	0
8:00 AM	0	0	5	0	0	0	0	0
8:15 AM	0	2	1	1	0	0	0	0
8:30 AM	2	1	9	3	0	0	0	0
8:45 AM	1	2	10	1	0	0	0	0
TOTALS	**6**	**8**	**34**	**14**	**0**	**1**	**0**	**0**
	3	5	25	5	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	2	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0
8:30 AM	0	3	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**3**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	3	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	8	9	7	0	0	1	8
4:15 PM	0	4	15	7	0	2	0	7
4:30 PM	1	2	6	9	5	5	0	2
4:45 PM	4	10	4	9	0	4	0	2
5:00 PM	5	3	16	5	1	1	2	0
5:15 PM	8	9	13	8	2	5	6	4
5:30 PM	7	5	12	4	4	0	2	8
5:45 PM	3	3	10	9	3	6	0	5
TOTALS	**34**	**44**	**85**	**58**	**15**	**23**	**11**	**36**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	2	1	0	0	0	0	0
4:45 PM	0	2	4	0	0	4	0	0
5:00 PM	1	2	0	0	0	0	0	0
5:15 PM	1	1	1	0	0	2	0	0
5:30 PM	1	0	1	0	0	0	0	0
5:45 PM	0	5	0	0	0	0	0	0
TOTALS	**4**	**14**	**8**	**0**	**0**	**6**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

40

PROJECT#: 11-4140-028
N/S Street: Harney St
E/W Street: Congress St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	0	0	0
7:15 AM	0	1	2	2	0	0	1	0
7:30 AM	1	0	2	2	1	1	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	4	0	0	0	0	0
8:15 AM	0	2	2	1	2	0	0	1
8:30 AM	2	1	5	2	0	0	0	0
8:45 AM	3	0	3	1	0	0	1	0
TOTALS	**6**	**4**	**20**	**13**	**3**	**1**	**2**	**1**
	5	3	14	4	2	0	1	1 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0
7:45 AM	0	3	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	2	0	0	0	0	0
8:30 AM	1	3	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	2	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	4	0	2	0	0	6	1
4:15 PM	0	0	6	4	4	3	2	1
4:30 PM	0	2	2	1	0	0	4	2
4:45 PM	2	4	5	3	1	3	4	0
5:00 PM	0	4	3	4	0	0	4	0
5:15 PM	0	0	6	2	0	0	3	2
5:30 PM	3	5	3	5	1	1	2	1
5:45 PM	2	1	3	2	0	0	3	0
TOTALS	**8**	**20**	**28**	**23**	**6**	**7**	**28**	**7**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	0	2	1	0	0	0	0	0
4:45 PM	0	1	3	0	0	0	0	0
5:00 PM	0	2	1	0	0	0	0	0
5:15 PM	0	1	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	3	0	0	0	0	0	0
TOTALS	**0**	**11**	**8**	**0**	**0**	**0**	**0**	**0**

41

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-029
N/S Street: Congress St/Ampudia St
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	2	0	0	1	0	1	0	0	0
7:45 AM	0	0	1	0	2	0	0	1	0	0
8:00 AM	2	0	0	0	3	2	0	0	0	0
8:15 AM	2	1	0	0	1	2	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0
TOTALS	**4**	**3**	**1**	**0**	**8**	**4**	**1**	**3**	**1**	**0**
	4	1	0	0	5	4	0	1	1	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	1	0
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	3	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**2**	**0**	**0**	**2**	**0**
	0	0	3	0	0	0	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	1	2	0	2
4:15 PM	0	0	0	0	3	0	1	4	0	3
4:30 PM	0	1	0	0	4	1	3	5	1	4
4:45 PM	0	0	0	0	3	2	2	3	2	2
5:00 PM	2	4	0	0	3	1	1	0	4	0
5:15 PM	1	0	0	0	2	2	2	0	2	0
5:30 PM	2	1	1	0	3	0	2	3	2	3
5:45 PM	0	2	0	0	0	1	1	2	0	1
TOTALS	**5**	**8**	**1**	**0**	**19**	**7**	**13**	**19**	**11**	**15**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	1	0
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	1	0	1	0	1	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0
TOTALS	**0**	**0**	**7**	**1**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

42

PROJECT#: 11-4140-030
N/S Street: Twiggs St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	3	0	1	0	0	0
7:15 AM	3	6	5	3	1	1	0	0
7:30 AM	4	8	9	5	0	4	0	0
7:45 AM	10	15	13	13	2	0	0	0
8:00 AM	12	22	12	8	5	9	0	0
8:15 AM	15	10	11	7	6	6	0	0
8:30 AM	18	11	9	15	3	11	0	0
8:45 AM	25	21	15	11	8	14	0	0
TOTALS	**88**	**94**	**77**	**62**	**26**	**45**	**0**	**0**
	70	64	47	41	22	40	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	22	26	25	8	5	8	0	0
4:15 PM	12	12	25	29	5	11	0	0
4:30 PM	33	16	22	8	4	11	0	0
4:45 PM	15	26	37	19	11	21	0	0
5:00 PM	25	29	21	16	3	10	0	0
5:15 PM	15	12	29	27	3	11	0	0
5:30 PM	34	13	17	10	4	10	0	0
5:45 PM	19	23	41	29	8	19	0	0
TOTALS	**175**	**157**	**217**	**146**	**43**	**101**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-031
N/S Street: Harney St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

43

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	5	1	2	3	0	1	0
7:15 AM	7	12	9	2	2	2	1	2
7:30 AM	14	8	12	10	10	13	11	6
7:45 AM	14	21	15	17	7	9	10	10
8:00 AM	13	29	14	11	12	10	8	7
8:15 AM	21	18	14	10	10	7	12	4
8:30 AM	18	15	12	19	2	11	2	9
8:45 AM	31	25	13	11	14	16	12	11
TOTALS	**118**	**133**	**90**	**82**	**60**	**68**	**57**	**49**
	83	87	53	51	38	44	34	31

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0
8:30 AM	2	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**4**	**0**	**2**	**2**	**0**	**0**	**0**	**0**
	3	0	2	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	52	28	36	28	17	9	0	9
4:15 PM	48	32	24	17	7	3	5	12
4:30 PM	48	28	24	16	7	10	14	5
4:45 PM	40	25	30	23	13	5	7	2
5:00 PM	30	26	37	25	5	7	15	4
5:15 PM	31	26	26	16	14	6	6	23
5:30 PM	36	39	17	35	7	12	1	16
5:45 PM	46	58	16	33	11	9	7	12
TOTALS	**331**	**262**	**210**	**193**	**81**	**61**	**55**	**83**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	3	1	0	1	0	0	0	0
4:30 PM	3	3	0	3	1	0	0	0
4:45 PM	0	1	2	0	0	0	0	0
5:00 PM	3	0	2	0	2	0	0	0
5:15 PM	0	1	0	2	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0
5:45 PM	0	3	1	0	0	1	0	0
TOTALS	**9**	**10**	**6**	**6**	**3**	**1**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

44

PROJECT#: 11-4140-032
N/S Street: Old Towne Ave
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	2	1	0	0	0	1	0
8:00 AM	0	4	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	1	0	0	1	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**4**	**7**	**4**	**1**	**0**	**0**	**4**	**2**
	0	4	2	1	0	0	3	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**
	0	1	2	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	1	0	0
4:15 PM	0	2	3	2	2	0	0	1
4:30 PM	2	2	2	3	0	1	2	0
4:45 PM	1	0	2	1	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	1	2	1	0	0	0	0	0
5:30 PM	1	4	1	1	0	2	2	3
5:45 PM	2	0	1	1	0	1	0	0
TOTALS	**10**	**10**	**10**	**9**	**2**	**5**	**4**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0
TOTALS	**1**	**10**	**2**	**0**	**0**	**0**	**0**	**1**

45

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-017
N/S Street: Taylor St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	1	1	2	0
7:30 AM	1	0	0	0	1	1	0	0
7:45 AM	1	1	0	0	3	1	0	0
8:00 AM	0	1	0	0	1	2	0	0
8:15 AM	1	0	0	0	2	1	0	0
8:30 AM	0	0	0	0	5	2	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**14**	**8**	**2**	**0**
	1	1	0	0	8	5	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	1
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	1
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**0**	**3**	**0**	**1**	**0**	**2**	**5**
	0	0	2	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	1	2	1	0	0
4:15 PM	1	1	0	1	1	4	0	0
4:30 PM	0	0	0	0	0	3	1	0
4:45 PM	0	0	1	4	2	0	0	1
5:00 PM	0	0	0	1	1	2	2	0
5:15 PM	0	2	0	0	0	4	9	0
5:30 PM	0	0	0	1	0	3	0	0
5:45 PM	1	0	0	2	1	0	4	0
TOTALS	**2**	**4**	**1**	**10**	**7**	**17**	**16**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	1	0
4:30 PM	2	0	0	0	0	0	1	2
4:45 PM	0	0	1	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**2**	**0**	**1**	**0**	**4**	**6**

46

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-034
N/S Street: Twiggs St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	4	2	0	0	2	0	0
7:30 AM	0	1	0	1	0	0	0	0
7:45 AM	1	0	1	1	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0
8:45 AM	0	5	2	2	1	1	0	0
TOTALS	**1**	**12**	**5**	**6**	**1**	**3**	**0**	**0**
	0	7	2	3	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1
7:45 AM	2	0	0	0	1	0	0	0
8:00 AM	1	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**6**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
	3	0	0	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	0
4:45 PM	0	0	2	6	0	18	2	0
5:00 PM	0	0	1	0	1	11	0	0
5:15 PM	0	0	2	0	2	4	0	0
5:30 PM	0	0	1	0	0	0	1	1
5:45 PM	0	0	6	0	6	1	8	0
TOTALS	**0**	**0**	**14**	**6**	**9**	**37**	**11**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

47

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-035
N/S Street: Harney St
E/W Street: Juan St
DATE: 5/18/2011
DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	7	0	0	0	0	1	3
7:15 AM	0	1	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	4
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0
TOTALS	**3**	**8**	**2**	**1**	**0**	**2**	**1**	**7**
	1	1	1	1	0	2	0	4

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**
	0	2	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	3	0	2	2	2
4:15 PM	0	0	2	1	2	0	2	1
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	1	2	0	0	1	0	5	0
5:00 PM	2	4	2	1	3	4	3	0
5:15 PM	3	1	2	4	0	2	2	2
5:30 PM	0	0	0	2	0	1	0	0
5:45 PM	0	2	1	0	2	0	3	4
TOTALS	**7**	**10**	**7**	**11**	**8**	**9**	**19**	**9**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0
TOTALS	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**1**

Table 3.1
Rosecrans Corridor 2-Hour AM Peak Period Pedestrian Counts

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Taylor Street / Congress Street	61	82 (Taylor St.)	29 (Congress St.)	15 (Taylor St.)	187
Rosecrans Street-Taylor Street / Pacific Highway	34 (PCH)	129 (Taylor St.)	21 (PCH)	61 (Rosecrans St.)	245
Rosecrans Street / Jefferson Street	69 (Jefferson St.)	1 (Rosecrans St.)	0 (Jefferson St.)	0 (Rosecrans St.)	70
Rosecrans Street / Moore Street	37 (Moore St.)	4 (Rosecrans St.)	0 (Moore St.)	4 (Rosecrans St.)	45
Rosecrans Street / Hancock Street	30 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	30
Rosecrans Street / Kurtz Street	47 (Kurtz St.)	4 (Rosecrans St.)	21 (Kurtz St.)	2 (Rosecrans St.)	74
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	9 (Sports Arena Blvd.)	9 (Rosecrans St.)	45 (Sports Arena Blvd.)	18 (Rosecrans St.)	100
Rosecrans Street / Midway Drive	18 (Midway Dr.)	14 (Rosecrans St.)	27 (Midway Dr.)	25 (Rosecrans St.)	84
Rosecrans Street / N. Evergreen Street	8 (Evergreen St.)	6 (Rosecrans St.)	5 (Evergreen St.)	0 (Rosecrans St.)	19
Rosecrans Street / Lytton Street	8 (Lytton St.)	0 (Rosecrans St.)	0 (Lytton St.)	3 (Rosecrans St.)	11
Rosecrans Street / Roosevelt Road	0	15 (Rosecrans St.)	11 (Roosevelt Rd.)	2 (Rosecrans St.)	28
Rosecrans Street / Curtis Street	9 (Curtis St.)	0 (Rosecrans St.)	0	0 (Rosecrans St.)	9
Rosecrans Street / Womble Road		82 (Rosecrans St.)	12 (Womble Rd.)	0 (Rosecrans St.)	94
Rosecrans Street / Xenophon Street	17 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	17
Rosecrans Street / Farragut Road-Voltaire Street	4 (Voltaire St.)	5 (Rosecrans St.)	17 (Farragut Rd.)	12 (Rosecrans St.)	38
Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	1 (Laning Rd.)	1 (Rosecrans St.)	2
Rosecrans Street / Oliphant Street	8 (Oliphant St.)	0 (Rosecrans St.)	8	0 (Rosecrans St.)	16
Rosecrans Street / Macualay Street	18 (Macualay St.)	1 (Rosecrans St.)	5 (DW)	3 (Rosecrans St.)	27
Rosecrans Street / Nimitz Boulevard	23 (Nimitz Blvd.)	14 (Rosecrans St.)	24 (Nimitz Blvd.)	19 (Rosecrans St.)	80
Rosecrans Street / Jarvis Street	23 (Jarvis St.)	8 (Rosecrans St.)	9 (Jarvis St.)	11 (Rosecrans St.)	51
Rosecrans Street / N. Harbor Drive-Hugo Street	14 (Hugo St.)	13 (Rosecrans St.)	16 (Harbor Dr.)	13 (Rosecrans St.)	56
Rosecrans Street / Garrison Street	11 (Garrison St.)	0 (Rosecrans St.)	0 (Garrison St.)	0 (Rosecrans St.)	11
Rosecrans Street / Carleton Street	25 (Carleton St.)	16 (Rosecrans St.)	11 (Carleton St.)	13 (Rosecrans St.)	65
Rosecrans Street / Shelter Island Drive-Byron Street	10 (Byron St.)	11 (Rosecrans St.)	14 (Shelter Island Dr.)	13 (Rosecrans St.)	48

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	15 (Canon St.)	23 (Rosecrans St.)	24 (Canon St.)	10 (Rosecrans St.)	72
Rosecrans Street / Talbot Street	10 (Talbot St.)	14 (Rosecrans St.)	5 (Talbot St.)	13 (Rosecrans St.)	42
Camino del Rio W. / Moore Street	1 (Moore St.)	0 (Camino del Rio)	0 (Moore St.)	3 (Camino del Rio)	4
#23 Camino del Rio W. / Hancock Street	0 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	0
#19 Camino del Rio W. / Kurtz Street	0 (Kurtz St.)	0 (Rosecrans St.)	0 (Kurtz St.)	0 (Rosecrans St.)	0
TOTAL	509	451	305	241	1,525

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 4 pedestrians along the northwest leg of the intersection (Camino del Rio) and 15 pedestrians along the south leg (Rosecrans St.).

Table 3.2
Rosecrans Corridor 2-Hour PM Peak Period Pedestrian Counts

	Intersection	West Leg	North Leg	East Leg	South Leg	Total
#38	Taylor Street / Congress Street	46	26 (Taylor St.)	81 (Congress St.)	53 (Taylor St.)	206
#36	Rosecrans Street-Taylor Street / Pacific Highway	23 (PCH)	170 (Taylor St.)	15 (PCH)	27 (Rosecrans St.)	235
	Rosecrans Street / Jefferson Street	86 (Jefferson St.)	0 (Rosecrans St.)	0 (Jefferson St.)	2 (Rosecrans St.)	88
	Rosecrans Street / Moore Street	57 (Moore St.)	7 (Rosecrans St.)	2 (Moore St.)	0 (Rosecrans St.)	66
#24	Rosecrans Street / Hancock Street	66 (Hancock St.)	0 (Rosecrans St.)	145 (Hancock St.)	0 (Rosecrans St.)	211
#20	Rosecrans Street / Kurtz Street	51 (Kurtz St.)	17 (Rosecrans St.)	43 (Kurtz St.)	3 (Rosecrans St.)	114
#15	Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	31 (Sports Arena Blvd.)	10 (Rosecrans St.)	29 (Sports Arena Blvd.)	63 (Rosecrans St.)	156
#7	Rosecrans Street / Midway Drive	48 (Midway Dr.)	40 (Rosecrans St.)	65 (Midway Dr.)	42 (Rosecrans St.)	195
	Rosecrans Street / N. Evergreen Street	11 (Evergreen St.)	11 (Rosecrans St.)	8 (Evergreen St.)	1 (Rosecrans St.)	31
#1	Rosecrans Street / Lytton Street	6 (Lytton St.)	6 (Rosecrans St.)	1 (Lytton St.)	0 (Rosecrans St.)	13
	Rosecrans Street / Roosevelt Road	0	7 (Rosecrans St.)	4 (Roosevelt Rd.)	0 (Rosecrans St.)	11
	Rosecrans Street / Curtis Street	5 (Curtis St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	5
	Rosecrans Street / Womble Road		32 (Rosecrans St.)	7 (Womble Rd.)	0 (Rosecrans St.)	39
	Rosecrans Street / Xenophon Street	6 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	6
	Rosecrans Street / Farragut Road-Voltaire Street	1 (Voltaire St.)	5 (Rosecrans St.)	13 (Farragut Rd.)	20 (Rosecrans St.)	39
#51	Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	3 (Laning Rd.)	0 (Rosecrans St.)	3
	Rosecrans Street / Oliphant Street	34 (Oliphant St.)	0 (Rosecrans St.)	47	0 (Rosecrans St.)	81
	Rosecrans Street / Macualay Street	8 (Macualay St.)	0 (Rosecrans St.)	12 (DW)	1 (Rosecrans St.)	21
#50	Rosecrans Street / Nimitz Boulevard	26 (Nimitz Blvd.)	25 (Rosecrans St.)	26 (Nimitz Blvd.)	41 (Rosecrans St.)	118
	Rosecrans Street / Jarvis Street	19 (Jarvis St.)	2 (Rosecrans St.)	20 (Jarvis St.)	5 (Rosecrans St.)	46
#49	Rosecrans Street / N. Harbor Drive-Hugo Street	4 (Hugo St.)	5 (Rosecrans St.)	3 (Harbor Dr.)	6 (Rosecrans St.)	18
	Rosecrans Street / Garrison Street	34 (Garrison St.)	0 (Rosecrans St.)	47 (Garrison St.)	0 (Rosecrans St.)	81
	Rosecrans Street / Carleton Street	15 (Carleton St.)	22 (Rosecrans St.)	10 (Carleton St.)	11 (Rosecrans St.)	58
	Rosecrans Street / Shelter Island Drive-Byron Street	9 (Byron St.)	8 (Rosecrans St.)	15 (Shelter Island Dr.)	19 (Rosecrans St.)	51

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	11 (Canon St.)	25 (Rosecrans St.)	28 (Canon St.)	11 (Rosecrans St.)	75
Rosecrans Street / Talbot Street	9 (Talbot St.)	20 (Rosecrans St.)	13 (Talbot St.)	19 (Rosecrans St.)	61
Camino del Rio W. / Moore Street	0 (Moore St.)	0 (Camino del Rio)	1 (Moore St.)	0 (Camino del Rio)	1
#23 Camino del Rio W. / Hancock Street	15 (Hancock St.)	20 (Rosecrans St.)	2 (Hancock St.)	1 (Rosecrans St.)	38
#19 Camino del Rio W. / Kurtz Street	15 (Kurtz St.)	20 (Rosecrans St.)	2 (Kurtz St.)	1 (Rosecrans St.)	38
TOTAL	636	478	642	326	2,105

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 9 pedestrians along the northwest leg of the intersection (Camino del Rio) and 14 pedestrians along the south leg (Rosecrans St.).

Table 5.1
Rosecrans Corridor 2-Hour AM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	3/9	0/0 (Taylor St.)	7/0 (Congress St.)	0/0 (Taylor St.)	19
Rosecrans Street - Taylor Street / Pacific Coast Highway	3/10 (PCH)	5/0 (Taylor St.)	7/0 (PCH)	0/5 (Rosecrans St.)	30
Rosecrans Street / Jefferson Street	2/13 (Jefferson St.)	0/0 (Rosecrans St.)	0/0 (Jefferson St.)	0/0 (Rosecrans St.)	15
Rosecrans Street / Moore Street	4/12 (Moore St.)	0/0 (Rosecrans St.)	10/2 (Moore St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Hancock Street	4/12 (Hancock St.)	0/0 (Rosecrans St.)	10/2 (Hancock St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Kurtz Street	1/8 (Kurtz St.)	2/0 (Rosecrans St.)	14/0 (Kurtz St.)	0/1 (Rosecrans St.)	26
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	0/0 (Sports Arena Blvd.)	0/1 (Rosecrans St.)	7/3 (Sports Arena Blvd.)	0/6 (Rosecrans St.)	20
Rosecrans Street / Midway Drive	0/7 (Midway Dr.)	3/1 (Rosecrans St.)	6/3 (Midway Dr.)	2/3 (Rosecrans St.)	25
Rosecrans Street / N. Evergreen Street	0/6 (Evergreen St.)	1/2 (Rosecrans St.)	6/2 (Evergreen St.)	0/0 (Rosecrans St.)	17
Rosecrans Street / Lytton Street	0/5 (Lytton St.)	2/1 (Rosecrans St.)	1/0 (Lytton St.)	0/0 (Rosecrans St.)	9
Rosecrans Street / Roosevelt Road	1/6	0/1 (Rosecrans St.)	7/1 (Roosevelt Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Curtis Street	1/6 (Curtis St.)	3/0 (Rosecrans St.)	0/0	1/3 (Rosecrans St.)	14
Rosecrans Street / Womble Road		2/4 (Rosecrans St.)	9/1 (Womble Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Xenophon Street	0/2 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	2
Rosecrans Street / Farragut Road-Voltaire Street	0/5 (Voltaire St.)	0/0 (Rosecrans St.)	3/0 (Farragut Rd.)	0/0 (Rosecrans St.)	8
Rosecrans Street / Russell Street-Laning Road	0/4 (Russell St.)	5/0 (Rosecrans St.)	17/0 (Laning Rd.)	0/12 (Rosecrans St.)	38
Rosecrans Street / Oliphant Street	0/4 (Oliphant St.)	0/0 (Rosecrans St.)	8/0	0/0 (Rosecrans St.)	12
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	7/1 (DW)	0/0 (Rosecrans St.)	13
Rosecrans Street / Nimitz Boulevard	1/4 (Nimitz Blvd.)	12/0 (Rosecrans St.)	8/1 (Nimitz Blvd.)	0/6 (Rosecrans St.)	32
Rosecrans Street / Jarvis Street	0/13 (Jarvis St.)	0/0 (Rosecrans St.)	5/0 (Jarvis St.)	1/0 (Rosecrans St.)	19
Rosecrans Street / N. Harbor Drive-Hugo Street	0/3 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/1 (Rosecrans St.)	7
Rosecrans Street / Garrison Street	0/4 (Garrison St.)	0/0	8/0 (Garrison St.)	0/0 (Rosecrans St.)	12
Rosecrans Street / Carleton Street	1/3 (Carleton St.)	1/0 (Rosecrans St.)	3/0 (Carleton St.)	1/0 (Rosecrans St.)	9

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/4 *(Byron St.)*	2/1 *(Rosecrans St.)*	2/0 *(Shelter Island Dr.)*	0/0 *(Rosecrans St.)*	9
Rosecrans Street / Canon Street	0/5 *(Canon St.)*	10/0 *(Rosecrans St.)*	2/0 *(Canon St.)*	0/12 *(Rosecrans St.)*	29
Rosecrans Street / Talbot Street	0/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	2/0 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6
Camino del Rio W. / Moore Street	0/6 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	3/0 *(Camino del Rio)*	9
#23 Camino del Rio W. / Hancock Street	0/1 *(Hancock St.)*	2/0 *(Rosecrans St.)*	1/0 *(Hancock St.)*	0/0 *(Rosecrans St.)*	4
#19 Camino del Rio W. / Kurtz Street	0/1 *(Kurtz St.)*	2/0 *(Rosecrans St.)*	1/0 *(Kurtz St.)*	0/0 *(Rosecrans St.)*	4
TOTAL	183	63	170	57	476

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 1 bicyclist southwest bound along the northwest leg of the intersection (Camino del Rio) and 0 west bound and 2 east bound along the south leg (Rosecrans St.).

Table 5.2
Rosecrans Corridor 2-Hour PM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	9/12	4/0 (Taylor St.)	18/2 (Congress St.)	1/1 (Taylor St.)	47
Rosecrans Street-Taylor Street / Pacific Coast Highway	9/12 (PCH)	21/2 (Taylor St.)	15/3 (PCH)	1/9 (Rosecrans St.)	72
Rosecrans Street / Jefferson Street	7/28 (Jefferson St.)	0/0 (Rosecrans St.)	4/1 (Jefferson St.)	0/0 (Rosecrans St.)	40
Rosecrans Street / Moore Street	4/20 (Moore St.)	0/0 (Rosecrans St.)	20/2 (Moore St.)	0/0 (Rosecrans St.)	46
Rosecrans Street / Hancock Street	1/1 (Hancock St.)	0/0 (Rosecrans St.)	20/5 (Hancock St.)	0/0 (Rosecrans St.)	27
Rosecrans Street / Kurtz Street	2/3 (Kurtz St.)	29/1 (Rosecrans St.)	3/0 (Kurtz St.)	3/15 (Rosecrans St.)	56
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	2/3 (Sports Arena Blvd.)	2/2 (Rosecrans St.)	6/4 (Sports Arena Blvd.)	6/13 (Rosecrans St.)	43
Rosecrans Street / Midway Drive	3/7 (Midway Dr.)	5/4 (Rosecrans St.)	8/3 (Midway Dr.)	0/7 (Rosecrans St.)	37
Rosecrans Street / N. Evergreen Street	2/5 (Evergreen St.)	0/2 (Rosecrans St.)	3/1 (Evergreen St.)	0/1 (Rosecrans St.)	14
Rosecrans Street / Lytton Street	0/3 (Lytton St.)	1/0 (Rosecrans St.)	2/0 (Lytton St.)	1/3 (Rosecrans St.)	10
Rosecrans Street / Roosevelt Road	2/1	0/2 (Rosecrans St.)	7/2 (Roosevelt Rd.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Curtis Street	0/1 (Curtis St.)	0/0 (Rosecrans St.)	0/0	0/0 (Rosecrans St.)	1
Rosecrans Street / Womble Road		2/2 (Rosecrans St.)	6/1 (Womble Rd.)	0/0 (Rosecrans St.)	11
Rosecrans Street / Xenophon Street	0/6 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	6
Rosecrans Street / Farragut Road-Voltaire Street	0/9 (Voltaire St.)	0/0 (Rosecrans St.)	10/0 (Farragut Rd.)	0/0 (Rosecrans St.)	19
Rosecrans Street / Russell Street-Laning Road	0/1 (Russell St.)	5/0 (Rosecrans St.)	11/0 (Laning Rd.)	0/20 (Rosecrans St.)	37
Rosecrans Street / Oliphant Street	0/3 (Oliphant St.)	0/0 (Rosecrans St.)	11/0	0/0 (Rosecrans St.)	14
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	6/2 (DW)	0/1 (Rosecrans St.)	14
Rosecrans Street / Nimitz Boulevard	0/2 (Nimitz Blvd.)	12/1 (Rosecrans St.)	6/2 (Nimitz Blvd.)	0/8 (Rosecrans St.)	31
Rosecrans Street / Jarvis Street	0/0 (Jarvis St.)	9/0 (Rosecrans St.)	0/0 (Jarvis St.)	0/1 (Rosecrans St.)	10
Rosecrans Street / N. Harbor Drive-Hugo Street	0/2 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/4 (Rosecrans St.)	9
Rosecrans Street / Garrison Street	0/3 (Garrison St.)	0/0 (Rosecrans St.)	11/0 (Garrison St.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Carleton Street	1/1 (Carleton St.)	1/0 (Rosecrans St.)	5/4 (Carleton St.)	1/0 (Rosecrans St.)	13

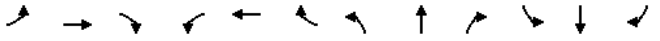
Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/2 *(Byron St.)*	5/0 *(Rosecrans St.)*	4/1 *(Shelter Island Dr.)*	1/0 *(Rosecrans St.)*	13
Rosecrans Street / Canon Street	1/5 *(Canon St.)*	12/0 *(Rosecrans St.)*	8/1 *(Canon St.)*	0/6 *(Rosecrans St.)*	33
Rosecrans Street / Talbot Street	1/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6/1 *(Talbot St.)*	0/0 *(Rosecrans St.)*	12
Camino del Rio W. / Moore Street	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0
Camino del Rio W. / Hancock Street	0/12 *(Hancock St.)*	8/0 *(Rosecrans St.)*	0/0 *(Hancock St.)*	0/2 *(Rosecrans St.)*	22
Camino del Rio W. / Kurtz Street	0/12 *(Kurtz St.)*	8/0 *(Rosecrans St.)*	0/0 *(Kurtz St.)*	0/2 *(Rosecrans St.)*	22
TOTAL	207	140	228	107	687

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:
*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 2 bicyclists southwest bound along the northwest leg of the intersection (Camino del Rio) and 2 bicyclists west bound and 1 bicyclist east bound along the south leg (Rosecrans St.).

Appendix E
Peak Hour Intersection Worksheets – Existing Conditions

Existing AM
1: Rosecrans St. & Lytton St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Volume (vph)	3	1019	308	142	1311	161	349	285	15	546	254	77
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	1084	328	151	1395	171	371	303	16	581	270	82
RTOR Reduction (vph)	0	0	227	0	0	68	0	0	12	0	8	0
Lane Group Flow (vph)	3	1084	101	151	1395	103	371	303	4	581	344	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	0.8	38.9	38.9	7.6	45.6	45.6	17.6	28.6	28.6	37.4	46.6	
Effective Green, g (s)	1.2	40.2	40.2	8.0	47.0	47.0	18.0	29.4	29.4	36.4	47.8	
Actuated g/C Ratio	0.01	0.31	0.31	0.06	0.36	0.36	0.14	0.23	0.23	0.28	0.37	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	16	1572	483	211	1279	542	475	421	353	496	659	
v/s Ratio Prot	0.00	0.21		c0.04	c0.39		c0.11	c0.16		c0.33	0.19	
v/s Ratio Perm			0.06			0.07			0.00			
v/c Ratio	0.19	0.69	0.21	0.72	1.09	0.19	0.78	0.72	0.01	1.17	0.52	
Uniform Delay, d1	63.9	39.4	33.2	59.9	41.5	28.4	54.1	46.5	39.0	46.8	32.2	
Progression Factor	1.00	1.00	1.00	1.39	0.60	0.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	2.5	1.0	5.9	49.6	0.5	7.5	6.1	0.0	96.9	0.3	
Delay (s)	66.0	41.9	34.2	89.4	74.3	15.1	61.6	52.6	39.0	143.7	32.5	
Level of Service	E	D	C	F	E	B	E	D	D	F	C	
Approach Delay (s)		40.2			69.7			57.2			101.7	
Approach LOS		D			E			E			F	

Intersection Summary				
HCM Average Control Delay	65.4	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/5/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	452	1054	306	0	0	428
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	1158	333	0	0	465
RTOR Reduction (vph)	0	540	0	0	0	0
Lane Group Flow (vph)	497	618	333	0	0	465
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	10.7	10.7	13.9			13.9
Effective Green, g (s)	10.7	10.7	13.9			13.9
Actuated g/C Ratio	0.28	0.28	0.36			0.36
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	952	773	1274			671
v/s Ratio Prot	0.14		0.09			c0.25
v/s Ratio Perm		c0.22				
v/c Ratio	0.52	0.80	0.26			0.69
Uniform Delay, d1	11.8	13.0	8.7			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.2	5.4	0.0			2.5
Delay (s)	12.0	18.4	8.8			13.0
Level of Service	B	B	A			B
Approach Delay (s)	16.5		8.8			13.0
Approach LOS	B		A			B

Intersection Summary				
HCM Average Control Delay	14.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	57.0%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
3: Channel Way & W Mission Bay Dr 4/5/2012

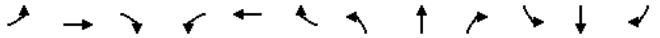


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	34	921	41	0	897
Peak Hour Factor	0.65	0.65	0.92	0.92	0.91	0.91
Hourly flow rate (vph)	0	52	1001	45	0	986
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked						
vC, conflicting volume	1352	359			1046	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1352	359			1046	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	141	636			661	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	52	400	400	245	329	329	329
Volume Left	0	0	0	0	0	0	0
Volume Right	52	0	0	45	0	0	0
cSH	636	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.24	0.24	0.14	0.19	0.19	0.19
Queue Length 95th (ft)	7	0	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	11.2	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	29.7%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
4: Sports Arena & W Mission Bay Dr 4/5/2012

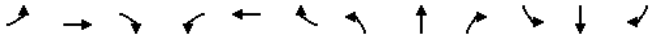


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Volume (vph)	412	277	244	16	125	223	149	327	19	298	428	171
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.79	0.79	0.79	0.94	0.94	0.94
Adj. Flow (vph)	438	295	260	19	147	262	189	414	24	317	455	182
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	357	376	122	19	147	262	189	414	24	249	523	182
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Split		pm+ov	Split		Free	Split		Free	Split		Free
Protected Phases	2	2	3	1	1		3	3		4	4	
Permitted Phases			2			Free			Free			Free
Actuated Green, G (s)	32.2	32.2	54.0	19.4	19.4	119.4	21.8	21.8	119.4	26.3	26.3	119.4
Effective Green, g (s)	33.1	33.1	55.8	20.4	20.4	119.4	22.7	22.7	119.4	27.2	27.2	119.4
Actuated g/C Ratio	0.28	0.28	0.47	0.17	0.17	1.00	0.19	0.19	1.00	0.23	0.23	1.00
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0		3.1	3.1		5.5	5.5	
Lane Grp Cap (vph)	466	485	785	302	605	1563	337	673	1562	367	767	1561
v/s Ratio Prot	0.21	c0.21	0.03	0.01	c0.04		0.11	c0.12		0.15	c0.16	
v/s Ratio Perm			0.05			0.17			0.02			0.12
v/c Ratio	0.77	0.78	0.15	0.06	0.24	0.17	0.56	0.62	0.02	0.68	0.68	0.12
Uniform Delay, d1	39.6	39.7	18.3	41.5	42.8	0.0	43.8	44.3	0.0	42.1	42.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	6.9	0.1	0.4	0.9	0.2	2.2	1.7	0.0	7.0	3.5	0.2
Delay (s)	46.3	46.7	18.4	41.9	43.7	0.2	46.0	46.0	0.0	49.1	45.7	0.2
Level of Service	D	D	B	D	D	A	D	D	A	D	D	A
Approach Delay (s)		39.1			17.0			44.3			37.9	
Approach LOS		D			B			D			D	

Intersection Summary					
HCM Average Control Delay	36.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.61				
Actuated Cycle Length (s)	119.4	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	69.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Existing AM
5: Kemper St & Midway Dr 4/5/2012

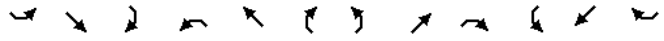


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Volume (vph)	97	95	91	25	89	53	64	309	35	62	390	70
Peak-hour factor, PHF	0.80	0.80	0.80	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Adj. Flow (vph)	121	119	114	27	98	58	73	351	40	67	419	75
RTOR Reduction (vph)	0	0	88	0	0	49	0	5	0	0	0	44
Lane Group Flow (vph)	121	119	26	27	98	9	73	386	0	67	419	31
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	12.9	12.9	17.6	11.9	11.9	11.9	4.7	33.1		4.7	33.1	33.1
Effective Green, g (s)	13.8	13.8	18.9	12.8	12.8	12.8	5.1	34.0		5.1	34.0	34.0
Actuated g/C Ratio	0.17	0.17	0.23	0.16	0.16	0.16	0.06	0.42		0.06	0.42	0.42
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	284	299	437	277	292	244	214	1448		110	1473	659
v/s Ratio Prot	c0.07	0.07	0.00	0.02	c0.05		0.02	0.11		c0.04	c0.12	
v/s Ratio Perm			0.01			0.01						0.02
v/c Ratio	0.43	0.40	0.06	0.10	0.34	0.04	0.34	0.27		0.61	0.28	0.05
Uniform Delay, d1	30.4	30.2	24.5	29.5	30.7	29.2	36.7	15.7		37.3	15.8	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.9	0.0	0.2	0.7	0.1	0.3	0.2		6.4	0.2	0.1
Delay (s)	31.4	31.1	24.5	29.7	31.3	29.3	37.0	15.8		43.7	16.0	14.3
Level of Service	C	C	C	C	C	C	D	B		D	B	B
Approach Delay (s)		29.1			30.4			19.2			19.1	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	22.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
6: Midway Dr & East Dr 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.98			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	3528		1770	3487			1750			1691	
Flt Permitted	0.33	1.00		0.42	1.00			0.76			0.83	
Satd. Flow (perm)	612	3528		791	3487			1382			1430	
Volume (vph)	16	537	10	25	629	68	19	3	5	16	2	15
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.61	0.61	0.61	0.75	0.75	0.75
Adj. Flow (vph)	18	590	11	29	740	80	31	5	8	21	3	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	7	0	0	18	0
Lane Group Flow (vph)	18	600	0	29	813	0	0	37	0	0	26	0
Confl. Peds. (#/hr)			3						1			10
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.4	41.6		42.4	41.6			4.1			4.1	
Effective Green, g (s)	43.7	42.5		43.7	42.5			5.0			5.0	
Actuated g/C Ratio	0.72	0.70		0.72	0.70			0.08			0.08	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	463	2470		589	2441			114			118	
v/s Ratio Prot	0.00	0.17		c0.00	c0.23							
v/s Ratio Perm	0.03			0.03				c0.03			0.02	
v/c Ratio	0.04	0.24		0.05	0.33			0.32			0.22	
Uniform Delay, d1	2.4	3.3		2.4	3.6			26.3			26.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.6			0.3	
Delay (s)	2.4	3.3		2.4	3.6			26.8			26.4	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		3.3			3.6			26.8			26.4	
Approach LOS		A			A			C			C	

Intersection Summary				
HCM Average Control Delay	4.8	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.33			
Actuated Cycle Length (s)	60.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	35.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
7: Rosecrans St. & Midway Dr 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Volume (vph)	156	1299	67	204	1658	246	207	255	152	64	297	169
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	1367	71	215	1745	259	218	268	160	67	313	178
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	125	0	0	144
Lane Group Flow (vph)	164	1433	0	215	1990	0	218	268	35	67	313	34
Confl. Peds. (#/hr)	14		25	25		14	27		14	18		27
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	13.9	50.4		25.8	62.4		11.0	27.6	27.6	7.4	24.0	24.0
Effective Green, g (s)	14.3	51.5		26.2	63.4		11.4	28.5	28.5	7.8	24.9	24.9
Actuated g/C Ratio	0.11	0.40		0.20	0.49		0.09	0.22	0.22	0.06	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	195	1995		692	2421		301	776	337	106	678	290
v/s Ratio Prot	c0.09	0.28		0.06	c0.40		c0.06	0.08		c0.04	c0.09	
v/s Ratio Perm									0.02			0.02
v/c Ratio	0.84	0.72		0.31	0.82		0.72	0.35	0.10	0.63	0.46	0.12
Uniform Delay, d1	56.7	33.1		44.2	28.5		57.8	42.9	40.5	59.7	46.6	43.5
Progression Factor	0.81	0.69		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	1.1		0.1	2.5		7.1	0.1	0.0	8.7	0.2	0.1
Delay (s)	60.2	24.1		44.3	30.9		64.9	43.0	40.6	68.4	46.8	43.5
Level of Service	E	C		D	C		E	D	D	E	D	D
Approach Delay (s)		27.8			32.2			49.8			48.3	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM Average Control Delay	34.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	84.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

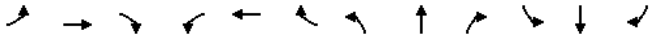
Existing AM
9: Enterprise St & Midway Dr 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	82	502	25	0	492
Peak Hour Factor	0.85	0.85	0.89	0.89	0.85	0.85
Hourly flow rate (vph)	0	96	564	28	0	579
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	870	301			594	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	870	301			594	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			100	
cM capacity (veh/h)	291	692			976	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	96	376	216	289	289
Volume Left	0	0	0	0	0
Volume Right	96	0	28	0	0
cSH	692	1700	1700	1700	1700
Volume to Capacity	0.14	0.22	0.13	0.17	0.17
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	11.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
10: Barnett Ave & Midway Dr 4/5/2012

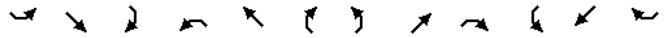


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	784	0	0	1211	527	0	0	0	397	0	95
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.81	0.92	0.81
Adj. Flow (vph)	0	852	0	0	1302	567	0	0	0	490	0	117
RTOR Reduction (vph)	0	0	0	0	0	267	0	0	0	0	0	90
Lane Group Flow (vph)	0	852	0	0	1302	300	0	0	0	490	0	27
Confl. Peds. (#/hr)						8				8		
Turn Type						custom				Prot		custom
Protected Phases		2			2	8				1		
Permitted Phases												1
Actuated Green, G (s)		26.8			26.8	22.3				12.9		12.9
Effective Green, g (s)		26.8			26.8	21.8				12.9		12.9
Actuated g/C Ratio		0.48			0.48	0.39				0.23		0.23
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	3.0				2.5		2.5
Lane Grp Cap (vph)		1688			1688	1081				788		363
v/s Ratio Prot		0.24			c0.37	0.11				c0.14		
v/s Ratio Perm												0.02
v/c Ratio		0.50			0.77	0.28				0.62		0.07
Uniform Delay, d1		10.1			12.2	11.8				19.5		17.0
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		0.2			2.2	0.1				1.3		0.1
Delay (s)		10.4			14.4	11.9				20.8		17.0
Level of Service		B			B	B				C		B
Approach Delay (s)		10.4			13.6			0.0			20.1	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	14.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	52.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
11: Sports Arena & Hancock 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9					4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91					1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes	1.00	1.00		0.78	1.00					1.00		1.00
Frt	1.00	1.00		1.00	0.98					1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)	1770	3532		1384	4970					1770		1583
Flt Permitted	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (perm)	1770	3532		1384	4970					1770		1583
Volume (vph)	104	484	6	1	331	52	0	0	0	18	0	33
Peak-hour factor, PHF	0.96	0.96	0.96	0.80	0.80	0.80	0.92	0.92	0.92	0.63	0.63	0.63
Adj. Flow (vph)	108	504	6	1	414	65	0	0	0	29	0	52
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	0	44
Lane Group Flow (vph)	108	510	0	1	462	0	0	0	0	29	0	8
Confl. Peds. (#/hr)	9		14	14		9			4	4		11
Turn Type	Prot			Prot					Free	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases									Free			
Actuated Green, G (s)	7.1	42.6		0.6	36.1					9.4		9.4
Effective Green, g (s)	7.1	42.6		0.6	36.1					9.4		10.3
Actuated g/C Ratio	0.11	0.64		0.01	0.54					0.14		0.15
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	188	2252		12	2686					249		244
v/s Ratio Prot	c0.06	c0.14		0.00	0.09					c0.02		0.01
v/s Ratio Perm												
v/c Ratio	0.57	0.23		0.08	0.17					0.12		0.03
Uniform Delay, d1	28.4	5.1		32.8	7.8					25.1		24.0
Progression Factor	1.00	1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2	2.6	0.1		1.1	0.1					0.1		0.0
Delay (s)	31.0	5.2		33.9	7.8					25.1		24.0
Level of Service	C	A		C	A					C		C
Approach Delay (s)		9.7			7.9			0.0			24.4	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	10.0	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.24			
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	9.3	
Intersection Capacity Utilization	33.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
12: Kemper Street & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Volume (vph)	62	40	90	46	23	100	68	481	76	117	327	80
Peak-hour factor, PHF	0.80	0.80	0.80	0.78	0.78	0.78	0.94	0.94	0.94	0.83	0.83	0.83
Adj. Flow (vph)	78	50	112	59	29	128	72	512	81	141	394	96
RTOR Reduction (vph)	0	94	0	0	0	117	0	13	0	0	38	0
Lane Group Flow (vph)	78	68	0	59	29	11	72	580	0	141	452	0
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	9.9	9.9		5.0	5.0	5.0	2.8	24.1		8.8	30.1	
Effective Green, g (s)	10.8	10.8		5.9	5.9	5.9	3.2	25.0		9.2	31.0	
Actuated g/C Ratio	0.16	0.16		0.09	0.09	0.09	0.05	0.37		0.14	0.46	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	286	270		156	164	140	164	1296		243	2287	
v/s Ratio Prot	c0.04	0.04		c0.03	0.02		0.02	c0.17		c0.08	0.09	
v/s Ratio Perm						0.01						
v/c Ratio	0.27	0.25		0.38	0.18	0.08	0.44	0.45		0.58	0.20	
Uniform Delay, d1	24.6	24.5		28.8	28.3	28.0	31.0	15.8		27.0	10.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.5		0.6	0.2	0.1	0.7	0.3		2.3	0.0	
Delay (s)	25.1	25.0		29.3	28.4	28.1	31.7	16.1		29.3	10.6	
Level of Service	C	C		C	C	C	C	B		C	B	
Approach Delay (s)		25.0			28.5			17.8			14.8	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	19.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
13: Sports Arena & 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99			0.97		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	3433	3464		1759	5042			1747		1770	1602	
Flt Permitted	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (perm)	3433	3464		1759	5042			1747		1770	1602	
Volume (vph)	72	482	63	20	458	25	26	5	8	25	3	40
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.71	0.71	0.71
Adj. Flow (vph)	77	513	67	24	539	29	35	7	11	35	4	56
RTOR Reduction (vph)	0	5	0	0	3	0	0	10	0	0	54	0
Lane Group Flow (vph)	77	575	0	24	565	0	0	43	0	35	6	0
Confl. Peds. (#/hr)	4		9	9		4			7	7		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Effective Green, g (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Actuated g/C Ratio	0.03	0.58		0.01	0.56			0.09		0.04	0.04	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	118	2021		20	2825			161		69	62	
v/s Ratio Prot	c0.02	c0.17		0.01	0.11			c0.02		c0.02	0.00	
v/s Ratio Perm												
v/c Ratio	0.65	0.28		1.20	0.20			0.27		0.51	0.10	
Uniform Delay, d1	33.2	7.2		34.4	7.6			29.4		32.8	32.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	9.5	0.0		270.0	0.0			0.3		2.1	0.3	
Delay (s)	42.6	7.3		304.4	7.6			29.7		34.9	32.5	
Level of Service	D	A		F	A			C		C	C	
Approach Delay (s)		11.4			19.6			29.7			33.4	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	17.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
14: Sports Arena & East Dr 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (prot)	1770	5037		1770	5024			1770	1542			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (perm)	1770	5037		1770	5024			1770	1542			1611
Volume (vph)	30	524	26	41	544	36	13	0	34	0	0	2
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.78	0.78	0.78	0.50	0.50	0.50
Adj. Flow (vph)	33	576	29	44	579	38	17	0	44	0	0	4
RTOR Reduction (vph)	0	4	0	0	5	0	0	0	39	0	0	0
Lane Group Flow (vph)	33	601	0	44	612	0	0	17	5	0	0	4
Confl. Peds. (#/hr)	21		15	15		21			21	21		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Effective Green, g (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Actuated g/C Ratio	0.02	0.65		0.02	0.65			0.11	0.11			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	27	3288		27	3280			199	174			1611
v/s Ratio Prot	0.02	0.12		c0.02	c0.12							
v/s Ratio Perm								0.01	0.00			0.00
v/c Ratio	1.22	0.18		1.63	0.19			0.09	0.03			0.00
Uniform Delay, d1	31.9	4.4		31.9	4.4			25.8	25.6			0.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	247.9	0.0		404.3	0.0			0.1	0.0			0.0
Delay (s)	279.8	4.5		436.2	4.5			25.8	25.6			0.0
Level of Service	F	A		F	A			C	C			A
Approach Delay (s)		18.7			33.2			25.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary				
HCM Average Control Delay	26.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.20			
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
15: Rosecrans St. & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (prot)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (perm)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Volume (vph)	171	1325	179	0	1887	296	155	154	10	242	215	101
Peak-hour factor, PHF	0.86	0.95	0.90	1.00	0.95	0.90	0.82	0.80	0.62	0.76	0.81	0.92
Adj. Flow (vph)	199	1395	199	0	1986	329	189	192	16	318	265	110
RTOR Reduction (vph)	0	13	0	0	0	0	0	4	0	0	0	87
Lane Group Flow (vph)	199	1581	0	0	1986	329	128	265	0	195	388	23
Confl. Peds. (#/hr)				45			18		9	9		45
Confl. Bikes (#/hr)									1			10
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	11.1	71.0			54.7	125.0	10.1	10.1		26.0	26.0	26.0
Effective Green, g (s)	12.5	73.1			56.6	125.0	10.1	10.1		26.0	26.0	26.0
Actuated g/C Ratio	0.10	0.58			0.45	1.00	0.08	0.08		0.21	0.21	0.21
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	343	2918			2302	1583	130	268		335	656	300
v/s Ratio Prot	0.06	c0.32			c0.39		0.08	c0.08		0.12	c0.12	0.02
v/s Ratio Perm						0.21						
v/c Ratio	0.58	0.54			0.86	0.21	0.98	0.99		0.58	0.59	0.08
Uniform Delay, d1	53.7	15.8			30.7	0.0	57.4	57.4		44.6	44.7	39.8
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.7			4.6	0.3	73.7	52.1		3.1	1.7	0.2
Delay (s)	55.4	16.5			35.3	0.3	131.1	109.5		47.7	46.4	40.0
Level of Service	E	B			D	A	F	F		D	D	D
Approach Delay (s)		20.8			30.3			116.4			45.8	
Approach LOS		C			C			F			D	

Intersection Summary				
HCM Average Control Delay	35.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	88.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	678	568	24
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	737	598	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	979	312	623			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	979	312	623			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	247	684	954			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	368	368	399	225
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	25
cSH	684	1700	1700	1700	1700
Volume to Capacity	0.06	0.22	0.22	0.23	0.13
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Existing AM
19: Kurtz & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1681	1752	1583		5085		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1681	1752	1583		5085		1770	6408	
Volume (vph)	0	0	0	112	78	45	0	1577	0	83	2142	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	122	85	47	0	1660	0	86	2208	0
RTOR Reduction (vph)	0	0	0	0	0	6	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	101	106	41	0	1660	0	86	2208	0
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				22.3	22.3	22.3		84.2		9.0	97.9	
Effective Green, g (s)				23.2	23.2	23.2		85.4		9.4	98.8	
Actuated g/C Ratio				0.18	0.18	0.18		0.66		0.07	0.76	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				300	313	283		3340		128	4870	
v/s Ratio Prot								c0.33		c0.05	0.34	
v/s Ratio Perm				0.06	0.06	0.03						
v/c Ratio				0.34	0.34	0.15		0.50		0.67	0.45	
Uniform Delay, d1				46.7	46.7	45.0		11.4		58.8	5.7	
Progression Factor				1.00	1.00	1.00		1.00		1.10	0.16	
Incremental Delay, d2				0.2	0.2	0.1		0.5		3.9	0.1	
Delay (s)				46.9	46.9	45.1		11.9		68.8	1.0	
Level of Service				D	D	D		B		E	A	
Approach Delay (s)		0.0			46.6			11.9			3.5	
Approach LOS		A			D			B			A	

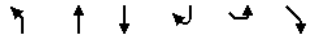
Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
20: Rosecrans St & Kurtz 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3364		1744	3539		1770		1548	1770	1863	
Flt Permitted		1.00		0.44	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3364		804	3539		1770		1548	1770	1863	
Volume (vph)	0	349	84	87	294	0	103	0	142	41	125	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.97	0.97	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	367	88	90	303	0	112	0	154	44	133	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	65	0	0	0
Lane Group Flow (vph)	0	446	0	90	303	0	112	0	89	44	133	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		74.3		85.7	85.7		13.1		74.3	17.0	17.0	
Effective Green, g (s)		75.2		86.6	86.6		13.5		75.2	17.9	17.9	
Actuated g/C Ratio		0.58		0.67	0.67		0.10		0.58	0.14	0.14	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1946		589	2358		184		895	244	257	
v/s Ratio Prot		c0.13		c0.01	0.09		c0.06			0.02	c0.07	
v/s Ratio Perm				0.09					0.06			
v/c Ratio		0.23		0.15	0.13		0.61		0.10	0.18	0.52	
Uniform Delay, d1		13.3		7.9	7.9		55.7		12.3	49.6	52.0	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.82	0.81	
Incremental Delay, d2		0.3		0.0	0.1		5.6		0.2	0.3	1.6	
Delay (s)		13.6		8.0	8.0		61.3		12.5	41.1	44.0	
Level of Service		B		A	A		E		B	D	D	
Approach Delay (s)		13.6			8.0			33.0			43.2	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
21: Pacific Highway & Kurtz St 4/5/2012

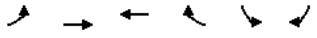


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	294	391	444	7	0	247
Peak Hour Factor	0.91	0.91	0.94	0.94	0.92	0.92
Hourly flow rate (vph)	323	430	472	7	0	268
Pedestrians		2				
Lane Width (ft)		12.0				
Walking Speed (ft/s)		4.0				
Percent Blockage		0				
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	480				1265	163
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	480				1265	163
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	65				100	68
cM capacity (veh/h)	918				104	851

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	323	143	143	143	189	189	102	268
Volume Left	323	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	7	268
cSH	918	1700	1700	1700	1700	1700	1700	851
Volume to Capacity	0.35	0.08	0.08	0.08	0.11	0.11	0.06	0.32
Queue Length 95th (ft)	40	0	0	0	0	0	0	34
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Lane LOS	B							B
Approach Delay (s)	4.7				0.0			11.2
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
22: Hancock & Channel Way 4/5/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	31	125	67	26	4	14
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	38	154	84	32	5	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1157				
pX, platoon unblocked						
vC, conflicting volume	116				331	100
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	116				331	100
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	98
cM capacity (veh/h)	1472				647	956

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	38	154	116	24
Volume Left	38	0	0	5
Volume Right	0	0	32	19
cSH	1472	1700	1700	864
Volume to Capacity	0.03	0.09	0.07	0.03
Queue Length 95th (ft)	2	0	0	2
Control Delay (s)	7.5	0.0	0.0	9.3
Lane LOS	A			A
Approach Delay (s)	1.5		0.0	9.3
Approach LOS				A

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
23: Hancock St & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frt		0.98					1.00	1.00			1.00	0.85
Flt Protected		1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3475					1770	5078			5085	1583
Flt Permitted		1.00					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3475					1770	5078			5085	1583
Volume (vph)	10	184	23	0	0	0	75	1594	15	0	2215	286
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	194	24	0	0	0	82	1752	16	0	2434	314
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	224	0	0	0	0	82	1768	0	0	2434	241
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		30.1					19.8	90.1			65.9	65.9
Effective Green, g (s)		31.0					20.2	91.0			66.8	66.8
Actuated g/C Ratio		0.24					0.16	0.70			0.51	0.51
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		829					275	3555			2613	813
v/s Ratio Prot		c0.06					0.05	c0.35			c0.48	
v/s Ratio Perm												0.15
v/c Ratio		0.27					0.30	0.50			0.93	0.30
Uniform Delay, d1		40.3					48.6	9.0			29.5	18.1
Progression Factor		0.90					0.89	0.52			1.00	1.00
Incremental Delay, d2		0.1					0.2	0.5			7.5	0.9
Delay (s)		36.4					43.3	5.1			37.0	19.1
Level of Service		D					D	A			D	B
Approach Delay (s)		36.4			0.0			6.8			34.9	
Approach LOS		D			A			A			C	

Intersection Summary				
HCM Average Control Delay	24.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
25: Old Town St & Hancock St 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	157	0	0	113	250	489
Peak Hour Factor	0.88	0.88	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	178	0	0	131	275	537

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	178	131	275	537
Volume Left (vph)	178	0	275	0
Volume Right (vph)	0	131	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.0	4.8	5.7	5.2
Degree Utilization, x	0.30	0.18	0.44	0.78
Capacity (veh/h)	566	707	615	674
Control Delay (s)	11.5	8.9	12.0	23.3
Approach Delay (s)	11.5	8.9	19.4	
Approach LOS	B	A	C	

Intersection Summary			
Delay	16.9		
HCM Level of Service	C		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
26: Witherby St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	93	2	35	0	1	1	7	19	3	9	166	471
Peak Hour Factor	0.84	0.84	0.84	0.76	0.76	0.76	0.91	0.91	0.91	0.91	0.72	0.72
Hourly flow rate (vph)	111	2	42	0	1	1	8	21	3	10	231	654

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	155	3	32	240	654
Volume Left (vph)	111	0	8	10	0
Volume Right (vph)	42	1	3	0	654
Hadj (s)	0.02	-0.27	0.02	0.05	-0.67
Departure Headway (s)	5.6	5.6	5.3	5.1	4.3
Degree Utilization, x	0.24	0.00	0.05	0.34	0.79
Capacity (veh/h)	609	592	646	697	816
Control Delay (s)	10.4	8.6	8.5	9.4	20.2
Approach Delay (s)	10.4	8.6	8.5	17.3	
Approach LOS	B	A	A	C	

Intersection Summary				
Delay		16.0		
HCM Level of Service		C		
Intersection Capacity Utilization		45.8%	ICU Level of Service	A
Analysis Period (min)		15		

Existing AM
27: Washington St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	1583
Volume (vph)	0	256	95	448	396	0	0	0	0	158	188	233
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	278	103	487	430	0	0	0	0	172	204	253
RTOR Reduction (vph)	0	0	54	0	0	0	0	0	0	0	0	207
Lane Group Flow (vph)	0	278	49	487	430	0	0	0	0	121	255	46
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		41.8	41.8	18.4	64.6					15.6	15.6	15.6
Effective Green, g (s)		42.7	42.7	18.8	65.5					16.5	16.5	16.5
Actuated g/C Ratio		0.47	0.47	0.21	0.73					0.18	0.18	0.18
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1679	751	717	2576					295	615	290
v/s Ratio Prot		0.08		c0.14	c0.12							
v/s Ratio Perm			0.03							0.08	0.08	0.03
v/c Ratio		0.17	0.07	0.68	0.17					0.41	0.41	0.16
Uniform Delay, d1		13.5	12.8	32.8	3.8					32.5	32.5	30.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	2.0	0.1					0.3	0.2	0.1
Delay (s)		13.7	13.0	34.8	3.9					32.8	32.6	31.0
Level of Service		B	B	C	A					C	C	C
Approach Delay (s)		13.5			20.4			0.0			32.0	
Approach LOS		B			C			A			C	

Intersection Summary						
HCM Average Control Delay		22.8	HCM Level of Service		C	
HCM Volume to Capacity ratio		0.35				
Actuated Cycle Length (s)		90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization		37.6%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

Existing AM
28: Vine St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	10	28	0	0	0	0	0	0	1404	14
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	20	40	0	0	0	0	0	0	1478	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1485	1485	500	513	1493	0	1493			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1485	1485	500	513	1493	0	1493			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	91	100	100	100			100		
cM capacity (veh/h)	86	124	516	427	122	1084	446			1622		

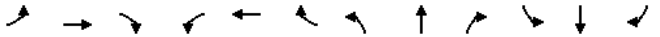
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	20	40	591	591	310
Volume Left	0	40	0	0	0
Volume Right	20	0	0	0	15
cSH	516	427	1700	1700	1700
Volume to Capacity	0.04	0.09	0.35	0.35	0.18
Queue Length 95th (ft)	3	8	0	0	0
Control Delay (s)	12.3	14.3	0.0	0.0	0.0
Lane LOS	B	B			
Approach Delay (s)	12.3	14.3	0.0		
Approach LOS	B	B			

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
29: Sassafras St & Kettner Bl 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3468					1770	4951	
Flt Permitted		1.00	1.00		0.81					0.95	1.00	
Satd. Flow (perm)		1863	1583		2850					1770	4951	
Volume (vph)	0	64	59	135	192	0	0	0	0	353	1036	221
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	70	64	147	209	0	0	0	0	384	1126	240
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	60	0
Lane Group Flow (vph)	0	70	40	0	356	0	0	0	0	384	1306	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		19.0	19.0		19.0					23.0	23.0	
Effective Green, g (s)		21.7	21.7		21.7					25.3	25.3	
Actuated g/C Ratio		0.39	0.39		0.39					0.46	0.46	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		735	625		1124					814	2277	
v/s Ratio Prot		0.04									c0.26	
v/s Ratio Perm			0.03		c0.12					0.22		
v/c Ratio		0.10	0.06		0.32					0.47	0.57	
Uniform Delay, d1		10.5	10.3		11.5					10.2	10.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.3	0.2		0.7					2.0	1.1	
Delay (s)		10.7	10.5		12.3					12.2	11.9	
Level of Service		B	B		B					B	B	
Approach Delay (s)		10.6			12.3			0.0			12.0	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM Average Control Delay	12.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	47.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3510		1770	3539						4657	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3510		1770	3539						4657	1362
Volume (vph)	0	637	37	29	178	0	0	0	0	510	287	250
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	692	40	32	193	0	0	0	0	554	312	272
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	728	0	32	193	0	0	0	0	0	866	90
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		37.3		3.0	43.0						25.0	25.0
Effective Green, g (s)		35.5		3.4	42.9						24.1	26.4
Actuated g/C Ratio		0.44		0.04	0.54						0.30	0.33
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1558		75	1898						1403	449
v/s Ratio Prot		c0.21		c0.02	0.05							
v/s Ratio Perm											0.19	0.07
v/c Ratio		0.47		0.43	0.10						1.09dl	0.20
Uniform Delay, d1		15.6		37.3	9.1						24.0	19.2
Progression Factor		1.00		1.33	0.85						1.00	1.00
Incremental Delay, d2		1.0		1.4	0.1						0.6	0.1
Delay (s)		16.6		50.9	7.9						24.6	19.3
Level of Service		B		D	A						C	B
Approach Delay (s)		16.6			14.0			0.0			23.3	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	20.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.5%	ICU Level of Service	C	
Analysis Period (min)	15			

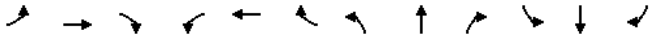
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Existing AM

32: Washington St & Pacific Highway NB Frontage Road

4/5/2012



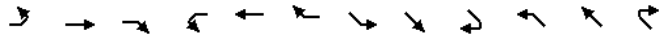
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.94			0.94	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97			0.97	
Satd. Flow (prot)	1770	3539			3539	1583	1610	3106			1702	
Flt Permitted	0.95	1.00			1.00	1.00	0.72	0.78			0.49	
Satd. Flow (perm)	1770	3539			3539	1583	1218	2502			856	
Volume (vph)	49	267	0	0	352	277	154	9	55	29	0	22
Peak-hour factor, PHF	0.95	0.92	0.95	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.83	0.83
Adj. Flow (vph)	52	290	0	0	383	301	164	10	60	32	0	27
RTOR Reduction (vph)	0	0	0	0	0	150	0	48	0	0	25	0
Lane Group Flow (vph)	52	290	0	0	383	151	82	104	0	0	34	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	2.3	48.7			41.5	41.5	14.0	14.0			6.3	
Effective Green, g (s)	2.8	48.7			41.9	41.9	16.4	16.4			6.3	
Actuated g/C Ratio	0.03	0.58			0.50	0.50	0.20	0.20			0.08	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	59	2067			1778	795	240	492			65	
v/s Ratio Prot	c0.03	0.08			c0.11							
v/s Ratio Perm						0.10	c0.07	0.04			c0.04	
v/c Ratio	0.88	0.14			0.22	0.19	0.34	0.21			0.52	
Uniform Delay, d1	40.1	7.9			11.6	11.4	28.9	28.1			37.1	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	76.9	0.0			0.3	0.5	0.3	0.1			3.5	
Delay (s)	117.0	7.9			11.9	11.9	29.2	28.2			40.6	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		24.5			11.9			28.5			40.6	
Approach LOS		C			B			C			D	

Intersection Summary				
HCM Average Control Delay	19.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	83.4	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

33: Washington St & Pacific Highway SB

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.97		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3411		1756	1863		1681	1701	1583			
Flt Permitted		1.00		0.60	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3411		1100	1863		1681	1701	1583			
Volume (vph)	0	186	47	131	397	0	130	15	224	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	202	51	142	432	0	141	16	243	0	0	0
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	69	0	0	0
Lane Group Flow (vph)	0	224	0	142	432	0	76	81	174	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		9.2		22.6	22.6		16.5	16.5	25.7			
Effective Green, g (s)		9.2		22.9	22.9		18.7	18.7	27.9			
Actuated g/C Ratio		0.15		0.36	0.36		0.30	0.30	0.44			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		500		401	679		501	507	804			
v/s Ratio Prot		c0.07			c0.23				c0.06			
v/s Ratio Perm				0.13			0.05	0.05	0.05			
v/c Ratio		0.45		0.35	0.64		0.15	0.16	0.22			
Uniform Delay, d1		24.5		14.6	16.5		16.2	16.3	10.7			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.2		2.4	4.5		0.1	0.1	0.0			
Delay (s)		24.7		17.0	21.0		16.3	16.3	10.8			
Level of Service		C		B	C		B	B	B			
Approach Delay (s)		24.7			20.0			12.9			0.0	
Approach LOS		C			C			B			A	

Intersection Summary				
HCM Average Control Delay	18.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	62.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	41.4%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
34: Sassafras St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.94		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1715		1766	1746		1770	4908		1770	5025	
Flt Permitted	0.65	1.00		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1207	1715		1368	1746		1770	4908		1770	5025	
Volume (vph)	2	16	15	276	93	66	27	231	70	26	258	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	17	16	300	101	72	29	251	76	28	280	21
RTOR Reduction (vph)	0	11	0	0	45	0	0	43	0	0	10	0
Lane Group Flow (vph)	2	22	0	300	128	0	29	284	0	28	291	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	17.2	17.2		16.5	16.5		1.6	22.0		1.3	21.5	
Effective Green, g (s)	17.2	17.2		16.9	16.9		1.6	23.4		1.8	23.6	
Actuated g/C Ratio	0.32	0.32		0.31	0.31		0.03	0.43		0.03	0.43	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	382	542		425	542		52	2111		59	2180	
v/s Ratio Prot		0.01			0.07		c0.02	0.06		0.02	c0.06	
v/s Ratio Perm	0.00			c0.22								
v/c Ratio	0.01	0.04		0.71	0.24		0.56	0.13		0.47	0.13	
Uniform Delay, d1	12.7	12.9		16.6	13.9		26.1	9.4		25.8	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		5.3	0.2		7.2	0.1		5.9	0.1	
Delay (s)	12.7	12.9		21.8	14.2		33.2	9.5		31.7	9.4	
Level of Service	B	B		C	B		C	A		C	A	
Approach Delay (s)		12.9			19.0			11.4			11.3	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM Average Control Delay	14.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	54.4	Sum of lost time (s)	8.3	
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
35: W Laurel St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Volume (vph)	208	401	36	49	319	60	73	222	64	209	148	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	226	436	39	53	347	65	79	241	70	227	161	43
RTOR Reduction (vph)	0	9	0	0	20	0	0	48	0	0	0	38
Lane Group Flow (vph)	226	466	0	53	392	0	79	263	0	227	161	5
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	8.7	20.9		6.6	18.2		6.2	23.7		8.7	26.1	8.7
Effective Green, g (s)	9.1	22.1		7.0	20.0		6.6	24.6		9.1	27.1	9.1
Actuated g/C Ratio	0.12	0.28		0.09	0.25		0.08	0.31		0.12	0.34	0.12
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	204	980		157	875		148	1529		204	1749	178
v/s Ratio Prot	c0.13	c0.13		0.03	0.11		0.04	c0.05		c0.13	0.03	
v/s Ratio Perm												0.00
v/c Ratio	1.11	0.48		0.34	0.45		0.53	0.17		1.11	0.09	0.03
Uniform Delay, d1	34.9	23.5		33.7	24.8		34.6	19.7		34.9	17.5	30.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	94.9	0.5		5.7	0.3		1.8	0.2		96.5	0.1	0.0
Delay (s)	129.7	24.0		39.5	25.1		36.5	19.9		131.4	17.6	30.9
Level of Service	F	C		D	C		D	B		F	B	C
Approach Delay (s)		58.1			26.7			23.3			78.9	
Approach LOS		E			C			C			E	

Intersection Summary				
HCM Average Control Delay	48.4	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.9%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
36: Rosecrans St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Volume (vph)	81	204	90	230	270	91	127	85	161	63	138	44
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	89	224	99	253	297	100	137	91	173	68	150	48
RTOR Reduction (vph)	0	0	47	0	0	54	0	0	132	0	0	38
Lane Group Flow (vph)	89	224	52	253	297	46	137	91	41	68	150	10
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	4.1	35.5	39.7	4.2	35.6	35.6	4.2	16.0	20.2	4.4	16.2	16.2
Effective Green, g (s)	4.5	36.4	41.0	4.6	36.5	36.5	4.6	15.4	18.5	4.8	15.7	15.7
Actuated g/C Ratio	0.06	0.46	0.52	0.06	0.46	0.46	0.06	0.20	0.24	0.06	0.20	0.20
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	101	1637	905	201	864	734	103	693	483	108	706	316
v/s Ratio Prot	0.05	0.06	0.00	c0.07	c0.16		c0.08	0.03	0.00	0.04	c0.04	
v/s Ratio Perm			0.03			0.03			0.02			0.01
v/c Ratio	0.88	0.14	0.06	1.26	0.34	0.06	1.33	0.13	0.08	0.63	0.21	0.03
Uniform Delay, d1	36.8	12.1	9.3	37.1	13.5	11.7	37.1	26.1	23.5	36.1	26.3	25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	52.4	0.2	0.0	150.2	1.1	0.2	200.7	0.1	0.0	8.0	0.3	0.1
Delay (s)	89.2	12.3	9.3	187.2	14.5	11.8	237.7	26.3	23.5	44.1	26.6	25.4
Level of Service	F	B	A	F	B	B	F	C	C	D	C	C
Approach Delay (s)		28.2			81.3			97.3			30.9	
Approach LOS		C			F			F			C	

Intersection Summary				
HCM Average Control Delay	64.6	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	46.1%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
37: Old Town St & Moore St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.91			0.93			0.88	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1807			1699			1703			1638	
Flt Permitted		0.80			1.00			0.97			0.97	
Satd. Flow (perm)		1465			1698			1663			1594	
Volume (vph)	109	219	35	2	105	196	36	161	185	2	1	16
Peak-hour factor, PHF	0.88	0.88	0.88	0.84	0.84	0.84	0.87	0.87	0.87	0.68	0.68	0.68
Adj. Flow (vph)	124	249	40	2	125	233	41	185	213	3	1	24
RTOR Reduction (vph)	0	5	0	0	53	0	0	51	0	0	17	0
Lane Group Flow (vph)	0	408	0	0	307	0	0	388	0	0	11	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		38.3			38.3			17.9			17.9	
Effective Green, g (s)		39.2			39.2			18.8			18.8	
Actuated g/C Ratio		0.59			0.59			0.28			0.28	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		870			1009			474			454	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.18			c0.23			0.01	
v/c Ratio		0.47			0.30			0.82			0.02	
Uniform Delay, d1		7.5			6.6			22.0			17.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.8			10.0			0.0	
Delay (s)		7.7			7.4			32.0			17.0	
Level of Service		A			A			C			B	
Approach Delay (s)		7.7			7.4			32.0			17.0	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	75.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
38: Taylor St & Congress St 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4974		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4974		1770	3539	1770	1583
Volume (vph)	376	52	124	517	74	84
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.86	0.86
Adj. Flow (vph)	409	57	141	588	86	98
RTOR Reduction (vph)	21	0	0	0	0	77
Lane Group Flow (vph)	445	0	141	588	86	21
Confl. Peds. (#/hr)		7	7		30	15
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.8		5.9	40.1	12.5	12.5
Effective Green, g (s)	31.7		6.3	40.1	13.4	13.4
Actuated g/C Ratio	0.51		0.10	0.64	0.21	0.21
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2527		179	2274	380	340
v/s Ratio Prot	0.09		c0.08	c0.17	c0.05	0.01
v/s Ratio Perm						
v/c Ratio	0.18		0.79	0.26	0.23	0.06
Uniform Delay, d1	8.3		27.4	4.8	20.2	19.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2		18.7	0.3	0.1	0.0
Delay (s)	8.4		46.1	5.1	20.3	19.5
Level of Service	A		D	A	C	B
Approach Delay (s)	8.4			13.0	19.9	
Approach LOS	A			B	B	

Intersection Summary				
HCM Average Control Delay	12.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

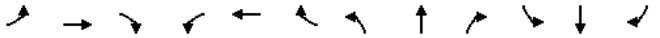
Existing AM
39: Twiggs St & Congress St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	0	1	22	0	25	5	122	7	20	91	1
Peak Hour Factor	0.63	0.63	0.63	0.73	0.73	0.73	0.88	0.88	0.88	0.72	0.72	0.72
Hourly flow rate (vph)	6	0	2	30	0	34	6	139	8	28	126	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	8	64	152	156
Volume Left (vph)	6	30	6	28
Volume Right (vph)	2	34	8	1
Hadj (s)	0.07	-0.19	0.01	0.06
Departure Headway (s)	4.7	4.4	4.2	4.3
Degree Utilization, x	0.01	0.08	0.18	0.19
Capacity (veh/h)	697	755	823	819
Control Delay (s)	7.8	7.8	8.2	8.3
Approach Delay (s)	7.8	7.8	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
HCM Level of Service	A			
Intersection Capacity Utilization	24.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
40: Harney St & Congress St 4/5/2012

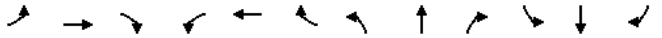


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	2	3	10	14	5	5	116	8	5	91	18
Peak Hour Factor	0.54	0.54	0.54	0.81	0.81	0.81	0.85	0.85	0.85	0.71	0.71	0.71
Hourly flow rate (vph)	24	4	6	12	17	6	6	136	9	7	128	25

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	33	36	152	161
Volume Left (vph)	24	12	6	7
Volume Right (vph)	6	6	9	25
Hadj (s)	0.08	0.00	0.00	-0.05
Departure Headway (s)	4.7	4.6	4.2	4.2
Degree Utilization, x	0.04	0.05	0.18	0.19
Capacity (veh/h)	704	717	824	842
Control Delay (s)	7.9	7.9	8.2	8.1
Approach Delay (s)	7.9	7.9	8.2	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.1		
HCM Level of Service		A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
41: Ampudia St & Congress St 4/5/2012

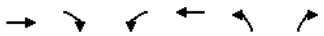


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	10	9	90	8	8	15	128	223	0	67	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	2	11	10	145	13	13	16	138	240	0	75	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								376				
pX, platoon unblocked												
vC, conflicting volume	273	497	78	271	258	152	80			386		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273	497	78	271	258	152	80			386		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	78	98	99	99			100		
cM capacity (veh/h)	646	465	981	648	633	884	1516			1163		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	23	171	154	240	78
Volume Left	2	145	16	0	0
Volume Right	10	13	0	240	2
cSH	622	660	1516	1700	1163
Volume to Capacity	0.04	0.26	0.01	0.14	0.00
Queue Length 95th (ft)	3	26	1	0	0
Control Delay (s)	11.0	12.3	0.9	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.0	12.3	0.3		0.0
Approach LOS	B	B			

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization	33.6%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
42: Twiggs St & San Diego Ave 4/5/2012

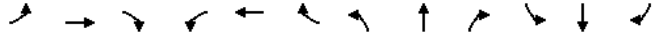


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	18	9	29	29	18	124
Peak Hour Factor	0.58	0.58	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	31	16	41	41	22	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	47	82	175
Volume Left (vph)	0	41	22
Volume Right (vph)	16	0	153
Hadj (s)	-0.17	0.13	-0.46
Departure Headway (s)	4.2	4.4	3.7
Degree Utilization, x	0.05	0.10	0.18
Capacity (veh/h)	821	779	931
Control Delay (s)	7.4	7.9	7.5
Approach Delay (s)	7.4	7.9	7.5
Approach LOS	A	A	A

Intersection Summary			
Delay		7.6	
HCM Level of Service		A	
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
43: Harney St & San Diego Ave 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	5	7	3	37	18	12	3	125	83	3	27	8
Peak Hour Factor	0.69	0.69	0.69	0.80	0.80	0.80	0.89	0.89	0.89	0.73	0.73	0.73
Hourly flow rate (vph)	7	10	4	46	22	15	3	140	93	4	37	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	22	84	237	52
Volume Left (vph)	7	46	3	4
Volume Right (vph)	4	15	93	11
Hadj (s)	-0.02	0.04	-0.20	-0.08
Departure Headway (s)	4.6	4.6	4.0	4.3
Degree Utilization, x	0.03	0.11	0.26	0.06
Capacity (veh/h)	718	731	871	792
Control Delay (s)	7.7	8.1	8.4	7.6
Approach Delay (s)	7.7	8.1	8.4	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
44: San Diego Ave & Old Town St 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.91			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1764	1850		1763	1668			1763			1819	
Flt Permitted	0.68	1.00		0.63	1.00			0.79			1.00	
Satd. Flow (perm)	1265	1850		1164	1668			1438			1819	
Volume (vph)	218	159	6	9	40	63	254	87	65	0	22	4
Peak-hour factor, PHF	0.79	0.79	0.79	0.87	0.87	0.87	0.78	0.78	0.78	0.81	0.81	0.81
Adj. Flow (vph)	276	201	8	10	46	72	326	112	83	0	27	5
RTOR Reduction (vph)	0	2	0	0	41	0	0	14	0	0	3	0
Lane Group Flow (vph)	276	207	0	10	78	0	0	507	0	0	29	0
Confl. Peds. (#/hr)	3		4	4		3	5					5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Effective Green, g (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Actuated g/C Ratio	0.44	0.44		0.44	0.44			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	4.4	4.4		2.1	2.1			2.0			2.0	
Lane Grp Cap (vph)	553	809		509	730			577			730	
v/s Ratio Prot		0.11			0.05						0.02	
v/s Ratio Perm	c0.22			0.01				c0.35				
v/c Ratio	0.50	0.26		0.02	0.11			0.88			0.04	
Uniform Delay, d1	10.0	8.8		7.9	8.2			13.7			9.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	3.2	0.8		0.1	0.3			13.8			0.0	
Delay (s)	13.2	9.6		8.0	8.5			27.6			9.0	
Level of Service	B	A		A	A			C			A	
Approach Delay (s)		11.7			8.5			27.6			9.0	
Approach LOS		B			A			C			A	

Intersection Summary				
HCM Average Control Delay	18.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	54.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

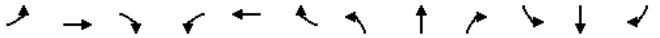
Existing AM
45: Taylor St & 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.90			0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1769	3499		1770	3467			1623			1632	
Flt Permitted	0.39	1.00		0.38	1.00			0.92			0.94	
Satd. Flow (perm)	728	3499		716	3467			1511			1535	
Volume (vph)	33	395	32	98	563	75	62	4	229	2	0	16
Peak-hour factor, PHF	0.78	0.77	0.77	0.93	0.93	0.93	0.82	0.82	0.82	0.75	0.75	0.75
Adj. Flow (vph)	42	513	42	105	605	81	76	5	279	3	0	21
RTOR Reduction (vph)	0	6	0	0	11	0	0	222	0	0	17	0
Lane Group Flow (vph)	42	549	0	105	675	0	0	138	0	0	7	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	29.7	27.9		35.2	30.7			10.9			10.9	
Effective Green, g (s)	31.1	28.9		36.5	31.6			11.8			11.8	
Actuated g/C Ratio	0.54	0.50		0.63	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	433	1756		543	1902			310			314	
v/s Ratio Prot	0.00	0.16		c0.02	c0.19							
v/s Ratio Perm	0.05			0.11				c0.09			0.00	
v/c Ratio	0.10	0.31		0.19	0.35			0.45			0.02	
Uniform Delay, d1	6.2	8.5		4.3	7.3			20.0			18.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.5		0.1	0.5			0.4			0.0	
Delay (s)	6.3	8.9		4.4	7.8			20.4			18.3	
Level of Service	A	A		A	A			C			B	
Approach Delay (s)		8.8			7.3			20.4			18.3	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	10.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
46: Twiggs St & Juan St 4/5/2012

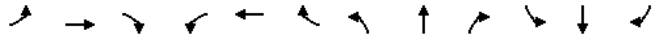


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	54	5	6	2	3	1	5	130	5	30	92	54
Peak Hour Factor	0.60	0.60	0.60	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77
Hourly flow rate (vph)	90	8	10	3	4	1	7	171	7	39	119	70

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	8	184	229
Volume Left (vph)	90	3	7	39
Volume Right (vph)	10	1	7	70
Hadj (s)	0.14	0.00	0.02	-0.12
Departure Headway (s)	5.0	5.0	4.5	4.3
Degree Utilization, x	0.15	0.01	0.23	0.27
Capacity (veh/h)	665	645	774	803
Control Delay (s)	8.9	8.0	8.8	8.9
Approach Delay (s)	8.9	8.0	8.8	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.8		
HCM Level of Service		A		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
47: Harney St & Juan St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	26	9	26	0	0	5	41	109	0	13	54	33
Peak Hour Factor	0.93	0.93	0.93	0.42	0.42	0.42	0.71	0.71	0.71	0.77	0.77	0.77
Hourly flow rate (vph)	28	10	28	0	0	12	58	154	0	17	70	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	12	211	130
Volume Left (vph)	28	0	58	17
Volume Right (vph)	28	12	0	43
Hadj (s)	-0.14	-0.57	0.09	-0.14
Departure Headway (s)	4.5	4.2	4.3	4.2
Degree Utilization, x	0.08	0.01	0.25	0.15
Capacity (veh/h)	730	780	814	829
Control Delay (s)	7.9	7.2	8.8	7.9
Approach Delay (s)	7.9	7.2	8.8	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.3		
HCM Level of Service		A		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
48: Taylor St & Morena Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95			0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00			1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Frt	1.00	1.00			0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3528			3397				1590	1681	1698	1583
Flt Permitted	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3528			3397				1590	1681	1698	1583
Volume (vph)	368	253	5	0	522	192	0	0	4	59	5	214
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.50	0.50	0.50	0.74	0.74	0.74
Adj. Flow (vph)	460	316	6	0	580	213	0	0	8	80	7	289
RTOR Reduction (vph)	0	1	0	0	42	0	0	0	0	0	0	190
Lane Group Flow (vph)	460	321	0	0	751	0	0	0	8	42	45	99
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	7.7	35.5			23.4				57.6	11.9	11.9	11.9
Effective Green, g (s)	8.1	36.4			24.3				57.6	13.2	13.2	13.2
Actuated g/C Ratio	0.14	0.63			0.42				1.00	0.23	0.23	0.23
Clearance Time (s)	4.4	4.9			4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3			3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	483	2230			1433				1590	385	389	363
v/s Ratio Prot	c0.13	0.09			c0.22					0.02	0.03	
v/s Ratio Perm									0.01			c0.06
v/c Ratio	0.95	0.14			0.52				0.01	0.11	0.12	0.27
Uniform Delay, d1	24.6	4.3			12.4				0.0	17.6	17.6	18.2
Progression Factor	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	28.9	0.1			1.4				0.0	0.2	0.2	0.7
Delay (s)	53.4	4.4			13.7				0.0	17.8	17.8	18.9
Level of Service	D	A			B				A	B	B	B
Approach Delay (s)		33.3			13.7			0.0			18.7	
Approach LOS		C			B			A			B	

Intersection Summary				
HCM Average Control Delay	22.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
49: Rosecrans St. & Hugo St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.99		1.00	1.00		1.00	0.89			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1678	3382		1671	3434		1633	1515			1675	
Flt Permitted	0.95	1.00		0.95	1.00		0.68	1.00			0.80	
Satd. Flow (perm)	1678	3382		1671	3434		1175	1515			1381	
Volume (vph)	6	679	66	24	1355	12	217	20	58	56	32	8
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	6	730	71	26	1457	13	233	22	62	60	34	9
RTOR Reduction (vph)	0	6	0	0	0	0	0	47	0	0	3	0
Lane Group Flow (vph)	6	795	0	26	1470	0	233	37	0	0	100	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.2	69.8		4.3	72.9		27.7	27.7			27.7	
Effective Green, g (s)	1.6	70.7		4.7	73.8		28.6	28.6			28.6	
Actuated g/C Ratio	0.01	0.61		0.04	0.64		0.25	0.25			0.25	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	23	2061		68	2185		290	374			340	
v/s Ratio Prot	0.00	0.24		c0.02	c0.43			0.02				
v/s Ratio Perm							c0.20				0.07	
v/c Ratio	0.26	0.39		0.38	0.67		0.80	0.10			0.29	
Uniform Delay, d1	56.6	11.6		54.2	13.4		41.1	33.8			35.5	
Progression Factor	1.00	1.00		1.38	0.37		1.00	1.00			1.00	
Incremental Delay, d2	2.2	0.5		0.7	0.9		14.0	0.0			0.2	
Delay (s)	58.8	12.1		75.7	5.9		55.1	33.8			35.7	
Level of Service	E	B		E	A		E	C			D	
Approach Delay (s)		12.5			7.1			49.4			35.7	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	14.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
50: Rosecrans St. & Lowell St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Volume (vph)	140	612	23	110	1192	29	33	103	80	233	341	215
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	644	24	116	1255	31	35	108	84	245	359	226
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	56	0	87	0
Lane Group Flow (vph)	147	666	0	116	1285	0	35	108	28	245	498	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	11.2	44.5		11.6	44.4		3.7	21.4	33.0	19.8	37.6	
Effective Green, g (s)	11.6	45.4		12.0	45.8		4.1	22.4	34.4	20.2	38.5	
Actuated g/C Ratio	0.10	0.39		0.10	0.39		0.04	0.19	0.30	0.17	0.33	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	177	1375		183	1391		63	683	458	308	1087	
v/s Ratio Prot	c0.08	0.19		0.07	c0.36		c0.02	0.03	0.01	c0.14	c0.15	
v/s Ratio Perm									0.01			
v/c Ratio	0.83	0.48		0.63	0.92		0.56	0.16	0.06	0.80	0.46	
Uniform Delay, d1	51.2	26.5		49.9	33.4		55.1	39.0	29.2	45.9	30.5	
Progression Factor	0.87	1.52		1.23	0.82		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.8	1.2		4.5	10.4		5.9	0.1	0.0	12.4	0.2	
Delay (s)	69.6	41.3		66.1	37.7		61.0	39.1	29.2	58.3	30.8	
Level of Service	E	D		E	D		E	D	C	E	C	
Approach Delay (s)		46.4			40.0			38.8			38.9	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	41.2	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	79.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
51: Rosecrans St. & Laning Rd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected		1.00		0.95	1.00			0.96	1.00		0.96	
Satd. Flow (prot)		5021		1770	3539			1778	1552		1747	
Flt Permitted		1.00		0.95	1.00			0.74	1.00		0.73	
Satd. Flow (perm)		5021		1770	3539			1377	1552		1329	
Volume (vph)	0	947	70	303	1318	1	54	4	132	55	1	8
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	76	329	1433	1	59	4	143	60	1	9
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	118	0	5	0
Lane Group Flow (vph)	0	1100	0	329	1434	0	0	63	25	0	65	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		57.5		24.8	86.7			19.1	19.1		19.1	
Effective Green, g (s)		58.8		25.2	88.0			20.0	20.0		20.0	
Actuated g/C Ratio		0.51		0.22	0.76			0.17	0.17		0.17	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		2545		385	2685			237	268		229	
v/s Ratio Prot		0.22		c0.19	c0.41							
v/s Ratio Perm								0.05	0.02		c0.05	
v/c Ratio		0.43		0.85	0.53			0.27	0.09		0.28	
Uniform Delay, d1		18.1		43.6	5.7			41.6	40.4		41.8	
Progression Factor		0.40		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		16.1	0.8			0.2	0.1		0.2	
Delay (s)		7.7		59.7	6.4			41.9	40.4		42.0	
Level of Service		A		E	A			D	D		D	
Approach Delay (s)		7.7			16.4			40.9			42.0	
Approach LOS		A			B			D			D	

Intersection Summary				
HCM Average Control Delay	15.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	60.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
52: Hawthorne St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.97	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5058						4892	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5058						4892	
Volume (vph)	0	0	0	168	1696	0	0	0	0	0	218	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	179	1804	0	0	0	0	0	303	86
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	0	0	0	1974	0	0	0	0	0	380	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3546						1027	
v/s Ratio Prot											c0.08	
v/s Ratio Perm					0.39							
v/c Ratio					0.56						0.37	
Uniform Delay, d1					6.6						30.4	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.6						0.1	
Delay (s)					7.2						30.5	
Level of Service					A						C	
Approach Delay (s)		0.0			7.2			0.0			30.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	11.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

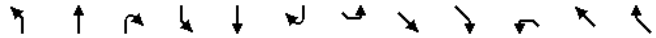
Existing AM
53: Grape St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5055									4985	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5055									4985	
Volume (vph)	0	833	30	0	0	0	0	0	0	110	276	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	896	32	0	0	0	0	0	0	124	310	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	926	0	0	0	0	0	0	0	0	364	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		62.0									19.0	
Effective Green, g (s)		62.0									20.0	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3482									1108	
v/s Ratio Prot		c0.18										
v/s Ratio Perm											0.07	
v/c Ratio		0.27									0.33	
Uniform Delay, d1		5.3									29.4	
Progression Factor		0.54									0.57	
Incremental Delay, d2		0.2									0.2	
Delay (s)		3.1									16.8	
Level of Service		A									B	
Approach Delay (s)		3.1			0.0			0.0			16.8	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	7.4	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.28			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
54: Seaworld Dr & E Mission Bay Dr 4/5/2012

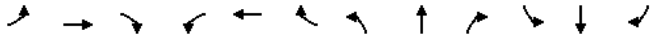


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Volume (vph)	100	926	35	111	691	116	59	70	189	37	32	77
Peak-hour factor, PHF	0.93	0.93	0.93	0.85	0.85	0.85	0.92	0.92	0.92	0.85	0.85	0.85
Adj. Flow (vph)	108	996	38	131	813	136	64	76	205	44	38	91
RTOR Reduction (vph)	0	0	37	0	0	130	0	0	170	0	0	77
Lane Group Flow (vph)	108	996	1	131	813	6	64	76	35	44	38	14
Confl. Peds. (#/hr)	2								2			
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	4.0	29.9	2.3	6.9	32.9	3.2	3.2	10.6	10.6	2.3	8.8	8.8
Effective Green, g (s)	4.0	31.4	2.3	6.9	34.3	3.2	3.2	11.5	11.5	2.3	10.6	10.6
Actuated g/C Ratio	0.06	0.46	0.03	0.10	0.50	0.05	0.05	0.17	0.17	0.03	0.16	0.16
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	202	1632	53	179	1782	74	161	315	264	60	290	246
v/s Ratio Prot	0.03	c0.28		c0.07	c0.23		0.02	c0.04		c0.02	0.02	
v/s Ratio Perm			0.00			0.00			0.02			0.01
v/c Ratio	0.53	0.61	0.02	0.73	0.46	0.09	0.40	0.24	0.13	0.73	0.13	0.06
Uniform Delay, d1	31.1	13.8	31.8	29.7	10.9	31.1	31.5	24.5	24.1	32.6	24.8	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	1.7	0.1	12.4	0.8	0.2	0.6	0.4	0.2	32.5	0.1	0.0
Delay (s)	32.5	15.5	31.9	42.1	11.7	31.2	32.1	24.9	24.3	65.1	24.9	24.5
Level of Service	C	B	C	D	B	C	C	C	C	E	C	C
Approach Delay (s)		17.6			17.9			25.9			34.9	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	19.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
55: Hawthorne St & Pacific Highway 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	5.0
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes				0.94	1.00		1.00	1.00			1.00	1.00
Frt				1.00	0.99		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1665	3509		1770	5085			5085	1545
Flt Permitted				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)				1665	3509		1770	5085			5085	1545
Volume (vph)	0	0	0	362	1326	70	64	158	0	0	139	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	381	1396	74	69	170	0	0	162	22
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	0	0	381	1466	0	69	170	0	0	162	3
Confl. Peds. (#/hr)				68		10	8					8
Turn Type				Perm			Prot					Perm
Protected Phases					6		3	8			4	
Permitted Phases				6								4
Actuated Green, G (s)				35.1	35.1		29.3	45.1			11.4	11.4
Effective Green, g (s)				35.6	34.2		29.3	45.1			11.3	11.3
Actuated g/C Ratio				0.40	0.38		0.33	0.50			0.13	0.13
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	4.9
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	3.3
Lane Grp Cap (vph)				659	1333		576	2548			638	194
v/s Ratio Prot					c0.42		c0.04	0.03			c0.03	
v/s Ratio Perm				0.23								0.00
v/c Ratio				0.58	1.10		0.12	0.07			0.25	0.01
Uniform Delay, d1				21.3	27.9		21.3	11.6			35.5	34.5
Progression Factor				0.77	0.82		0.78	0.85			1.00	1.00
Incremental Delay, d2				3.1	55.1		0.4	0.0			0.2	0.0
Delay (s)				19.6	78.1		17.0	9.9			35.8	34.5
Level of Service				B	E		B	A			D	C
Approach Delay (s)		0.0			66.0			12.0			35.6	
Approach LOS		A			E			B			D	

Intersection Summary				
HCM Average Control Delay	57.9	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
56: Grape St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.92		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5069	1549					4632		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5069	1549					4632		1770	5085	
Volume (vph)	39	609	25	0	0	0	0	209	213	41	460	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.93	0.93	0.93	0.75	0.75	0.75
Adj. Flow (vph)	44	684	28	0	0	0	0	225	229	55	613	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	160	0	0	0	0
Lane Group Flow (vph)	0	728	12	0	0	0	0	294	0	55	613	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		37.8	37.8					27.0		11.0	42.4	
Effective Green, g (s)		38.7	38.7					27.0		11.4	42.4	
Actuated g/C Ratio		0.43	0.43					0.30		0.13	0.47	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2180	666					1390		224	2396	
v/s Ratio Prot								0.06		0.03	c0.12	
v/s Ratio Perm		0.14	0.01									
v/c Ratio		0.33	0.02					0.21		0.25	0.26	
Uniform Delay, d1		17.1	14.7					23.5		35.4	14.3	
Progression Factor		1.00	1.00					1.00		0.89	0.81	
Incremental Delay, d2		0.4	0.0					0.3		2.5	0.2	
Delay (s)		17.5	14.8					23.9		34.2	11.9	
Level of Service		B	B					C		C	B	
Approach Delay (s)		17.4			0.0			23.9			13.7	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	17.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.9	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
57: Seaworld Dr & Friars Rd 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.97	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3360	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3360	1421
Volume (vph)	963	244	138	779	197	98
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.85	0.50
Adj. Flow (vph)	1047	265	144	811	232	196
RTOR Reduction (vph)	0	28	0	0	36	109
Lane Group Flow (vph)	1047	237	144	811	255	28
Confl. Peds. (#/hr)						2
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.5	43.9	5.1	42.8	11.4	11.4
Effective Green, g (s)	34.7	48.3	5.0	44.2	13.6	13.6
Actuated g/C Ratio	0.53	0.73	0.08	0.67	0.21	0.21
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1866	1258	261	2377	694	294
v/s Ratio Prot	c0.30	0.04	c0.04	0.23	c0.08	
v/s Ratio Perm		0.11				0.02
v/c Ratio	0.56	0.19	0.55	0.34	0.37	0.10
Uniform Delay, d1	10.4	2.7	29.3	4.6	22.4	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	1.4	0.4	0.1	0.1
Delay (s)	11.7	2.7	30.8	5.0	22.5	21.2
Level of Service	B	A	C	A	C	C
Approach Delay (s)	9.9			8.9	22.1	
Approach LOS	A			A	C	

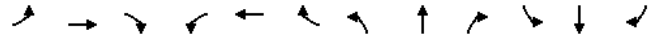
Intersection Summary				
HCM Average Control Delay	11.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM

58: I-5 SB On/I-5 SB Off & Seaworld Dr

12/07/2017



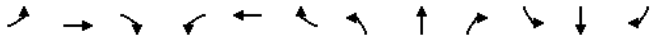
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Future Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1139	68	358	331	0	0	0	0	341	0	712
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1139	29	358	331	0	0	0	0	341	0	713
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		23.6	23.6	7.7	35.5					12.8		57.9
Effective Green, g (s)		24.6	24.6	7.9	36.5					13.4		57.9
Actuated g/C Ratio		0.42	0.42	0.14	0.63					0.23		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1503	663	468	2230					409		1583
v/s Ratio Prot		c0.32		c0.10	0.09					c0.19		
v/s Ratio Perm			0.02									0.45
v/c Ratio		0.76	0.04	0.76	0.15					0.83		0.45
Uniform Delay, d1		14.1	9.8	24.1	4.4					21.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.6	0.1	6.6	0.1					13.0		0.9
Delay (s)		17.7	9.9	30.7	4.5					34.2		0.9
Level of Service		B	A	C	A					C		A
Approach Delay (s)		17.3			18.1			0.0			11.7	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

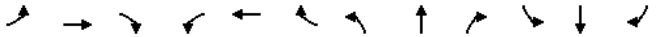
59: Seaworld Dr & I-5 NB On

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.92			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3266			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3266			1770	1583			
Volume (vph)	797	505	0	0	438	464	168	0	276	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88
Adj. Flow (vph)	866	549	0	0	461	488	183	0	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	162	0	0	0	268	0	0	0
Lane Group Flow (vph)	866	549	0	0	787	0	0	183	32	0	0	0
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	15.5	37.8			18.1			5.0	5.0			
Effective Green, g (s)	15.7	38.3			18.6			5.6	5.6			
Actuated g/C Ratio	0.30	0.72			0.35			0.11	0.11			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1019	2562			1148			187	168			
v/s Ratio Prot	c0.25	0.16			c0.24			c0.10				
v/s Ratio Perm									0.02			
v/c Ratio	0.85	0.21			0.69			0.98	0.19			
Uniform Delay, d1	17.5	2.4			14.7			23.6	21.6			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	6.5	0.2			3.3			58.7	0.2			
Delay (s)	24.0	2.6			18.0			82.3	21.8			
Level of Service	C	A			B			F	C			
Approach Delay (s)		15.7			18.0			44.7			0.0	
Approach LOS		B			B			D			A	

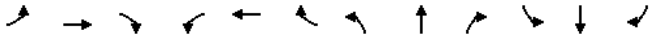
Intersection Summary				
HCM Average Control Delay	21.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	3433	1863			3302			3510	1583			
Flt Permitted	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	3433	1863			3302			3510	1583			
Volume (vph)	359	788	0	0	186	150	21	106	20	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	390	857	0	0	202	163	23	115	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	73	0	0	0	20	0	0	0
Lane Group Flow (vph)	390	857	0	0	292	0	0	138	2	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	15.7	64.1			44.0			6.1	6.1			
Effective Green, g (s)	15.7	64.1			44.0			6.1	6.1			
Actuated g/C Ratio	0.20	0.80			0.55			0.08	0.08			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	674	1493			1816			268	121			
v/s Ratio Prot	0.11	c0.46			0.09							
v/s Ratio Perm								0.04	0.00			
v/c Ratio	0.58	0.57			0.16			0.51	0.01			
Uniform Delay, d1	29.2	2.9			8.9			35.5	34.2			
Progression Factor	1.04	1.61			1.00			1.00	1.00			
Incremental Delay, d2	1.1	1.4			0.2			0.7	0.0			
Delay (s)	31.5	6.2			9.1			36.2	34.2			
Level of Service	C	A			A			D	C			
Approach Delay (s)		14.1			9.1			35.9			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Exisitng PM
1: Rosecrans St. & Lytton St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Volume (vph)	15	1495	429	102	1142	346	414	329	144	279	238	11
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	16	1557	447	106	1190	360	431	343	150	291	248	11
RTOR Reduction (vph)	0	0	173	0	0	123	0	0	93	0	1	0
Lane Group Flow (vph)	16	1557	274	106	1190	237	431	343	57	291	258	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.4	71.6	71.6	8.2	76.3	76.3	23.7	33.3	33.3	29.4	37.2	
Effective Green, g (s)	3.8	72.9	72.9	8.6	77.7	77.7	24.1	34.1	34.1	28.4	38.4	
Actuated g/C Ratio	0.02	0.46	0.46	0.05	0.49	0.49	0.15	0.21	0.21	0.18	0.24	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	42	2317	711	185	1719	730	517	397	331	314	444	
v/s Ratio Prot	0.01	0.31		c0.03	c0.34		0.13	c0.18		c0.16	0.14	
v/s Ratio Perm			0.18			0.16			0.04			
v/c Ratio	0.38	0.67	0.39	0.57	0.69	0.32	0.83	0.86	0.17	0.93	0.58	
Uniform Delay, d1	76.9	34.2	28.8	73.9	31.9	25.1	66.0	60.7	51.4	64.8	53.7	
Progression Factor	1.00	1.00	1.00	0.94	0.77	1.09	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	1.6	1.6	1.7	1.5	0.7	10.6	17.9	0.3	31.7	1.3	
Delay (s)	79.0	35.7	30.3	70.9	26.1	28.1	76.6	78.6	51.7	96.4	55.0	
Level of Service	E	D	C	E	C	C	E	E	D	F	D	
Approach Delay (s)		34.9			29.4			73.3			76.9	
Approach LOS		C			C			E			E	

Intersection Summary				
HCM Average Control Delay	44.5	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/9/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	689	1585	603	0	0	573
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	757	1742	655	0	0	623
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	757	1674	655	0	0	623
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	65.0	65.0	40.5			40.5
Effective Green, g (s)	65.0	65.0	40.5			40.5
Actuated g/C Ratio	0.54	0.54	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1867	1516	1199			631
v/s Ratio Prot	0.22		0.19			c0.33
v/s Ratio Perm		c0.60				
v/c Ratio	0.41	1.10	0.55			0.99
Uniform Delay, d1	15.9	27.2	32.0			39.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	57.1	0.3			32.2
Delay (s)	16.0	84.4	32.3			71.5
Level of Service	B	F	C			E
Approach Delay (s)	63.6		32.3			71.5
Approach LOS	E		C			E

Intersection Summary				
HCM Average Control Delay	59.5	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.06			
Actuated Cycle Length (s)	119.5	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	83.8%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
3: Channel Way & W Mission Bay Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	136	1380	25	0	1200
Peak Hour Factor	0.65	0.87	0.98	0.98	0.90	0.90
Hourly flow rate (vph)	0	156	1408	26	0	1333
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.98	0.98			0.98	
vC, conflicting volume	1865	485			1434	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1847	444			1408	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	72			100	
cM capacity (veh/h)	65	551			473	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	156	563	563	307	444	444	444
Volume Left	0	0	0	0	0	0	0
Volume Right	156	0	0	26	0	0	0
cSH	551	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.33	0.33	0.18	0.26	0.26	0.26
Queue Length 95th (ft)	29	0	0	0	0	0	0
Control Delay (s)	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	14.1	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Exisitng PM
4: Midway Dr & W Point Loma Blvd 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Volume (vph)	359	445	30	312	594	294	350	206	287	39	503	610
Peak-hour factor, PHF	0.88	0.88	0.88	0.90	0.90	0.90	0.99	0.99	0.99	0.84	0.84	0.84
Adj. Flow (vph)	408	506	34	347	660	327	354	208	290	46	599	726
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	159	0	0	0
Lane Group Flow (vph)	408	506	34	324	683	327	274	288	131	46	599	726
Confl. Peds. (#/hr)	6					6	6		3	3		6
Turn Type	Split		Free	Split		Free	Split		pm+ov	Split		Free
Protected Phases	3	3		4	4		2	2	3	1	1	
Permitted Phases			Free			Free			2			Free
Actuated Green, G (s)	39.9	39.9	150.0	34.0	34.0	150.0	25.9	25.9	65.8	30.5	30.5	150.0
Effective Green, g (s)	40.8	40.8	150.0	34.9	34.9	150.0	26.8	26.8	67.6	31.5	31.5	150.0
Actuated g/C Ratio	0.27	0.27	1.00	0.23	0.23	1.00	0.18	0.18	0.45	0.21	0.21	1.00
Clearance Time (s)	4.9	4.9		4.9	4.9		4.9	4.9	4.9	5.0	5.0	
Vehicle Extension (s)	3.1	3.1		5.5	5.5		0.2	0.2	3.1	8.0	8.0	
Lane Grp Cap (vph)	481	963	1583	375	787	1562	300	312	751	372	743	1562
v/s Ratio Prot	c0.23	0.14		0.20	c0.20		0.16	c0.17	0.05	0.03	c0.17	
v/s Ratio Perm			0.02			0.21			0.04			0.46
v/c Ratio	0.85	0.53	0.02	0.86	0.87	0.21	0.91	0.92	0.17	0.12	0.81	0.46
Uniform Delay, d1	51.7	46.4	0.0	55.3	55.3	0.0	60.5	60.6	24.6	48.1	56.3	0.0
Progression Factor	0.90	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.6	1.9	0.0	20.0	11.0	0.3	30.0	31.2	0.0	0.6	8.3	1.0
Delay (s)	61.9	41.5	0.0	75.3	66.4	0.3	90.4	91.8	24.6	48.7	64.6	1.0
Level of Service	E	D	A	E	E	A	F	F	C	D	E	A
Approach Delay (s)		48.8			52.4			68.5			30.4	
Approach LOS		D			D			E			C	

Intersection Summary				
HCM Average Control Delay	48.0	HCM Level of Service		D
HCM Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		16.0
Intersection Capacity Utilization	84.6%	ICU Level of Service		E
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
5: Kemper St & Midway Dr 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Volume (vph)	186	122	157	53	141	74	225	621	59	122	500	140
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	209	137	176	57	152	80	247	682	65	136	556	156
RTOR Reduction (vph)	0	0	126	0	0	70	0	3	0	0	0	81
Lane Group Flow (vph)	168	178	50	57	152	10	247	744	0	136	556	75
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	41.7	18.4	18.4	18.4	17.8	65.8		22.8	70.8	70.8
Effective Green, g (s)	24.8	24.8	43.0	19.3	19.3	19.3	18.2	66.7		23.2	71.7	71.7
Actuated g/C Ratio	0.17	0.17	0.29	0.13	0.13	0.13	0.12	0.44		0.15	0.48	0.48
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	278	289	488	228	240	199	417	1549		274	1692	729
v/s Ratio Prot	0.10	c0.10	0.01	0.03	c0.08		c0.07	c0.21		c0.08	0.16	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.60	0.62	0.10	0.25	0.63	0.05	0.59	0.48		0.50	0.33	0.10
Uniform Delay, d1	58.1	58.2	39.3	58.8	62.0	57.3	62.4	29.4		58.1	24.2	21.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.81		1.13	0.56	0.79
Incremental Delay, d2	3.7	3.9	0.0	0.6	5.4	0.1	1.3	0.9		0.4	0.4	0.2
Delay (s)	61.7	62.0	39.4	59.4	67.4	57.4	59.4	24.6		65.8	13.9	17.2
Level of Service	E	E	D	E	E	E	E	C		E	B	B
Approach Delay (s)		54.3			63.0			33.2			22.8	
Approach LOS		D			E			C			C	

Intersection Summary				
HCM Average Control Delay	37.3	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	70.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
6: Midway Dr & East Dr 4/9/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	1.00		1.00	0.98			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	3530		1770	3452			1682			1676	
Flt Permitted	0.14	1.00		0.23	1.00			0.86			0.82	
Satd. Flow (perm)	269	3530		431	3452			1479			1406	
Volume (vph)	46	943	16	27	1008	164	24	6	34	69	4	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.79	0.79	0.79	0.74	0.74	0.74
Adj. Flow (vph)	51	1036	18	29	1096	178	30	8	43	93	5	70
RTOR Reduction (vph)	0	1	0	0	10	0	0	35	0	0	46	0
Lane Group Flow (vph)	51	1053	0	29	1264	0	0	46	0	0	122	0
Confl. Peds. (#/hr)	3					3	33					33
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.0	45.9		46.2	44.0			12.7			12.7	
Effective Green, g (s)	51.3	46.8		47.5	44.9			13.6			13.6	
Actuated g/C Ratio	0.68	0.62		0.63	0.60			0.18			0.18	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	274	2203		319	2067			268			255	
v/s Ratio Prot	c0.01	0.30		0.00	c0.37							
v/s Ratio Perm	0.12			0.05				0.03			c0.09	
v/c Ratio	0.19	0.48		0.09	0.61			0.17			0.48	
Uniform Delay, d1	5.8	7.6		5.4	9.5			25.9			27.5	
Progression Factor	1.14	1.63		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.7		0.0	1.4			0.1			0.5	
Delay (s)	6.6	13.1		5.5	10.9			26.0			28.0	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		12.8			10.8			26.0			28.0	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	13.2	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
7: Rosecrans St. & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.92	1.00	1.00	0.93
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Volume (vph)	290	1688	63	425	1298	332	312	490	244	130	577	328
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	293	1705	64	429	1311	335	315	495	246	131	583	331
RTOR Reduction (vph)	0	2	0	0	27	0	0	0	195	0	0	202
Lane Group Flow (vph)	293	1767	0	429	1619	0	315	495	51	131	583	129
Confl. Peds. (#/hr)	48		65	65		48	40		42	42		40
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	29.1	68.0		26.5	65.5		17.0	32.3	32.3	14.4	29.7	29.7
Effective Green, g (s)	29.5	69.1		26.9	66.5		17.4	33.2	33.2	14.8	30.6	30.6
Actuated g/C Ratio	0.18	0.43		0.17	0.42		0.11	0.21	0.21	0.09	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	326	2174		577	2005		373	734	304	164	677	281
v/s Ratio Prot	c0.17	c0.35		0.12	c0.34		c0.09	0.14		0.07	c0.16	
v/s Ratio Perm									0.03			0.09
v/c Ratio	0.90	0.81		0.74	0.81		0.84	0.67	0.17	0.80	0.86	0.46
Uniform Delay, d1	63.8	39.8		63.3	41.1		70.0	58.4	52.1	71.1	62.6	57.4
Progression Factor	1.06	0.44		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.8	2.7		4.5	2.6		15.3	1.9	0.1	21.8	10.6	0.4
Delay (s)	88.3	20.2		67.8	43.7		85.3	60.4	52.2	92.9	73.2	57.8
Level of Service	F	C		E	D		F	E	D	F	E	E
Approach Delay (s)		29.8			48.7			65.9			70.8	
Approach LOS		C			D			E			E	

Intersection Summary				
HCM Average Control Delay	49.1	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
9: Enterprise St & Midway Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	228	763	6	0	863
Peak Hour Factor	0.80	0.80	0.87	0.87	0.93	0.93
Hourly flow rate (vph)	0	285	877	7	0	928
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	1346	447			886	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1346	447			886	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	49			100	
cM capacity (veh/h)	142	557			759	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	285	585	299	464	464
Volume Left	0	0	0	0	0
Volume Right	285	0	7	0	0
cSH	557	1700	1700	1700	1700
Volume to Capacity	0.51	0.34	0.18	0.27	0.27
Queue Length 95th (ft)	72	0	0	0	0
Control Delay (s)	18.1	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	18.1	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	42.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
10: Barnett Ave & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	1232	0	0	891	769	0	0	0	739	0	124
Peak-hour factor, PHF	0.86	0.86	0.86	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1433	0	0	938	809	0	0	0	803	0	135
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	0	97
Lane Group Flow (vph)	0	1433	0	0	938	408	0	0	0	803	0	38
Confl. Peds. (#/hr)						6				3		
Turn Type						custom				Prot		custom
Protected Phases		2			2	2				1		
Permitted Phases						8						1
Actuated Green, G (s)		43.0			43.0	43.0				24.0		24.0
Effective Green, g (s)		43.0			43.0	42.5				24.0		24.0
Actuated g/C Ratio		0.51			0.51	0.50				0.29		0.29
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	2.9				2.5		2.5
Lane Grp Cap (vph)		1807			1807	1407				979		451
v/s Ratio Prot		c0.40			0.27	0.15				c0.23		
v/s Ratio Perm												0.02
v/c Ratio		0.79			0.52	0.29				0.82		0.09
Uniform Delay, d1		16.9			13.7	12.1				28.1		22.1
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		2.5			0.2	0.1				5.5		0.1
Delay (s)		19.4			14.0	12.2				33.6		22.1
Level of Service		B			B	B				C		C
Approach Delay (s)		19.4			13.1			0.0			31.9	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	19.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	84.2	Sum of lost time (s)	17.2	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
11: Sport Arena Blvd & Hancock 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9				4.0	4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91				1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99				0.86	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (prot)	1770	3529		1770	5041				1611	1770		1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (perm)	1770	3529		1770	5041				1611	1770		1583
Volume (vph)	86	905	14	20	996	51	0	0	10	56	0	185
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	90	943	15	24	1172	60	0	0	11	62	0	206
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	11	0	0	166
Lane Group Flow (vph)	90	957	0	24	1229	0	0	0	0	62	0	40
Confl. Peds. (#/hr)	18		10	10		18				11		16
Turn Type	Prot			Prot					NA	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases												
Actuated Green, G (s)	8.5	67.0		4.1	62.6				0.0	19.7		19.7
Effective Green, g (s)	8.5	67.0		4.1	62.6				0.0	19.7		20.6
Actuated g/C Ratio	0.08	0.64		0.04	0.60				0.00	0.19		0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	143	2252		69	3005				0	332		311
v/s Ratio Prot	c0.05	c0.27		0.01	0.24					c0.04		0.03
v/s Ratio Perm												
v/c Ratio	0.63	0.43		0.35	0.41				0.00	0.19		0.13
Uniform Delay, d1	46.7	9.4		49.1	11.3				52.5	35.9		34.8
Progression Factor	1.00	1.00		1.50	0.58				1.00	1.00		1.00
Incremental Delay, d2	6.1	0.6		1.0	0.4				0.0	0.1		0.1
Delay (s)	52.8	10.0		74.5	6.9				52.5	36.0		34.9
Level of Service	D	B		E	A				D	D		C
Approach Delay (s)		13.7			8.2			52.5			35.1	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	13.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.40			
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	53.8%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
12: Kemper Street & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Volume (vph)	27	14	40	102	21	102	136	806	19	56	938	108
Peak-hour factor, PHF	0.92	0.92	0.92	0.78	0.78	0.78	0.95	0.95	0.95	0.91	0.91	0.91
Adj. Flow (vph)	29	15	43	131	27	131	143	848	20	62	1031	119
RTOR Reduction (vph)	0	37	0	0	0	115	0	1	0	0	9	0
Lane Group Flow (vph)	29	21	0	131	27	16	143	867	0	62	1141	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	14.8	14.8		11.9	11.9	11.9	8.7	50.1		9.1	50.5	
Effective Green, g (s)	15.7	15.7		12.8	12.8	12.8	9.1	51.0		9.5	51.4	
Actuated g/C Ratio	0.15	0.15		0.12	0.12	0.12	0.09	0.49		0.09	0.49	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	265	244		216	227	189	298	1712		160	2443	
v/s Ratio Prot	c0.02	0.01		c0.07	0.01		0.04	c0.25		0.04	c0.23	
v/s Ratio Perm						0.01						
v/c Ratio	0.11	0.09		0.61	0.12	0.08	0.48	0.51		0.39	0.47	
Uniform Delay, d1	38.6	38.5		43.7	41.1	40.9	45.7	18.4		45.0	17.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.74	0.99		0.59	0.35	
Incremental Delay, d2	0.2	0.2		3.3	0.1	0.1	0.4	1.0		0.5	0.6	
Delay (s)	38.8	38.6		47.0	41.2	41.0	34.2	19.2		27.0	6.9	
Level of Service	D	D		D	D	D	C	B		C	A	
Approach Delay (s)		38.7			43.7			21.3			7.9	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
13: Sport Arena Blvd & 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.94		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	3433	3492		1770	5034			1694		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (perm)	3433	3492		1770	5034			1694		1770	1610	
Volume (vph)	101	786	61	34	931	53	50	11	54	129	13	121
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.79	0.79	0.79	0.93	0.93	0.93
Adj. Flow (vph)	107	836	65	36	990	56	63	14	68	139	14	130
RTOR Reduction (vph)	0	4	0	0	4	0	0	38	0	0	115	0
Lane Group Flow (vph)	107	897	0	36	1042	0	0	107	0	139	29	0
Confl. Peds. (#/hr)	18		7	7		18			6	6		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Effective Green, g (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Actuated g/C Ratio	0.09	0.48		0.08	0.48			0.14		0.12	0.12	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	314	1686		148	2392			231		204	186	
v/s Ratio Prot	c0.03	c0.26		0.02	0.21			c0.06		c0.08	0.02	
v/s Ratio Perm												
v/c Ratio	0.34	0.53		0.24	0.44			0.46		0.68	0.16	
Uniform Delay, d1	44.7	18.9		45.0	18.2			41.8		44.6	41.8	
Progression Factor	1.10	1.07		1.23	0.77			1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.1		0.3	0.6			0.5		7.3	0.1	
Delay (s)	49.6	21.4		55.6	14.6			42.3		51.9	42.0	
Level of Service	D	C		E	B			D		D	D	
Approach Delay (s)		24.4			15.9			42.3			46.8	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
14: Sport Arena Blvd & East Dr 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00	0.99			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.98		1.00	1.00			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (prot)	1770	4954		1770	5074			1788	1563			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (perm)	1770	4954		1770	5074			1788	1563			1611
Volume (vph)	22	837	110	123	989	11	24	5	56	0	0	5
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.78	0.78	0.78	0.30	0.30	0.30
Adj. Flow (vph)	23	890	117	135	1087	12	31	6	72	0	0	17
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	23	999	0	135	1098	0	0	37	6	0	0	17
Confl. Peds. (#/hr)	19		19	19		19			1	1		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Effective Green, g (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Actuated g/C Ratio	0.03	0.66		0.11	0.75			0.09	0.09			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	49	3274		202	3793			160	140			1611
v/s Ratio Prot	0.01	c0.20		c0.08	0.22							
v/s Ratio Perm								0.02	0.00			0.01
v/c Ratio	0.47	0.31		0.67	0.29			0.23	0.05			0.01
Uniform Delay, d1	50.3	7.6		44.6	4.3			44.4	43.7			0.0
Progression Factor	0.81	1.40		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	2.3	0.2		6.3	0.2			0.3	0.0			0.0
Delay (s)	42.9	10.8		50.9	4.5			44.7	43.8			0.0
Level of Service	D	B		D	A			D	D			A
Approach Delay (s)		11.5			9.5			44.1			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
15: Rosecrans St. & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	0.99			1.00	0.98	1.00	0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Volume (vph)	274	1612	442	0	1621	587	251	262	26	372	338	183
Peak-hour factor, PHF	0.86	0.95	0.90	0.25	0.95	0.89	0.85	0.82	0.81	0.93	0.94	0.93
Adj. Flow (vph)	319	1697	491	0	1706	660	295	320	32	400	360	197
RTOR Reduction (vph)	0	33	0	0	0	0	0	3	0	0	0	159
Lane Group Flow (vph)	319	2155	0	0	1706	660	210	434	0	254	506	38
Confl. Peds. (#/hr)	29		31	31		29	63		31	10		63
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	15.6	79.9			59.1	150.0	23.0	23.0		29.2	29.2	29.2
Effective Green, g (s)	17.0	82.0			61.0	150.0	23.0	23.0		29.2	29.2	29.2
Actuated g/C Ratio	0.11	0.55			0.41	1.00	0.15	0.15		0.19	0.19	0.19
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	389	2652			2068	1551	247	506		313	615	281
v/s Ratio Prot	0.09	c0.44			0.34		0.13	c0.13		0.16	c0.16	0.03
v/s Ratio Perm						0.43						
v/c Ratio	0.82	0.81			0.82	0.43	0.85	0.86		0.81	0.82	0.14
Uniform Delay, d1	65.0	27.7			39.7	0.0	61.8	61.9		57.8	57.9	50.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.4	2.8			3.9	0.9	23.3	13.4		15.5	9.2	0.3
Delay (s)	77.4	30.6			43.6	0.9	85.1	75.3		73.3	67.1	50.3
Level of Service	E	C			D	A	F	E		E	E	D
Approach Delay (s)		36.5			31.7			78.5			65.3	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.8
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	852	844	19
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	926	888	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1361	454	908			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1361	454	908			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	100			
cM capacity (veh/h)	139	553	745			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	463	463	592	316
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	20
cSH	553	1700	1700	1700	1700
Volume to Capacity	0.07	0.27	0.27	0.35	0.19
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.0	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM
19: Kurtz & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frpb, ped/bikes				1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes				0.98	1.00	1.00		1.00		1.00	1.00	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1654	1738	1559		5080		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1654	1738	1559		5080		1770	6408	
Volume (vph)	0	0	0	295	177	75	0	1996	14	85	2133	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	311	186	79	0	2101	15	88	2199	0
RTOR Reduction (vph)	0	0	0	0	0	10	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	240	257	69	0	2116	0	88	2199	0
Confl. Peds. (#/hr)				14		3				13		
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				30.4	30.4	30.4		104.1		11.0	119.8	
Effective Green, g (s)				31.3	31.3	31.3		105.3		11.4	120.7	
Actuated g/C Ratio				0.20	0.20	0.20		0.66		0.07	0.75	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				324	340	305		3343		126	4834	
v/s Ratio Prot								c0.42		c0.05	0.34	
v/s Ratio Perm				0.15	0.15	0.04						
v/c Ratio				0.74	0.76	0.22		0.63		0.70	0.45	
Uniform Delay, d1				60.5	60.7	54.1		16.0		72.6	7.3	
Progression Factor				1.00	1.00	1.00		1.00		0.89	1.20	
Incremental Delay, d2				7.7	8.2	0.1		0.9		8.7	0.2	
Delay (s)				68.3	69.0	54.3		16.9		73.3	9.0	
Level of Service				E	E	D		B		E	A	
Approach Delay (s)		0.0			66.7			16.9			11.5	
Approach LOS		A			E			B			B	

Intersection Summary				
HCM Average Control Delay	20.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	68.5%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

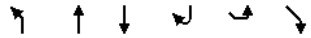
Exisitng PM
20: Rosecrans St & Kurtz 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.94		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3227		1770	3539		1770		1549	1770	1863	
Flt Permitted		1.00		0.23	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3227		435	3539		1770		1549	1770	1863	
Volume (vph)	0	672	199	80	464	0	167	0	124	67	209	0
Peak-hour factor, PHF	1.00	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Adj. Flow (vph)	0	693	205	82	478	0	172	0	128	73	227	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	56	0	0	0
Lane Group Flow (vph)	0	888	0	82	478	0	172	0	72	73	227	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		89.4		101.3	101.3		19.8		89.4	24.7	24.7	
Effective Green, g (s)		90.3		102.2	102.2		20.2		90.3	25.6	25.6	
Actuated g/C Ratio		0.56		0.64	0.64		0.13		0.56	0.16	0.16	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1821		344	2261		223		874	283	298	
v/s Ratio Prot		c0.28		0.01	c0.14		c0.10			0.04	c0.12	
v/s Ratio Perm				0.14					0.05			
v/c Ratio		0.49		0.24	0.21		0.77		0.08	0.26	0.76	
Uniform Delay, d1		20.9		13.2	12.1		67.7		15.9	58.9	64.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.95	0.99	
Incremental Delay, d2		0.9		0.1	0.2		15.1		0.2	0.4	9.1	
Delay (s)		21.9		13.3	12.3		82.8		16.1	56.1	72.6	
Level of Service		C		B	B		F		B	E	E	
Approach Delay (s)		21.9			12.4			54.3			68.6	
Approach LOS		C			B			D			E	

Intersection Summary				
HCM Average Control Delay	30.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	66.6%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
21: Pacific Highway & Kurtz St 4/9/2012

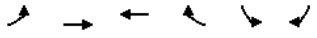


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	214	656	444	7	0	423
Peak Hour Factor	0.92	0.92	0.87	0.87	0.99	0.99
Hourly flow rate (vph)	233	713	510	8	0	427
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	520				1219	176
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	520				1219	176
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	74				100	49
cM capacity (veh/h)	905				128	835

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	233	238	238	238	204	204	110	427
Volume Left	233	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	427
cSH	905	1700	1700	1700	1700	1700	1700	835
Volume to Capacity	0.26	0.14	0.14	0.14	0.12	0.12	0.06	0.51
Queue Length 95th (ft)	26	0	0	0	0	0	0	74
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Lane LOS	B							B
Approach Delay (s)	2.5				0.0			13.7
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
22: Hancock & Channel Way 4/9/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	51	72	159	59	10	70
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	63	89	199	74	13	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1226				
pX, platoon unblocked						
vC, conflicting volume	272				450	236
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				450	236
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	88
cM capacity (veh/h)	1291				539	803

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	63	89	272	107
Volume Left	63	0	0	13
Volume Right	0	0	74	93
cSH	1291	1700	1700	757
Volume to Capacity	0.05	0.05	0.16	0.14
Queue Length 95th (ft)	4	0	0	12
Control Delay (s)	7.9	0.0	0.0	10.5
Lane LOS	A			B
Approach Delay (s)	3.3		0.0	10.5
Approach LOS				B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
23: Hancock St & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frpb, ped/bikes		0.98					1.00	1.00			1.00	0.96
Flpb, ped/bikes		1.00					1.00	1.00			1.00	1.00
Frt		0.92					1.00	1.00			1.00	0.85
Flt Protected		0.99					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3165					1770	5073			5085	1516
Flt Permitted		0.99					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3165					1770	5073			5085	1516
Volume (vph)	40	81	146	0	0	0	87	2175	29	0	2178	83
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	88	159	0	0	0	95	2364	32	0	2367	90
RTOR Reduction (vph)	0	6	0	0	0	0	0	1	0	0	0	21
Lane Group Flow (vph)	0	284	0	0	0	0	95	2395	0	0	2367	69
Confl. Peds. (#/hr)	1		20				15		2			15
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		32.1					13.6	118.1			100.1	100.1
Effective Green, g (s)		33.0					14.0	119.0			101.0	101.0
Actuated g/C Ratio		0.21					0.09	0.74			0.63	0.63
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		653					155	3773			3210	957
v/s Ratio Prot		c0.09					0.05	c0.47			c0.47	
v/s Ratio Perm												0.05
v/c Ratio		0.43					0.61	0.63			0.74	0.07
Uniform Delay, d1		55.4					70.4	10.0			20.4	11.4
Progression Factor		0.81					1.08	1.20			1.00	1.00
Incremental Delay, d2		0.2					4.0	0.7			1.6	0.1
Delay (s)		44.9					79.8	12.6			21.9	11.5
Level of Service		D					E	B			C	B
Approach Delay (s)		44.9			0.0			15.2			21.5	
Approach LOS		D			A			B			C	

Intersection Summary				
HCM Average Control Delay	19.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	79.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

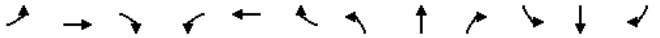
Exisitng PM
25: Old Town St & Hancock St 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	242	0	0	304	294	258
Peak Hour Factor	0.85	0.85	0.93	0.93	0.84	0.84
Hourly flow rate (vph)	285	0	0	327	350	307

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	285	327	350	307
Volume Left (vph)	285	0	350	0
Volume Right (vph)	0	327	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.3	5.3	6.5	5.9
Degree Utilization, x	0.50	0.48	0.63	0.51
Capacity (veh/h)	530	658	547	593
Control Delay (s)	15.5	13.0	18.5	13.7
Approach Delay (s)	15.5	13.0	16.3	
Approach LOS	C	B	C	

Intersection Summary				
Delay	15.2			
HCM Level of Service	C			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
26: Witherby St & Hancock St 4/9/2012

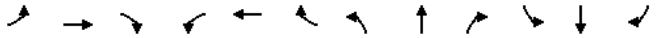


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	87	154	172	10	75	0	422	217	50	15	270	215
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.91	0.91	0.91	0.72	0.72	0.72
Hourly flow rate (vph)	104	183	205	12	94	0	464	238	55	21	375	299

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	492	106	757	396	299
Volume Left (vph)	104	13	464	21	0
Volume Right (vph)	205	0	55	0	299
Hadj (s)	-0.17	0.06	0.11	0.06	-0.67
Departure Headway (s)	7.4	9.5	7.8	8.2	7.5
Degree Utilization, x	1.02	0.28	1.64	0.90	0.62
Capacity (veh/h)	492	371	465	427	469
Control Delay (s)	72.3	16.1	319.6	50.2	20.9
Approach Delay (s)	72.3	16.1	319.6	37.6	
Approach LOS	F	C	F	E	

Intersection Summary				
Delay	149.0			
HCM Level of Service	F			
Intersection Capacity Utilization	93.1%	ICU Level of Service	F	
Analysis Period (min)	15			

Exisitng PM
27: Washington St & Hancock St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Volume (vph)	0	547	124	346	378	0	0	0	0	96	228	760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	595	135	376	411	0	0	0	0	104	248	826
RTOR Reduction (vph)	0	0	99	0	0	0	0	0	0	0	0	253
Lane Group Flow (vph)	0	595	36	376	411	0	0	0	0	104	248	573
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		20.5	20.5	12.7	37.6					32.6	32.6	32.6
Effective Green, g (s)		21.4	21.4	13.1	38.5					33.5	33.5	33.5
Actuated g/C Ratio		0.27	0.27	0.16	0.48					0.42	0.42	0.42
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		947	423	562	1703					674	1420	663
v/s Ratio Prot		c0.17		c0.11	0.12						0.07	
v/s Ratio Perm			0.02							0.06		c0.36
v/c Ratio		0.63	0.09	0.67	0.24					0.15	0.17	0.86
Uniform Delay, d1		25.8	22.0	31.4	12.2					14.4	14.6	21.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2	0.4	2.3	0.3					0.0	0.0	11.0
Delay (s)		29.0	22.4	33.8	12.5					14.5	14.6	32.2
Level of Service		C	C	C	B					B	B	C
Approach Delay (s)		27.7			22.7			0.0			26.9	
Approach LOS		C			C			A			C	

Intersection Summary						
HCM Average Control Delay	25.9	HCM Level of Service		C		
HCM Volume to Capacity ratio	0.75					
Actuated Cycle Length (s)	80.0	Sum of lost time (s)		12.0		
Intersection Capacity Utilization	64.2%	ICU Level of Service		C		
Analysis Period (min)	15					
c Critical Lane Group						

Exisitng PM
28: Vine St & Hancock St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	18	51	0	0	0	0	0	0	2034	4
Peak Hour Factor	0.56	0.56	0.56	0.75	0.75	0.75	0.95	0.95	0.95	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	32	68	0	0	0	0	0	0	2211	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	2213	2213	739	769	2215	0	2215			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2213	2213	739	769	2215	0	2215			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	91	74	100	100	100			100		
cM capacity (veh/h)	24	43	360	265	43	1084	233			1622		

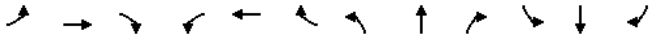
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	32	68	884	884	447
Volume Left	0	68	0	0	0
Volume Right	32	0	0	0	4
cSH	360	265	1700	1700	1700
Volume to Capacity	0.09	0.26	0.52	0.52	0.26
Queue Length 95th (ft)	7	25	0	0	0
Control Delay (s)	16.0	23.2	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	16.0	23.2	0.0		
Approach LOS	C	C			

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Exisitng PM
29: Sassafras St & Kettner Bl 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.96	
Flt Protected		1.00	1.00		0.97					0.95	1.00	
Satd. Flow (prot)		1863	1583		3418					1770	4887	
Flt Permitted		1.00	1.00		0.72					0.95	1.00	
Satd. Flow (perm)		1863	1583		2557					1770	4887	
Volume (vph)	0	202	97	82	34	0	0	0	0	248	686	241
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	220	105	89	37	0	0	0	0	270	746	262
RTOR Reduction (vph)	0	0	52	0	0	0	0	0	0	0	115	0
Lane Group Flow (vph)	0	220	53	0	126	0	0	0	0	270	893	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		22.0	22.0		22.0					20.0	20.0	
Effective Green, g (s)		24.7	24.7		24.7					22.3	22.3	
Actuated g/C Ratio		0.45	0.45		0.45					0.41	0.41	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		837	711		1148					718	1981	
v/s Ratio Prot		c0.12									c0.18	
v/s Ratio Perm			0.03		0.05					0.15		
v/c Ratio		0.26	0.07		0.11					0.38	0.45	
Uniform Delay, d1		9.5	8.6		8.8					11.5	11.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.8	0.2		0.2					1.5	0.7	
Delay (s)		10.2	8.8		9.0					13.0	12.6	
Level of Service		B	A		A					B	B	
Approach Delay (s)		9.8			9.0			0.0			12.7	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	11.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3481		1770	3539						4718	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3481		1770	3539						4718	1362
Volume (vph)	0	813	100	49	196	0	0	0	0	438	732	334
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	884	109	53	213	0	0	0	0	476	796	363
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	0	241
Lane Group Flow (vph)	0	985	0	53	213	0	0	0	0	0	1272	122
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		49.6		6.2	58.5						33.5	33.5
Effective Green, g (s)		47.8		6.6	58.4						32.6	34.9
Actuated g/C Ratio		0.46		0.06	0.56						0.31	0.34
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1600		112	1987						1479	457
v/s Ratio Prot		c0.28		c0.03	0.06							
v/s Ratio Perm											0.27	0.09
v/c Ratio		0.62		0.47	0.11						0.90dl	0.27
Uniform Delay, d1		21.2		47.0	10.6						33.6	25.2
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		1.8		1.1	0.1						5.2	0.1
Delay (s)		23.0		48.2	10.7						38.7	25.3
Level of Service		C		D	B						D	C
Approach Delay (s)		23.0			18.2			0.0			35.8	
Approach LOS		C			B			A			D	

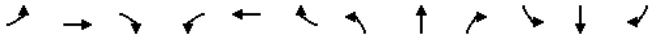
Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM

32: Washington St & Pacific Highway NB Frontage Road 4/9/2012

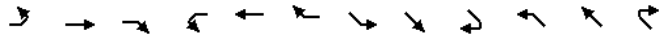


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.88			0.90	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99			0.99	
Satd. Flow (prot)	1770	3539			3539	1583	1610	2969			1653	
Flt Permitted	0.95	1.00			1.00	1.00	0.70	0.90			0.31	
Satd. Flow (perm)	1770	3539			3539	1583	1184	2690			514	
Volume (vph)	139	511	0	0	766	372	93	11	140	20	0	63
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	151	555	0	0	833	404	101	12	152	22	0	68
RTOR Reduction (vph)	0	0	0	0	0	228	0	121	0	0	61	0
Lane Group Flow (vph)	151	555	0	0	833	176	71	73	0	0	29	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	4.0	42.9			34.0	34.0	13.5	13.5			8.1	
Effective Green, g (s)	4.5	42.9			34.4	34.4	15.9	15.9			8.1	
Actuated g/C Ratio	0.06	0.54			0.44	0.44	0.20	0.20			0.10	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	101	1924			1543	690	239	542			53	
v/s Ratio Prot	c0.09	0.16			c0.24							
v/s Ratio Perm						0.11	c0.06	0.03			c0.06	
v/c Ratio	1.50	0.29			0.54	0.26	0.30	0.13			0.55	
Uniform Delay, d1	37.2	9.7			16.4	14.1	26.8	25.9			33.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	267.6	0.0			1.4	0.9	0.3	0.0			6.0	
Delay (s)	304.8	9.8			17.8	15.0	27.0	25.9			39.7	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		72.9			16.9			26.2			39.7	
Approach LOS		E			B			C			D	

Intersection Summary				
HCM Average Control Delay	36.0	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	52.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM

33: Washington St & Pacific Highway SB 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.98		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3457		1757	1863		1681	1699	1583			
Flt Permitted		1.00		0.49	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3457		904	1863		1681	1699	1583			
Volume (vph)	0	367	53	270	652	0	283	27	358	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	399	58	293	709	0	308	29	389	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	0	444	0	293	709	0	164	173	348	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		12.7		32.2	32.2		18.3	18.3	31.0			
Effective Green, g (s)		12.7		32.5	32.5		20.5	20.5	33.2			
Actuated g/C Ratio		0.16		0.42	0.42		0.26	0.26	0.43			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		565		378	779		444	448	758			
v/s Ratio Prot		c0.13			c0.38				c0.12			
v/s Ratio Perm				0.32			0.10	0.10	0.10			
v/c Ratio		0.79		0.78	0.91		0.37	0.39	0.46			
Uniform Delay, d1		31.2		19.5	21.2		23.3	23.4	15.9			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		6.6		14.4	16.6		0.2	0.2	0.2			
Delay (s)		37.8		33.8	37.8		23.5	23.6	16.0			
Level of Service		D		C	D		C	C	B			
Approach Delay (s)		37.8			36.7			19.5			0.0	
Approach LOS		D			D			B			A	

Intersection Summary				
HCM Average Control Delay	31.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
34: Sassafras St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.89		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1833		1763	1665		1767	4984		1770	5083	
Flt Permitted	0.69	1.00		0.64	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1278	1833		1182	1665		1767	4984		1770	5083	
Volume (vph)	23	139	15	174	29	72	19	549	84	76	404	1
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	151	16	189	32	78	21	597	91	83	439	1
RTOR Reduction (vph)	0	7	0	0	58	0	0	23	0	0	0	0
Lane Group Flow (vph)	25	160	0	189	52	0	21	665	0	83	440	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	15.3	15.3		14.6	14.6		0.8	24.8		4.1	27.4	
Effective Green, g (s)	15.3	15.3		15.0	15.0		0.8	26.2		1.9	29.5	
Actuated g/C Ratio	0.27	0.27		0.26	0.26		0.01	0.45		0.03	0.51	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	339	487		308	434		25	2267		58	2603	
v/s Ratio Prot		0.09			0.03		0.01	c0.13		c0.05	c0.09	
v/s Ratio Perm	0.02			c0.16								
v/c Ratio	0.07	0.33		0.61	0.12		0.84	0.29		1.43	0.17	
Uniform Delay, d1	15.8	17.0		18.7	16.3		28.3	9.9		27.9	7.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1		3.6	0.1		106.1	0.3		268.4	0.1	
Delay (s)	15.9	17.2		22.4	16.4		134.4	10.2		296.3	7.6	
Level of Service	B	B		C	B		F	B		F	A	
Approach Delay (s)		17.0			20.2			13.9			53.4	
Approach LOS		B			C			B			D	

Intersection Summary				
HCM Average Control Delay	27.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	18.5	
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
35: W Laurel St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Volume (vph)	278	524	64	89	352	89	155	421	51	338	562	150
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	302	570	70	97	383	97	168	458	55	367	611	163
RTOR Reduction (vph)	0	9	0	0	22	0	0	13	0	0	0	134
Lane Group Flow (vph)	302	631	0	97	458	0	168	500	0	367	611	29
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	17.7	27.0		12.3	21.0		13.2	20.9		21.2	28.8	17.7
Effective Green, g (s)	18.1	28.2		12.7	22.8		13.6	21.8		21.6	29.8	18.1
Actuated g/C Ratio	0.18	0.28		0.13	0.23		0.14	0.22		0.22	0.30	0.18
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	319	979		224	778		240	1086		381	1511	280
v/s Ratio Prot	c0.17	c0.18		0.05	0.13		0.09	c0.10		c0.21	0.12	
v/s Ratio Perm												0.02
v/c Ratio	0.95	0.64		0.43	0.59		0.70	0.46		0.96	0.40	0.11
Uniform Delay, d1	40.6	31.6		40.5	34.6		41.4	34.1		39.0	28.2	34.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	35.8	1.6		6.0	1.0		7.0	1.4		36.1	0.8	0.1
Delay (s)	76.5	33.3		46.5	35.6		48.4	35.5		75.1	29.0	34.4
Level of Service	E	C		D	D		D	D		E	C	C
Approach Delay (s)		47.1			37.4			38.7			44.6	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	42.9	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	90.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
36: Rosecrans St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.84	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Volume (vph)	100	685	78	143	257	80	235	206	456	57	97	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	753	86	157	282	88	258	226	501	63	107	57
RTOR Reduction (vph)	0	0	39	0	0	54	0	0	88	0	0	47
Lane Group Flow (vph)	110	753	47	157	282	34	258	226	413	63	107	10
Confl. Peds. (#/hr)	170		27	27		170	23		15	15		23
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	7.2	34.4	46.4	5.8	33.0	33.0	12.0	21.9	27.7	5.8	15.7	15.7
Effective Green, g (s)	7.6	35.3	47.7	6.2	33.9	33.9	12.4	21.3	26.0	6.2	15.2	15.2
Actuated g/C Ratio	0.09	0.41	0.55	0.07	0.39	0.39	0.14	0.25	0.30	0.07	0.18	0.18
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	156	1444	923	246	730	520	254	871	565	127	622	270
v/s Ratio Prot	c0.06	c0.21	0.01	0.05	0.15		c0.15	0.06	c0.04	0.04	0.03	
v/s Ratio Perm			0.02			0.03			0.23			0.01
v/c Ratio	0.71	0.52	0.05	0.64	0.39	0.07	1.02	0.26	0.73	0.50	0.17	0.04
Uniform Delay, d1	38.4	19.2	9.0	39.1	18.8	16.4	37.0	26.2	27.1	38.6	30.3	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	1.3	0.0	4.0	1.5	0.2	60.6	0.3	4.2	1.1	0.2	0.1
Delay (s)	49.6	20.6	9.0	43.0	20.4	16.7	97.6	26.5	31.3	39.8	30.5	29.7
Level of Service	D	C	A	D	C	B	F	C	C	D	C	C
Approach Delay (s)		22.9			26.5			47.6			32.9	
Approach LOS		C			C			D			C	

Intersection Summary				
HCM Average Control Delay	33.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	86.5	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	77.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
37: Old Town St & Moore St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.94			0.95			0.88	
Flt Protected		0.97			1.00			0.99			1.00	
Satd. Flow (prot)		1796			1726			1725			1605	
Flt Permitted		0.62			0.99			0.90			0.99	
Satd. Flow (perm)		1147			1714			1570			1596	
Volume (vph)	406	183	9	5	150	137	71	88	95	1	2	21
Peak-hour factor, PHF	0.98	0.98	0.98	0.86	0.86	0.86	0.89	0.89	0.89	0.67	0.67	0.67
Adj. Flow (vph)	414	187	9	6	174	159	80	99	107	1	3	31
RTOR Reduction (vph)	0	1	0	0	21	0	0	29	0	0	24	0
Lane Group Flow (vph)	0	609	0	0	318	0	0	257	0	0	11	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		49.4			49.4			15.4			15.4	
Effective Green, g (s)		50.3			50.3			16.3			16.3	
Actuated g/C Ratio		0.67			0.67			0.22			0.22	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		773			1156			343			349	
v/s Ratio Prot												
v/s Ratio Perm		c0.53			0.19			c0.16			0.01	
v/c Ratio		0.79			0.27			0.75			0.03	
Uniform Delay, d1		8.4			4.9			27.2			22.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.9			0.6			7.6			0.0	
Delay (s)		13.4			5.4			34.9			22.9	
Level of Service		B			A			C			C	
Approach Delay (s)		13.4			5.4			34.9			22.9	
Approach LOS		B			A			C			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	74.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
38: Taylor St & Congress St 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4770		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4770		1770	3539	1770	1583
Volume (vph)	902	296	132	392	88	157
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.90	0.90
Adj. Flow (vph)	1013	333	148	440	98	174
RTOR Reduction (vph)	67	0	0	0	0	136
Lane Group Flow (vph)	1279	0	148	440	98	38
Confl. Peds. (#/hr)		53	53		46	81
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	33.8		6.3	44.5	14.0	14.0
Effective Green, g (s)	35.7		6.7	44.5	14.9	14.9
Actuated g/C Ratio	0.52		0.10	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2493		174	2306	386	345
v/s Ratio Prot	c0.27		c0.08	0.12	c0.06	0.02
v/s Ratio Perm						
v/c Ratio	0.51		0.85	0.19	0.25	0.11
Uniform Delay, d1	10.6		30.3	4.7	22.1	21.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		29.8	0.2	0.1	0.1
Delay (s)	11.4		60.1	4.9	22.2	21.4
Level of Service	B		E	A	C	C
Approach Delay (s)	11.4			18.8	21.7	
Approach LOS	B			B	C	

Intersection Summary				
HCM Average Control Delay	14.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	55.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

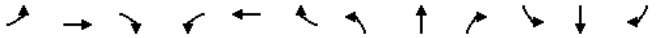
Exisitng PM
39: Twiggs St & Congress St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	2	3	17	5	47	12	106	13	43	136	9
Peak Hour Factor	0.80	0.80	0.80	0.66	0.66	0.66	0.82	0.82	0.82	0.90	0.90	0.90
Hourly flow rate (vph)	10	2	4	26	8	71	15	129	16	48	151	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	105	160	209
Volume Left (vph)	10	26	15	48
Volume Right (vph)	4	71	16	10
Hadj (s)	0.02	-0.33	-0.01	0.05
Departure Headway (s)	4.9	4.4	4.4	4.4
Degree Utilization, x	0.02	0.13	0.20	0.26
Capacity (veh/h)	666	744	783	782
Control Delay (s)	8.0	8.1	8.5	8.9
Approach Delay (s)	8.0	8.1	8.5	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
HCM Level of Service	A			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
40: Harney St & Congress St 4/9/2012

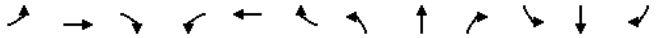


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	10	5	19	29	8	5	102	15	20	96	40
Peak Hour Factor	0.75	0.75	0.75	0.73	0.73	0.73	0.87	0.87	0.87	0.92	0.92	0.92
Hourly flow rate (vph)	28	13	7	26	40	11	6	117	17	22	104	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	48	77	140	170
Volume Left (vph)	28	26	6	22
Volume Right (vph)	7	11	17	43
Hadj (s)	0.07	0.02	-0.03	-0.09
Departure Headway (s)	4.8	4.7	4.4	4.3
Degree Utilization, x	0.06	0.10	0.17	0.20
Capacity (veh/h)	695	712	791	805
Control Delay (s)	8.1	8.2	8.2	8.3
Approach Delay (s)	8.1	8.2	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.3	
HCM Level of Service			A	
Intersection Capacity Utilization			30.3%	ICU Level of Service
Analysis Period (min)			15	A

Exisitng PM
41: Ampudia St & Congress St 4/9/2012

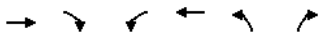


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	5	6	51	18	11	9	99	290	0	107	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	7	5	7	82	29	18	10	106	312	0	120	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								320				
pX, platoon unblocked												
vC, conflicting volume	286	570	123	265	259	120	124			427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	286	570	123	265	259	120	124			427		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	88	95	98	99			100		
cM capacity (veh/h)	619	425	926	662	635	920	1460			1124		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	19	129	116	312	122
Volume Left	7	82	10	0	0
Volume Right	7	18	0	312	2
cSH	608	682	1460	1700	1124
Volume to Capacity	0.03	0.19	0.01	0.18	0.00
Queue Length 95th (ft)	2	17	1	0	0
Control Delay (s)	11.1	11.5	0.7	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.1	11.5	0.2		0.0
Approach LOS	B	B			

Intersection Summary					
Average Delay			2.5		
Intersection Capacity Utilization			38.5%	ICU Level of Service	
Analysis Period (min)			15		A

Exisitng PM
42: Twiggs St & San Diego Ave 4/9/2012

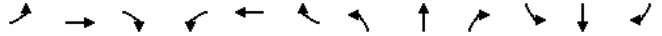


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	30	28	41	35	34	85
Peak Hour Factor	0.89	0.89	0.78	0.78	0.83	0.83
Hourly flow rate (vph)	34	31	53	45	41	102

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	65	97	143
Volume Left (vph)	0	53	41
Volume Right (vph)	31	0	102
Hadj (s)	-0.26	0.14	-0.34
Departure Headway (s)	4.0	4.4	3.9
Degree Utilization, x	0.07	0.12	0.16
Capacity (veh/h)	851	787	877
Control Delay (s)	7.4	8.0	7.6
Approach Delay (s)	7.4	8.0	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay		7.7	
HCM Level of Service		A	
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
43: Harney St & San Diego Ave 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	18	13	40	18	6	30	99	46	3	58	8
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.91	0.91	0.91	0.81	0.81	0.81
Hourly flow rate (vph)	17	22	16	47	21	7	33	109	51	4	72	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	74	192	85
Volume Left (vph)	17	47	33	4
Volume Right (vph)	16	7	51	10
Hadj (s)	-0.08	0.10	-0.09	-0.03
Departure Headway (s)	4.5	4.7	4.2	4.4
Degree Utilization, x	0.07	0.10	0.23	0.10
Capacity (veh/h)	732	713	822	777
Control Delay (s)	7.9	8.2	8.4	7.9
Approach Delay (s)	7.9	8.2	8.4	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
44: Old Town St & San Diego Ave 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.97		1.00	1.00		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1728			1785		1765	1852		1763	1623	
Flt Permitted		0.77			0.95		0.62	1.00		0.66	1.00	
Satd. Flow (perm)		1377			1713		1149	1852		1219	1623	
Volume (vph)	160	28	91	7	45	17	100	121	4	8	48	147
Peak-hour factor, PHF	0.78	0.78	0.78	0.81	0.81	0.81	0.79	0.79	0.79	0.87	0.87	0.87
Adj. Flow (vph)	205	36	117	9	56	21	127	153	5	9	55	169
RTOR Reduction (vph)	0	41	0	0	14	0	0	2	0	0	83	0
Lane Group Flow (vph)	0	317	0	0	72	0	127	156	0	9	141	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Effective Green, g (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.31			0.31		0.51	0.51		0.51	0.51	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		431			536		582	939		618	822	
v/s Ratio Prot								0.08			0.09	
v/s Ratio Perm		c0.23			0.04		c0.11			0.01		
v/c Ratio		0.73			0.13		0.22	0.17		0.01	0.17	
Uniform Delay, d1		13.6			10.9		6.1	5.9		5.4	5.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.5			0.0		0.9	0.4		0.0	0.5	
Delay (s)		19.1			11.0		6.9	6.3		5.5	6.4	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		19.1			11.0			6.6			6.3	
Approach LOS		B			B			A			A	

Intersection Summary				
HCM Average Control Delay	11.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	44.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	55.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

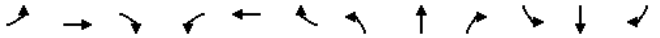
Exisitng PM
45: Taylor St & 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.90			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1764	3473		1769	3530			1640			1742	
Flt Permitted	0.46	1.00		0.14	1.00			0.90			0.73	
Satd. Flow (perm)	856	3473		264	3530			1500			1315	
Volume (vph)	52	909	98	188	454	6	65	2	179	15	2	5
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.95	0.95	0.95	0.79	0.79	0.79
Adj. Flow (vph)	56	977	105	211	510	7	68	2	188	19	3	6
RTOR Reduction (vph)	0	10	0	0	1	0	0	148	0	0	5	0
Lane Group Flow (vph)	56	1072	0	211	516	0	0	110	0	0	23	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.1	25.8		37.3	30.6			10.5			10.5	
Effective Green, g (s)	29.5	26.8		38.2	31.5			11.4			11.4	
Actuated g/C Ratio	0.51	0.47		0.66	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	481	1616		368	1930			297			260	
v/s Ratio Prot	0.01	c0.31		c0.07	0.15							
v/s Ratio Perm	0.05			0.31				c0.07			0.02	
v/c Ratio	0.12	0.66		0.57	0.27			0.37			0.09	
Uniform Delay, d1	7.1	11.9		6.8	6.9			20.0			18.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	2.2		1.3	0.3			0.3			0.1	
Delay (s)	7.1	14.1		8.1	7.3			20.3			18.9	
Level of Service	A	B		A	A			C			B	
Approach Delay (s)		13.7			7.5			20.3			18.9	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	12.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
46: Twiggs St & Juan St 4/9/2012

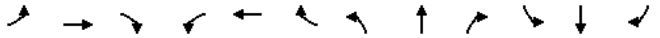


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	98	4	13	0	1	5	4	91	3	6	127	71
Peak Hour Factor	0.93	0.93	0.93	0.50	0.50	0.50	0.87	0.87	0.87	0.96	0.96	0.96
Hourly flow rate (vph)	105	4	14	0	2	10	5	105	3	6	132	74

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	124	12	113	213
Volume Left (vph)	105	0	5	6
Volume Right (vph)	14	10	3	74
Hadj (s)	0.14	-0.47	0.02	-0.17
Departure Headway (s)	4.8	4.3	4.5	4.2
Degree Utilization, x	0.16	0.01	0.14	0.25
Capacity (veh/h)	701	753	765	819
Control Delay (s)	8.7	7.4	8.2	8.6
Approach Delay (s)	8.7	7.4	8.2	8.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.5		
HCM Level of Service		A		
Intersection Capacity Utilization		33.9%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
47: Harney St & Juan St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	22	3	42	0	3	9	21	67	4	4	96	40
Peak Hour Factor	0.90	0.90	0.90	0.50	0.50	0.50	0.92	0.92	0.92	0.88	0.88	0.80
Hourly flow rate (vph)	24	3	47	0	6	18	23	73	4	5	109	50

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	74	24	100	164
Volume Left (vph)	24	0	23	5
Volume Right (vph)	47	18	4	50
Hadj (s)	-0.28	-0.42	0.05	-0.14
Departure Headway (s)	4.2	4.1	4.3	4.1
Degree Utilization, x	0.09	0.03	0.12	0.19
Capacity (veh/h)	790	799	798	858
Control Delay (s)	7.6	7.3	7.9	8.0
Approach Delay (s)	7.6	7.3	7.9	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.9		
HCM Level of Service		A		
Intersection Capacity Utilization		33.2%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
48: Taylor St & Morena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3510		1770	3426				1611	1681	1699	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3510		1770	3426				1611	1681	1699	1561
Volume (vph)	468	606	29	3	448	107	0	0	14	78	7	200
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	498	645	31	3	477	114	0	0	16	88	8	225
RTOR Reduction (vph)	0	3	0	0	21	0	0	0	0	0	0	181
Lane Group Flow (vph)	498	673	0	3	570	0	0	0	16	47	49	44
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	12.0	38.5		0.6	27.1				65.3	11.6	11.6	11.6
Effective Green, g (s)	12.4	39.4		1.0	28.0				65.3	12.9	12.9	12.9
Actuated g/C Ratio	0.19	0.60		0.02	0.43				1.00	0.20	0.20	0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	652	2118		27	1469				1611	332	336	308
v/s Ratio Prot	c0.15	0.19		0.00	c0.17					0.03	c0.03	
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.76	0.32		0.11	0.39				0.01	0.14	0.15	0.14
Uniform Delay, d1	25.1	6.4		31.7	12.8				0.0	21.6	21.6	21.6
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	0.4		0.7	0.8				0.0	0.3	0.3	0.4
Delay (s)	29.8	6.8		32.4	13.6				0.0	22.0	22.0	22.0
Level of Service	C	A		C	B				A	C	C	C
Approach Delay (s)		16.5			13.6			0.0			22.0	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
49: Rosecrans St. & Hugo St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.92			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3420		1671	3423		1644	1575			1736	
Flt Permitted	0.95	1.00		0.95	1.00		0.55	1.00			0.51	
Satd. Flow (perm)	1678	3420		1671	3423		949	1575			900	
Volume (vph)	16	1386	63	32	969	26	105	99	124	24	76	3
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	1540	70	36	1077	29	117	110	138	27	84	3
RTOR Reduction (vph)	0	1	0	0	1	0	0	34	0	0	1	0
Lane Group Flow (vph)	18	1609	0	36	1105	0	117	214	0	0	113	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	105.3		6.8	109.0		23.7	23.7			23.7	
Effective Green, g (s)	3.5	106.2		7.2	109.9		24.6	24.6			24.6	
Actuated g/C Ratio	0.02	0.71		0.05	0.73		0.16	0.16			0.16	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	39	2421		80	2508		156	258			148	
v/s Ratio Prot	0.01	c0.47		c0.02	c0.32			c0.14				
v/s Ratio Perm							0.12				0.13	
v/c Ratio	0.46	0.66		0.45	0.44		0.75	0.83			0.76	
Uniform Delay, d1	72.3	12.1		69.5	7.9		59.8	60.7			59.9	
Progression Factor	1.00	1.00		0.91	0.44		1.00	1.00			1.00	
Incremental Delay, d2	3.1	1.5		1.0	0.4		16.3	18.4			18.8	
Delay (s)	75.4	13.5		64.3	3.8		76.1	79.0			78.7	
Level of Service	E	B		E	A		E	E			E	
Approach Delay (s)		14.2			5.8			78.1			78.7	
Approach LOS		B			A			E			E	

Intersection Summary				
HCM Average Control Delay	20.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	72.2%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
50: Rosecrans St. & Lowell St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Volume (vph)	352	1316	24	165	799	184	18	370	181	287	190	135
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	371	1385	25	174	841	194	19	389	191	302	200	142
RTOR Reduction (vph)	0	1	0	0	13	0	0	0	31	0	85	0
Lane Group Flow (vph)	371	1409	0	174	1022	0	19	389	160	302	257	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	33.0	60.9		16.7	44.1		3.6	24.8	41.5	28.9	50.2	
Effective Green, g (s)	33.4	61.8		17.1	45.5		4.0	25.8	42.9	29.3	51.1	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.03	0.17	0.29	0.20	0.34	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	394	1453		202	1030		47	609	437	346	1084	
v/s Ratio Prot	c0.21	c0.40		0.10	0.30		0.01	c0.11	0.04	c0.17	0.08	
v/s Ratio Perm									0.06			
v/c Ratio	0.94	0.97		0.86	0.99		0.40	0.64	0.37	0.87	0.24	
Uniform Delay, d1	57.3	43.2		65.3	52.1		71.8	57.8	42.7	58.5	35.5	
Progression Factor	1.19	0.83		1.16	0.91		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.0	15.0		26.6	25.0		2.1	2.5	0.2	20.2	0.1	
Delay (s)	94.0	50.7		102.4	72.3		73.9	60.2	42.9	78.8	35.6	
Level of Service	F	D		F	E		E	E	D	E	D	
Approach Delay (s)		59.7			76.7			55.1			55.8	
Approach LOS		E			E			E			E	

Intersection Summary				
HCM Average Control Delay	63.3	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.3%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
51: Rosecrans St. & Laning Rd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (prot)		5045		1770	3539			1775	1552		1787	
Flt Permitted		1.00		0.95	1.00			0.71	1.00		0.70	
Satd. Flow (perm)		5045		1770	3539			1329	1552		1302	
Volume (vph)	0	1855	83	142	1217	1	87	1	203	40	10	1
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1953	87	149	1281	1	92	1	214	42	11	1
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	184	0	1	0
Lane Group Flow (vph)	0	2038	0	149	1282	0	0	93	30	0	53	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		98.8		16.5	119.7			20.1	20.1		20.1	
Effective Green, g (s)		100.1		16.9	121.0			21.0	21.0		21.0	
Actuated g/C Ratio		0.67		0.11	0.81			0.14	0.14		0.14	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		3367		199	2855			186	217		182	
v/s Ratio Prot		c0.40		c0.08	0.36							
v/s Ratio Perm								c0.07	0.02		0.04	
v/c Ratio		0.61		0.75	0.45			0.50	0.14		0.29	
Uniform Delay, d1		13.9		64.5	4.4			59.6	56.6		57.8	
Progression Factor		0.35		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		12.6	0.5			0.8	0.1		0.3	
Delay (s)		5.4		77.1	4.9			60.4	56.7		58.2	
Level of Service		A		E	A			E	E		E	
Approach Delay (s)		5.4			12.4			57.8			58.2	
Approach LOS		A			B			E			E	

Intersection Summary				
HCM Average Control Delay	12.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
52: Hawthorne St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.98	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5031						4958	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5031						4958	
Volume (vph)	0	0	0	197	900	0	0	0	0	0	393	67
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	210	957	0	0	0	0	0	546	93
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	0	0	0	1141	0	0	0	0	0	607	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3527						1041	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.23							
v/c Ratio					0.32						0.58	
Uniform Delay, d1					5.2						32.0	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.2						0.5	
Delay (s)					5.4						32.5	
Level of Service					A						C	
Approach Delay (s)		0.0			5.4			0.0			32.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	15.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

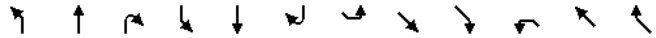
Exisitng PM
53: Grape St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		1.00									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5063									4943	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5063									4943	
Volume (vph)	0	1526	39	0	0	0	0	0	0	240	350	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	1641	42	0	0	0	0	0	0	270	393	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	1681	0	0	0	0	0	0	0	0	655	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		61.8									19.2	
Effective Green, g (s)		61.8									20.2	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3477									1109	
v/s Ratio Prot		c0.33										
v/s Ratio Perm											0.13	
v/c Ratio		0.48									0.59	
Uniform Delay, d1		6.6									31.2	
Progression Factor		0.40									0.72	
Incremental Delay, d2		0.4									0.8	
Delay (s)		3.0									23.3	
Level of Service		A									C	
Approach Delay (s)		3.0			0.0			0.0			23.3	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	8.7	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
54: Seaworld Dr & E Mission Bay Dr 4/9/2012

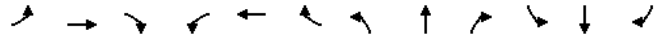


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Volume (vph)	78	1077	116	142	1276	13	59	70	189	102	41	116
Peak-hour factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96	0.82	0.82	0.82	0.74	0.74	0.74
Adj. Flow (vph)	80	1110	120	148	1329	14	72	85	230	138	55	157
RTOR Reduction (vph)	0	0	89	0	0	9	0	0	115	0	0	116
Lane Group Flow (vph)	80	1110	31	148	1329	5	72	85	115	138	55	41
Confl. Peds. (#/hr)	1					1			1	1		
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	3.1	31.6	8.0	8.1	36.7	3.9	3.9	11.8	11.8	8.0	15.0	15.0
Effective Green, g (s)	3.1	33.1	8.0	8.1	38.1	3.9	3.9	12.7	12.7	8.0	16.8	16.8
Actuated g/C Ratio	0.04	0.42	0.10	0.10	0.49	0.05	0.05	0.16	0.16	0.10	0.22	0.22
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	137	1504	163	184	1731	78	172	304	255	182	402	341
v/s Ratio Prot	0.02	0.31		c0.08	c0.38		0.02	0.05		c0.08	0.03	
v/s Ratio Perm			0.02			0.00			c0.07			0.03
v/c Ratio	0.58	0.74	0.19	0.80	0.77	0.07	0.42	0.28	0.45	0.76	0.14	0.12
Uniform Delay, d1	36.8	18.8	32.0	34.1	16.3	35.3	35.9	28.6	29.5	34.0	24.7	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	3.3	0.2	20.8	3.3	0.1	0.6	0.5	1.3	14.8	0.1	0.1
Delay (s)	40.8	22.0	32.2	54.9	19.6	35.4	36.5	29.1	30.7	48.8	24.7	24.7
Level of Service	D	C	C	D	B	D	D	C	C	D	C	C
Approach Delay (s)		24.1			23.3			31.4			34.2	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM Average Control Delay	25.6	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	77.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
55: Hawthorne St & Pacific Highway 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				0.97	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			0.99	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1716	3482		1770	5085			5029	
Flt Permitted				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)				1716	3482		1770	5085			5029	
Volume (vph)	0	0	0	110	775	82	52	375	0	0	258	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.88	0.88	0.88	0.84	0.84	0.84
Adj. Flow (vph)	0	0	0	124	871	92	59	426	0	0	307	21
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	124	954	0	59	426	0	0	318	0
Confl. Peds. (#/hr)				35		10	7					7
Turn Type				Perm			Prot					
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)				40.5	40.5		23.3	39.7			12.0	
Effective Green, g (s)				41.0	39.6		23.3	39.7			11.9	
Actuated g/C Ratio				0.46	0.44		0.26	0.44			0.13	
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	
Lane Grp Cap (vph)				782	1532		458	2243			665	
v/s Ratio Prot					c0.27		0.03	c0.08			c0.06	
v/s Ratio Perm				0.07								
v/c Ratio				0.16	0.62		0.13	0.19			0.48	
Uniform Delay, d1				14.4	19.4		25.6	15.3			36.2	
Progression Factor				1.07	1.09		0.47	0.53			1.00	
Incremental Delay, d2				0.4	1.8		0.5	0.2			0.6	
Delay (s)				15.8	23.1		12.4	8.2			36.8	
Level of Service				B	C		B	A			D	
Approach Delay (s)		0.0			22.3			8.7			36.8	
Approach LOS		A			C			A			D	

Intersection Summary				
HCM Average Control Delay	21.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.44			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.8	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
56: Grape St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5075	1532					4668		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5075	1532					4668		1770	5085	
Volume (vph)	43	1141	24	0	0	0	0	384	332	92	276	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.92	0.92	0.92	0.95	0.95
Adj. Flow (vph)	47	1240	26	0	0	0	0	417	361	100	291	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	119	0	0	0	0
Lane Group Flow (vph)	0	1287	10	0	0	0	0	659	0	100	291	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		34.6	34.6					26.0		15.2	45.6	
Effective Green, g (s)		35.5	35.5					26.0		15.6	45.6	
Actuated g/C Ratio		0.39	0.39					0.29		0.17	0.51	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2002	604					1349		307	2576	
v/s Ratio Prot								c0.14		c0.06	0.06	
v/s Ratio Perm		0.25	0.01									
v/c Ratio		0.64	0.02					0.49		0.33	0.11	
Uniform Delay, d1		22.1	16.6					26.5		32.6	11.6	
Progression Factor		1.00	1.00					1.00		1.77	0.56	
Incremental Delay, d2		1.6	0.1					1.3		2.8	0.1	
Delay (s)		23.7	16.7					27.8		60.3	6.6	
Level of Service		C	B					C		E	A	
Approach Delay (s)		23.6			0.0			27.8			20.4	
Approach LOS		C			A			C			C	

Intersection Summary				
HCM Average Control Delay	24.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

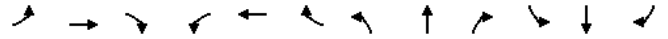
Exisitng PM
57: Seaworld Dr & Friars Rd 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1568	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1568	3433	3539	3433	1418
Volume (vph)	1153	391	270	1297	301	118
Peak-hour factor, PHF	0.96	0.96	0.99	0.99	0.93	0.93
Adj. Flow (vph)	1201	407	273	1310	324	127
RTOR Reduction (vph)	0	7	0	0	0	98
Lane Group Flow (vph)	1201	400	273	1310	324	29
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.8	41.6	7.8	41.8	12.8	12.8
Effective Green, g (s)	31.0	46.0	7.7	43.2	15.0	15.0
Actuated g/C Ratio	0.47	0.69	0.12	0.65	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1657	1184	399	2309	778	321
v/s Ratio Prot	c0.34	0.08	0.08	c0.37	c0.09	
v/s Ratio Perm		0.18				0.02
v/c Ratio	0.72	0.34	0.68	0.57	0.42	0.09
Uniform Delay, d1	14.2	4.0	28.1	6.3	21.9	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	3.8	1.0	0.1	0.0
Delay (s)	17.0	4.1	31.9	7.4	22.0	20.3
Level of Service	B	A	C	A	C	C
Approach Delay (s)	13.7			11.6	21.5	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Existing PM
58: I-5 SB On/I-5 SB Off & Seaworld Dr 12/07/2017

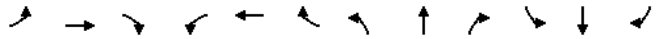


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Future Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.86	0.86	0.86	0.25	0.25	0.25	0.96	0.96	0.96
Adj. Flow (vph)	0	1116	259	340	356	0	0	0	0	347	0	1172
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1116	131	340	356	0	0	0	0	347	0	1172
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		36.8	36.8	9.4	50.4					15.0		75.0
Effective Green, g (s)		37.8	37.8	9.6	51.4					15.6		75.0
Actuated g/C Ratio		0.50	0.50	0.13	0.69					0.21		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1783	786	439	2425					368		1583
v/s Ratio Prot		0.32		0.10	0.10					c0.20		
v/s Ratio Perm			0.08									c0.74
v/c Ratio		0.63	0.17	0.77	0.15					0.94		0.74
Uniform Delay, d1		13.5	10.1	31.7	4.1					29.3		0.0
Progression Factor		1.00	1.00	0.91	1.16					1.00		1.00
Incremental Delay, d2		1.7	0.5	6.7	0.1					32.1		3.2
Delay (s)		15.1	10.5	35.5	4.9					61.3		3.2
Level of Service		B	B	D	A					E		A
Approach Delay (s)		14.3			19.9			0.0			16.4	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
59: Seaworld Dr & I-5 NB On 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3265			1775	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3265			1775	1583			
Volume (vph)	783	566	0	0	432	384	166	3	418	0	0	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.90	0.90	0.90	0.25	0.25	0.25
Adj. Flow (vph)	833	602	0	0	436	388	184	3	464	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	328	0	0	0
Lane Group Flow (vph)	833	602	0	0	622	0	0	187	136	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	19.5	55.7			32.0			9.2	9.2			
Effective Green, g (s)	19.7	56.2			32.5			9.8	9.8			
Actuated g/C Ratio	0.26	0.75			0.43			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	902	2652			1415			232	207			
v/s Ratio Prot	c0.24	0.17			c0.19			c0.11				
v/s Ratio Perm									0.09			
v/c Ratio	0.92	0.23			0.44			0.81	0.66			
Uniform Delay, d1	26.9	2.8			14.9			31.7	31.0			
Progression Factor	1.47	0.76			1.00			1.00	1.00			
Incremental Delay, d2	11.1	0.1			1.0			17.2	5.7			
Delay (s)	50.6	2.3			15.9			48.9	36.7			
Level of Service	D	A			B			D	D			
Approach Delay (s)		30.3			15.9			40.2			0.0	
Approach LOS		C			B			D			A	

Intersection Summary				
HCM Average Control Delay	28.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	87.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Appendix F
Caltrans Freeway Count Worksheets

Dist	Rte		Description	CO		Poast Mile	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak hour	Ahead Peak Month	Ahead AADT	Peak Hour
	11	8	NIMITZ BLVD	SD	T	0.466	740	11,000	10,500	4,050	48,500	46,500	8.7%
	11	8	MIDWAY DRIVE	SD	L	1.213	4,050	48,500	46,500	8,800	113,000	102,000	8.6%
	11	8	JCT RTE 5 LT LANES	SD	L	2.379	8,800	113,000	102,000	11,100	144,000	132,000	8.4%
	11	8	SAN DIEGO, MORENA BLVD	SD	R	0.364	11,100	144,000	132,000	15,700	194,000	191,000	8.2%
	11	5	CLAIREMONT DRIVE	SD	R	22.262	Ahead Peak hour 18,300	Ahead Peak Month 230,000	Ahead AADT 220,000	Back Peak Hour 16,800	Back Peak Month 208,000	Back AADT 203,000	8.3%
	11	5	MISSION BAY/SEA WORLD	SD	R	20.818	16,700	212,000	199,000	18,300	230,000	220,000	8.4%
	11	5	JCT. RTE. 8/CAMINO DEL RIO	SD	R	20.056	16,300	212,000	199,000	16,700	212,000	199,000	8.2%
	11	5	SAN DIEGO, OLD TOWN AVE	SD	R	19.033	15,400	205,000	192,000	16,300	212,000	199,000	8.0%
	11	5	SAN DIEGO, WASHINGTON ST	SD	R	18.283	11,500	152,000	142,000	15,400	205,000	192,000	8.1%
	11	5	SAN DIEGO, SASSAFRAS ST	SD	R	17.77	12,400	157,000	147,000	11,500	152,000	142,000	8.4%
	11	5	PACIFIC HIGHWAY VIADUCT	SD	R	17.53	14,400	200,000	183,000	12,400	157,000	147,000	7.9%

Location (I.D.)	Route	Dir	Period	Cars per green	Fast. rate (cyc./min.)	Slow. rate (cyc./min.)	Rate Delta	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV	Flow/lane			Total Flow
												High	Low	Average	Average
W. Mission Bay Dr (251)	8	EB	1500 - 1900	2	8.3	5.8	0.18	7.2 - 10.4	996 - 694	2	No	996	694	845	1690
Sports Arena Blvd (252)	8	EB	1500 - 1900	2	6.6	4.1	0.18	9.1 - 14.7	396 - 245	3	Lt	396	245	320.5	641
Sea World Dr (97)	5	SB	0530 - 0930	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
Sea World Dr (223)	5	NB	0530 - 0930	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555
			1500 - 1900	2	8.3	5.5	0.20	7.2 - 10.9	996 - 660	2	No	996	660	828	1656
Old Town Ave (187)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	1	No	570	352	461	461
Old Town Ave (188)	5	NB	0530 - 0930	1	9.5	5.6	0.28	6.3 - 10.8	570 - 335	2	No	570	335	452.5	905
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	No	570	318	444	888
Washington St (184)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Washington St (186)	5	NB	0530 - 0930	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Hawthorne St (181)	5	NB	0530 - 0930	2	8.3	4.8	0.25	7.2 - 12.5	996 - 576	2	No	996	576	786	1572
			1500 - 1900	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555

There are 15 separate rates or steps that depend on the mainlane volumes. The Cycles/min. have a definite rate delta whereas the seconds/cycle from one rate to another can vary from 0.1 - 0.4 sec.

RTE	DIST	CNTY	POST MILE	LEG	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
008	11	SD	T.407	A	SAN DIEGO, SUNSET CLIFFS BOULEVARD	10500	105	1	86	8	3	8	82.3	7.4	2.9	7.4	7	78E
008	11	SD	L2.379	B	JCT RTE 5 LT LANES	102000	1224	1.2	1038	87	9	91	84.8	7.1	.7	7.4	77	78V
008	11	SD	L2.379	A	JCT RTE 5 LT LANES	129000	3612	2.8	2416	520	155	520	66.9	14.4	4.3	14.4	335	83V
008	11	SD	2.41	B	SAN DIEGO, JCT. RTE. 163	201000	5427	2.7	4200	586	136	505	77.4	10.8	2.5	9.3	395	83E
008	11	SD	2.41	A	SAN DIEGO, JCT. RTE. 163	205000	5740	2.8	4483	574	138	545	78.1	10	2.4	9.5	418	83E
008	11	SD	4.378	B	SAN DIEGO, JCT. RTE. 805	194000	6208	3.2	4662	615	211	720	75.1	9.9	3.4	11.6	499	83E
008	11	SD	5.638	B	JCT. RTE. 15	241000	7230	3	4230	918	304	1779	58.5	12.7	4.2	24.6	891	83V
008	11	SD	5.638	A	JCT. RTE. 15	214000	7490	3.5	4794	861	337	1498	64	11.5	4.5	20	813	84E
008	11	SD	10.57	B	FLETCHER PARKWAY	190000	7030	3.7	4204	893	246	1687	59.8	12.7	3.5	24	847	84V
008	11	SD	10.57	A	FLETCHER PARKWAY	174000	7656	4.4	4326	1179	390	1761	56.5	15.4	5.1	23	925	78V
008	11	SD	15.8	B	EL CAJON, JCT. RTE. 67 NORTH	166000	7802	4.7	4205	1022	359	2216	53.9	13.1	4.6	28.4	1058	78V
008	11	SD	15.8	A	EL CAJON, JCT. RTE. 67 NORTH	134000	3886	2.9	2153	439	136	1158	55.4	11.3	3.5	29.8	535	78V
008	11	SD	R18.727	A	GREENFIELD DRIVE	80000	5520	6.9	2909	431	132	2048	52.7	7.8	2.4	37.1	867	86V
008	11	SD	R37.831	B	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	24900	2988	12	1174	176	90	1548	39.3	5.9	3	51.8	605	86E
008	11	SD	R37.831	A	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	19300	2625	13.6	853	205	76	1491	32.5	7.8	2.9	56.8	574	00E
008	11	SD	R51.98	B	CAMERON ROAD	15700	2013	12.82	843	94	40	1036	41.89	4.67	1.99	51.46	401	09V

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
005	11	SD	R.09	A	SAN DIEGO, MEXICAN BORDER, TIE OFF	74000	1628	2.2	1014	62	46	506	62.3	3.8	2.8	31.1	223	83E
005	11	SD	R.878	A	SOUTH JCT. RTE. 805	40000	1520	3.8	800	195	15	511	52.6	12.8	1	33.6	224	83V
005	11	SD	4.632	B	JCT. RTE. 75 WEST	117000	4914	4.2	3155	595	147	1017	64.2	12.1	3	20.7	538	78V
005	11	SD	4.632	A	JCT. RTE. 75 WEST	143000	5291	3.7	2974	857	254	1206	56.2	16.2	4.8	22.8	636	83V
005	11	SD	R11.129	B	8TH STREET	168000	8400	5	4259	1344	445	2352	50.7	16	5.3	28	1150	85V
005	11	SD	R12.647	B	JCT. RTE. 15 NORTH	187000	9350	5	4740	1496	496	2618	50.7	16	5.3	28	1280	85E
005	11	SD	R12.647	A	JCT. RTE. 15 NORTH	152000	6232	4.1	3509	897	287	1539	56.3	14.4	4.6	24.7	778	85V
005	11	SD	R14.077	B	SAN DIEGO, JCT. RTE. 75 SOUTH	159000	6519	4.1	3670	939	300	1610	56.3	14.4	4.6	24.7	814	85E
005	11	SD	R14.077	A	SAN DIEGO, JCT. RTE. 75 SOUTH	163000	6520	4	3984	782	254	1500	61.1	12	3.9	23	766	78E
005	11	SD	R15.036	B	SAN DIEGO, JCT. RTE. 94	163000	6194	3.8	3785	743	242	1425	61.1	12	3.9	23	728	78V
005	11	SD	R15.036	A	SAN DIEGO, JCT. RTE. 94	209000	8360	4	5827	920	242	1371	69.7	11	2.9	16.4	797	87V
005	11	SD	R16.069	B	SAN DIEGO, JCT. RTE. 163	209000	7733	3.7	5119	773	286	1554	66.2	10	3.7	20.1	828	78E
005	11	SD	R16.069	A	SAN DIEGO, JCT. RTE. 163	200000	8200	4.1	5150	730	230	2091	62.8	8.9	2.8	25.5	1003	85V
005	11	SD	R20.056	B	JCT. RTE. 8/CAMINO DEL RIO	197000	8077	4.1	5072	719	226	2060	62.8	8.9	2.8	25.5	988	85V
005	11	SD	R20.056	A	JCT. RTE. 8/CAMINO DEL RIO	198000	6732	3.4	4443	673	289	1326	66	10	4.3	19.7	717	84V
005	11	SD	R23.476	B	SAN DIEGO, BALBOA	162000	7290	4.5	4811	729	313	1436	66	10	4.3	19.7	777	84E

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Mainline VDS 1111514 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM T.68 (Abs PM 0.3)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	60.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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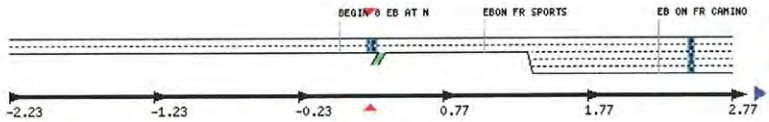
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From Sep 2010 *Max Range:*10 years

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,292	23,244		23,357	23,356	23,244	23,255	23,357	67	2,3
10/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,251	23,190		23,335	23,329	23,190	23,200	23,335	68	2,3
11/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,242	23,238		23,349	23,342	23,238	23,247	23,349	71	2,2
12/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,170	23,207		23,295	23,302	23,207	23,212	23,295	75	2,2
01/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,265	23,289		23,346	23,346	23,289	23,295	23,346	74	2,2
02/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,202	23,274		23,343	23,346	23,274	23,281	23,343	75	2,2
03/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,212	23,290		23,333	23,343	23,290	23,297	23,333	76	2,2
04/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,182	23,261		23,312	23,322	23,261	23,268	23,312	76	2,2
05/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,144	23,262		23,301	23,315	23,262	23,269	23,301	76	2,2
06/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,211	23,285		23,343	23,384	23,285	23,292	23,343	79	2,2
07/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,188	23,266		23,343	23,380	23,266	23,273	23,343	78	2,2
08/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,073	23,218		23,312	23,349	23,218	22,994	23,312	73	2,2



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Used for D Factor

$$\frac{23,300}{23,300 + 21,700} = .52$$

(EB) (WB)

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Mainline VDS 1111515 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM T.54 (Abs PM 0.1)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	40.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,684	21,626		21,708	21,722	21,626	21,630	21,708	65	2,(
10/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,627	21,547		21,675	21,686	21,547	21,550	21,675	67	2,(
11/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,616	21,598		21,686	21,694	21,598	21,601	21,686	70	2,(
12/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,535	21,566		21,637	21,654	21,566	21,566	21,637	74	2,(
01/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,637	21,649		21,685	21,701	21,649	21,651	21,685	73	2,(
02/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,576	21,631		21,682	21,697	21,631	21,633	21,682	74	2,(
03/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,594	21,658		21,685	21,703	21,658	21,660	21,685	76	2,(
04/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,557	21,624		21,658	21,678	21,624	21,626	21,658	75	2,(
05/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,505	21,606		21,633	21,653	21,606	21,607	21,633	75	2,(
06/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,551	21,610		21,649	21,691	21,610	21,611	21,649	78	2,(
07/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,516	21,589		21,646	21,682	21,589	21,589	21,646	77	2,(
08/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,391	21,548		21,621	21,647	21,548	21,358	21,621	72	2,(



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Mainline VDS 1115528 - E/O MORENA BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM R.589 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10308
LDS	1115522
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	134.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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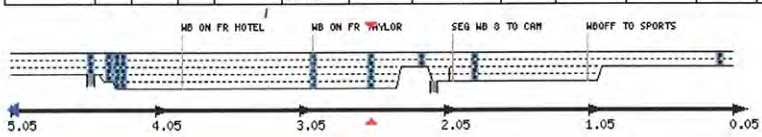
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,314	84,891		85,180	85,215	84,891	84,899	85,180	68
10/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,083	84,566		85,019	85,059	84,566	84,567	85,019	69
11/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,957	84,644		84,970	84,986	84,644	84,643	84,970	72
12/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,605	84,457		84,760	84,820	84,457	84,439	84,760	76
01/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,819	84,729		84,830	84,875	84,729	84,712	84,830	77
02/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,468	84,564		84,723	84,761	84,564	84,547	84,723	78
03/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,364	84,581		84,710	84,748	84,581	84,564	84,710	80
04/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,178	84,392		84,544	84,629	84,392	84,372	84,544	79
05/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,035	84,357		84,470	84,526	84,357	84,336	84,470	79
06/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,277	84,502		84,584	84,727	84,502	84,481	84,584	80
07/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,234	84,471		84,647	84,795	84,471	84,448	84,647	79
08/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	83,631	84,381		84,609	84,681	84,381	83,667	84,609	74



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$$\frac{85{,}000}{85000 + 92{,}000} = .48$$

(WB) (EB)

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Mainline VDS 1115356 - EB 8 E/O Morena

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM R.535 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10307
LDS	1115357
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	150.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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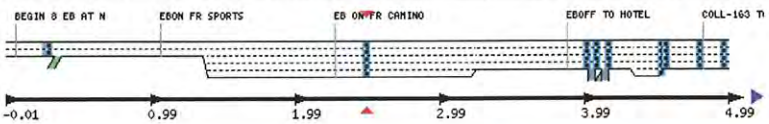
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From Sep 2010
*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,802				92,959				45	8,2
10/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
11/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
12/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	93,070				92,984				39	8,2
01/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	94,431				94,074				33	8,2
02/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,379				95,149				28	8,1
03/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	96,142				95,919				22	8,1
04/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,987				95,888				15	8,0
05/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,805				95,761				8	7,9
06/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	98,871				97,707				2	7,1



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Mainline VDS 1108457 - SEA WORLD DR

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R20.719 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 97
LDS	1108113
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	148.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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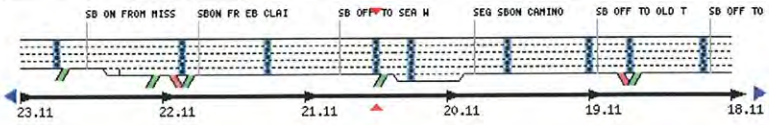
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From Sep 2010 To Sep 2011
*Max Range:*10 years

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09/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,407	90,808		89,922	89,853	90,808		89,922	3
10/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,017	90,111		89,788	89,630	90,111		89,788	3
11/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,990	89,582		88,612	89,628	89,582		88,612	3
12/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,517	88,234			89,867	88,234		86,475	2
01/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,253	89,079			90,438	89,079		86,658	2
02/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,388				91,039	89,267		81,735	1
03/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,567				91,403				1
04/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,971				91,538				1
05/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,395				91,660				
06/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,053				92,054				
07/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,811				91,310				
08/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,847				90,103				



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{88{,}000}{88{,}000 + 97{,}000} = .48$$

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Mainline VDS 1118496 - 5 NB S/O Sea World

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R20.7 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 16202
LDS	1118490
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	159.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	ISS RTMS	Mainline
2	2	ISS RTMS	Mainline
3	3	ISS RTMS	Mainline
4	4	ISS RTMS	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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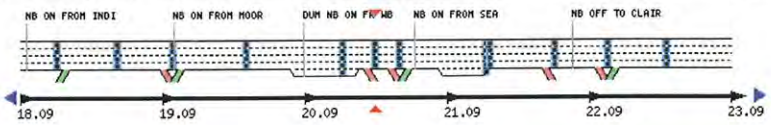
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,464	97,291		97,753	97,684	97,291	97,355	97,753	67	8,
10/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,301	97,106		97,606	97,542	97,106	97,167	97,606	68	8,
11/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,304	97,277		97,735	97,653	97,277	97,338	97,735	71	8,
12/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,174	97,282		97,589	97,553	97,282	97,330	97,589	75	8,
01/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,496	97,618		97,746	97,678	97,618	97,669	97,746	76	8,
02/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,533		97,692	97,637	97,533	97,585	97,692	77	8,
03/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,134	97,553		97,694	97,657	97,553	97,603	97,694	79	8,
04/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,079	97,521		97,661	97,638	97,521	97,573	97,661	78	8,
05/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,086	97,619		97,729	97,696	97,619	97,673	97,729	78	8,
06/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,621		97,812	97,873	97,621	97,674	97,812	79	8,
07/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,115	97,517		97,782	97,821	97,517	97,569	97,782	78	8,
08/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	96,570	97,463		97,751	97,682	97,463	96,393	97,751	73	8,



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Mainline VDS 1115355 - SB 5 S/O 8

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To Sep 2011

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Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10304
LDS	1115349
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	157.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

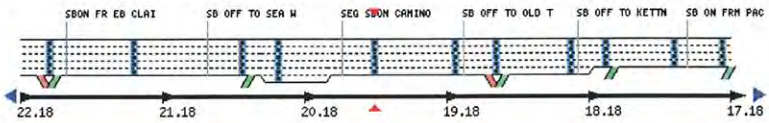
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,377	98,871		99,305	99,501	98,871	98,912	99,305	63
10/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,035	98,563		99,132	99,345	98,563	98,601	99,132	64
11/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,002	98,719		99,174	99,354	98,719	98,756	99,174	67
12/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,709	98,645		98,988	99,215	98,645	98,666	98,988	70
01/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,723	98,892		99,035	99,155	98,892	98,916	99,035	73
02/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,093	98,626		98,807	98,817	98,626	98,648	98,807	75
03/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,842	98,594		98,805	98,822	98,594	98,614	98,805	77
04/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,975	98,466		98,733	98,819	98,466	98,487	98,733	76
05/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,980	98,523		98,700	98,748	98,523	98,545	98,700	76
06/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,259	98,667		98,831	99,000	98,667	98,689	98,831	77
07/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,137	98,572		98,858	99,033	98,572	98,591	98,858	76
08/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,278	98,480		98,805	98,893	98,480	97,276	98,805	71



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

$$\frac{99{,}000}{99{,}000 + 64{,}700} = .61$$

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Mainline VDS 1115269 - NB 5 @ I-8

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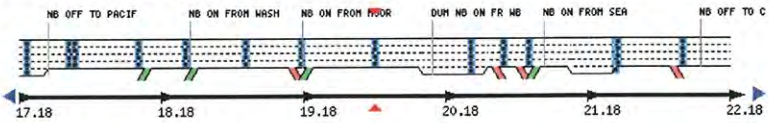
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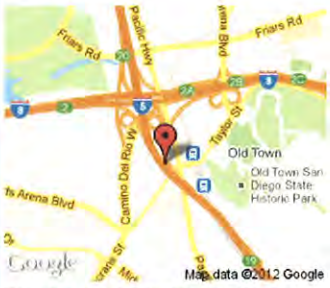
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,282				64,658				50
10/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,182				64,373				46
11/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,245				64,467				42
12/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,053				64,370				43
01/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,160				64,347				45
02/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,760				64,156				48
03/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,710				64,228				50
04/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,727				64,238				49
05/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,742				64,273				48
06/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,135				64,575				50
07/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,355				64,892				51
08/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,704				65,656				54



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10303
LDS	1115262
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	111.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1108615 - OLD TOWN AVE

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R18.931 (Abs PM 18.8)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10411
LDS	1108200
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	145.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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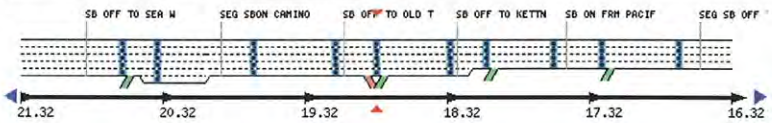
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09/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,546	87,579		88,554	88,360	87,579	86,924	88,554	60
10/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,512				88,153	87,233		88,401	57
11/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,518				88,236	87,295		88,315	54
12/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,164				88,067	87,241		88,120	58
01/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,556				88,195	87,507		88,247	57
02/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,881				88,010	87,329		88,093	59
03/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,902				88,074	87,161		87,935	57
04/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,820				88,010				50
05/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,494				87,789				43
06/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,638				87,966				42
07/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	86,430				86,950				36
08/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	84,971				86,227				32



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{88{,}500}{88{,}500 + 91{,}500} = .49$$

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Mainline VDS 1114050 - OLD TOWN AVE

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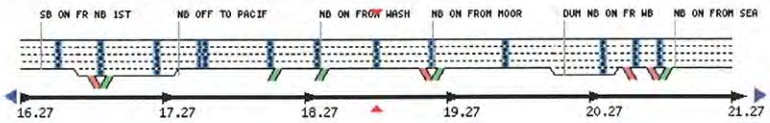
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To Sep 2011

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,821	90,949			91,722	90,949	90,139	91,630	63
10/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,665	90,808			91,614	90,808	89,973	91,529	64
11/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,719	91,038			91,725	91,038	90,243	91,653	67
12/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,472	91,079			91,657	91,079	90,480	91,544	71
01/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,792	91,334			91,789	91,334	90,777	91,687	70
02/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,388	91,213			91,664	91,213	90,607	91,594	71
03/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,447	91,104			91,758	91,104	90,512	91,485	69
04/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,396				91,703	91,018			62
05/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,107				91,505				55
06/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,203				91,623				54
07/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	90,387				90,837				48
08/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	89,232				90,428				44



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R18.874 (Abs PM 18.8)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10412
LDS	1114045
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	138.8 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1117724 - SB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.681 (Abs PM 17.6)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10406
LDS	1117700
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	181.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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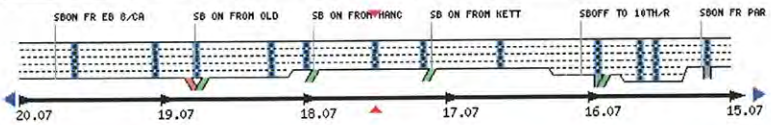
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From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	D. Us
09/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	147,017	146,263		146,781	146,818	146,263	146,432	146,781	
10/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	146,711	145,795		146,583	146,622	145,795	145,259	146,583	
11/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	144,957	144,852		144,969	144,760	144,852	143,905	144,969	
12/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	136,029	137,637		137,478	136,968	137,637	136,817	137,478	
01/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	127,132	130,565		130,273	129,050	130,565	129,832	130,273	
02/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	119,356	122,914		122,738	121,367	122,914	122,160	122,738	
03/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	111,112	115,457		115,296	113,899	115,457	114,729	115,296	
04/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	101,795	107,589		107,418	105,619	107,589	106,848	107,418	
05/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	94,870	99,619		99,395	98,300	99,619	98,839	99,395	
06/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	86,902	91,837		91,628	90,213	91,837	91,049	91,628	
07/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	80,939	83,787		83,655	82,609	83,787	82,961	83,655	
08/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	71,906	75,617		75,543	73,989	75,617	75,108	75,543	



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{115000}{115{,}000 + 75{,}000} = .62$$

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Mainline VDS 1117717 - NB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.68 (Abs PM 17.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10405
LDS	1117710
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	126.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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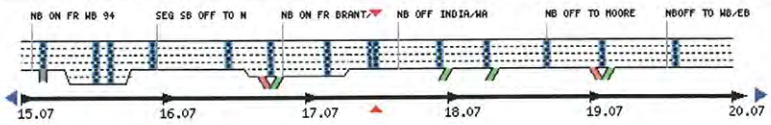
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From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,877	75,545		75,830	75,835	75,545	75,539	75,830	68
10/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,720	75,304		75,693	75,713	75,304	75,298	75,693	69
11/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,721	75,474		75,789	75,792	75,474	75,468	75,789	72
12/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,471	75,450		75,664	75,710	75,450	75,434	75,664	76
01/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,717	75,729		75,810	75,840	75,729	75,715	75,810	76
02/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,408	75,604		75,713	75,744	75,604	75,592	75,713	77
03/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,291	75,597		75,693	75,731	75,597	75,584	75,693	79
04/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,190	75,513		75,618	75,678	75,513	75,499	75,618	78
05/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,100	75,523		75,566	75,603	75,523	75,512	75,566	78
06/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,334	75,667		75,686	75,795	75,667	75,657	75,686	80
07/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,248	75,574		75,707	75,808	75,574	75,562	75,707	79
08/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	74,658	75,568		75,701	75,736	75,568	74,731	75,701	74



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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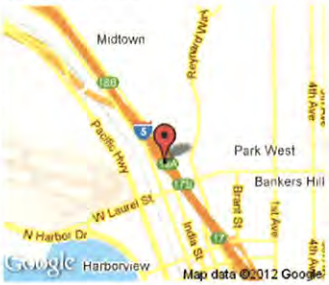
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Mainline VDS 1108605 - KETTNER BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.339 (Abs PM 17.2)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10403
LDS	1108195
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	156.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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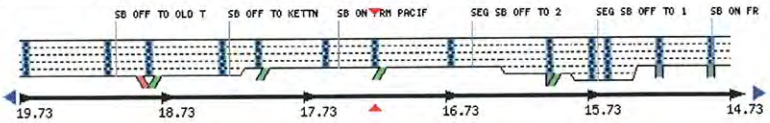
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From Sep 2010 *Max Range:10 years*

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	Da Us
09/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,935	88,657		88,989	88,883	88,657	88,698	88,989	
10/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,770	88,297		88,601	88,560	88,297	88,337	88,601	
11/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,698	88,451		88,643	88,572	88,451	88,491	88,643	
12/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,907	88,734		88,795	88,811	88,734	88,781	88,795	
01/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,772				89,521	89,594	88,303	89,515	
02/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,291				90,119				
03/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,581				90,490				
04/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,757				90,590				
05/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,722				90,572				
06/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,972				90,943				
07/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,255				90,332				
08/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,112				90,024				



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

90,000

90,000 + 86,000
(SB) (NB)

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Mainline VDS 1117835 - NB S/O Pacific

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.34 (Abs PM 17.2)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10404
LDS	1117827
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	160.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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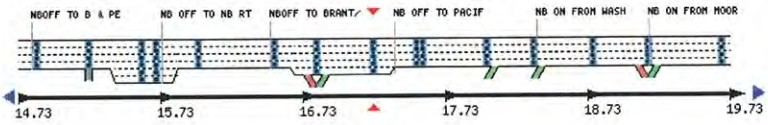
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From Sep 2010 To Sep 2011
Max Range: 10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,750	94,616		94,964	94,829	94,616	94,624	94,964	67
10/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,691				94,636	94,308	92,994	94,810	64
11/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,479				94,520	93,820		94,105	61
12/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	92,229				92,636	92,158		92,315	65
01/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	90,594				90,959	90,917		90,874	66
02/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	88,426				89,009	89,103		89,084	67
03/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	86,468				87,218	87,380		87,341	69
04/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	84,180				85,145	85,461		85,439	68
05/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	82,279				83,228	83,703		83,640	68
06/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	80,653				81,496	82,041		81,976	69
07/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	78,905				79,563	80,181		80,200	68
08/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	76,079				77,390	78,272		78,313	64

Average = 86,000



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Appendix G
VMT Analysis Worksheet – Preferred Plan

2035N - Alt 7 land uses (no Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,349,227	3,082	-	3,082	4,346,145
CHULA VISTA TOTAL	5,604,549	7,443	-	7,443	5,597,106
CORONADO TOTAL	466,693	1,344	-	1,344	465,349
DEL MAR TOTAL	101,870	58	-	58	101,812
EL CAJON TOTAL	2,448,216	3,801	-	3,801	2,444,415
ENCINITAS TOTAL	2,563,578	3,769	-	3,769	2,559,809
ESCONDIDO TOTAL	3,488,757	1,939	-	1,939	3,486,818
External TOTAL	526,695	408	-	408	526,287
IMPERIAL BEACH TOTAL	131,578	24	-	24	131,554
LA MESA TOTAL	2,097,955	6,068	-	6,068	2,091,887
LEMON GROVE TOTAL	962,357	1,688	-	1,688	960,669
NATIONAL CITY TOTAL	1,963,371	6,312	-	6,312	1,957,059
OCEANSIDE TOTAL	4,091,379	1,001	-	1,001	4,090,378
POWAY TOTAL	1,305,271	614	-	614	1,304,657
OLD TOWN TOTAL	47,331,316	277,876	19,555	258,321	47,053,440
SAN MARCOS TOTAL	2,648,495	286	-	286	2,648,209
SANTEE TOTAL	1,350,483	789	-	789	1,349,694
SOLANA BEACH TOTAL	717,586	1,387	-	1,387	716,199
Unincorporated TOTAL	24,645,744	12,650	-	12,650	24,633,094
VISTA TOTAL	2,207,063	100	-	100	2,206,963
REGIONWIDE TOTAL	109,002,183	330,639 175,097	19,555	311,084	108,671,544

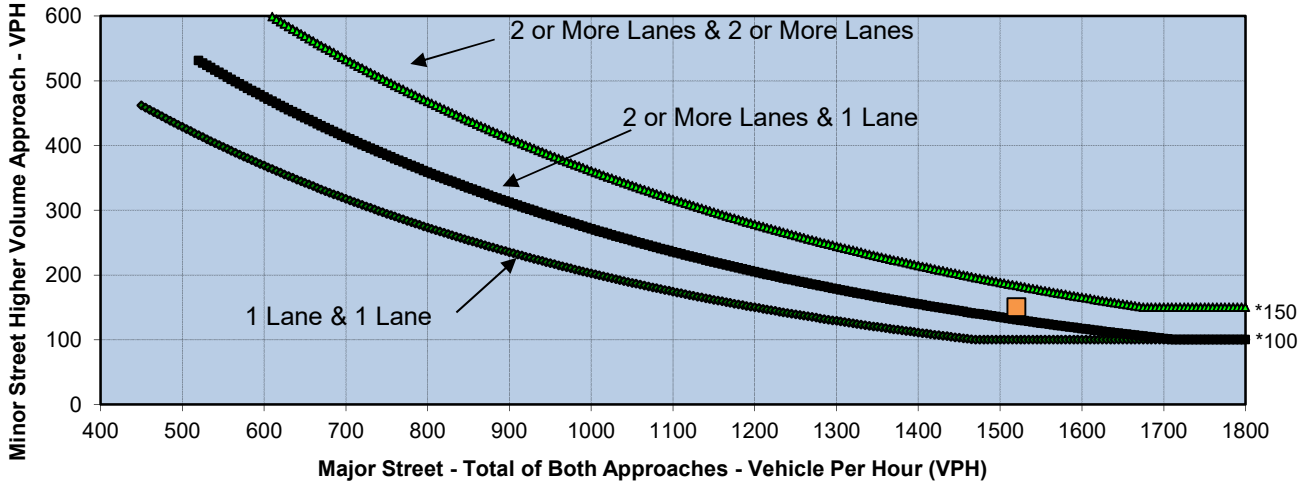
2035N - Alt 7 land uses (no Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,349,227	14,458	-	14,458	4,334,769
CHULA VISTA TOTAL	5,604,549	32,338	-	32,338	5,572,211
CORONADO TOTAL	466,693	6,317	-	6,317	460,376
DEL MAR TOTAL	101,870	248	-	248	101,622
EL CAJON TOTAL	2,448,216	15,252	-	15,252	2,432,964
ENCINITAS TOTAL	2,563,578	16,914	-	16,914	2,546,664
ESCONDIDO TOTAL	3,488,757	8,452	-	8,452	3,480,305
External TOTAL	526,695	2,193	-	2,193	524,502
IMPERIAL BEACH TOTAL	131,578	274	-	274	131,304
LA MESA TOTAL	2,097,955	23,895	-	23,895	2,074,060
LEMON GROVE TOTAL	962,357	8,204	-	8,204	954,153
NATIONAL CITY TOTAL	1,963,371	27,381	-	27,381	1,935,990
OCEANSIDE TOTAL	4,091,379	5,175	-	5,175	4,086,204
POWAY TOTAL	1,305,271	2,573	-	2,573	1,302,698
MIDWAY TOTAL	47,331,316	1,230,064	206,376	1,023,688	46,101,252
SAN MARCOS TOTAL	2,648,495	1,291	-	1,291	2,647,204
SANTEE TOTAL	1,350,483	3,475	-	3,475	1,347,008
SOLANA BEACH TOTAL	717,586	6,093	-	6,093	711,493
Unincorporated TOTAL	24,645,744	60,264	-	60,264	24,585,480
VISTA TOTAL	2,207,063	756	-	756	2,206,307
REGIONWIDE TOTAL	109,002,183	1,465,617 835,997	206,376	1,259,241	107,536,566

Appendix H
Signal Warrant Worksheets

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left		150		30
Through	600	680		
Right	90			120
Total	690	830	0	150

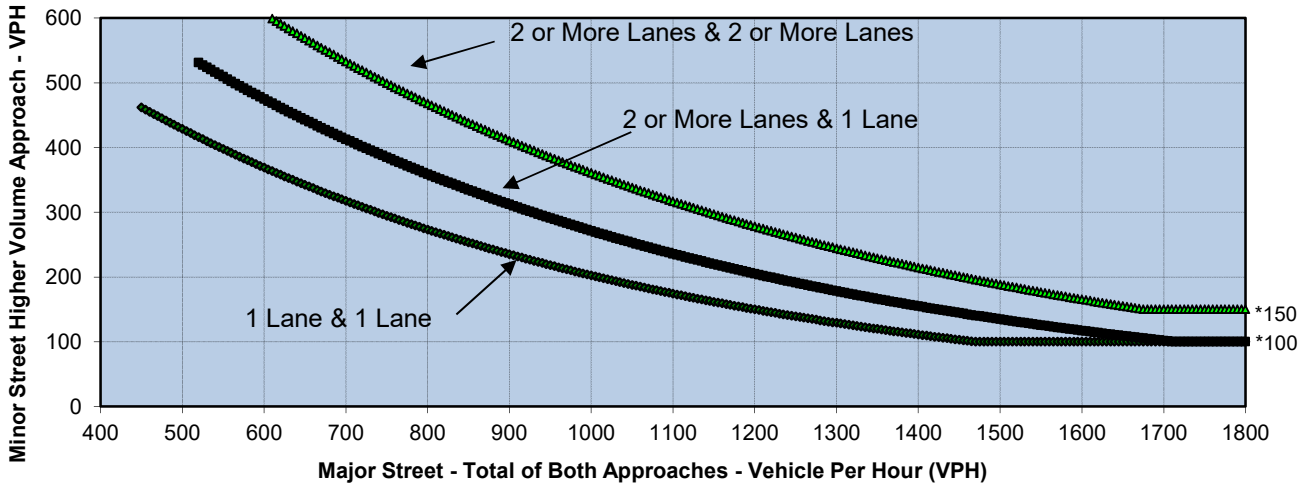
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,520**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left		400		300
Through	780	850		
Right	120			120
Total	900	1,250	0	420

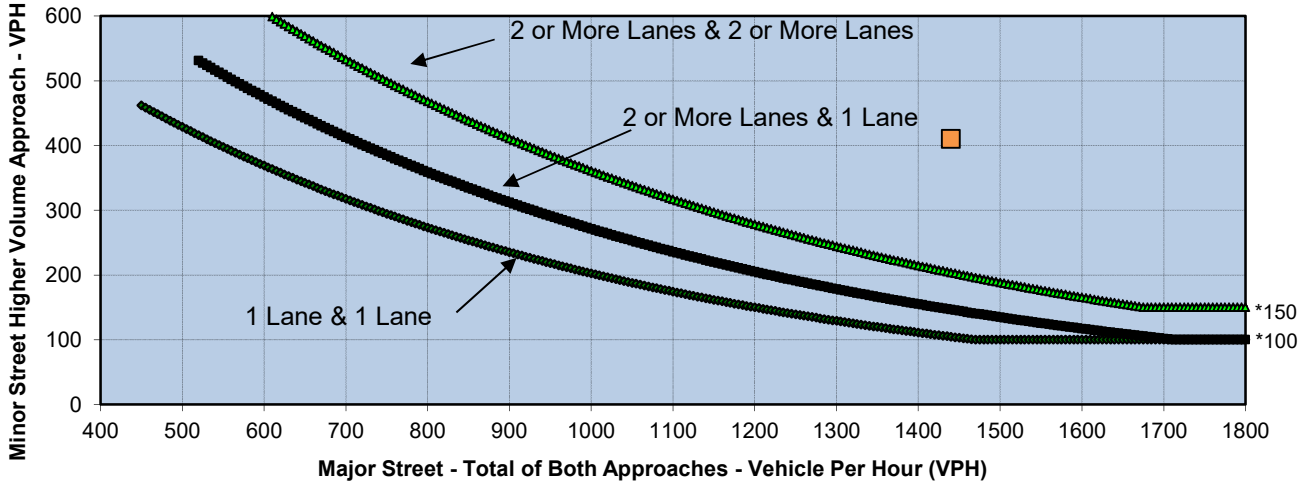
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,150	420	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	200	110	80	110
Through	410	520	50	140
Right	90	110	110	160
Total	700	740	240	410

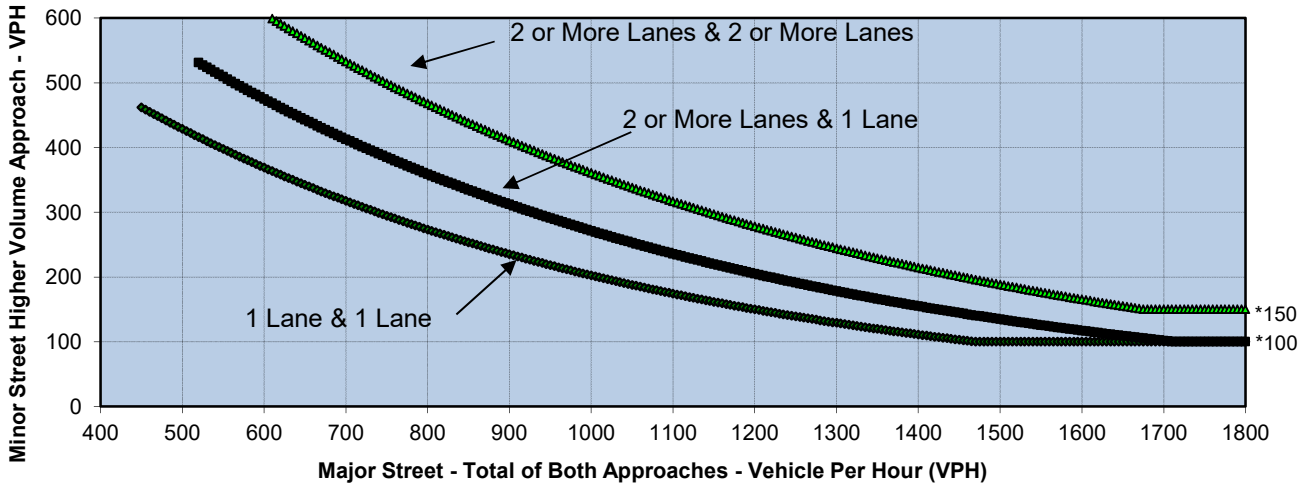
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,440**	**410**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	230	170	70	160
Through	1,110	920	130	40
Right	120	70	150	120
Total	1,460	1,160	350	320

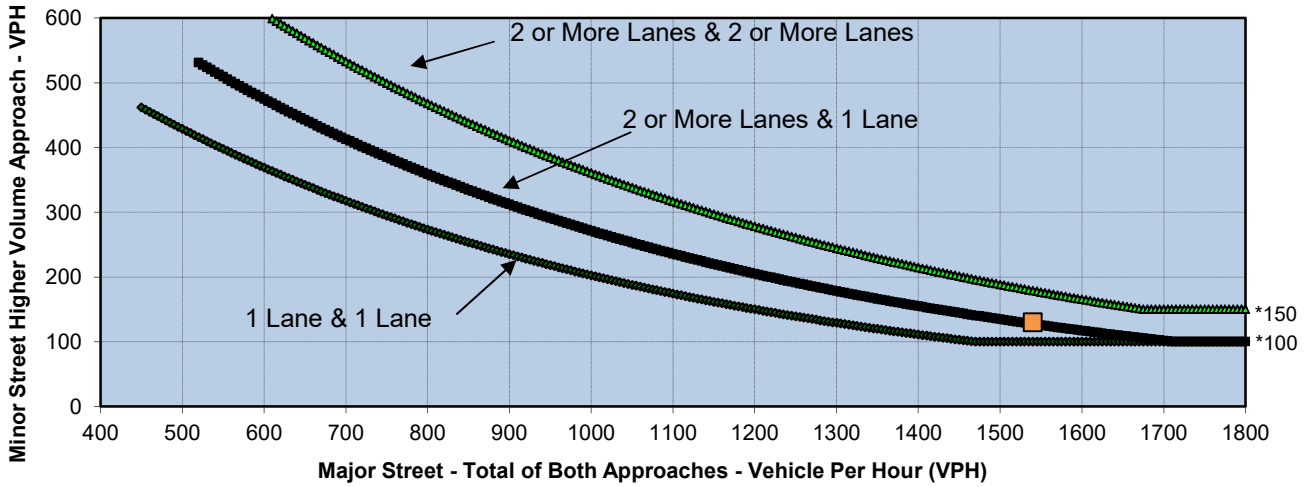
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,620	350	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	30	90	40	50
Through	620	680	20	20
Right	40	80	20	60
Total	690	850	80	130

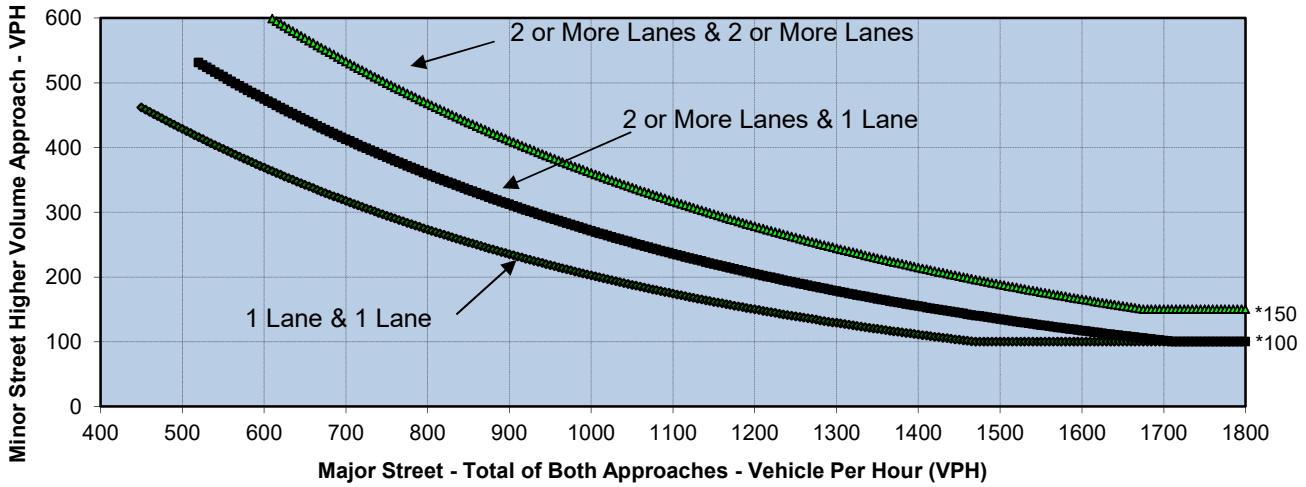
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,540**	**130**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	50	120	60	120
Through	1,250	1,080	30	30
Right	70	80	70	150
Total	1,370	1,280	160	300

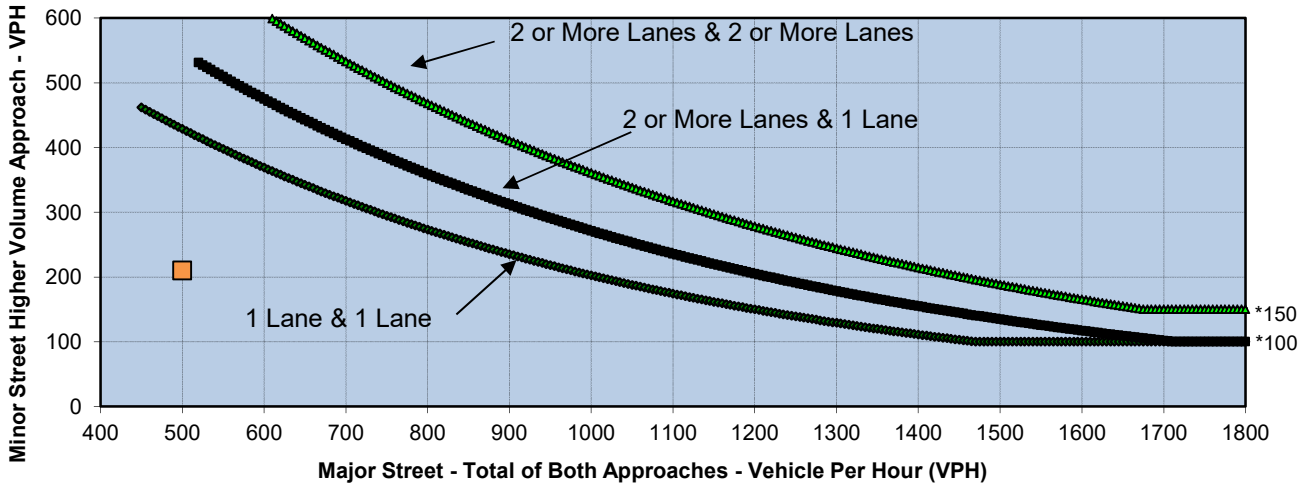
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,650	300	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

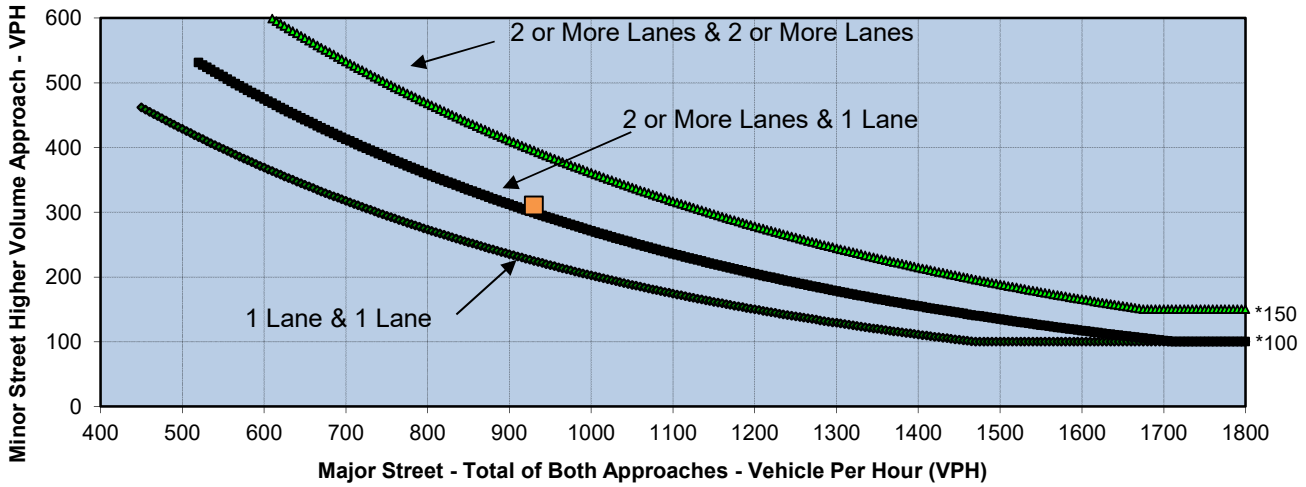
	NB	SB	EB	WB
Left	70	20	50	80
Through	50	30	100	80
Right	90	30	100	90
Total	210	80	250	250

Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**500**	**210**	

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16		Project	Midway & Old Town CPU
Major Street	Sports Arean Boulevard	Scenario	3B
Minor Street	Charles Lindbergh Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	90	90	70
Through	90	120	120	230
Right	120	100	300	120
Total	280	310	510	420

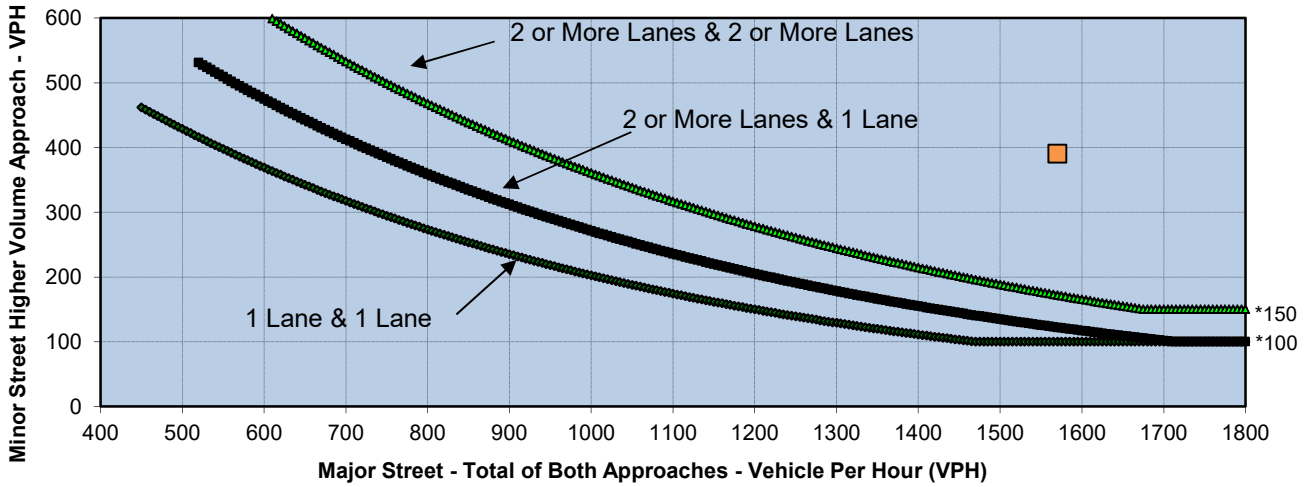
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	930	310	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	290	0	200	0
Through	610	600	0	0
Right	0	70	190	0
Total	900	670	390	0

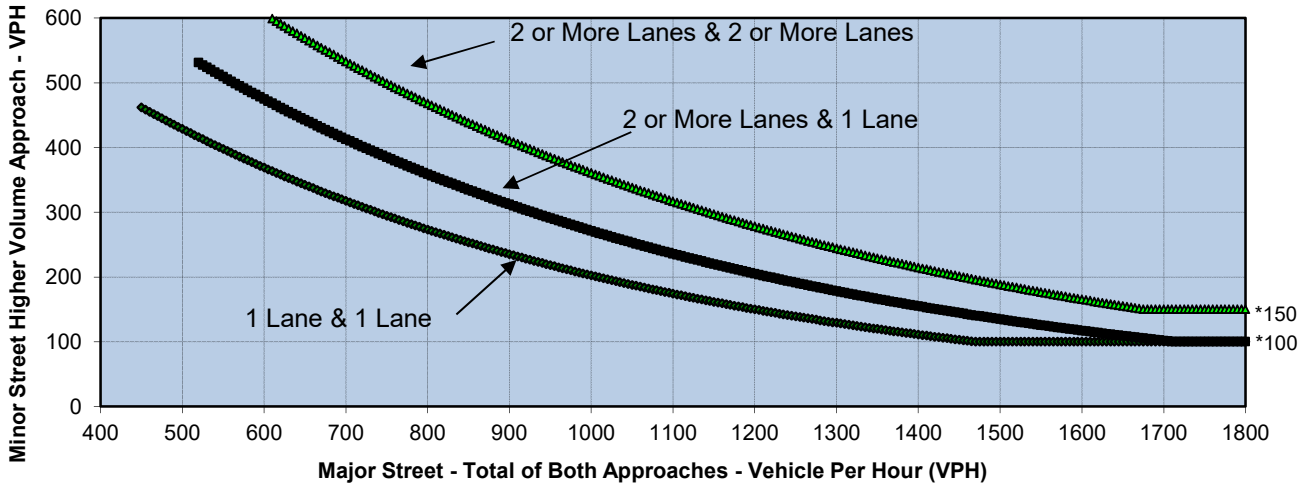
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,570**	**390**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	280	0	50	0
Through	1,320	840	0	0
Right	0	50	470	0
Total	1,600	890	520	0

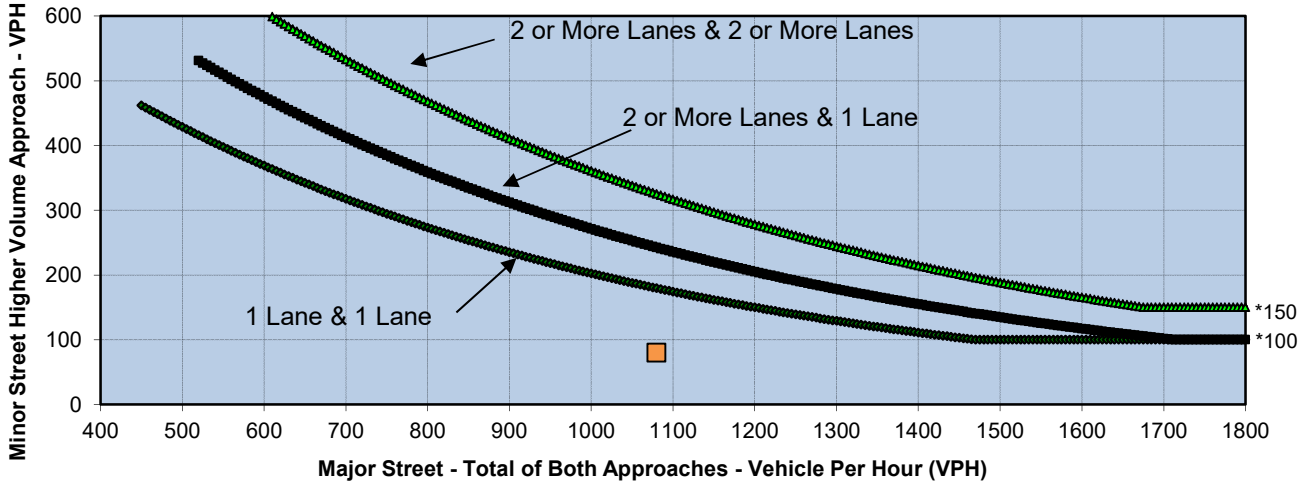
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,490	520	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	3B
Minor Street	Hancock Street	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left			30	100
Through		70		390
Right		10	100	460
Total	0	80	130	950

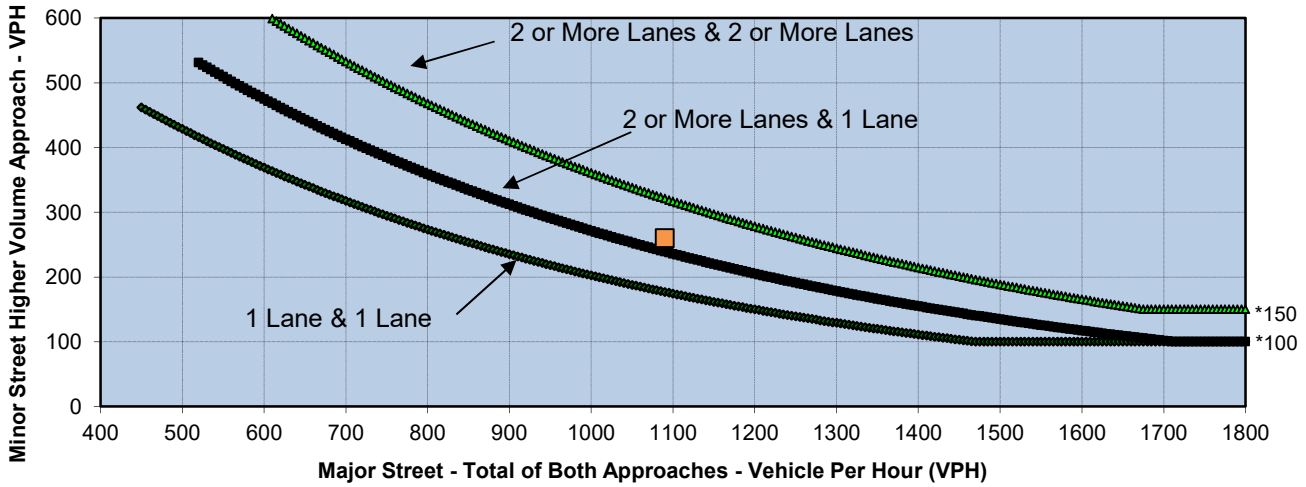
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Hancock Street	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,080**	**80**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18

Major Street	Kurtz Street
Minor Street	Hancock Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left			100	150
Through		170		310
Right		90	140	390
Total	0	260	240	850

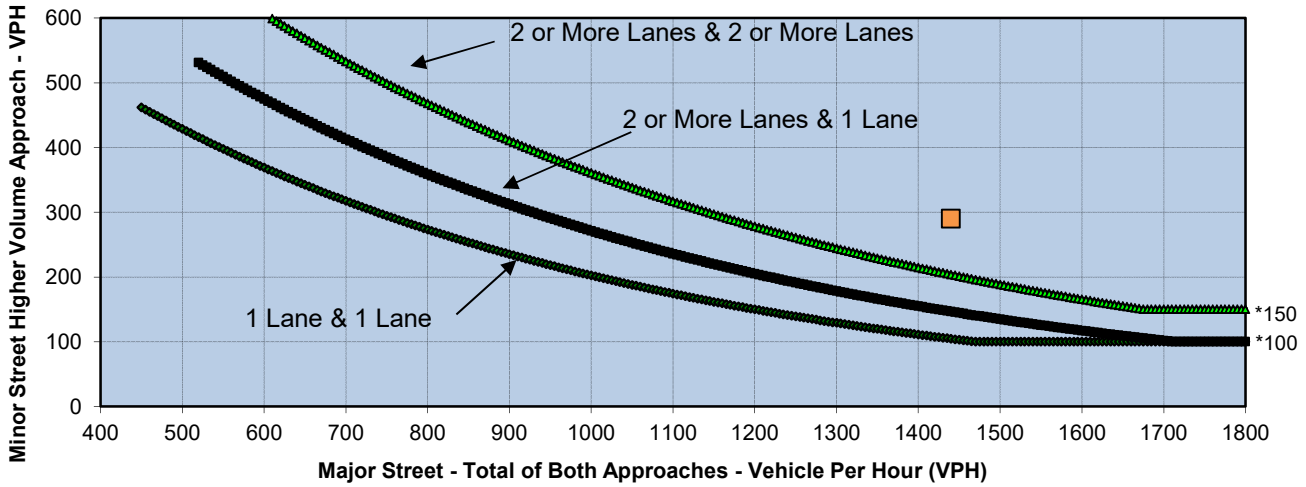
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Hancock Street	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	1,090	260	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	350		100	
Through	460	480		
Right		150	190	
Total	810	630	290	0

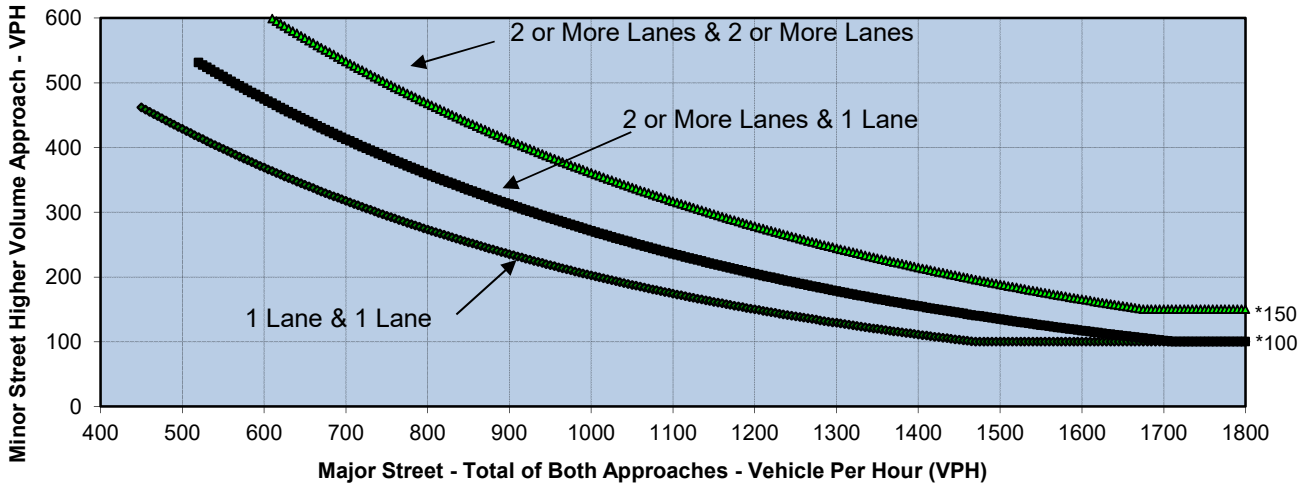
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,440**	**290**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	490		230	
Through	880	440		
Right		100	450	
Total	1,370	540	680	0

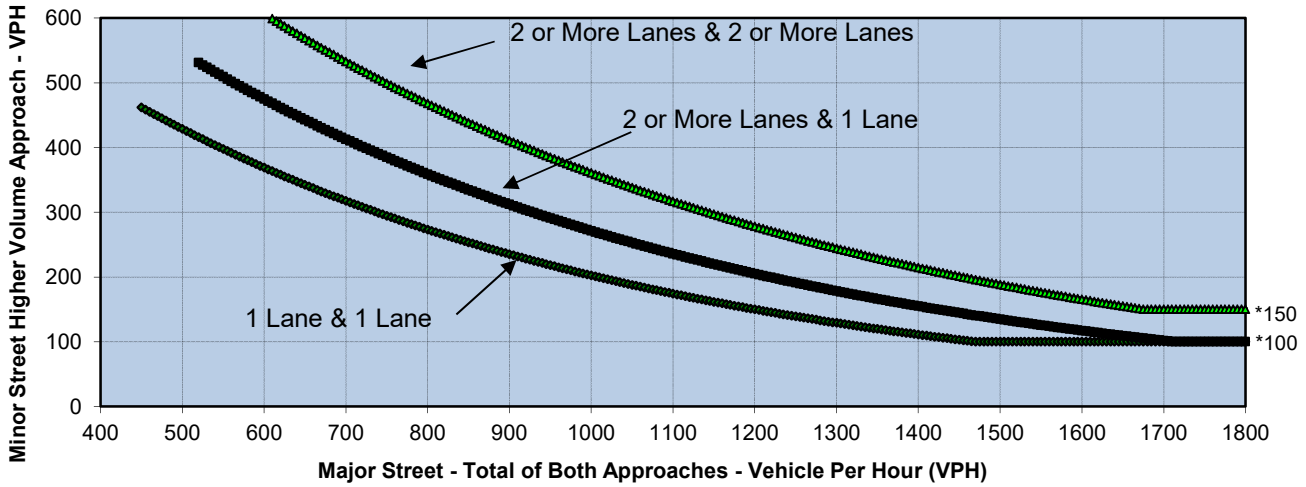
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	1,910	680	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left		10		60
Through		220	20	90
Right		40	100	
Total	0	270	120	150

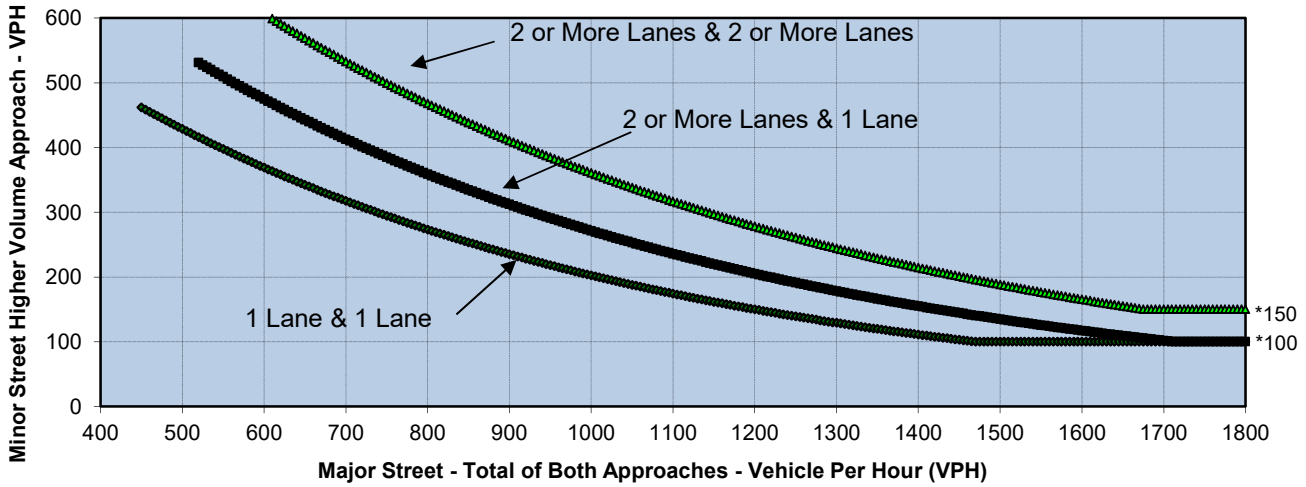
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**270**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left		70		320
Through		720	30	290
Right		50	260	
Total	0	840	290	610

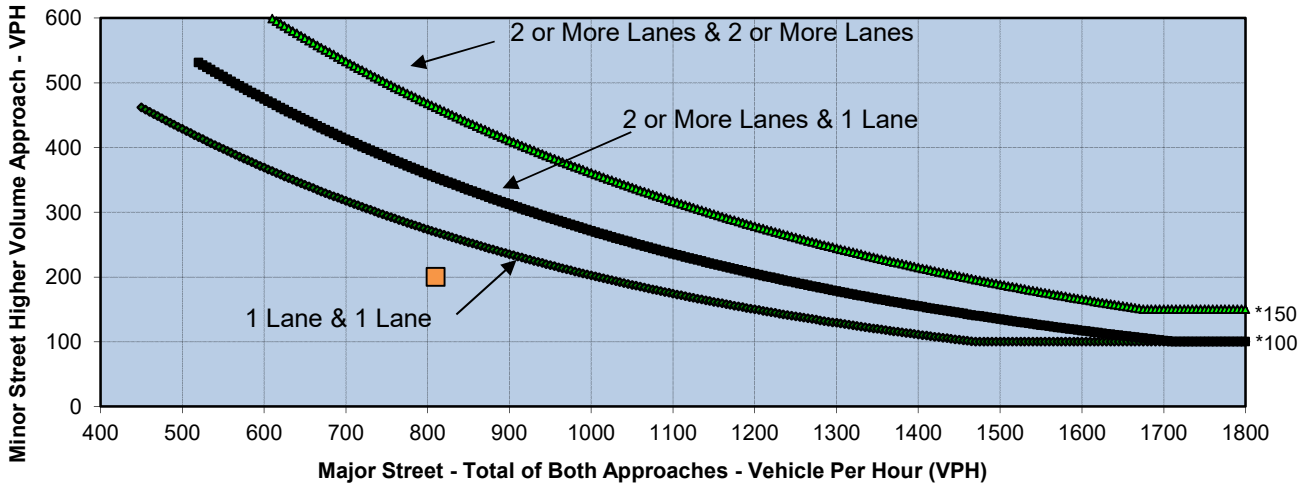
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	840	610	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	140		50	
Through	330	310		
Right		30	150	
Total	470	340	200	0

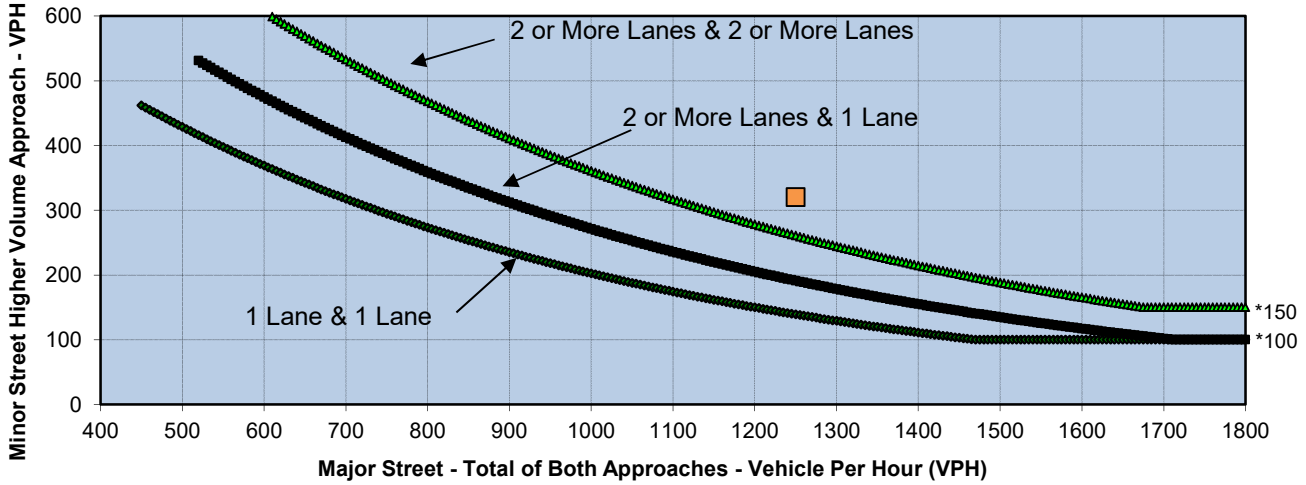
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**810**	**200**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	180		120	
Through	370	480		
Right		220	200	
Total	550	700	320	0

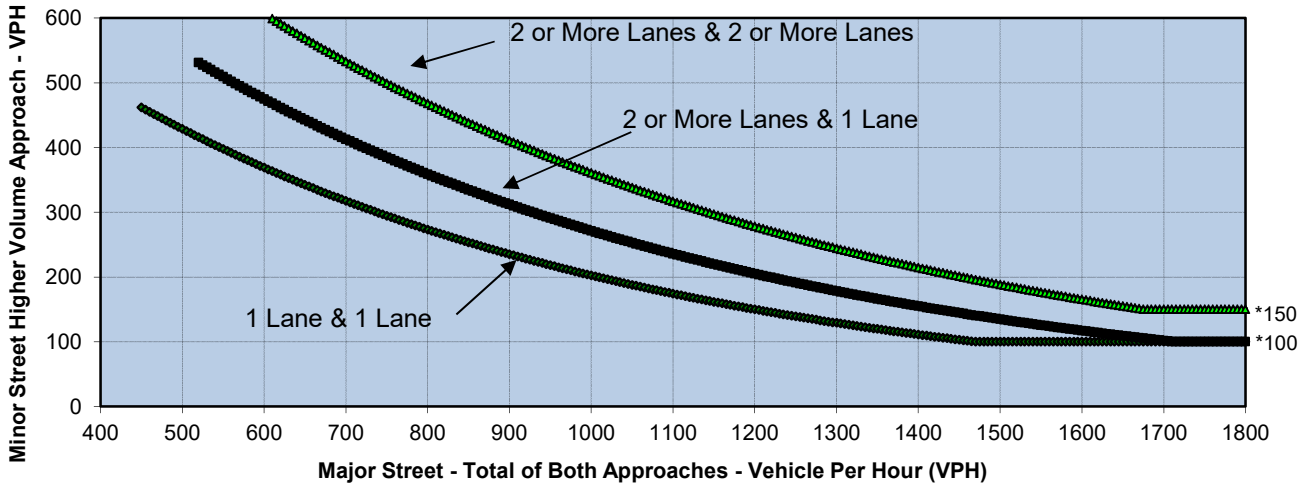
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,250	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	3B
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left		150	50	
Through			670	10
Right		250		1,420
Total	0	400	720	1,430

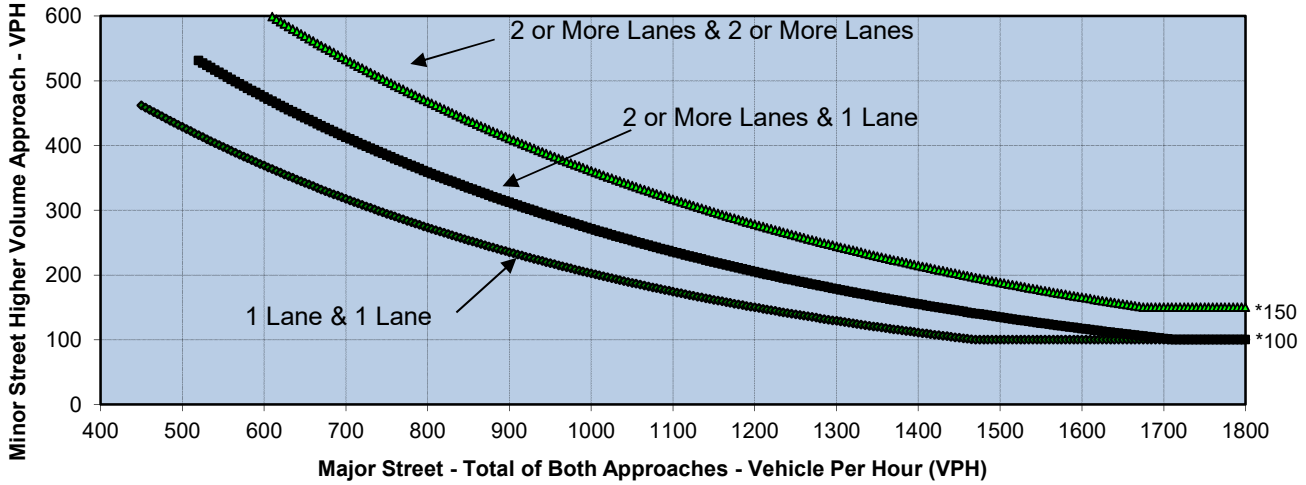
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**2,150**	**400**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	3B
Minor Street	Dutch Flats Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left		160	60	
Through			1,090	1,200
Right		240		70
Total	0	400	1,150	1,270

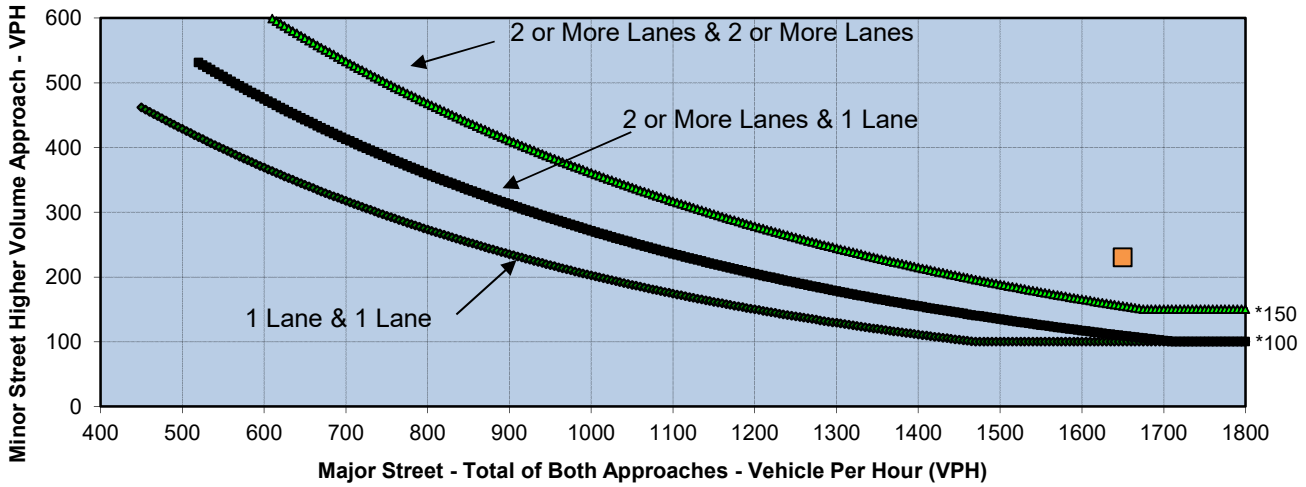
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,420	400	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive	Project	Midway & Old Town CPU
Minor Street	Dutch Flats Parkway	Scenario	3B
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	230	260	70	40
Through	390	450	10	150
Right	130	190	100	40
Total	750	900	180	230

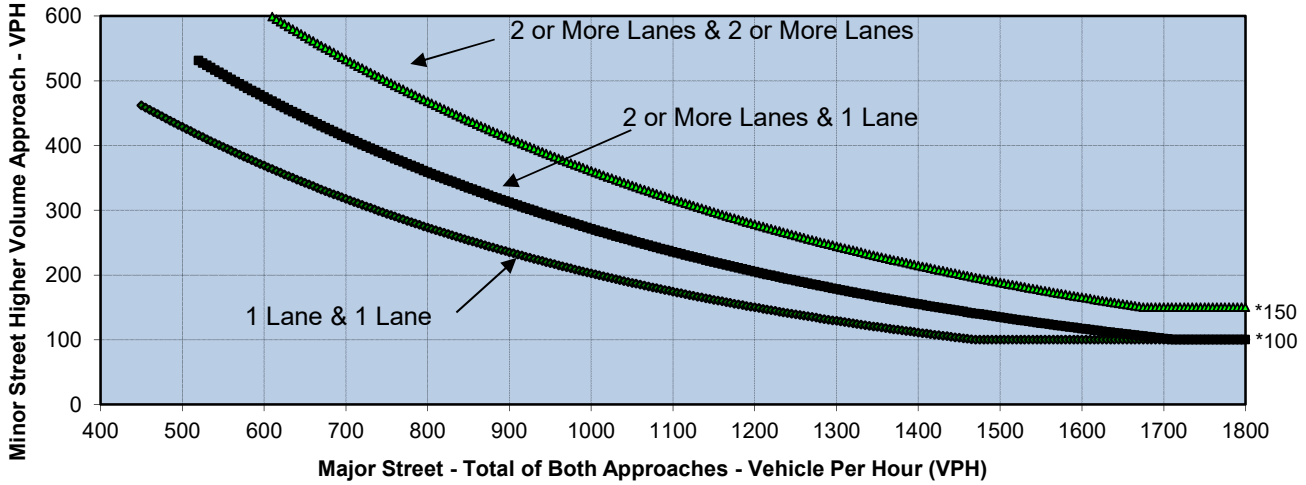
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,650**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	160	210	110	60
Through	510	520	20	110
Right	370	150	80	280
Total	1,040	880	210	450

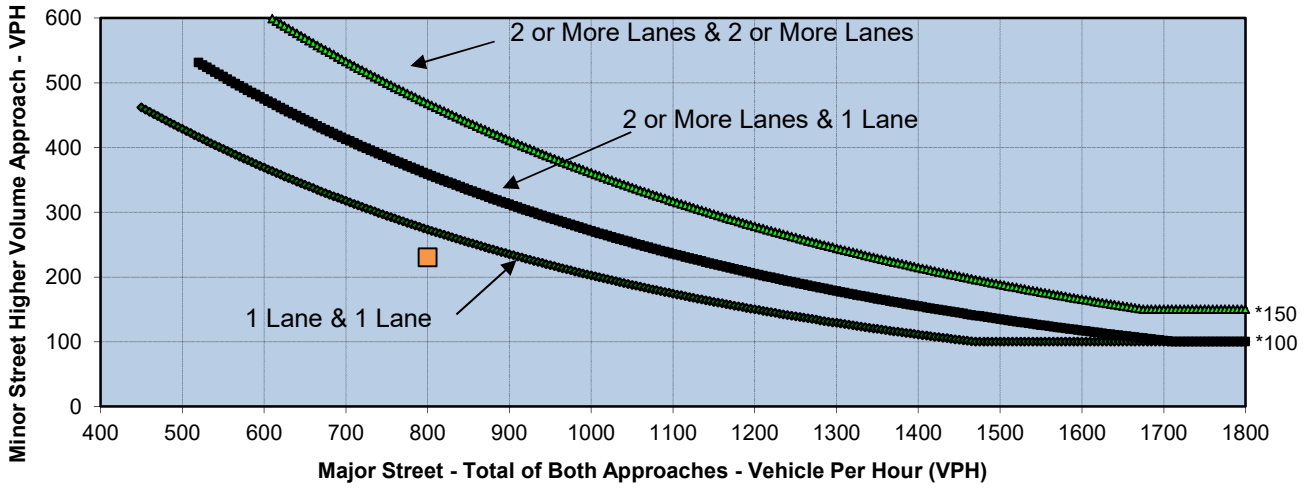
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,920	450	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	340		30	
Through	180	190		
Right		90	200	
Total	520	280	230	0

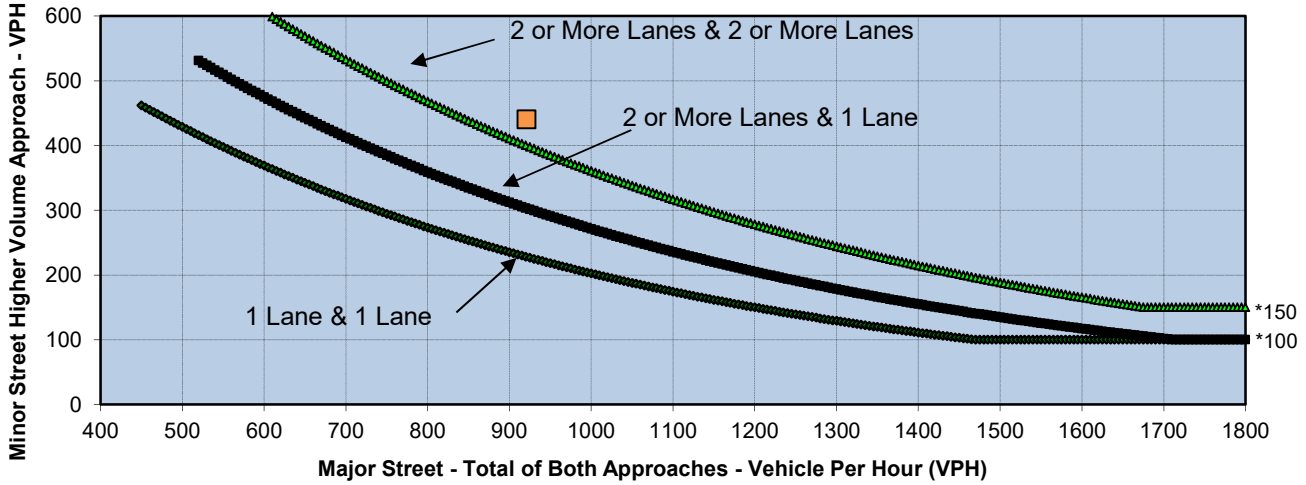
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**800**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	3B
Peak Hour	PM

Turn Movement Volumes

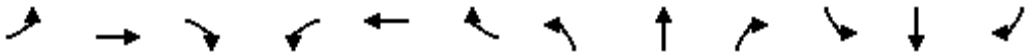
	NB	SB	EB	WB
Left	190		180	
Through	141	270		
Right		320	260	
Total	331	590	440	0

Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	921	440	

Appendix I
Peak Hour Intersection Worksheets – Preferred Plan Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1150	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1150	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1250	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	293	0	0	93	0	0	100	0	13	0
Lane Group Flow (vph)	65	1250	142	174	1446	103	522	435	63	630	421	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.0	39.9	39.9	8.6	44.4	44.4	30.5	33.2	33.2	35.8	36.7	
Effective Green, g (s)	4.4	41.2	41.2	9.0	45.8	45.8	30.9	34.0	34.0	34.8	37.9	
Actuated g/C Ratio	0.03	0.31	0.31	0.07	0.34	0.34	0.23	0.25	0.25	0.26	0.28	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	57	1551	477	228	1200	507	785	469	392	456	497	
v/s Ratio Prot	0.04	0.25		c0.05	c0.41		0.15	c0.23		c0.36	0.24	
v/s Ratio Perm			0.09			0.07			0.04			
v/c Ratio	1.14	0.81	0.30	0.76	1.21	0.20	0.66	0.93	0.16	1.38	0.85	
Uniform Delay, d1	65.3	43.2	35.8	62.0	44.6	31.7	47.3	49.3	39.4	50.1	45.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	162.7	4.6	1.6	12.7	100.4	0.9	1.7	24.8	0.3	185.0	12.1	
Delay (s)	228.0	47.8	37.4	74.7	145.0	32.6	49.0	74.1	39.6	235.1	58.0	
Level of Service	F	D	D	E	F	C	D	E	D	F	E	
Approach Delay (s)		51.9			126.1			57.4			162.8	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	96.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

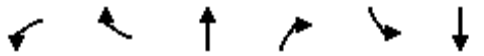
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	550	1190	370	0	0	650
Future Volume (vph)	550	1190	370	0	0	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	1293	402	0	0	707
RTOR Reduction (vph)	0	301	0	0	0	0
Lane Group Flow (vph)	598	992	402	0	0	707
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	19.7	19.7	13.0			13.0
Effective Green, g (s)	19.7	19.7	13.0			13.0
Actuated g/C Ratio	0.42	0.42	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1448	1175	985			985
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.36				
v/c Ratio	0.41	0.84	0.41			0.72
Uniform Delay, d1	9.5	12.1	13.7			15.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	5.5	0.1			2.1
Delay (s)	9.5	17.6	13.8			17.3
Level of Service	A	B	B			B
Approach Delay (s)	15.1		13.8			17.3
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	46.7	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	130	970	220	0	1200
Future Volume (Veh/h)	0	130	970	220	0	1200
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	141	1054	239	0	1304
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked	0.97	0.97			0.97	
vC, conflicting volume	1608	471			1293	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1510	349			1196	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	110	634			562	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	141	422	422	450	435	435	435
Volume Left	0	0	0	0	0	0	0
Volume Right	141	0	0	239	0	0	0
cSH	634	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.22	0.25	0.25	0.26	0.26	0.26	0.26
Queue Length 95th (ft)	21	0	0	0	0	0	0
Control Delay (s)	12.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	12.3	0.0			0.0		
Approach LOS	B						

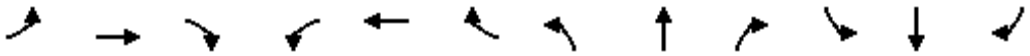
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	38.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	300	270	30	140	300	180	460	50	440	510	250
Future Volume (vph)	440	300	270	30	140	300	180	460	50	440	510	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1564	1770	3539	1574	1770	3482		1770	3539	1565
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1564	1770	3539	1574	1770	3482		1770	3539	1565
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	326	293	33	152	326	196	500	54	478	554	272
RTOR Reduction (vph)	0	0	76	0	0	44	0	6	0	0	0	117
Lane Group Flow (vph)	478	326	217	33	152	282	196	548	0	478	554	155
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	31.3	47.0	63.6	3.4	19.0	50.3	16.6	24.6		31.3	39.3	70.6
Effective Green, g (s)	32.2	47.9	65.4	4.4	20.0	50.3	17.5	25.5		32.2	40.2	70.6
Actuated g/C Ratio	0.26	0.39	0.53	0.04	0.16	0.41	0.14	0.21		0.26	0.32	0.57
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	459	719	824	62	570	637	249	715		459	1146	890
v/s Ratio Prot	c0.27	c0.18	0.04	0.02	0.04	0.11	0.11	c0.16		c0.27	0.16	0.04
v/s Ratio Perm			0.10			0.07						0.06
v/c Ratio	1.04	0.45	0.26	0.53	0.27	0.44	0.79	0.77		1.04	0.48	0.17
Uniform Delay, d1	45.9	28.4	16.1	58.8	45.6	26.7	51.5	46.5		45.9	33.6	12.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	53.2	0.2	0.2	8.5	1.1	0.5	15.1	5.0		53.2	0.8	0.1
Delay (s)	99.1	28.5	16.3	67.3	46.7	27.2	66.6	51.5		99.1	34.4	12.9
Level of Service	F	C	B	E	D	C	E	D		F	C	B
Approach Delay (s)		56.0			35.6			55.4			53.6	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	124.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	110	110	90	100	170	80	320	50	90	410	90
Future Volume (vph)	110	110	110	90	100	170	80	320	50	90	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	120	120	98	109	185	87	348	54	98	446	98
RTOR Reduction (vph)	0	0	96	0	0	159	0	7	0	0	0	47
Lane Group Flow (vph)	120	120	24	98	109	26	87	395	0	98	446	51
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	17.0	17.0	23.6	16.0	16.0	16.0	6.6	56.8		11.1	61.3	61.3
Effective Green, g (s)	17.9	17.9	24.4	16.9	16.9	16.9	7.0	57.7		11.5	62.2	62.2
Actuated g/C Ratio	0.15	0.15	0.20	0.14	0.14	0.14	0.06	0.48		0.10	0.52	0.52
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	250	264	316	249	262	218	200	1663		169	1834	820
v/s Ratio Prot	c0.07	0.07	0.00	0.06	c0.06		0.03	0.11		c0.06	c0.13	
v/s Ratio Perm			0.01			0.02						0.03
v/c Ratio	0.48	0.45	0.08	0.39	0.42	0.12	0.43	0.24		0.58	0.24	0.06
Uniform Delay, d1	46.8	46.6	38.7	46.9	47.0	45.0	54.6	18.3		51.9	15.9	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.25	0.71	0.71
Incremental Delay, d2	1.5	1.2	0.0	1.0	1.1	0.2	0.6	0.3		2.5	0.3	0.1
Delay (s)	48.2	47.8	38.7	47.9	48.1	45.3	55.1	18.6		67.7	11.5	10.4
Level of Service	D	D	D	D	D	D	E	B		E	B	B
Approach Delay (s)		44.9			46.7			25.1			19.9	
Approach LOS		D			D			C			B	

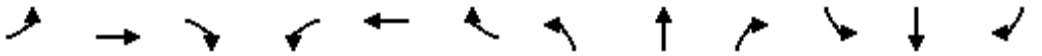
Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	20
Future Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.98		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1746			1724		1770	3460		1770	3515	
Flt Permitted		0.83			0.84		0.39	1.00		0.32	1.00	
Satd. Flow (perm)		1489			1482		724	3460		603	3515	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	22	22	33	22	33	65	717	98	33	598	22
RTOR Reduction (vph)	0	19	0	0	28	0	0	13	0	0	4	0
Lane Group Flow (vph)	0	58	0	0	60	0	65	802	0	33	616	0
Confl. Peds. (#/hr)			1			10			10			10
Confl. Bikes (#/hr)									5			5
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.3			5.3		21.8	20.1		20.0	19.2	
Effective Green, g (s)		6.2			6.2		22.6	21.0		20.8	20.1	
Actuated g/C Ratio		0.15			0.15		0.56	0.52		0.51	0.50	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		228			227		459	1798		345	1748	
v/s Ratio Prot							c0.01	c0.23		0.00	0.18	
v/s Ratio Perm		0.04			c0.04		0.07			0.05		
v/c Ratio		0.26			0.26		0.14	0.45		0.10	0.35	
Uniform Delay, d1		15.1			15.1		4.1	6.1		4.9	6.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.2		0.1	0.2		0.0	0.1	
Delay (s)		15.3			15.3		4.1	6.2		4.9	6.3	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		15.3			15.3			6.1			6.2	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	40.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Future Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1555
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	370	1957	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	13	0	0	0	79	0	0	77	0	0	77
Lane Group Flow (vph)	239	1759	0	370	1957	247	130	359	151	250	304	119
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	10.6	42.7		10.3	42.5	51.7	8.5	24.0	34.3	9.2	24.7	35.3
Effective Green, g (s)	11.0	43.8		10.7	43.5	51.7	8.9	24.9	36.1	9.6	25.6	37.1
Actuated g/C Ratio	0.10	0.42		0.10	0.41	0.49	0.08	0.24	0.34	0.09	0.24	0.35
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	359	2079		349	2106	760	150	839	581	313	862	549
v/s Ratio Prot	0.07	c0.35		0.11	c0.38	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.67	0.85		1.06	0.93	0.33	0.87	0.43	0.26	0.80	0.35	0.22
Uniform Delay, d1	45.2	27.6		47.1	29.3	16.1	47.5	34.0	24.8	46.8	32.8	23.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6	4.5		65.0	8.8	0.1	36.3	0.1	0.1	12.4	0.1	0.1
Delay (s)	48.8	32.0		112.1	38.1	16.2	83.8	34.1	24.9	59.2	32.9	23.8
Level of Service	D	C		F	D	B	F	C	C	E	C	C
Approach Delay (s)		34.0			45.7			40.2			39.3	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	30	600	90	150	680
Future Volume (vph)	120	30	600	90	150	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1742		3470		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1742		3470		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	33	652	98	163	739
RTOR Reduction (vph)	16	0	14	0	0	0
Lane Group Flow (vph)	147	0	736	0	163	739
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	8.9		30.2		8.8	43.5
Effective Green, g (s)	8.9		30.2		8.8	43.5
Actuated g/C Ratio	0.14		0.49		0.14	0.71
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	252		1706		253	2507
v/s Ratio Prot	c0.08		c0.21		c0.09	0.21
v/s Ratio Perm						
v/c Ratio	0.58		0.43		0.64	0.29
Uniform Delay, d1	24.5		10.1		24.8	3.3
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	3.4		0.8		5.5	0.3
Delay (s)	27.9		10.9		30.4	3.6
Level of Service	C		B		C	A
Approach Delay (s)	27.9		10.9			8.4
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

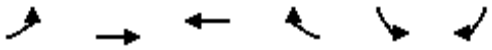
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	180	570	100	0	590
Future Volume (Veh/h)	0	180	570	100	0	590
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	620	109	0	641
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			491
pX, platoon unblocked	0.86					
vC, conflicting volume	997	370			731	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	671	370			731	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	69			100	
cM capacity (veh/h)	335	625			868	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	196	413	316	320	320
Volume Left	0	0	0	0	0
Volume Right	196	0	109	0	0
cSH	625	1700	1700	1700	1700
Volume to Capacity	0.31	0.24	0.19	0.19	0.19
Queue Length 95th (ft)	33	0	0	0	0
Control Delay (s)	13.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	13.4	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	37.3%	ICU Level of Service		A
Analysis Period (min)	15			



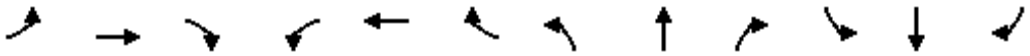
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	820	1290	670	420	170
Future Volume (vph)	0	820	1290	670	420	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	891	1402	728	457	185
RTOR Reduction (vph)	0	0	0	293	0	148
Lane Group Flow (vph)	0	891	1402	435	457	37
Confl. Peds. (#/hr)				8	8	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	8	1	
Permitted Phases						1
Actuated Green, G (s)		31.9	31.9	27.3	12.1	12.1
Effective Green, g (s)		31.9	31.9	26.8	12.1	12.1
Actuated g/C Ratio		0.52	0.52	0.44	0.20	0.20
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	3.0	2.5	2.5
Lane Grp Cap (vph)		1856	1856	1228	683	315
v/s Ratio Prot		0.25	c0.40	0.16	c0.13	
v/s Ratio Perm						0.02
v/c Ratio		0.48	0.76	0.35	0.67	0.12
Uniform Delay, d1		9.2	11.4	11.3	22.5	20.0
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	1.8	0.2	2.2	0.1
Delay (s)		9.4	13.2	11.4	24.7	20.1
Level of Service		A	B	B	C	C
Approach Delay (s)		9.4	12.6		23.4	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.8	Sum of lost time (s)	17.1
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	50	410	80	130	670
Future Volume (vph)	30	50	410	80	130	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	5.6		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1550	4943		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1550	4943		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	54	446	87	141	728
RTOR Reduction (vph)	0	48	14	0	0	0
Lane Group Flow (vph)	33	6	519	0	141	728
Confl. Peds. (#/hr)	4	11		9	9	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.9	11.9	70.8		13.1	88.3
Effective Green, g (s)	11.9	11.9	70.1		13.1	88.3
Actuated g/C Ratio	0.11	0.11	0.64		0.12	0.80
Clearance Time (s)	4.9	4.9	4.9		4.4	4.9
Vehicle Extension (s)	2.0	2.0	5.0		2.0	3.2
Lane Grp Cap (vph)	191	167	3150		210	4081
v/s Ratio Prot	c0.02		0.11		c0.08	c0.14
v/s Ratio Perm		0.00				
v/c Ratio	0.17	0.03	0.16		0.67	0.18
Uniform Delay, d1	44.6	43.9	8.1		46.4	2.5
Progression Factor	1.00	1.00	1.89		1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1		6.5	0.1
Delay (s)	44.7	43.9	15.4		52.9	2.6
Level of Service	D	D	B		D	A
Approach Delay (s)	44.2		15.4			10.8
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.9
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

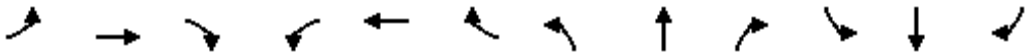


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	50	110	160	140	110	200	410	90	110	520	110
Future Volume (vph)	80	50	110	160	140	110	200	410	90	110	520	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.5	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.93		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1739		1770	4787		3433	3446	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1739		1770	4787		3433	3446	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	54	120	174	152	120	217	446	98	120	565	120
RTOR Reduction (vph)	0	87	0	0	26	0	0	31	0	0	13	0
Lane Group Flow (vph)	87	87	0	174	246	0	217	513	0	120	672	0
Confl. Peds. (#/hr)									120			
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	14.0	14.0		17.1	17.1		16.8	36.0		23.3	43.0	
Effective Green, g (s)	14.9	14.9		18.0	18.0		17.2	36.9		23.7	43.9	
Actuated g/C Ratio	0.14	0.14		0.16	0.16		0.16	0.34		0.22	0.40	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		3.9	3.9	
Lane Grp Cap (vph)	239	226		289	284		276	1605		739	1375	
v/s Ratio Prot	0.05	c0.05		0.10	c0.14		c0.12	0.11		0.03	c0.20	
v/s Ratio Perm												
v/c Ratio	0.36	0.38		0.60	0.87		0.79	0.32		0.16	0.49	
Uniform Delay, d1	43.2	43.4		42.7	44.8		44.6	27.2		35.1	24.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.92	0.92	
Incremental Delay, d2	0.9	1.1		2.4	22.4		12.7	0.5		0.1	1.2	
Delay (s)	44.2	44.4		45.1	67.2		57.3	27.7		32.4	23.9	
Level of Service	D	D		D	E		E	C		C	C	
Approach Delay (s)		44.4			58.6			36.2			25.1	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	20	60	20	50	30	620	40	90	680	80
Future Volume (vph)	40	20	20	60	20	50	30	620	40	90	680	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.97		1.00	0.89		1.00	0.99		1.00	0.98	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1749		1770	1664		1770	5032		3433	3471	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1749		1770	1664		1770	5032		3433	3471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	22	65	22	54	33	674	43	98	739	87
RTOR Reduction (vph)	0	10	0	0	49	0	0	4	0	0	5	0
Lane Group Flow (vph)	0	77	0	65	27	0	33	713	0	98	821	0
Confl. Peds. (#/hr)			7	7			9		4	4		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		9.0		6.1	6.1		2.1	20.2		13.5	32.1	
Effective Green, g (s)		9.0		6.1	6.1		2.1	20.2		13.5	32.1	
Actuated g/C Ratio		0.13		0.09	0.09		0.03	0.30		0.20	0.47	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		230		157	148		54	1486		677	1628	
v/s Ratio Prot		c0.04		c0.04	0.02		c0.02	0.14		0.03	c0.24	
v/s Ratio Perm												
v/c Ratio		0.33		0.41	0.18		0.61	0.48		0.14	0.50	
Uniform Delay, d1		27.0		29.5	28.8		32.7	19.8		22.7	12.6	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.6	0.2		13.5	0.1		0.0	0.1	
Delay (s)		27.3		30.1	29.1		46.3	19.9		22.7	12.7	
Level of Service		C		C	C		D	B		C	B	
Approach Delay (s)		27.3			29.5			21.0			13.8	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	19.6
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	50	10	10	50	60	610	50	40	730	40
Future Volume (vph)	30	10	50	10	10	50	60	610	50	40	730	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.9	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1795	1583		1817	1583	1770	5028		1770	5046	
Flt Permitted		0.77	1.00		0.84	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1440	1583		1562	1583	1770	5028		1770	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	54	11	11	54	65	663	54	43	793	43
RTOR Reduction (vph)	0	0	47	0	0	47	0	11	0	0	7	0
Lane Group Flow (vph)	0	44	7	0	22	7	65	706	0	43	829	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		8						
Actuated Green, G (s)		7.4	7.4		7.4	7.4	4.4	33.1		2.5	31.2	
Effective Green, g (s)		7.4	7.4		6.5	7.4	4.4	33.1		2.5	31.2	
Actuated g/C Ratio		0.13	0.13		0.12	0.13	0.08	0.60		0.05	0.57	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		193	212		184	212	141	3025		80	2862	
v/s Ratio Prot							c0.04	0.14		c0.02	c0.16	
v/s Ratio Perm		c0.03	0.00		0.01	0.00						
v/c Ratio		0.23	0.03		0.12	0.03	0.46	0.23		0.54	0.29	
Uniform Delay, d1		21.2	20.7		21.7	20.7	24.2	5.1		25.7	6.2	
Progression Factor		1.00	1.00		1.00	1.00	0.81	0.64		1.00	1.00	
Incremental Delay, d2		0.6	0.1		0.3	0.1	2.0	0.2		6.8	0.3	
Delay (s)		21.9	20.8		22.0	20.8	21.7	3.4		32.5	6.4	
Level of Service		C	C		C	C	C	A		C	A	
Approach Delay (s)		21.3			21.1			4.9			7.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	200	1360	150	190	2160	380	100	270	180	140	90	190
Future Volume (vph)	200	1360	150	190	2160	380	100	270	180	140	90	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	7.8	5.9	5.9	5.9	5.9	5.9	5.9
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (prot)	3433	4726		1362	5085	1583	1611	1681	1610	1666	1401	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (perm)	3433	4726		1362	5085	1583	1611	1681	1610	1666	1401	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	1478	163	207	2348	413	109	293	196	152	98	207
RTOR Reduction (vph)	0	1	0	80	0	36	74	0	0	0	84	0
Lane Group Flow (vph)	217	1661	0	106	2348	377	35	179	228	234	14	207
Confl. Peds. (#/hr)								9			45	18
Confl. Bikes (#/hr)											10	
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	8.0	62.9		62.9	51.1	67.2	35.1	16.1	16.1	16.1	16.1	13.1
Effective Green, g (s)	9.4	65.0		62.9	53.0	63.4	35.1	16.1	16.1	16.1	16.1	13.1
Actuated g/C Ratio	0.09	0.59		0.57	0.48	0.58	0.32	0.15	0.15	0.15	0.15	0.12
Clearance Time (s)	4.0	6.1		6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Vehicle Extension (s)	3.0	2.8		2.8	3.2	2.9	4.1	2.9	2.9	2.9	2.9	2.9
Lane Grp Cap (vph)	293	2792		778	2450	912	514	246	235	243	205	210
v/s Ratio Prot	c0.06	0.35			c0.46	0.05		0.11	c0.14	0.14		c0.12
v/s Ratio Perm				0.08		0.18	0.02				0.01	
v/c Ratio	0.74	0.59		0.14	0.96	0.41	0.07	0.73	0.97	0.96	0.07	0.99
Uniform Delay, d1	49.1	14.2		10.9	27.4	13.0	26.1	44.9	46.7	46.7	40.5	48.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.85	0.87	0.87	2.50	1.00
Incremental Delay, d2	9.7	0.9		0.4	10.7	0.3	0.1	10.0	49.6	46.6	0.1	57.5
Delay (s)	58.8	15.1		11.3	38.2	13.3	26.1	48.3	90.2	87.1	101.2	105.9
Level of Service	E	B		B	D	B	C	D	F	F	F	F
Approach Delay (s)		19.4			34.5					80.5		74.6
Approach LOS		B			C					F		E

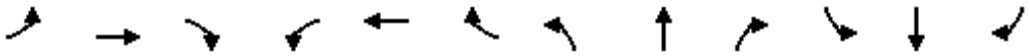
Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	170	30
Future Volume (vph)	170	30
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.9	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	185	33
RTOR Reduction (vph)	114	0
Lane Group Flow (vph)	104	0
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		1
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	13.1	
Effective Green, g (s)	13.1	
Actuated g/C Ratio	0.12	
Clearance Time (s)	5.9	
Vehicle Extension (s)	2.9	
Lane Grp Cap (vph)	331	
v/s Ratio Prot	0.04	
v/s Ratio Perm		
v/c Ratio	0.32	
Uniform Delay, d1	44.3	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	44.9	
Level of Service	D	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	100	100	90	80	80	70	50	90	20	30	30
Future Volume (vph)	50	100	100	90	80	80	70	50	90	20	30	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.95			0.96			0.94			0.95	
Flt Protected		0.99			0.98			0.98			0.99	
Satd. Flow (prot)		1745			1751			1726			1747	
Flt Permitted		0.90			0.75			0.89			0.92	
Satd. Flow (perm)		1577			1335			1563			1635	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	109	109	98	87	87	76	54	98	22	33	33
RTOR Reduction (vph)	0	50	0	0	35	0	0	32	0	0	15	0
Lane Group Flow (vph)	0	222	0	0	237	0	0	196	0	0	73	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		12.9			12.9			26.7			27.2	
Effective Green, g (s)		12.9			12.9			26.7			27.2	
Actuated g/C Ratio		0.27			0.27			0.55			0.56	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		418			354			858			915	
v/s Ratio Prot												
v/s Ratio Perm		0.14			c0.18			c0.13			0.04	
v/c Ratio		0.53			0.67			0.23			0.08	
Uniform Delay, d1		15.3			15.9			5.6			4.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.3			4.7			0.6			0.0	
Delay (s)		16.6			20.7			6.3			5.0	
Level of Service		B			C			A			A	
Approach Delay (s)		16.6			20.7			6.3			5.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	48.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

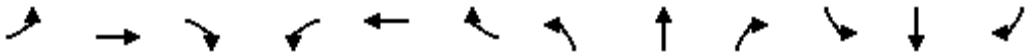
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	290	610	600	70	200	190
Future Volume (vph)	290	610	600	70	200	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.3	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5006		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5006		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	663	652	76	217	207
RTOR Reduction (vph)	0	0	8	0	0	172
Lane Group Flow (vph)	315	663	720	0	217	35
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.7	91.8	61.1		20.2	20.2
Effective Green, g (s)	26.4	91.8	61.1		20.2	20.2
Actuated g/C Ratio	0.22	0.76	0.51		0.17	0.17
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	389	3890	2548		297	266
v/s Ratio Prot	c0.18	0.13	c0.14		c0.12	
v/s Ratio Perm						0.02
v/c Ratio	0.81	0.17	0.28		0.73	0.13
Uniform Delay, d1	44.4	3.8	16.9		47.3	42.4
Progression Factor	1.01	0.15	1.25		1.00	1.00
Incremental Delay, d2	11.6	0.1	0.3		8.9	0.2
Delay (s)	56.5	0.7	21.4		56.2	42.7
Level of Service	E	A	C		E	D
Approach Delay (s)		18.7	21.4		49.6	
Approach LOS		B	C		D	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		

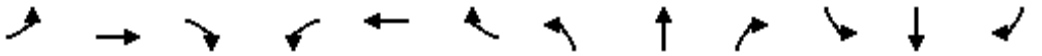
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Future Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.97						0.98	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1806						1831	
Flt Permitted	0.53		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	980		1583	1770	1806						1831	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	0	109	500	424	109	0	0	0	0	76	11
RTOR Reduction (vph)	0	0	92	284	11	0	0	0	0	0	9	0
Lane Group Flow (vph)	33	0	17	216	522	0	0	0	0	0	78	0
Turn Type	Perm		Perm	Split	NA						NA	
Protected Phases				8	8						6	
Permitted Phases	4		4									
Actuated Green, G (s)	7.6		7.6	20.7	20.7						7.6	
Effective Green, g (s)	7.6		7.6	20.7	20.7						7.6	
Actuated g/C Ratio	0.16		0.16	0.43	0.43						0.16	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	155		251	764	780						290	
v/s Ratio Prot				0.12	c0.29						c0.04	
v/s Ratio Perm	c0.03		0.01									
v/c Ratio	0.21		0.07	0.28	0.67						0.27	
Uniform Delay, d1	17.5		17.1	8.8	10.9						17.7	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.7		0.1	0.2	2.2						0.5	
Delay (s)	18.2		17.3	9.0	13.1						18.2	
Level of Service	B		B	A	B						B	
Approach Delay (s)		17.5			11.1			0.0			18.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	47.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

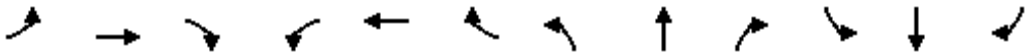
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1650	10	410	2390	0	0	0	0	390	300	150
Future Volume (vph)	0	1650	10	410	2390	0	0	0	0	390	300	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.2		2.4	3.9					3.4	3.4	3.9
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frt		1.00		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		5081		1770	6408					1681	1754	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		5081		1770	6408					1681	1754	1583
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	0	1774	11	441	2570	0	0	0	0	419	323	161
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	0	1784	0	441	2570	0	0	0	0	348	394	119
Turn Type		NA		Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases												4
Actuated Green, G (s)		55.0		30.8	90.5					34.7	34.7	34.7
Effective Green, g (s)		57.0		32.8	91.5					36.2	36.2	35.7
Actuated g/C Ratio		0.42		0.24	0.68					0.27	0.27	0.26
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2145		430	4343					450	470	418
v/s Ratio Prot		c0.35		c0.25	0.40					0.21	c0.22	
v/s Ratio Perm												0.08
v/c Ratio		0.83		1.03	0.59					0.77	0.84	0.28
Uniform Delay, d1		34.7		51.1	11.7					45.6	46.6	39.5
Progression Factor		1.00		0.90	0.18					1.00	1.00	1.00
Incremental Delay, d2		3.9		20.1	0.1					7.4	11.8	0.1
Delay (s)		38.7		66.1	2.2					53.0	58.5	39.6
Level of Service		D		E	A					D	E	D
Approach Delay (s)		38.7			11.5			0.0			53.0	
Approach LOS		D			B			A			D	

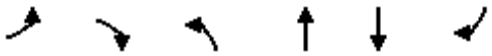
Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



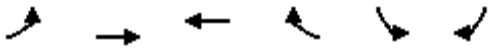
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	100	160	240	0	140	0	160	180	230	10
Future Volume (vph)	0	330	100	160	240	0	140	0	160	180	230	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5		4.0	4.0		4.0		3.5	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3331		1750	3539		1770		1557	1770	1850	
Flt Permitted		1.00		0.40	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3331		740	3539		1770		1557	1770	1850	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	359	109	174	261	0	152	0	174	196	250	11
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	70	0	2	0
Lane Group Flow (vph)	0	451	0	174	261	0	152	0	104	196	259	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type		NA		pm+pt	NA		Prot		custom	Split	NA	
Protected Phases		2		1	6		3		3	4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		56.6		71.7	71.7		16.0		72.6	23.1	23.1	
Effective Green, g (s)		57.0		72.1	72.6		16.4		74.4	24.0	24.0	
Actuated g/C Ratio		0.46		0.58	0.58		0.13		0.60	0.19	0.19	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.4	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)		1518		516	2055		232		926	339	355	
v/s Ratio Prot		0.14		c0.03	0.07		c0.09		0.02	0.11	c0.14	
v/s Ratio Perm				c0.16					0.05			
v/c Ratio		0.30		0.34	0.13		0.66		0.11	0.58	0.73	
Uniform Delay, d1		21.4		13.0	11.9		51.6		11.0	45.9	47.5	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		0.5		0.1	0.1		6.5		0.1	2.4	7.5	
Delay (s)		21.9		13.1	12.0		58.1		11.0	48.3	55.0	
Level of Service		C		B	B		E		B	D	D	
Approach Delay (s)		21.9			12.4			33.0			52.1	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	190	350	460	480	150
Future Volume (vph)	100	190	350	460	480	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.96	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1651		1770	5085	4904	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1651		1770	5085	4904	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	207	380	500	522	163
RTOR Reduction (vph)	57	0	0	0	35	0
Lane Group Flow (vph)	259	0	380	500	650	0
Confl. Peds. (#/hr)		2				
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	29.0		32.6	83.0	46.4	
Effective Green, g (s)	29.0		32.2	83.0	45.5	
Actuated g/C Ratio	0.24		0.27	0.69	0.38	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	398		474	3517	1859	
v/s Ratio Prot	c0.16		c0.21	0.10	c0.13	
v/s Ratio Perm						
v/c Ratio	0.65		0.80	0.14	0.35	
Uniform Delay, d1	40.9		40.9	6.3	26.7	
Progression Factor	1.00		1.03	1.42	1.00	
Incremental Delay, d2	8.0		9.3	0.1	0.5	
Delay (s)	49.0		51.6	9.1	27.2	
Level of Service	D		D	A	C	
Approach Delay (s)	49.0			27.4	27.2	
Approach LOS	D			C	C	

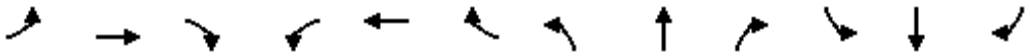
Intersection Summary			
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	140	80	40	20	30
Future Volume (Veh/h)	50	140	80	40	20	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	152	87	43	22	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1157	644			
pX, platoon unblocked						
vC, conflicting volume	130				368	108
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130				368	108
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				96	97
cM capacity (veh/h)	1455				608	945

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	54	152	130	55
Volume Left	54	0	0	22
Volume Right	0	0	43	33
cSH	1455	1700	1700	774
Volume to Capacity	0.04	0.09	0.08	0.07
Queue Length 95th (ft)	3	0	0	6
Control Delay (s)	7.6	0.0	0.0	10.0
Lane LOS	A			B
Approach Delay (s)	2.0		0.0	10.0
Approach LOS				B

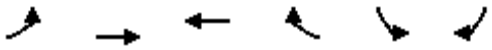
Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1980	0	0	2720	640	80	410	110	0	0	0
Future Volume (vph)	60	1980	0	0	2720	640	80	410	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.9			4.0	4.9		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frt	1.00	1.00			1.00	0.85		0.97				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1583		3419				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1583		3419				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	2152	0	0	2957	696	87	446	120	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	108	0	6	0	0	0	0
Lane Group Flow (vph)	65	2152	0	0	2957	588	0	647	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	9.6	88.4			74.4	74.4		36.8				
Effective Green, g (s)	10.0	88.4			75.3	74.4		37.7				
Actuated g/C Ratio	0.07	0.65			0.56	0.55		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	131	3329			2836	872		954				
v/s Ratio Prot	0.04	c0.42			c0.58			c0.19				
v/s Ratio Perm						0.37						
v/c Ratio	0.50	0.65			1.04	0.67		0.68				
Uniform Delay, d1	60.1	13.9			29.9	21.7		43.3				
Progression Factor	0.69	0.14			1.00	1.00		1.00				
Incremental Delay, d2	0.6	0.6			29.3	4.2		1.5				
Delay (s)	42.2	2.5			59.2	25.8		44.8				
Level of Service	D	A			E	C		D				
Approach Delay (s)		3.6			52.8			44.8			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	35.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	660	400	330	0	0
Future Volume (Veh/h)	10	660	400	330	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	717	435	359	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		480	811			
pX, platoon unblocked	0.93				0.96	0.93
vC, conflicting volume	794				995	397
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	637				647	212
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	100
cM capacity (veh/h)	880				384	741

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	11	358	358	290	504
Volume Left	11	0	0	0	0
Volume Right	0	0	0	0	359
cSH	880	1700	1700	1700	1700
Volume to Capacity	0.01	0.21	0.21	0.17	0.30
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.1	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.1			0.0	
Approach LOS					

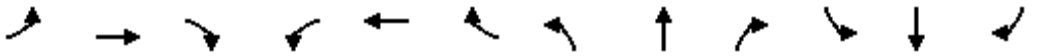
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	25.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	170	0	0	130	300	570
Future Volume (vph)	170	0	0	130	300	570
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	185	0	0	141	326	620

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	185	141	326	620
Volume Left (vph)	185	0	326	0
Volume Right (vph)	0	141	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.2	5.0	5.8	5.3
Degree Utilization, x	0.32	0.19	0.53	0.91
Capacity (veh/h)	567	702	611	675
Control Delay (s)	12.0	9.1	13.8	38.0
Approach Delay (s)	12.0	9.1	29.7	
Approach LOS	B	A	D	

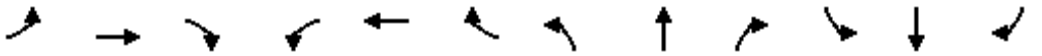
Intersection Summary			
Delay	24.8		
Level of Service	C		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Future Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	109	22	54	43	22	11	22	33	22	22	250	533

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	120	65	76	77	272	533
Volume Left (vph)	109	0	43	22	22	0
Volume Right (vph)	0	54	11	22	0	533
Hadj (s)	0.49	-0.55	0.06	-0.08	0.07	-0.67
Departure Headway (s)	7.1	6.1	6.7	6.1	5.5	4.8
Degree Utilization, x	0.24	0.11	0.14	0.13	0.42	0.71
Capacity (veh/h)	473	547	493	553	632	729
Control Delay (s)	11.1	8.6	10.9	10.1	11.3	17.5
Approach Delay (s)	10.2		10.9	10.1	15.4	
Approach LOS	B		B	B	C	

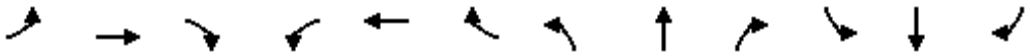
Intersection Summary				
Delay	13.9			
Level of Service	B			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	340	190	540	520	0	0	0	0	280	360	410
Future Volume (vph)	0	340	190	540	520	0	0	0	0	280	360	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3358	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3358	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	207	587	565	0	0	0	0	304	391	446
RTOR Reduction (vph)	0	0	99	0	0	0	0	0	0	0	0	220
Lane Group Flow (vph)	0	370	108	587	565	0	0	0	0	213	482	226
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		30.1	30.1	16.0	50.5					19.7	19.7	19.7
Effective Green, g (s)		30.1	31.0	16.4	51.4					20.6	20.6	20.6
Actuated g/C Ratio		0.38	0.39	0.20	0.64					0.26	0.26	0.26
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1331	613	703	2273					414	864	407
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.07							0.13	0.14	0.14
v/c Ratio		0.28	0.18	0.83	0.25					0.51	0.56	0.56
Uniform Delay, d1		17.4	16.1	30.5	6.1					25.4	25.8	25.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.6	8.1	0.3					0.5	0.4	0.9
Delay (s)		17.9	16.7	38.6	6.3					25.9	26.2	26.7
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.5			22.8			0.0			26.3	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

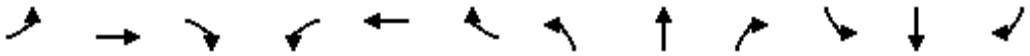
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	40	40	0	0	0	0	0	0	1490	160
Future Volume (Veh/h)	0	0	40	40	0	0	0	0	0	0	1490	160
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	43	43	0	0	0	0	0	0	1620	174
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1707	1707	627	583	1794	0	1794			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1707	1707	627	583	1794	0	1794			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	90	88	100	100	100			100		
cM capacity (veh/h)	59	90	426	356	80	1084	341			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	43	43	648	648	498
Volume Left	0	43	0	0	0
Volume Right	43	0	0	0	174
cSH	426	356	1700	1700	1700
Volume to Capacity	0.10	0.12	0.38	0.38	0.29
Queue Length 95th (ft)	8	10	0	0	0
Control Delay (s)	14.4	16.5	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	14.4	16.5	0.0		
Approach LOS	B	C			

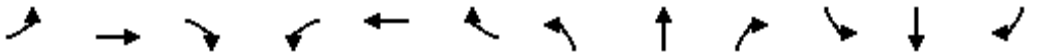
Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	190	160	190	370	0	0	0	0	470	1270	350
Future Volume (vph)	0	190	160	190	370	0	0	0	0	470	1270	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	6.7		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3480					1770	4921	
Flt Permitted		1.00	1.00		0.76					0.95	1.00	
Satd. Flow (perm)		1863	1583		2673					1770	4921	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	207	174	207	402	0	0	0	0	511	1380	380
RTOR Reduction (vph)	0	0	37	0	0	0	0	0	0	0	76	0
Lane Group Flow (vph)	0	207	137	0	609	0	0	0	0	511	1684	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		21.3	21.3		21.3					30.7	30.7	
Effective Green, g (s)		24.0	21.3		24.0					33.0	33.0	
Actuated g/C Ratio		0.37	0.33		0.37					0.51	0.51	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		687	518		986					898	2498	
v/s Ratio Prot		0.11									c0.34	
v/s Ratio Perm			0.09		c0.23					0.29		
v/c Ratio		0.30	0.26		0.62					0.57	0.67	
Uniform Delay, d1		14.5	16.1		16.8					11.1	12.0	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		1.1	1.2		2.9					2.6	1.5	
Delay (s)		15.7	17.3		19.7					13.7	13.4	
Level of Service		B	B		B					B	B	
Approach Delay (s)		16.4			19.7			0.0			13.5	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

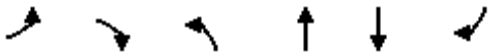


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	680	80	40	510	0	0	0	0	540	340	510
Future Volume (vph)	0	680	80	40	510	0	0	0	0	540	340	510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3483		1770	3539						4663	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3483		1770	3539						4663	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	739	87	43	554	0	0	0	0	587	370	554
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	119
Lane Group Flow (vph)	0	812	0	43	554	0	0	0	0	0	957	435
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.4		2.8	27.9						25.1	25.1
Effective Green, g (s)		20.6		3.2	27.8						24.2	26.5
Actuated g/C Ratio		0.32		0.05	0.43						0.37	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1103		87	1513						1736	555
v/s Ratio Prot		c0.23		0.02	c0.16							
v/s Ratio Perm											0.21	c0.32
v/c Ratio		0.74		0.49	0.37						0.94dl	0.78
Uniform Delay, d1		19.8		30.1	12.6						16.1	16.8
Progression Factor		1.00		1.34	0.84						1.00	1.00
Incremental Delay, d2		4.4		1.5	0.6						0.2	6.6
Delay (s)		24.2		41.7	11.2						16.3	23.4
Level of Service		C		D	B						B	C
Approach Delay (s)		24.2			13.4			0.0			18.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



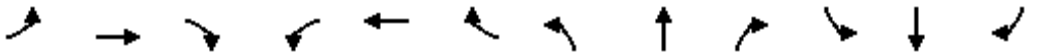
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	140	1100	1820	760	650	140
Future Volume (vph)	140	1100	1820	760	650	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2764	3433	5085	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2764	3433	5085	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	1196	1978	826	707	152
RTOR Reduction (vph)	0	19	0	0	0	1
Lane Group Flow (vph)	152	1177	1978	826	707	151
Confl. Peds. (#/hr)	129	61	34			
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	15.6	76.0	60.4	96.4	32.0	47.6
Effective Green, g (s)	15.6	76.0	60.4	96.4	32.0	47.6
Actuated g/C Ratio	0.13	0.63	0.50	0.80	0.27	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	230	1842	1727	4084	1356	680
v/s Ratio Prot	0.09	c0.32	c0.58	0.16	c0.14	0.03
v/s Ratio Perm		0.10				0.07
v/c Ratio	0.66	0.64	1.15	0.20	0.52	0.22
Uniform Delay, d1	49.7	13.5	29.8	2.8	37.5	23.9
Progression Factor	1.00	1.00	0.43	0.64	0.70	0.80
Incremental Delay, d2	6.9	0.7	68.3	0.0	1.4	0.2
Delay (s)	56.6	14.3	81.1	1.8	27.6	19.3
Level of Service	E	B	F	A	C	B
Approach Delay (s)	19.1			57.7	26.1	
Approach LOS	B			E	C	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	100	280	0	0	610	320	60	0	60	250	20	180
Future Volume (vph)	100	280	0	0	610	320	60	0	60	250	20	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0		3.6	4.0	4.0
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.95	0.95	1.00
Frt	1.00	1.00			1.00	0.85		0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539			3539	1583		1695		1681	1697	1583
Flt Permitted	0.95	1.00			1.00	1.00		0.76		0.50	0.54	1.00
Satd. Flow (perm)	1770	3539			3539	1583		1326		890	962	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	304	0	0	663	348	65	0	65	272	22	196
RTOR Reduction (vph)	0	0	0	0	0	228	0	119	0	0	0	152
Lane Group Flow (vph)	109	304	0	0	663	120	0	11	0	147	147	44
Turn Type	Prot	NA			NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		7
Actuated Green, G (s)	6.1	32.2			22.1	22.1		5.5		14.4	14.4	14.4
Effective Green, g (s)	6.1	32.2			22.1	22.1		5.5		14.8	14.4	14.4
Actuated g/C Ratio	0.10	0.50			0.34	0.34		0.09		0.23	0.22	0.22
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	168	1777			1220	545		113		205	216	355
v/s Ratio Prot	c0.06	0.09			c0.19							
v/s Ratio Perm						0.08		c0.01		c0.17	0.15	0.03
v/c Ratio	0.65	0.17			0.54	0.22		0.10		0.72	0.68	0.12
Uniform Delay, d1	28.0	8.7			16.9	14.9		27.0		22.7	22.7	19.8
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	8.3	0.2			1.7	0.9		0.4		11.3	8.5	0.2
Delay (s)	36.3	8.9			18.7	15.8		27.4		34.0	31.3	20.0
Level of Service	D	A			B	B		C		C	C	B
Approach Delay (s)		16.1			17.7			27.4			27.6	
Approach LOS		B			B			C			C	

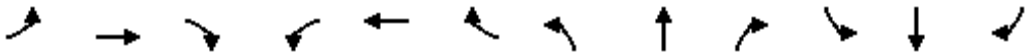
Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	64.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	60	330	600	0	0	0	0	170	30	240
Future Volume (vph)	0	210	60	330	600	0	0	0	0	170	30	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.7	5.7					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3408		1763	1863					1681	1708	1583
Flt Permitted		1.00		0.57	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3408		1063	1863					1681	1708	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	228	65	359	652	0	0	0	0	185	33	261
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	80
Lane Group Flow (vph)	0	259	0	359	652	0	0	0	0	100	118	181
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Perm	NA					Perm	NA	custom
Protected Phases		7			8						6	7
Permitted Phases				8						6		6
Actuated Green, G (s)		11.1		25.7	25.7					10.0	10.0	21.1
Effective Green, g (s)		11.1		26.2	26.2					12.2	12.2	25.5
Actuated g/C Ratio		0.18		0.43	0.43					0.20	0.20	0.42
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		620		456	800					336	341	708
v/s Ratio Prot		c0.08			c0.35							0.06
v/s Ratio Perm				0.34						0.06	0.07	0.06
v/c Ratio		0.42		0.79	0.81					0.30	0.35	0.26
Uniform Delay, d1		22.1		15.0	15.3					20.8	21.0	11.6
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5		8.1	6.1					0.5	0.6	0.2
Delay (s)		22.6		23.1	21.4					21.3	21.6	11.8
Level of Service		C		C	C					C	C	B
Approach Delay (s)		22.6			22.0			0.0			16.2	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	61.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

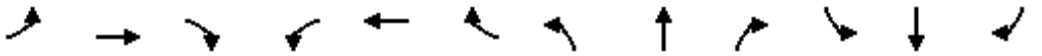


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Future Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1697		1770	4981		1770	4955	
Flt Permitted	0.45	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	834	1710		1326	1697		1770	4981		1770	4955	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1446	228	152	804	141
RTOR Reduction (vph)	0	21	0	0	59	0	0	23	0	0	23	0
Lane Group Flow (vph)	22	45	0	478	235	0	43	1651	0	152	922	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	32.0	32.0		31.3	31.3		4.7	35.2		10.1	40.4	
Effective Green, g (s)	32.0	32.0		31.7	31.7		4.7	36.6		10.6	42.5	
Actuated g/C Ratio	0.35	0.35		0.35	0.35		0.05	0.40		0.12	0.47	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	292	600		460	589		91	1998		205	2309	
v/s Ratio Prot		0.03			0.14		0.02	c0.33		c0.09	0.19	
v/s Ratio Perm	0.03			c0.36								
v/c Ratio	0.08	0.07		1.04	0.40		0.47	0.83		0.74	0.40	
Uniform Delay, d1	19.7	19.7		29.8	22.5		42.0	24.5		39.0	16.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		52.5	0.4		1.4	4.1		13.5	0.5	
Delay (s)	19.8	19.7		82.2	23.0		43.5	28.5		52.4	16.5	
Level of Service	B	B		F	C		D	C		D	B	
Approach Delay (s)		19.8			59.7			28.9			21.5	
Approach LOS		B			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	91.2	Sum of lost time (s)	12.3
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Future Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3433		1770	3428		1770	4980		1770	5085	1571
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3433		1770	3428		1770	4980		1770	5085	1571
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	707	609	152	163	793	185	326	750	109	120	772	272
RTOR Reduction (vph)	0	16	0	0	16	0	0	15	0	0	0	51
Lane Group Flow (vph)	707	745	0	163	962	0	326	844	0	120	772	221
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	40.6	56.1		16.1	31.0		18.6	29.7		9.2	20.2	60.8
Effective Green, g (s)	41.0	57.3		16.5	32.8		19.0	30.6		9.6	21.2	61.6
Actuated g/C Ratio	0.32	0.44		0.13	0.25		0.15	0.24		0.07	0.16	0.47
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	558	1513		224	864		258	1172		130	829	744
v/s Ratio Prot	c0.40	0.22		0.09	c0.28		c0.18	0.17		0.07	c0.15	0.09
v/s Ratio Perm												0.05
v/c Ratio	1.27	0.49		0.73	1.11		1.26	0.72		0.92	0.93	0.30
Uniform Delay, d1	44.5	26.0		54.6	48.6		55.5	45.8		59.8	53.7	20.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	133.9	0.3		9.6	66.8		145.8	3.8		55.0	18.4	0.1
Delay (s)	178.4	26.3		64.1	115.4		201.3	49.6		114.8	72.1	21.0
Level of Service	F	C		E	F		F	D		F	E	C
Approach Delay (s)		99.6			108.1			91.3			64.6	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	91.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	390	150	330	400	110	230	120	210	80	150	100
Future Volume (vph)	120	390	150	330	400	110	230	120	210	80	150	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	424	163	359	435	120	250	130	228	87	163	109
RTOR Reduction (vph)	0	0	89	0	0	74	0	0	143	0	0	85
Lane Group Flow (vph)	130	424	74	359	435	46	250	130	85	87	163	24
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.6	32.8	40.4	10.9	34.1	34.1	7.6	21.4	32.3	6.7	20.5	20.5
Effective Green, g (s)	10.0	33.7	41.2	11.3	35.0	35.0	8.0	20.8	30.1	7.1	20.0	20.0
Actuated g/C Ratio	0.11	0.37	0.46	0.12	0.39	0.39	0.09	0.23	0.33	0.08	0.22	0.22
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	195	1319	1270	429	1370	612	303	428	527	139	1125	350
v/s Ratio Prot	0.07	0.12	0.01	c0.10	c0.12		c0.07	c0.07	0.02	0.05	0.03	
v/s Ratio Perm			0.02			0.03			0.04			0.02
v/c Ratio	0.67	0.32	0.06	0.84	0.32	0.08	0.83	0.30	0.16	0.63	0.14	0.07
Uniform Delay, d1	38.6	20.2	13.8	38.6	19.4	17.5	40.5	28.8	21.3	40.4	28.3	27.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.6	0.0	12.7	0.6	0.2	15.8	0.7	0.1	6.2	0.1	0.1
Delay (s)	45.1	20.8	13.8	51.4	20.0	17.7	56.3	29.5	21.3	46.5	28.4	28.0
Level of Service	D	C	B	D	B	B	E	C	C	D	C	C
Approach Delay (s)		23.6			32.0			37.4			32.7	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	47.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

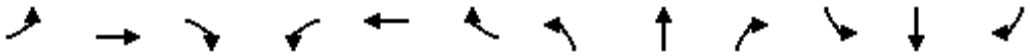
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Future Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.92			0.93			0.94	
Flt Protected		0.98			1.00			0.99			0.99	
Satd. Flow (prot)		1787			1715			1691			1728	
Flt Permitted		0.78			0.97			0.96			0.80	
Satd. Flow (perm)		1410			1664			1634			1398	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	228	54	196	272	22	22	33
RTOR Reduction (vph)	0	10	0	0	40	0	0	57	0	0	23	0
Lane Group Flow (vph)	0	468	0	0	362	0	0	465	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		39.1			39.1			20.3			20.3	
Effective Green, g (s)		40.0			40.0			21.2			21.2	
Actuated g/C Ratio		0.58			0.58			0.31			0.31	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		815			961			500			428	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.22			c0.28			0.04	
v/c Ratio		0.57			0.38			0.93			0.13	
Uniform Delay, d1		9.2			7.9			23.3			17.3	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			1.1			23.8			0.0	
Delay (s)		9.8			9.0			47.1			17.4	
Level of Service		A			A			D			B	
Approach Delay (s)		9.8			9.0			47.1			17.4	
Approach LOS		A			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	460	190	240	680	150	150
Future Volume (vph)	460	190	240	680	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4819		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4819		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	500	207	261	739	163	163
RTOR Reduction (vph)	89	0	0	0	0	125
Lane Group Flow (vph)	618	0	261	739	163	38
Confl. Peds. (#/hr)		7	7		30	15
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	22.8		12.3	39.5	13.6	13.6
Effective Green, g (s)	24.7		12.7	39.5	14.5	14.5
Actuated g/C Ratio	0.39		0.20	0.63	0.23	0.23
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1892		357	2222	408	364
v/s Ratio Prot	0.13		c0.15	c0.21	c0.09	0.02
v/s Ratio Perm						
v/c Ratio	0.33		0.73	0.33	0.40	0.10
Uniform Delay, d1	13.3		23.5	5.5	20.5	19.1
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5		6.5	0.0	0.2	0.0
Delay (s)	13.8		30.0	5.5	20.7	19.1
Level of Service	B		C	A	C	B
Approach Delay (s)	13.8			11.9	19.9	
Approach LOS	B			B	B	

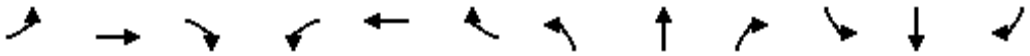
Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	62.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	10	20	40	10	40	30	150	30	50	170	50
Future Volume (vph)	20	10	20	40	10	40	30	150	30	50	170	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	11	22	43	11	43	33	163	33	54	185	54

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	97	229	293
Volume Left (vph)	22	43	33	54
Volume Right (vph)	22	43	33	54
Hadj (s)	-0.13	-0.14	-0.02	-0.04
Departure Headway (s)	5.1	5.1	4.6	4.5
Degree Utilization, x	0.08	0.14	0.29	0.37
Capacity (veh/h)	619	637	744	760
Control Delay (s)	8.6	8.8	9.5	10.2
Approach Delay (s)	8.6	8.8	9.5	10.2
Approach LOS	A	A	A	B

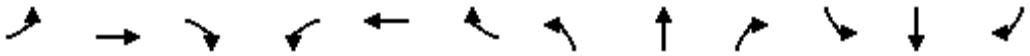
Intersection Summary				
Delay	9.6			
Level of Service	A			
Intersection Capacity Utilization	36.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Future Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	22	22	33	22	33	152	33	43	130	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	77	77	218	238
Volume Left (vph)	33	22	33	43
Volume Right (vph)	22	22	33	65
Hadj (s)	-0.05	-0.08	-0.03	-0.09
Departure Headway (s)	5.0	5.0	4.5	4.5
Degree Utilization, x	0.11	0.11	0.28	0.30
Capacity (veh/h)	646	649	757	768
Control Delay (s)	8.6	8.6	9.3	9.3
Approach Delay (s)	8.6	8.6	9.3	9.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.1			
Level of Service	A			
Intersection Capacity Utilization	31.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	85	20	20	30	260	300	10	100	20
Future Volume (vph)	20	20	20	85	20	20	30	260	300	10	100	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	92	22	22	33	283	326	11	109	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	136	316	326	142
Volume Left (vph)	22	92	33	0	11
Volume Right (vph)	22	22	0	326	22
Hadj (s)	-0.10	0.07	0.09	-0.67	-0.04
Departure Headway (s)	5.7	5.7	5.3	4.6	5.2
Degree Utilization, x	0.10	0.22	0.47	0.41	0.21
Capacity (veh/h)	568	579	659	764	649
Control Delay (s)	9.3	10.2	11.8	9.6	9.6
Approach Delay (s)	9.3	10.2	10.7		9.6
Approach LOS	A	B	B		A

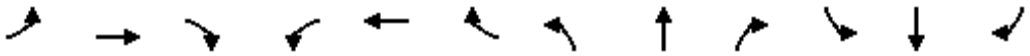
Intersection Summary				
Delay	10.4			
Level of Service	B			
Intersection Capacity Utilization	41.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	30	20	40	40	50	150
Future Volume (vph)	30	20	40	40	50	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	43	43	54	163

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	55	86	217
Volume Left (vph)	0	43	54
Volume Right (vph)	22	0	163
Hadj (s)	-0.21	0.13	-0.37
Departure Headway (s)	4.2	4.5	3.9
Degree Utilization, x	0.06	0.11	0.23
Capacity (veh/h)	800	744	900
Control Delay (s)	7.5	8.1	8.0
Approach Delay (s)	7.5	8.1	8.0
Approach LOS	A	A	A

Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		



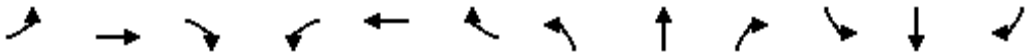
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Future Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	54	33	33	22	152	109	22	43	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	283	87
Volume Left (vph)	22	54	22	22
Volume Right (vph)	22	33	109	22
Hadj (s)	-0.10	-0.04	-0.18	-0.07
Departure Headway (s)	4.8	4.8	4.3	4.6
Degree Utilization, x	0.09	0.16	0.34	0.11
Capacity (veh/h)	679	691	806	728
Control Delay (s)	8.3	8.7	9.5	8.2
Approach Delay (s)	8.3	8.7	9.5	8.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	38.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	100	80	10	40	20	260	270	40	20	50	80
Future Volume (vph)	290	100	80	10	40	20	260	270	40	20	50	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.9			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.96		1.00	0.98		1.00	0.91	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1761			1769		1763	1821		1764	1663	
Flt Permitted		0.77			0.93		0.67	1.00		0.49	1.00	
Satd. Flow (perm)		1394			1662		1238	1821		902	1663	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	109	87	11	43	22	283	293	43	22	54	87
RTOR Reduction (vph)	0	13	0	0	13	0	0	7	0	0	49	0
Lane Group Flow (vph)	0	498	0	0	63	0	283	329	0	22	92	0
Confl. Peds. (#/hr)	5					5	3		4	4		4
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		
Actuated Green, G (s)		23.3			23.3		24.4	24.4		24.4	24.4	
Effective Green, g (s)		23.4			23.3		24.4	24.4		24.4	24.4	
Actuated g/C Ratio		0.42			0.42		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		4.4	4.4		2.1	2.1	
Lane Grp Cap (vph)		585			695		542	797		395	728	
v/s Ratio Prot								0.18			0.06	
v/s Ratio Perm		c0.36			0.04		c0.23			0.02		
v/c Ratio		0.85			0.09		0.52	0.41		0.06	0.13	
Uniform Delay, d1		14.6			9.8		11.4	10.7		9.0	9.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.0			0.0		3.6	1.6		0.3	0.4	
Delay (s)		25.6			9.8		15.0	12.3		9.3	9.7	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		25.6			9.8			13.5			9.6	
Approach LOS		C			A			B			A	

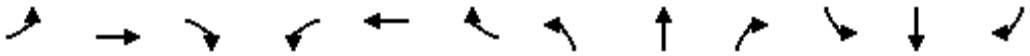
Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	55.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	430	180	230	720	90	130	20	270	20	10	30
Future Volume (vph)	50	430	180	230	720	90	130	20	270	20	10	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.0		4.0	2.9			3.9			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.98			0.91			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1769	4860		1770	3472			1653			1706	
Flt Permitted	0.30	1.00		0.25	1.00			0.87			0.85	
Satd. Flow (perm)	568	4860		470	3472			1466			1471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	467	196	250	783	98	141	22	293	22	11	33
RTOR Reduction (vph)	0	103	0	0	13	0	0	103	0	0	23	0
Lane Group Flow (vph)	54	560	0	250	868	0	0	353	0	0	43	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	17.2	15.1		28.6	22.1			16.4			16.4	
Effective Green, g (s)	18.0	17.1		29.0	24.1			17.4			17.3	
Actuated g/C Ratio	0.33	0.31		0.53	0.44			0.32			0.32	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	241	1516		471	1526			465			464	
v/s Ratio Prot	0.01	0.12		c0.09	c0.25							
v/s Ratio Perm	0.06			0.19				c0.24			0.03	
v/c Ratio	0.22	0.37		0.53	0.57			0.76			0.09	
Uniform Delay, d1	12.8	14.7		7.7	11.5			16.8			13.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.2	0.2		0.6	0.5			6.2			0.0	
Delay (s)	12.9	14.8		8.3	12.0			23.0			13.3	
Level of Service	B	B		A	B			C			B	
Approach Delay (s)		14.7			11.2			23.0			13.3	
Approach LOS		B			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	54.8	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

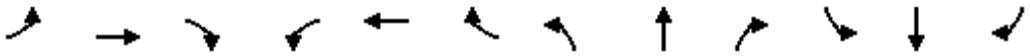
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Future Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	22	22	22	22	22	22	174	43	65	130	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	120	66	239	271
Volume Left (vph)	76	22	22	65
Volume Right (vph)	22	22	43	76
Hadj (s)	0.05	-0.10	-0.06	-0.09
Departure Headway (s)	5.3	5.2	4.7	4.6
Degree Utilization, x	0.18	0.10	0.31	0.35
Capacity (veh/h)	618	611	732	741
Control Delay (s)	9.4	8.7	9.8	10.1
Approach Delay (s)	9.4	8.7	9.8	10.1
Approach LOS	A	A	A	B

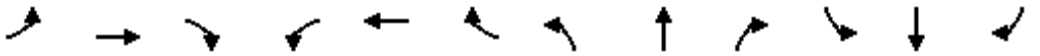
Intersection Summary			
Delay	9.7		
Level of Service	A		
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Future Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	43	11	11	22	65	163	11	33	98	54

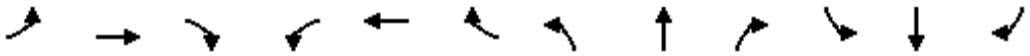
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	44	239	185
Volume Left (vph)	43	11	65	33
Volume Right (vph)	43	22	11	54
Hadj (s)	-0.13	-0.22	0.06	-0.11
Departure Headway (s)	4.8	4.8	4.6	4.5
Degree Utilization, x	0.14	0.06	0.30	0.23
Capacity (veh/h)	680	667	759	766
Control Delay (s)	8.6	8.1	9.5	8.8
Approach Delay (s)	8.6	8.1	9.5	8.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	35.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Future Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3478		1770	3387				1590	1681	1736	1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3478		1770	3387				1590	1681	1736	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	293	33	11	707	283	0	0	22	217	163	348
RTOR Reduction (vph)	0	8	0	0	46	0	0	0	0	0	0	214
Lane Group Flow (vph)	435	318	0	11	944	0	0	0	22	113	267	134
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	11.2	38.3		0.7	27.8				71.2	17.6	17.6	17.6
Effective Green, g (s)	11.6	39.2		1.1	28.7				71.2	18.9	18.9	18.9
Actuated g/C Ratio	0.16	0.55		0.02	0.40				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	559	1914		27	1365				1590	446	460	420
v/s Ratio Prot	c0.13	0.09		0.01	c0.28					0.07	c0.15	
v/s Ratio Perm									0.01			0.08
v/c Ratio	0.78	0.17		0.41	0.69				0.01	0.25	0.58	0.32
Uniform Delay, d1	28.6	7.9		34.7	17.6				0.0	20.6	22.7	21.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.2		3.6	2.9				0.0	0.5	2.5	0.7
Delay (s)	34.7	8.1		38.3	20.5				0.0	21.1	25.2	21.7
Level of Service	C	A		D	C				A	C	C	C
Approach Delay (s)		23.3			20.7			0.0			22.9	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



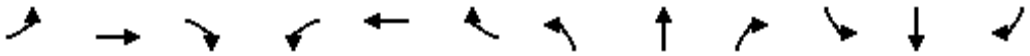
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	710	90	70	1420	60	230	30	70	70	50	20
Future Volume (vph)	30	710	90	70	1420	60	230	30	70	70	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.0		4.0	4.0		3.6	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1678	3364		1671	3411		1656	1527			1682	
Flt Permitted	0.95	1.00		0.95	1.00		0.63	1.00			0.80	
Satd. Flow (perm)	1678	3364		1671	3411		1091	1527			1384	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	772	98	76	1543	65	250	33	76	76	54	22
RTOR Reduction (vph)	0	8	0	0	2	0	0	56	0	0	5	0
Lane Group Flow (vph)	33	862	0	76	1606	0	250	53	0	0	147	0
Confl. Peds. (#/hr)	14		16	16		14			13			13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.2	67.5		8.0	72.3		30.3	30.3			30.3	
Effective Green, g (s)	4.1	68.4		8.4	73.2		31.6	31.2			31.2	
Actuated g/C Ratio	0.03	0.57		0.07	0.61		0.26	0.26			0.26	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	57	1917		116	2080		287	397			359	
v/s Ratio Prot	0.02	0.26		c0.05	c0.47			0.03				
v/s Ratio Perm							c0.23				0.11	
v/c Ratio	0.58	0.45		0.66	0.77		0.87	0.13			0.41	
Uniform Delay, d1	57.1	14.9		54.4	17.2		42.3	34.0			36.8	
Progression Factor	1.00	1.00		0.84	1.57		1.00	1.00			1.00	
Incremental Delay, d2	8.6	0.8		2.8	0.8		23.2	0.1			0.3	
Delay (s)	65.7	15.7		48.5	27.8		65.4	34.1			37.0	
Level of Service	E	B		D	C		E	C			D	
Approach Delay (s)		17.5			28.7			55.9			37.0	
Approach LOS		B			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	660	90	170	1240	70	70	130	110	260	380	250
Future Volume (vph)	180	660	90	170	1240	70	70	130	110	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3454		1770	3501		1770	3539	1550	1770	3267	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3454		1770	3501		1770	3539	1550	1770	3267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	717	98	185	1348	76	76	141	120	283	413	272
RTOR Reduction (vph)	0	8	0	0	3	0	0	0	45	0	92	0
Lane Group Flow (vph)	196	807	0	185	1421	0	76	141	75	283	593	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	13.9	40.9		16.3	42.8		7.3	21.4	37.7	22.7	36.9	
Effective Green, g (s)	14.3	41.8		16.7	44.2		7.7	22.4	38.5	23.1	37.8	
Actuated g/C Ratio	0.12	0.35		0.14	0.37		0.06	0.19	0.32	0.19	0.31	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	210	1203		246	1289		113	660	497	340	1029	
v/s Ratio Prot	c0.11	0.23		0.10	c0.41		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.03			
v/c Ratio	0.93	0.67		0.75	1.10		0.67	0.21	0.15	0.83	0.58	
Uniform Delay, d1	52.4	33.2		49.7	37.9		54.9	41.3	29.1	46.6	34.4	
Progression Factor	1.19	0.83		1.06	0.84		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	41.4	2.8		9.0	56.1		11.7	0.2	0.1	15.2	0.7	
Delay (s)	103.7	30.3		61.9	87.8		66.6	41.6	29.1	61.8	35.1	
Level of Service	F	C		E	F		E	D	C	E	D	
Approach Delay (s)		44.5			84.8			42.8			42.9	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	60.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



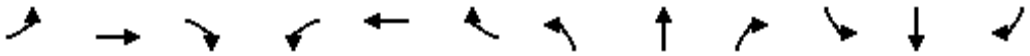
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	990	80	320	1390	70	70	20	150	70	20	20
Future Volume (vph)	10	990	80	320	1390	70	70	20	150	70	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5015		1770	3510			1792	1552		1750	
Flt Permitted	0.95	1.00		0.95	1.00			0.70	1.00		0.70	
Satd. Flow (perm)	1770	5015		1770	3510			1309	1552		1265	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1076	87	348	1511	76	76	22	163	76	22	22
RTOR Reduction (vph)	0	6	0	0	2	0	0	0	135	0	7	0
Lane Group Flow (vph)	11	1157	0	348	1585	0	0	98	28	0	113	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	1.3	57.2		28.3	84.2			19.9	19.9		19.9	
Effective Green, g (s)	1.7	58.5		28.7	85.5			20.8	20.8		20.8	
Actuated g/C Ratio	0.01	0.49		0.24	0.71			0.17	0.17		0.17	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	25	2444		423	2500			226	269		219	
v/s Ratio Prot	0.01	0.23		c0.20	c0.45							
v/s Ratio Perm								0.07	0.02		c0.09	
v/c Ratio	0.44	0.47		0.82	0.63			0.43	0.11		0.51	
Uniform Delay, d1	58.7	20.5		43.2	9.0			44.3	41.8		45.0	
Progression Factor	0.80	1.50		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	3.5	0.5		11.6	1.2			0.5	0.1		0.8	
Delay (s)	50.4	31.2		54.9	10.3			44.8	41.8		45.9	
Level of Service	D	C		D	B			D	D		D	
Approach Delay (s)		31.3			18.3			43.0			45.9	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

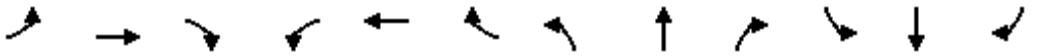
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	280	3130	0	0	0	0	0	150	150
Future Volume (vph)	0	0	0	280	3130	0	0	0	0	0	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.2						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.93	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5061						4651	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5061						4651	
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	298	3330	0	0	0	0	0	163	163
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3621	0	0	0	0	0	326	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					62.9						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3537						976	
v/s Ratio Prot											c0.07	
v/s Ratio Perm					0.72							
v/c Ratio					1.02						0.33	
Uniform Delay, d1					13.6						30.2	
Progression Factor					1.00						1.00	
Incremental Delay, d2					21.6						0.1	
Delay (s)					35.1						30.3	
Level of Service					D						C	
Approach Delay (s)		0.0			35.1			0.0			30.3	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.2
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



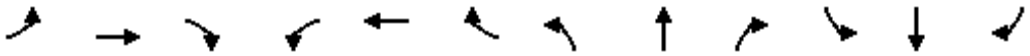
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	910	110	0	0	0	0	0	0	160	330	0
Future Volume (vph)	0	910	110	0	0	0	0	0	0	160	330	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.98									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		4990									4977	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		4990									4977	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	989	120	0	0	0	0	0	0	174	359	0
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	68	0
Lane Group Flow (vph)	0	1093	0	0	0	0	0	0	0	0	465	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		47.0									19.0	
Effective Green, g (s)		47.0									20.0	
Actuated g/C Ratio		0.63									0.27	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3127									1327	
v/s Ratio Prot		c0.22										
v/s Ratio Perm											0.09	
v/c Ratio		0.35									0.35	
Uniform Delay, d1		6.7									22.2	
Progression Factor		0.58									1.00	
Incremental Delay, d2		0.3									0.2	
Delay (s)		4.1									22.4	
Level of Service		A									C	
Approach Delay (s)		4.1			0.0			0.0			22.4	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1090	40	120	780	190	50	40	90	80	80	210
Future Volume (vph)	240	1090	40	120	780	190	50	40	90	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		1770	3539	1583	1770	1863	1583	3433	1863	1562
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		1770	3539	1583	1770	1863	1583	3433	1863	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1185	43	130	848	207	54	43	98	87	87	228
RTOR Reduction (vph)	0	3	0	0	0	190	0	0	84	0	0	187
Lane Group Flow (vph)	261	1225	0	130	848	17	54	43	14	87	87	41
Confl. Peds. (#/hr)	2											2
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	8.6	33.1		7.1	31.7	6.3	3.5	9.0	9.0	6.3	12.7	12.7
Effective Green, g (s)	8.6	34.6		7.1	33.1	6.3	3.5	10.8	10.8	6.3	13.6	13.6
Actuated g/C Ratio	0.11	0.46		0.09	0.44	0.08	0.05	0.14	0.14	0.08	0.18	0.18
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	394	1628		168	1566	133	82	268	228	289	338	284
v/s Ratio Prot	c0.08	c0.35		0.07	0.24		c0.03	0.02		0.03	c0.05	
v/s Ratio Perm						0.01			0.01			0.03
v/c Ratio	0.66	0.75		0.77	0.54	0.13	0.66	0.16	0.06	0.30	0.26	0.15
Uniform Delay, d1	31.7	16.6		33.1	15.3	31.7	35.1	28.0	27.6	32.2	26.3	25.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	3.3		18.1	1.3	0.2	13.6	0.1	0.0	0.2	0.4	0.2
Delay (s)	34.9	19.8		51.1	16.6	31.9	48.7	28.1	27.7	32.4	26.7	26.0
Level of Service	C	B		D	B	C	D	C	C	C	C	C
Approach Delay (s)		22.5			23.1			33.6			27.5	
Approach LOS		C			C			C			C	

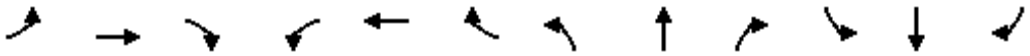
Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	74.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	550	2560	170	300	290	0	0	210	80
Future Volume (vph)	0	0	0	550	2560	170	300	290	0	0	210	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.5		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6272		1770	3539			3376	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6272		1770	3539			3376	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	579	2695	179	316	305	0	0	221	84
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	13	0
Lane Group Flow (vph)	0	0	0	0	3446	0	316	305	0	0	292	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					66.6		16.6	33.6			12.1	
Effective Green, g (s)					68.0		16.6	33.6			12.1	
Actuated g/C Ratio					0.62		0.15	0.31			0.11	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					3877		267	1081			371	
v/s Ratio Prot							c0.18	0.09			c0.09	
v/s Ratio Perm					0.55							
v/c Ratio					0.89		1.18	0.28			0.79	
Uniform Delay, d1					17.8		46.7	29.0			47.7	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					3.5		114.1	0.2			10.0	
Delay (s)					21.3		160.8	29.2			57.7	
Level of Service					C		F	C			E	
Approach Delay (s)		0.0			21.3			96.1			57.7	
Approach LOS		A			C			F			E	

Intersection Summary			
HCM 2000 Control Delay	34.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



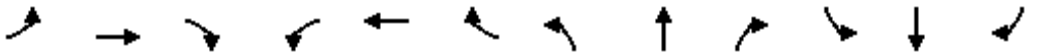
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	710	70	0	0	0	0	510	230	70	680	0
Future Volume (vph)	90	710	70	0	0	0	0	510	230	70	680	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5055	1551					4809		1770	5085	
Flt Permitted		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5055	1551					4809		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	772	76	0	0	0	0	554	250	76	739	0
RTOR Reduction (vph)	0	0	42	0	0	0	0	104	0	0	0	0
Lane Group Flow (vph)	0	870	34	0	0	0	0	700	0	76	739	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		32.2	32.2					22.0		6.6	33.0	
Effective Green, g (s)		33.1	33.1					22.0		7.0	33.0	
Actuated g/C Ratio		0.44	0.44					0.29		0.09	0.44	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2230	684					1410		165	2237	
v/s Ratio Prot								c0.15		c0.04	0.15	
v/s Ratio Perm		0.17	0.02									
v/c Ratio		0.39	0.05					0.50		0.46	0.33	
Uniform Delay, d1		14.1	12.0					21.9		32.2	13.8	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1					1.3		9.0	0.4	
Delay (s)		14.7	12.1					23.2		41.2	14.2	
Level of Service		B	B					C		D	B	
Approach Delay (s)		14.4			0.0			23.2			16.7	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1180	530	280	900	310	200
Future Volume (vph)	1180	530	280	900	310	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.98	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3377	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3377	1421
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1283	576	304	978	337	217
RTOR Reduction (vph)	0	5	0	0	24	116
Lane Group Flow (vph)	1283	571	304	978	378	36
Confl. Peds. (#/hr)						2
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.6	42.3	8.0	41.8	13.7	13.7
Effective Green, g (s)	30.8	46.7	7.9	43.2	15.9	15.9
Actuated g/C Ratio	0.46	0.70	0.12	0.64	0.24	0.24
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1624	1196	404	2278	800	336
v/s Ratio Prot	c0.36	c0.11	c0.09	0.28	0.11	
v/s Ratio Perm		0.25				0.03
v/c Ratio	0.79	0.48	0.75	0.43	0.47	0.11
Uniform Delay, d1	15.4	4.6	28.7	5.9	22.0	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.1	6.9	0.6	0.2	0.1
Delay (s)	19.4	4.8	35.5	6.5	22.2	20.1
Level of Service	B	A	D	A	C	C
Approach Delay (s)	14.9			13.4	21.6	
Approach LOS	B			B	C	

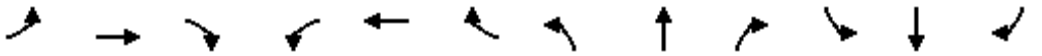
Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	67.1	Sum of lost time (s)	12.5
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1060	140	380	340	0	0	0	0	340	0	670
Future Volume (vph)	0	1060	140	380	340	0	0	0	0	340	0	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1152	152	413	370	0	0	0	0	370	0	728
RTOR Reduction (vph)	0	0	88	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1152	64	413	370	0	0	0	0	370	0	728
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		27.5	27.5	10.4	42.1					15.7		67.4
Effective Green, g (s)		28.5	28.5	10.6	43.1					16.3		67.4
Actuated g/C Ratio		0.42	0.42	0.16	0.64					0.24		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1496	660	539	2263					428		1583
v/s Ratio Prot		c0.33		c0.12	0.10					c0.21		
v/s Ratio Perm			0.04									0.46
v/c Ratio		0.77	0.10	0.77	0.16					0.86		0.46
Uniform Delay, d1		16.6	11.7	27.2	4.9					24.5		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.9	0.3	5.8	0.2					15.9		1.0
Delay (s)		20.5	12.0	33.0	5.0					40.4		1.0
Level of Service		C	B	C	A					D		A
Approach Delay (s)		19.5			19.8			0.0			14.3	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	67.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

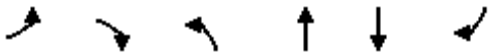
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	890	650	0	0	620	590	190	0	300	0	0	0
Future Volume (vph)	890	650	0	0	620	590	190	0	300	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3280			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3280			1770	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	967	707	0	0	674	641	207	0	326	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	277	0	0	0
Lane Group Flow (vph)	967	707	0	0	1113	0	0	207	49	0	0	0
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	23.6	59.3			31.5			10.0	10.0			
Effective Green, g (s)	23.8	59.8			32.0			10.6	10.6			
Actuated g/C Ratio	0.30	0.75			0.40			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1029	2665			1321			236	211			
v/s Ratio Prot	c0.28	0.20			c0.34			c0.12				
v/s Ratio Perm									0.03			
v/c Ratio	0.94	0.27			0.84			0.88	0.23			
Uniform Delay, d1	27.1	3.0			21.4			33.8	30.8			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	15.3	0.2			6.7			27.8	0.2			
Delay (s)	42.4	3.3			28.1			61.5	31.0			
Level of Service	D	A			C			E	C			
Approach Delay (s)		25.8			28.1			42.8			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	13.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

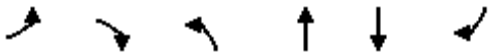
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	210	210	110	500	700	110
Future Volume (vph)	210	210	110	500	700	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.93		1.00	1.00	0.98	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1695		1770	3539	3467	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1695		1770	3539	3467	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	228	120	543	761	120
RTOR Reduction (vph)	35	0	0	0	9	0
Lane Group Flow (vph)	421	0	120	543	872	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	35.5		13.1	76.5	59.4	
Effective Green, g (s)	35.5		13.1	76.5	59.4	
Actuated g/C Ratio	0.30		0.11	0.64	0.49	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	501		193	2256	1716	
v/s Ratio Prot	c0.25		c0.07	0.15	c0.25	
v/s Ratio Perm						
v/c Ratio	0.84		0.62	0.24	0.51	
Uniform Delay, d1	39.6		51.1	9.3	20.4	
Progression Factor	1.00		1.00	0.90	1.00	
Incremental Delay, d2	11.8		6.0	0.2	1.1	
Delay (s)	51.4		56.9	8.7	21.5	
Level of Service	D		E	A	C	
Approach Delay (s)	51.4			17.4	21.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

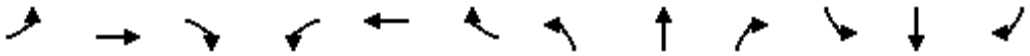
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	180	0	0	160	30
Future Volume (Veh/h)	0	180	0	0	160	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	0	0	174	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				973	1298	
pX, platoon unblocked						
vC, conflicting volume	190	104	207			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	190	104	207			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	79	100			
cM capacity (veh/h)	781	931	1361			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	196	116	91
Volume Left	0	0	0
Volume Right	196	0	33
cSH	931	1700	1700
Volume to Capacity	0.21	0.07	0.05
Queue Length 95th (ft)	20	0	0
Control Delay (s)	9.9	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.9	0.0	
Approach LOS	A		

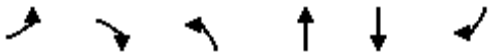
Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	100	60	90	0	0	0	0	40	220	10
Future Volume (vph)	0	20	100	60	90	0	0	0	0	40	220	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.89			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		1654			1826						3494	
Flt Permitted		1.00			0.86						0.99	
Satd. Flow (perm)		1654			1598						3494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	22	109	65	98	0	0	0	0	43	239	11
RTOR Reduction (vph)	0	56	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	75	0	0	163	0	0	0	0	0	289	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases				6						4		
Actuated Green, G (s)		31.5			31.5						24.5	
Effective Green, g (s)		31.5			31.5						24.5	
Actuated g/C Ratio		0.48			0.48						0.38	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		801			774						1316	
v/s Ratio Prot		0.05										
v/s Ratio Perm					c0.10						0.08	
v/c Ratio		0.09			0.21						0.22	
Uniform Delay, d1		9.0			9.6						13.8	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			0.6						0.4	
Delay (s)		9.1			10.2						14.1	
Level of Service		A			B						B	
Approach Delay (s)		9.1			10.2			0.0			14.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		

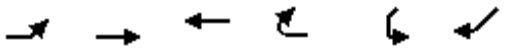
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	150	140	330	310	30
Future Volume (vph)	50	150	140	330	310	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.90			1.00	0.99	
Flt Protected	0.99			0.99	1.00	
Satd. Flow (prot)	1653			1835	1840	
Flt Permitted	0.99			0.80	1.00	
Satd. Flow (perm)	1653			1481	1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	163	152	359	337	33
RTOR Reduction (vph)	141	0	0	0	4	0
Lane Group Flow (vph)	76	0	0	511	366	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.3			45.5	45.5	
Effective Green, g (s)	8.3			45.5	45.5	
Actuated g/C Ratio	0.13			0.74	0.74	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	222			1090	1354	
v/s Ratio Prot	c0.05				0.20	
v/s Ratio Perm				c0.35		
v/c Ratio	0.34			0.47	0.27	
Uniform Delay, d1	24.3			3.3	2.7	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.9			1.4	0.5	
Delay (s)	25.2			4.7	3.2	
Level of Service	C			A	A	
Approach Delay (s)	25.2			4.7	3.2	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

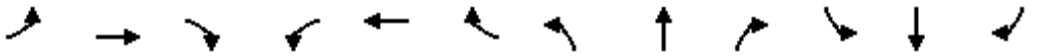
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	50	670	1420	40	150	250
Future Volume (vph)	50	670	1420	40	150	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3525		1674	
Flt Permitted	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	3525		1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	728	1543	43	163	272
RTOR Reduction (vph)	0	0	3	0	74	0
Lane Group Flow (vph)	54	728	1583	0	361	0
Turn Type	Prot	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases						
Actuated Green, G (s)	3.5	46.0	38.0		23.6	
Effective Green, g (s)	3.5	46.0	38.0		23.6	
Actuated g/C Ratio	0.04	0.59	0.48		0.30	
Clearance Time (s)	4.5	4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	78	2071	1704		502	
v/s Ratio Prot	c0.03	0.21	c0.45		c0.22	
v/s Ratio Perm						
v/c Ratio	0.69	0.35	0.93		0.72	
Uniform Delay, d1	37.0	8.5	19.0		24.5	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	23.3	0.1	9.4		8.6	
Delay (s)	60.3	8.6	28.4		33.1	
Level of Service	E	A	C		C	
Approach Delay (s)		12.2	28.4		33.1	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

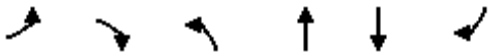
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	10	100	40	150	240	230	390	130	260	450	190
Future Volume (vph)	70	10	100	40	150	240	230	390	130	260	450	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.92			0.92		1.00	0.96		1.00	0.96	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1690			1714		1770	3407		1770	3381	
Flt Permitted		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1690			1714		1770	3407		1770	3381	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	11	109	43	163	261	250	424	141	283	489	207
RTOR Reduction (vph)	0	54	0	0	50	0	0	36	0	0	51	0
Lane Group Flow (vph)	0	142	0	0	417	0	250	529	0	283	645	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		12.0			21.6		11.7	15.8		15.4	19.5	
Effective Green, g (s)		12.0			21.6		11.7	15.8		15.4	19.5	
Actuated g/C Ratio		0.14			0.26		0.14	0.19		0.19	0.24	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		244			447		250	650		329	796	
v/s Ratio Prot		c0.08			c0.24		0.14	0.16		c0.16	c0.19	
v/s Ratio Perm												
v/c Ratio		0.58			0.93		1.00	0.81		0.86	0.81	
Uniform Delay, d1		33.1			29.9		35.5	32.1		32.7	29.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		3.5			26.7		56.9	7.7		19.9	6.3	
Delay (s)		36.6			56.6		92.5	39.8		52.5	36.2	
Level of Service		D			E		F	D		D	D	
Approach Delay (s)		36.6			56.6			56.0			40.9	
Approach LOS		D			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	82.8	Sum of lost time (s)	18.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

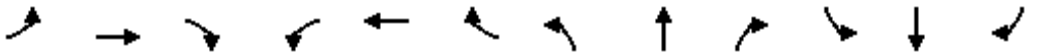
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	200	340	190	190	90
Future Volume (vph)	30	200	340	190	190	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			4.5	4.5	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.88			1.00	0.96	
Flt Protected	0.99			0.97	1.00	
Satd. Flow (prot)	1634			1805	1782	
Flt Permitted	0.99			0.64	1.00	
Satd. Flow (perm)	1634			1185	1782	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	217	370	207	207	98
RTOR Reduction (vph)	188	0	0	0	19	0
Lane Group Flow (vph)	62	0	0	577	286	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.1			43.5	43.5	
Effective Green, g (s)	8.1			43.5	43.5	
Actuated g/C Ratio	0.13			0.72	0.72	
Clearance Time (s)	4.5			4.5	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	218			850	1279	
v/s Ratio Prot	c0.04				0.16	
v/s Ratio Perm				c0.49		
v/c Ratio	0.28			0.68	0.22	
Uniform Delay, d1	23.6			4.7	2.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.7			4.3	0.4	
Delay (s)	24.4			9.1	3.3	
Level of Service	C			A	A	
Approach Delay (s)	24.4			9.1	3.3	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	60.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

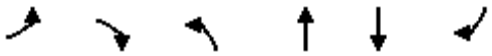
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	50	200	180	150	70	2380	70	80	1620	50
Future Volume (vph)	50	20	50	200	180	150	70	2380	70	80	1620	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.89		1.00	0.93		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3162		1770	3298		1770	5064		1770	5063	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3162		1770	3298		1770	5064		1770	5063	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	54	217	196	163	76	2587	76	87	1761	54
RTOR Reduction (vph)	0	46	0	0	122	0	0	3	0	0	2	0
Lane Group Flow (vph)	54	30	0	217	237	0	76	2660	0	87	1813	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Effective Green, g (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Actuated g/C Ratio	0.06	0.14		0.12	0.21		0.07	0.54		0.07	0.53	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	101	442		221	684		122	2713		116	2696	
v/s Ratio Prot	0.03	0.01		c0.12	c0.07		0.04	c0.53		c0.05	0.36	
v/s Ratio Perm												
v/c Ratio	0.53	0.07		0.98	0.35		0.62	0.98		0.75	0.67	
Uniform Delay, d1	55.0	44.8		52.4	40.6		54.3	27.2		55.1	20.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	0.95	
Incremental Delay, d2	5.4	0.3		55.1	1.4		9.5	13.3		19.1	1.1	
Delay (s)	60.3	45.1		107.5	42.0		63.8	40.5		63.9	20.5	
Level of Service	E	D		F	D		E	D		E	C	
Approach Delay (s)		51.4			66.7			41.2			22.4	
Approach LOS		D			E			D			C	

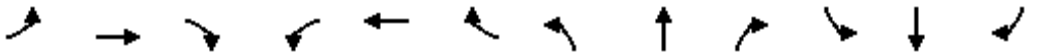
Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	110	0	200	700	0	0
Future Volume (vph)	110	0	200	700	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	0	217	761	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	120	0	217	761	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.07			c0.22		
v/s Ratio Perm			0.12			
v/c Ratio	0.17		0.31	0.54		
Uniform Delay, d1	7.7		8.2	9.2		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		1.1	1.5		
Delay (s)	8.2		9.3	10.6		
Level of Service	A		A	B		
Approach Delay (s)	8.2			10.4	0.0	
Approach LOS	A			B	A	

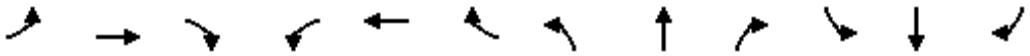
Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	410	790	0	0	390	200	150	200	20	0	0	0
Future Volume (vph)	410	790	0	0	390	200	150	200	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.95			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (prot)	3433	1863			3359			3465	1583			
Flt Permitted	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (perm)	3433	1863			3359			3465	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	859	0	0	424	217	163	217	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	92	0	0	0	18	0	0	0
Lane Group Flow (vph)	446	859	0	0	549	0	0	380	4	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	14.4	43.5			24.7			11.7	11.7			
Effective Green, g (s)	14.4	43.5			24.7			11.7	11.7			
Actuated g/C Ratio	0.22	0.67			0.38			0.18	0.18			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	760	1246			1276			623	284			
v/s Ratio Prot	0.13	c0.46			0.16							
v/s Ratio Perm								0.11	0.00			
v/c Ratio	0.59	0.69			0.43			0.61	0.01			
Uniform Delay, d1	22.6	6.6			14.9			24.5	21.9			
Progression Factor	0.99	1.17			1.00			1.00	1.00			
Incremental Delay, d2	0.9	2.5			1.1			1.2	0.0			
Delay (s)	23.3	10.2			16.0			25.7	21.9			
Level of Service	C	B			B			C	C			
Approach Delay (s)		14.7			16.0			25.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1680	570	120	1170	360	460	350	180	300	260	40
Future Volume (vph)	90	1680	570	120	1170	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1826	620	130	1272	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	242	0	0	158	0	0	95	0	4	0
Lane Group Flow (vph)	98	1826	378	130	1272	233	500	380	101	326	322	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.5	59.8	59.8	10.0	61.2	61.2	23.4	32.9	32.9	29.8	37.5	
Effective Green, g (s)	8.9	61.1	61.1	10.4	62.6	62.6	23.8	33.7	33.7	28.8	38.7	
Actuated g/C Ratio	0.06	0.41	0.41	0.07	0.42	0.42	0.16	0.22	0.22	0.19	0.26	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	105	2071	635	238	1476	628	544	418	348	339	470	
v/s Ratio Prot	c0.06	0.36		0.04	c0.36		0.15	c0.20		c0.18	0.18	
v/s Ratio Perm			0.24			0.15			0.06			
v/c Ratio	0.93	0.88	0.59	0.55	0.86	0.37	0.92	0.91	0.29	0.96	0.69	
Uniform Delay, d1	70.3	41.1	34.8	67.5	39.8	30.1	62.2	56.7	48.2	60.1	50.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	65.7	5.8	4.1	1.4	6.8	1.7	20.2	23.5	0.6	38.3	3.3	
Delay (s)	136.0	46.9	38.8	68.9	46.6	31.8	82.4	80.2	48.8	98.4	53.5	
Level of Service	F	D	D	E	D	C	F	F	D	F	D	
Approach Delay (s)		48.4			45.0			75.5			75.9	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1790	930	0	0	870
Future Volume (vph)	830	1790	930	0	0	870
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1946	1011	0	0	946
RTOR Reduction (vph)	0	6	0	0	0	0
Lane Group Flow (vph)	902	1940	1011	0	0	946
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	92.7	92.7	43.3			43.3
Effective Green, g (s)	92.7	92.7	43.3			43.3
Actuated g/C Ratio	0.62	0.62	0.29			0.29
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	2121	1722	1021			1021
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.70				
v/c Ratio	0.43	1.13	0.99			0.93
Uniform Delay, d1	14.8	28.6	53.1			51.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	65.2	25.7			13.5
Delay (s)	14.9	93.8	78.8			65.3
Level of Service	B	F	E			E
Approach Delay (s)	68.8		78.8			65.3
Approach LOS	E		E			E

Intersection Summary			
HCM 2000 Control Delay	70.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		

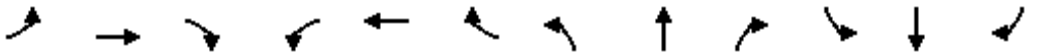
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	290	1450	130	0	1510
Future Volume (Veh/h)	0	290	1450	130	0	1510
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	315	1576	141	0	1641
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.83					
vC, conflicting volume	2194	599			1717	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1720	599			1717	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	29			100	
cM capacity (veh/h)	67	444			365	

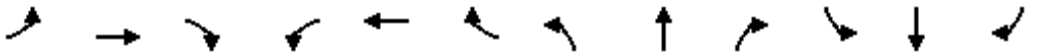
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	315	630	630	456	547	547	547
Volume Left	0	0	0	0	0	0	0
Volume Right	315	0	0	141	0	0	0
cSH	444	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.71	0.37	0.37	0.27	0.32	0.32	0.32
Queue Length 95th (ft)	137	0	0	0	0	0	0
Control Delay (s)	30.6	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D						
Approach Delay (s)	30.6	0.0			0.0		
Approach LOS	D						

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		



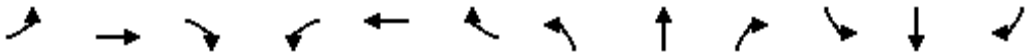
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	410	310	80	540	700	460	510	130	420	700	390
Future Volume (vph)	380	410	310	80	540	700	460	510	130	420	700	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.3	4.0	4.0	5.0	5.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1568	1770	3539	1568	1770	3432		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1568	1770	3539	1568	1770	3432		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	446	337	87	587	761	500	554	141	457	761	424
RTOR Reduction (vph)	0	0	21	0	0	30	0	15	0	0	0	50
Lane Group Flow (vph)	413	446	316	87	587	731	500	680	0	457	761	374
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	28.1	50.6	86.3	9.0	31.5	69.0	35.7	33.2		37.5	35.0	63.1
Effective Green, g (s)	28.7	51.5	88.1	9.0	31.5	69.0	36.6	34.1		38.4	35.9	63.1
Actuated g/C Ratio	0.19	0.34	0.59	0.06	0.21	0.46	0.24	0.23		0.26	0.24	0.42
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	338	639	962	106	743	772	431	780		453	847	658
v/s Ratio Prot	c0.23	0.24	0.08	0.05	0.17	c0.24	c0.28	0.20		c0.26	0.22	0.11
v/s Ratio Perm			0.12			0.23						0.13
v/c Ratio	1.22	0.70	0.33	0.82	0.79	0.95	1.16	0.87		1.01	0.90	0.57
Uniform Delay, d1	60.6	42.5	15.8	69.7	56.1	38.7	56.7	55.8		55.8	55.3	33.1
Progression Factor	1.00	1.00	1.00	0.99	0.60	0.93	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	123.6	6.2	0.2	43.9	7.9	20.2	95.0	10.5		44.5	13.2	0.7
Delay (s)	184.2	48.8	16.0	112.9	41.8	56.0	151.7	66.4		100.3	68.5	33.7
Level of Service	F	D	B	F	D	E	F	E		F	E	C
Approach Delay (s)		86.3			53.7			102.1			68.4	
Approach LOS		F			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	75.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.8
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



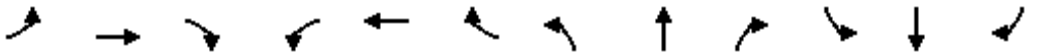
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	140	170	70	160	90	240	640	70	150	730	170
Future Volume (vph)	200	140	170	70	160	90	240	640	70	150	730	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	152	185	76	174	98	261	696	76	163	793	185
RTOR Reduction (vph)	0	0	133	0	0	81	0	5	0	0	0	104
Lane Group Flow (vph)	174	195	52	76	174	17	261	767	0	163	793	81
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	36.5	22.4	22.4	22.4	12.6	50.0		14.6	52.0	52.0
Effective Green, g (s)	23.9	23.9	36.5	22.4	22.4	22.4	12.6	50.0		14.6	52.0	52.9
Actuated g/C Ratio	0.18	0.18	0.28	0.17	0.17	0.17	0.10	0.38		0.11	0.40	0.41
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	309	321	437	304	321	266	332	1336		198	1415	622
v/s Ratio Prot	0.10	c0.11	0.01	0.04	c0.09		0.08	0.22		c0.09	c0.22	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.56	0.61	0.12	0.25	0.54	0.06	0.79	0.57		0.82	0.56	0.13
Uniform Delay, d1	48.3	48.7	34.8	46.5	49.1	45.0	57.4	31.6		56.4	30.2	24.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.41	0.67	0.41
Incremental Delay, d2	2.3	3.2	0.0	0.4	1.9	0.1	10.8	1.8		16.3	1.1	0.3
Delay (s)	50.6	52.0	34.8	47.0	51.0	45.1	68.1	33.4		95.8	21.4	10.1
Level of Service	D	D	C	D	D	D	E	C		F	C	B
Approach Delay (s)		45.8			48.5			42.2			30.2	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	19.1
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



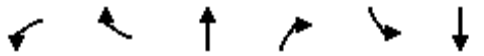
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Future Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.5		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.97		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.94		1.00	0.98		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1696			1659		1770	3435		1770	3523	
Flt Permitted		0.78			0.71		0.22	1.00		0.16	1.00	
Satd. Flow (perm)		1348			1205		415	3435		297	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	54	87	22	76	98	1141	217	65	1043	33
RTOR Reduction (vph)	0	21	0	0	18	0	0	8	0	0	1	0
Lane Group Flow (vph)	0	98	0	0	167	0	98	1350	0	65	1075	0
Confl. Peds. (#/hr)	33					33			3	3		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		23.3			23.3		114.1	107.6		110.9	106.0	
Effective Green, g (s)		24.2			24.2		114.9	108.0		111.7	106.9	
Actuated g/C Ratio		0.16			0.16		0.77	0.72		0.74	0.71	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		217			194		380	2473		273	2510	
v/s Ratio Prot							c0.01	c0.39		0.01	0.31	
v/s Ratio Perm		0.07			c0.14		0.19			0.17		
v/c Ratio		0.45			0.86		0.26	0.55		0.24	0.43	
Uniform Delay, d1		56.9			61.3		5.6	9.7		7.0	8.9	
Progression Factor		1.00			1.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			27.8		0.1	0.9		0.2	0.5	
Delay (s)		57.4			104.9		5.7	10.6		7.1	9.4	
Level of Service		E			F		A	B		A	A	
Approach Delay (s)		57.4			104.9			10.2			9.3	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4954		3433	5085	1464	1770	3539	1522	3433	3539	1516
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4954		3433	5085	1464	1770	3539	1522	3433	3539	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2033	217	554	1685	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	9	0	0	0	39	0	0	54	0	0	55
Lane Group Flow (vph)	413	2241	0	554	1685	385	250	696	392	380	576	260
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.7	57.7		20.9	59.0	75.9	16.2	30.7	51.6	16.9	31.4	51.1
Effective Green, g (s)	20.1	58.8		21.3	60.0	75.9	16.6	31.6	53.4	17.3	32.3	52.9
Actuated g/C Ratio	0.14	0.41		0.15	0.41	0.52	0.11	0.22	0.37	0.12	0.22	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	475	2008		504	2104	766	202	771	597	409	788	553
v/s Ratio Prot	0.12	c0.45		c0.16	0.33	0.06	c0.14	c0.20	0.10	c0.11	0.16	0.07
v/s Ratio Perm						0.20			0.16			0.10
v/c Ratio	0.87	1.12		1.10	0.80	0.50	1.24	0.90	0.66	0.93	0.73	0.47
Uniform Delay, d1	61.2	43.1		61.9	37.3	22.4	64.2	55.2	38.2	63.2	52.3	35.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.0	59.8		69.9	2.4	0.2	141.9	13.6	2.0	26.8	3.0	0.2
Delay (s)	76.2	102.9		131.8	39.6	22.5	206.1	68.8	40.1	90.1	55.3	35.5
Level of Service	E	F		F	D	C	F	E	D	F	E	D
Approach Delay (s)		98.7			56.1			84.3			60.8	
Approach LOS		F			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	76.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	300	780	120	400	850
Future Volume (vph)	120	300	780	120	400	850
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.90		0.98		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1659		3469		1770	3539
Flt Permitted	0.99		1.00		0.95	1.00
Satd. Flow (perm)	1659		3469		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	326	848	130	435	924
RTOR Reduction (vph)	130	0	17	0	0	0
Lane Group Flow (vph)	326	0	961	0	435	924
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	15.2		21.7		18.8	45.0
Effective Green, g (s)	15.2		21.7		18.8	45.0
Actuated g/C Ratio	0.22		0.31		0.27	0.65
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	364		1087		480	2301
v/s Ratio Prot	c0.20		c0.28		c0.25	0.26
v/s Ratio Perm						
v/c Ratio	0.89		0.88		0.91	0.40
Uniform Delay, d1	26.2		22.6		24.3	5.7
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	23.2		10.5		20.5	0.5
Delay (s)	49.5		33.1		44.8	6.3
Level of Service	D		C		D	A
Approach Delay (s)	49.5		33.1			18.6
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

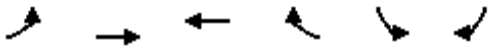
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	350	690	170	0	660
Future Volume (Veh/h)	0	350	690	170	0	660
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	380	750	185	0	717
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			407
pX, platoon unblocked	0.83					
vC, conflicting volume	1203	472			937	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	838	472			937	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	29			100	
cM capacity (veh/h)	253	536			726	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	380	500	435	358	358
Volume Left	0	0	0	0	0
Volume Right	380	0	185	0	0
cSH	536	1700	1700	1700	1700
Volume to Capacity	0.71	0.29	0.26	0.21	0.21
Queue Length 95th (ft)	142	0	0	0	0
Control Delay (s)	26.5	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	26.5	0.0		0.0	
Approach LOS	D				

Intersection Summary				
Average Delay	4.9			
Intersection Capacity Utilization	53.2%	ICU Level of Service		A
Analysis Period (min)	15			



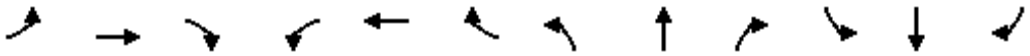
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1250	970	860	360	300
Future Volume (vph)	0	1250	970	860	360	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1359	1054	935	391	326
RTOR Reduction (vph)	0	0	0	429	0	267
Lane Group Flow (vph)	0	1359	1054	506	391	59
Confl. Peds. (#/hr)				6	3	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	2	1	
Permitted Phases				8		1
Actuated Green, G (s)		34.2	34.2	34.2	11.2	11.2
Effective Green, g (s)		34.2	34.2	33.7	11.2	11.2
Actuated g/C Ratio		0.55	0.55	0.54	0.18	0.18
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	2.9	2.5	2.5
Lane Grp Cap (vph)		1942	1942	1507	617	284
v/s Ratio Prot		c0.38	0.30	0.18	c0.11	
v/s Ratio Perm						0.04
v/c Ratio		0.70	0.54	0.34	0.63	0.21
Uniform Delay, d1		10.3	9.0	8.0	23.7	21.8
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1	0.3	0.1	1.9	0.3
Delay (s)		11.4	9.3	8.1	25.5	22.0
Level of Service		B	A	A	C	C
Approach Delay (s)		11.4	8.8		23.9	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	16.6
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



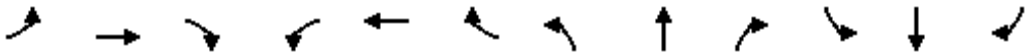
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	240	1080	110	130	970
Future Volume (vph)	70	240	1080	110	130	970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.1	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.94	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1495	4997		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1495	4997		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	261	1174	120	141	1054
RTOR Reduction (vph)	0	230	5	0	0	0
Lane Group Flow (vph)	76	31	1289	0	141	1054
Confl. Peds. (#/hr)	11	16		18	18	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	12.3	12.3	108.1		16.3	128.8
Effective Green, g (s)	12.3	13.2	108.1		16.3	128.8
Actuated g/C Ratio	0.08	0.09	0.72		0.11	0.86
Clearance Time (s)	4.0	4.0	4.9		4.4	4.9
Vehicle Extension (s)	3.0	3.0	5.0		2.0	3.2
Lane Grp Cap (vph)	145	131	3601		192	4366
v/s Ratio Prot	c0.04		c0.26		c0.08	0.21
v/s Ratio Perm		0.02				
v/c Ratio	0.52	0.24	0.36		0.73	0.24
Uniform Delay, d1	66.0	63.7	7.9		64.8	1.9
Progression Factor	1.00	1.00	1.32		1.11	0.97
Incremental Delay, d2	3.4	0.9	0.2		7.9	0.1
Delay (s)	69.4	64.7	10.7		79.9	1.9
Level of Service	E	E	B		E	A
Approach Delay (s)	65.7		10.7			11.1
Approach LOS	E		B			B

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



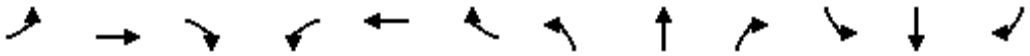
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	130	150	120	40	160	230	1110	120	170	920	70
Future Volume (vph)	70	130	150	120	40	160	230	1110	120	170	920	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.4		4.0	4.0		4.0	4.0		4.0	4.9	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1690		1770	1612		1770	4992		3433	3492	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1690		1770	1612		1770	4992		3433	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	141	163	130	43	174	250	1207	130	185	1000	76
RTOR Reduction (vph)	0	28	0	0	99	0	0	9	0	0	3	0
Lane Group Flow (vph)	76	276	0	130	118	0	250	1328	0	185	1073	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.0	28.0		14.7	14.7		23.5	67.2		21.0	64.7	
Effective Green, g (s)	28.9	28.5		15.6	15.6		23.9	68.1		21.4	64.7	
Actuated g/C Ratio	0.19	0.19		0.10	0.10		0.16	0.45		0.14	0.43	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		2.0	3.9	
Lane Grp Cap (vph)	341	321		184	167		282	2266		489	1506	
v/s Ratio Prot	0.04	c0.16		c0.07	0.07		c0.14	0.27		0.05	c0.31	
v/s Ratio Perm												
v/c Ratio	0.22	0.86		0.71	0.70		0.89	0.59		0.38	0.71	
Uniform Delay, d1	51.1	58.8		65.0	65.0		61.7	30.5		58.3	35.0	
Progression Factor	1.00	1.00		1.00	1.00		1.05	0.53		0.88	1.21	
Incremental Delay, d2	0.3	19.8		9.7	10.5		23.3	1.0		0.2	2.9	
Delay (s)	51.4	78.6		74.6	75.4		88.2	17.1		51.4	45.3	
Level of Service	D	E		E	E		F	B		D	D	
Approach Delay (s)		73.1			75.1			28.3			46.2	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	43.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.3
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	30	70	150	30	140	50	1250	70	120	1080	80
Future Volume (vph)	60	30	70	150	30	140	50	1250	70	120	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.0	4.9		4.4	4.2		4.4	4.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.94		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1706		1770	1633		1770	5024		3433	3492	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1706		1770	1633		1770	5024		3433	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	33	76	163	33	152	54	1359	76	130	1174	87
RTOR Reduction (vph)	0	22	0	0	114	0	0	3	0	0	3	0
Lane Group Flow (vph)	0	152	0	163	71	0	54	1432	0	130	1258	0
Confl. Peds. (#/hr)			6	6			7		18	18		7
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		19.9		17.5	17.5		8.4	79.8		13.7	85.1	
Effective Green, g (s)		19.9		18.4	17.5		8.4	80.5		13.7	86.0	
Actuated g/C Ratio		0.13		0.12	0.12		0.06	0.54		0.09	0.57	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		226		217	190		99	2696		313	2002	
v/s Ratio Prot		c0.09		c0.09	0.04		0.03	c0.28		0.04	c0.36	
v/s Ratio Perm												
v/c Ratio		0.67		0.75	0.37		0.55	0.53		0.42	0.63	
Uniform Delay, d1		62.0		63.6	61.2		68.9	22.5		64.4	21.3	
Progression Factor		1.00		1.00	1.00		1.11	0.96		0.70	0.47	
Incremental Delay, d2		6.1		12.2	0.5		3.2	0.7		0.2	1.1	
Delay (s)		68.1		75.8	61.6		80.0	22.3		45.5	11.1	
Level of Service		E		E	E		E	C		D	B	
Approach Delay (s)		68.1			68.3			24.4			14.3	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.4
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	70	30	110	210	140	1110	30	40	1140	120
Future Volume (vph)	50	20	70	30	110	210	140	1110	30	40	1140	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		4.9	4.0	4.4	4.0		4.4	4.5	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.99		1.00	1.00	1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799	1562		1842	1583	1770	5055		1770	4966	
Flt Permitted		0.42	1.00		0.91	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		783	1562		1699	1583	1770	5055		1770	4966	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	76	33	120	228	152	1207	33	43	1239	130
RTOR Reduction (vph)	0	0	67	0	0	0	0	1	0	0	6	0
Lane Group Flow (vph)	0	76	9	0	153	228	152	1239	0	43	1363	0
Confl. Peds. (#/hr)			1	1			19		19	19		19
Turn Type	Perm	NA	Perm	Perm	NA	Free	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		Free						
Actuated Green, G (s)		18.5	18.5		18.5	150.0	32.5	110.2		7.1	84.8	
Effective Green, g (s)		18.5	18.5		18.5	150.0	32.5	111.1		7.1	85.2	
Actuated g/C Ratio		0.12	0.12		0.12	1.00	0.22	0.74		0.05	0.57	
Clearance Time (s)		4.9	4.9		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.9		2.0	3.9	
Lane Grp Cap (vph)		96	192		209	1583	383	3744		83	2820	
v/s Ratio Prot							c0.09	0.25		0.02	c0.27	
v/s Ratio Perm		c0.10	0.01		0.09	0.14						
v/c Ratio		0.79	0.05		0.73	0.14	0.40	0.33		0.52	0.48	
Uniform Delay, d1		63.9	58.0		63.4	0.0	50.4	6.7		69.8	19.3	
Progression Factor		1.27	2.69		1.00	1.00	0.86	0.74		0.91	1.42	
Incremental Delay, d2		30.2	0.0		10.8	0.2	0.1	0.1		1.8	0.5	
Delay (s)		111.0	156.2		74.2	0.2	43.4	5.1		65.2	27.9	
Level of Service		F	F		E	A	D	A		E	C	
Approach Delay (s)		133.6			29.9			9.3			29.0	
Approach LOS		F			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.8
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



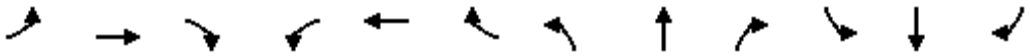
Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	310	1620	470	230	2030	680	150	350	400	140	220	200
Future Volume (vph)	310	1620	470	230	2030	680	150	350	400	140	220	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	5.9	5.9	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.94	1.00	1.00	1.00	1.00	0.81	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (prot)	3433	4577		1362	5085	1484	1611	1681	1610	1647	1289	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (perm)	3433	4577		1362	5085	1484	1611	1681	1610	1647	1289	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	337	1761	511	250	2207	739	163	380	435	152	239	217
RTOR Reduction (vph)	0	1	0	69	0	14	104	0	0	0	152	0
Lane Group Flow (vph)	337	2296	0	156	2207	725	59	243	359	365	87	217
Confl. Peds. (#/hr)	29		31			29		10			63	63
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	15.0	83.9		83.9	65.1	96.7	54.1	31.6	31.6	31.6	31.6	20.4
Effective Green, g (s)	16.4	86.0		83.9	67.0	92.9	54.1	31.6	31.6	31.6	31.6	20.4
Actuated g/C Ratio	0.11	0.57		0.56	0.45	0.62	0.36	0.21	0.21	0.21	0.21	0.14
Clearance Time (s)	4.0	6.1		6.1	5.9	4.0	5.9	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	2.8		2.8	3.2	3.0	4.1	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	375	2624		761	2271	919	581	354	339	346	271	240
v/s Ratio Prot	c0.10	0.50			c0.43	0.16		0.14	c0.22	0.22		c0.12
v/s Ratio Perm				0.11		0.33	0.04				0.07	
v/c Ratio	0.90	0.88		0.21	0.97	0.79	0.10	0.69	1.06	1.05	0.32	0.90
Uniform Delay, d1	66.0	27.4		16.5	40.6	21.3	31.8	54.6	59.2	59.2	50.1	63.8
Progression Factor	1.00	1.00		1.00	1.06	1.25	1.00	0.88	0.89	0.89	1.00	1.00
Incremental Delay, d2	23.2	4.5		0.6	11.3	3.6	0.1	4.9	62.9	61.2	0.6	33.5
Delay (s)	89.2	31.9		17.1	54.3	30.1	31.9	53.0	115.4	113.6	50.7	97.3
Level of Service	F	C		B	D	C	C	D	F	F	D	F
Approach Delay (s)		37.4			48.2					89.5		87.8
Approach LOS		D			D					F		F

Intersection Summary			
HCM 2000 Control Delay	53.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	91.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	330	50
Future Volume (vph)	330	50
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	359	54
RTOR Reduction (vph)	82	0
Lane Group Flow (vph)	331	0
Confl. Peds. (#/hr)		31
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	20.4	
Effective Green, g (s)	20.4	
Actuated g/C Ratio	0.14	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	379	
v/s Ratio Prot	0.12	
v/s Ratio Perm		
v/c Ratio	0.87	
Uniform Delay, d1	63.5	
Progression Factor	1.00	
Incremental Delay, d2	19.3	
Delay (s)	82.9	
Level of Service	F	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	120	300	120	230	70	70	90	120	90	120	100
Future Volume (vph)	90	120	300	120	230	70	70	90	120	90	120	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.92			0.98			0.94			0.96	
Flt Protected		0.99			0.99			0.99			0.99	
Satd. Flow (prot)		1700			1795			1734			1756	
Flt Permitted		0.86			0.70			0.86			0.84	
Satd. Flow (perm)		1469			1280			1508			1495	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	130	326	130	250	76	76	98	130	98	130	109
RTOR Reduction (vph)	0	99	0	0	14	0	0	36	0	0	23	0
Lane Group Flow (vph)	0	455	0	0	442	0	0	268	0	0	314	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		21.8			21.8			22.0			22.5	
Effective Green, g (s)		21.8			21.8			22.0			22.5	
Actuated g/C Ratio		0.41			0.41			0.42			0.43	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		606			528			628			637	
v/s Ratio Prot												
v/s Ratio Perm		0.31			c0.35			0.18			c0.21	
v/c Ratio		0.75			0.84			0.43			0.49	
Uniform Delay, d1		13.2			13.9			10.9			11.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		5.2			11.1			2.1			0.6	
Delay (s)		18.4			25.0			13.0			11.6	
Level of Service		B			C			B			B	
Approach Delay (s)		18.4			25.0			13.0			11.6	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	52.8	Sum of lost time (s)	9.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

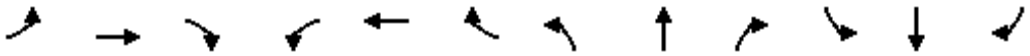
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	280	1320	840	50	50	470
Future Volume (vph)	280	1320	840	50	50	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	4.5
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5043		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5043		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	1435	913	54	54	511
RTOR Reduction (vph)	0	0	3	0	0	420
Lane Group Flow (vph)	304	1435	964	0	54	91
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.3	97.1	66.3		13.9	13.9
Effective Green, g (s)	26.3	97.1	66.3		13.9	13.9
Actuated g/C Ratio	0.22	0.81	0.55		0.12	0.12
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	387	4114	2786		205	183
v/s Ratio Prot	c0.17	c0.28	0.19		0.03	
v/s Ratio Perm						c0.06
v/c Ratio	0.79	0.35	0.35		0.26	0.50
Uniform Delay, d1	44.2	3.0	14.9		48.4	49.8
Progression Factor	1.00	1.00	0.56		1.00	1.00
Incremental Delay, d2	10.1	0.2	0.2		0.7	2.1
Delay (s)	54.2	3.3	8.4		49.1	51.9
Level of Service	D	A	A		D	D
Approach Delay (s)		12.2	8.4		51.6	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

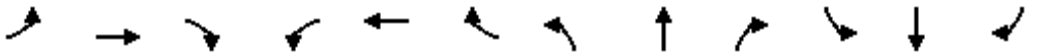


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	0	140	390	310	150	0	0	0	0	70	90
Future Volume (vph)	100	0	140	390	310	150	0	0	0	0	70	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	3.3						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.95						0.92	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1772						1721	
Flt Permitted	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1770		1583	1770	1772						1721	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	152	424	337	163	0	0	0	0	76	98
RTOR Reduction (vph)	0	0	135	249	23	0	0	0	0	0	76	0
Lane Group Flow (vph)	109	0	17	175	477	0	0	0	0	0	98	0
Turn Type	Prot		Perm	Split	NA						NA	
Protected Phases	2!			8	8						6!	
Permitted Phases			4									
Actuated Green, G (s)	8.6		4.9	18.0	18.0						8.6	
Effective Green, g (s)	8.6		4.9	18.0	18.7						8.6	
Actuated g/C Ratio	0.20		0.11	0.41	0.43						0.20	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	349		178	732	761						340	
v/s Ratio Prot	c0.06			0.10	c0.27						0.06	
v/s Ratio Perm			c0.01									
v/c Ratio	0.31		0.10	0.24	0.63						0.29	
Uniform Delay, d1	14.9		17.3	8.3	9.7						14.8	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.5		0.2	0.2	1.6						0.5	
Delay (s)	15.4		17.6	8.5	11.3						15.3	
Level of Service	B		B	A	B						B	
Approach Delay (s)		16.7			10.0			0.0			15.3	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	43.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

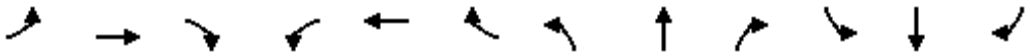
! Phase conflict between lane groups.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1850	170	290	2390	0	0	0	0	790	420	320
Future Volume (vph)	0	1850	170	290	2390	0	0	0	0	790	420	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.1		2.4	2.9					2.9	2.9	2.9
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.98	1.00	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		5021		1770	6408					1656	1735	1559
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		5021		1770	6408					1656	1735	1559
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1947	179	305	2516	0	0	0	0	832	442	337
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	31
Lane Group Flow (vph)	0	2119	0	305	2516	0	0	0	0	641	633	306
Confl. Peds. (#/hr)				13						14		3
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		61.8		22.0	88.5					51.7	51.7	51.7
Effective Green, g (s)		63.9		24.0	90.5					53.7	53.7	53.7
Actuated g/C Ratio		0.43		0.16	0.60					0.36	0.36	0.36
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2138		283	3866					592	621	558
v/s Ratio Prot		c0.42		c0.17	0.39							
v/s Ratio Perm										c0.39	0.36	0.20
v/c Ratio		0.99		1.08	0.65					1.08	1.02	0.55
Uniform Delay, d1		42.8		63.0	19.4					48.1	48.1	38.5
Progression Factor		0.88		1.16	0.12					1.00	1.00	1.00
Incremental Delay, d2		11.5		41.6	0.1					61.4	41.1	0.6
Delay (s)		49.0		114.6	2.4					109.5	89.2	39.1
Level of Service		D		F	A					F	F	D
Approach Delay (s)		49.0			14.5			0.0			86.8	
Approach LOS		D			B			A			F	

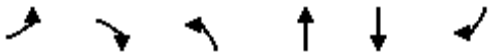
Intersection Summary			
HCM 2000 Control Delay	43.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.4
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	800	220	180	390	0	180	0	300	390	370	10
Future Volume (vph)	0	800	220	180	390	0	180	0	300	390	370	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.4		4.0	3.4		3.4		4.0	2.9	2.9	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3317		1770	3539		1770		1556	1770	1854	
Flt Permitted		1.00		0.11	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3317		210	3539		1770		1556	1770	1854	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	870	239	196	424	0	196	0	326	424	402	11
RTOR Reduction (vph)	0	27	0	0	0	0	0	0	210	0	1	0
Lane Group Flow (vph)	0	1082	0	196	424	0	196	0	116	424	412	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		31.1		43.2	43.2		10.8		31.1	21.8	21.8	
Effective Green, g (s)		32.6		43.6	44.7		11.8		32.0	23.8	23.8	
Actuated g/C Ratio		0.36		0.48	0.50		0.13		0.36	0.26	0.26	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1201		242	1757		232		553	468	490	
v/s Ratio Prot		c0.33		c0.07	0.12		c0.11			c0.24	0.22	
v/s Ratio Perm				0.32					0.07			
v/c Ratio		0.90		0.81	0.24		0.84		0.21	0.91	0.84	
Uniform Delay, d1		27.2		18.9	13.0		38.2		20.2	32.0	31.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		10.9		16.9	0.3		23.5		0.9	20.9	12.4	
Delay (s)		38.1		35.8	13.3		61.7		21.1	52.9	43.7	
Level of Service		D		D	B		E		C	D	D	
Approach Delay (s)		38.1			20.4			36.3			48.3	
Approach LOS		D			C			D			D	

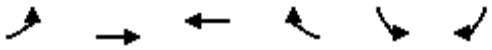
Intersection Summary			
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.7
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	450	490	880	440	100
Future Volume (vph)	230	450	490	880	440	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.3	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.97	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1668		1770	5085	4919	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1668		1770	5085	4919	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	489	533	957	478	109
RTOR Reduction (vph)	59	0	0	0	30	0
Lane Group Flow (vph)	680	0	533	957	557	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	50.1		38.1	61.9	19.8	
Effective Green, g (s)	50.1		37.8	61.9	18.9	
Actuated g/C Ratio	0.42		0.31	0.52	0.16	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	696		557	2623	774	
v/s Ratio Prot	c0.41		c0.30	0.19	c0.11	
v/s Ratio Perm						
v/c Ratio	0.98		0.96	0.36	0.72	
Uniform Delay, d1	34.4		40.3	17.3	48.0	
Progression Factor	1.00		1.05	1.29	1.00	
Incremental Delay, d2	28.0		26.6	0.4	5.7	
Delay (s)	62.4		69.1	22.7	53.7	
Level of Service	E		E	C	D	
Approach Delay (s)	62.4			39.3	53.7	
Approach LOS	E			D	D	

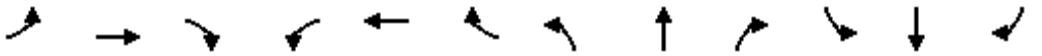
Intersection Summary			
HCM 2000 Control Delay	48.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	90	170	80	70	130
Future Volume (Veh/h)	70	90	170	80	70	130
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	98	185	87	76	141
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1226	738			
pX, platoon unblocked						
vC, conflicting volume	272				478	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				478	228
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				85	83
cM capacity (veh/h)	1291				514	811

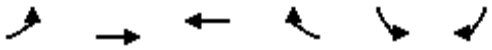
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	76	98	272	217
Volume Left	76	0	0	76
Volume Right	0	0	87	141
cSH	1291	1700	1700	674
Volume to Capacity	0.06	0.06	0.16	0.32
Queue Length 95th (ft)	5	0	0	35
Control Delay (s)	8.0	0.0	0.0	12.9
Lane LOS	A			B
Approach Delay (s)	3.5		0.0	12.9
Approach LOS				B

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	2530	0	0	2550	650	130	360	280	0	0	0
Future Volume (vph)	140	2530	0	0	2550	650	130	360	280	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frpb, ped/bikes	1.00	1.00			1.00	0.96		0.99				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1519		3279				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1519		3279				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	2663	0	0	2684	684	137	379	295	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	91	0	2	0	0	0	0
Lane Group Flow (vph)	147	2663	0	0	2684	593	0	809	0	0	0	0
Confl. Peds. (#/hr)	15		2			15	1		20			
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	18.0	99.1			76.7	76.7		41.1				
Effective Green, g (s)	18.4	100.0			77.6	77.6		42.0				
Actuated g/C Ratio	0.12	0.67			0.52	0.52		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	217	3390			2630	785		918				
v/s Ratio Prot	0.08	c0.52			c0.53			c0.25				
v/s Ratio Perm						0.39						
v/c Ratio	0.68	0.79			1.02	0.76		0.88				
Uniform Delay, d1	63.0	17.5			36.2	28.7		51.6				
Progression Factor	0.83	0.76			1.00	1.00		1.00				
Incremental Delay, d2	0.6	0.2			22.9	6.7		9.7				
Delay (s)	52.9	13.5			59.1	35.3		61.3				
Level of Service	D	B			E	D		E				
Approach Delay (s)		15.6			54.3			61.3			0.0	
Approach LOS		B			D			E			A	

Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	1360	570	140	0	0
Future Volume (Veh/h)	130	1360	570	140	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	1478	620	152	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		345	945			
pX, platoon unblocked	0.94				0.75	0.94
vC, conflicting volume	772				1717	386
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	642				947	233
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	84				100	100
cM capacity (veh/h)	887				163	726

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	141	739	739	413	359
Volume Left	141	0	0	0	0
Volume Right	0	0	0	0	152
cSH	887	1700	1700	1700	1700
Volume to Capacity	0.16	0.43	0.43	0.24	0.21
Queue Length 95th (ft)	14	0	0	0	0
Control Delay (s)	9.8	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.9			0.0	
Approach LOS					

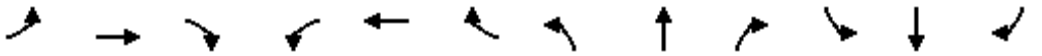
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	130	0	0	590	360	280
Future Volume (vph)	130	0	0	590	360	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	0	0	641	391	304

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	141	641	391	304
Volume Left (vph)	141	0	391	0
Volume Right (vph)	0	641	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.9	4.7	6.2	5.7
Degree Utilization, x	0.27	0.84	0.67	0.48
Capacity (veh/h)	499	751	565	624
Control Delay (s)	12.4	27.4	19.7	12.6
Approach Delay (s)	12.4	27.4	16.6	
Approach LOS	B	D	C	

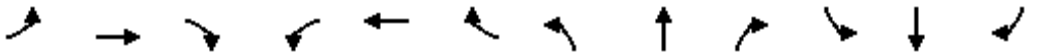
Intersection Summary			
Delay	20.9		
Level of Service	C		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	440	50	150	20	20	30	60	130	10	20	200	190
Future Volume (vph)	440	50	150	20	20	30	60	130	10	20	200	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	478	54	163	22	22	33	65	141	11	22	217	207

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	505	190	77	217	239	207
Volume Left (vph)	478	0	22	65	22	0
Volume Right (vph)	0	163	33	11	0	207
Hadj (s)	0.51	-0.57	-0.17	0.06	0.08	-0.67
Departure Headway (s)	7.3	6.2	7.8	7.5	7.4	6.6
Degree Utilization, x	1.03	0.33	0.17	0.45	0.49	0.38
Capacity (veh/h)	485	567	432	457	478	531
Control Delay (s)	73.1	11.0	12.3	16.7	16.1	12.5
Approach Delay (s)	56.2		12.3	16.7	14.4	
Approach LOS	F		B	C	B	

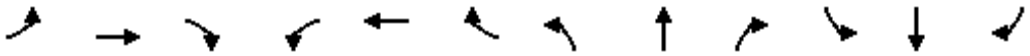
Intersection Summary				
Delay	34.9			
Level of Service	D			
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	690	290	430	480	0	0	0	0	400	550	1080
Future Volume (vph)	0	690	290	430	480	0	0	0	0	400	550	1080
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.3	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	750	315	467	522	0	0	0	0	435	598	1174
RTOR Reduction (vph)	0	0	163	0	0	0	0	0	0	0	0	87
Lane Group Flow (vph)	0	750	152	467	522	0	0	0	0	435	598	1087
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.6	26.6	15.1	46.1					64.1	64.1	64.1
Effective Green, g (s)		27.5	27.5	15.2	47.0					65.0	65.0	65.0
Actuated g/C Ratio		0.23	0.23	0.13	0.39					0.54	0.54	0.54
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		811	362	434	1386					872	1836	857
v/s Ratio Prot		c0.21		c0.14	0.15							
v/s Ratio Perm			0.10							0.27	0.18	c0.69
v/c Ratio		0.92	0.42	1.08	0.38					0.50	0.33	1.27
Uniform Delay, d1		45.2	39.4	52.4	26.0					17.3	15.3	27.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		17.9	3.5	65.1	0.8					0.2	0.0	130.0
Delay (s)		63.1	43.0	117.5	26.8					17.4	15.3	157.5
Level of Service		E	D	F	C					B	B	F
Approach Delay (s)		57.1			69.6			0.0			91.3	
Approach LOS		E			E			A			F	

Intersection Summary			
HCM 2000 Control Delay	77.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		

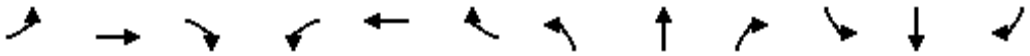
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	60	50	0	0	0	0	0	0	1620	150
Future Volume (Veh/h)	0	0	60	50	0	0	0	0	0	0	1620	150
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	65	54	0	0	0	0	0	0	1761	163
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1842	1842	668	652	1924	0	1924			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1842	1842	668	652	1924	0	1924			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	84	82	100	100	100			100		
cM capacity (veh/h)	47	74	400	296	66	1084	303			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	65	54	704	704	515
Volume Left	0	54	0	0	0
Volume Right	65	0	0	0	163
cSH	400	296	1700	1700	1700
Volume to Capacity	0.16	0.18	0.41	0.41	0.30
Queue Length 95th (ft)	14	16	0	0	0
Control Delay (s)	15.7	19.9	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	15.7	19.9	0.0		
Approach LOS	C	C			

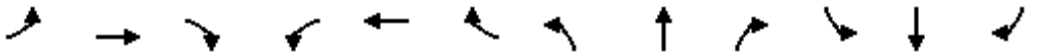
Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	53.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	440	260	110	170	0	0	0	0	400	860	490
Future Volume (vph)	0	440	260	110	170	0	0	0	0	400	860	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.95	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3471					1770	4808	
Flt Permitted		1.00	1.00		0.62					0.95	1.00	
Satd. Flow (perm)		1863	1583		2177					1770	4808	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	478	283	120	185	0	0	0	0	435	935	533
RTOR Reduction (vph)	0	0	38	0	0	0	0	0	0	0	158	0
Lane Group Flow (vph)	0	478	245	0	305	0	0	0	0	435	1310	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		25.3	25.3		25.3					26.7	26.7	
Effective Green, g (s)		28.0	28.0		28.0					29.0	29.0	
Actuated g/C Ratio		0.43	0.43		0.43					0.45	0.45	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		802	681		937					789	2145	
v/s Ratio Prot		c0.26									c0.27	
v/s Ratio Perm			0.16		0.14					0.25		
v/c Ratio		0.60	0.36		0.33					0.55	0.61	
Uniform Delay, d1		14.2	12.5		12.2					13.2	13.7	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		3.3	1.5		0.9					2.8	1.3	
Delay (s)		17.4	13.9		13.2					16.0	15.0	
Level of Service		B	B		B					B	B	
Approach Delay (s)		16.1			13.2			0.0			15.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

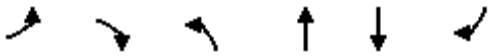


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1100	360	50	700	0	0	0	0	730	1100	660
Future Volume (vph)	0	1100	360	50	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.4	6.7						6.3	6.3
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3408		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3408		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1196	391	54	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	31	0	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	1556	0	54	761	0	0	0	0	0	1989	663
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		31.5		3.4	37.6						40.4	40.4
Effective Green, g (s)		29.7		3.4	37.5						39.5	39.5
Actuated g/C Ratio		0.33		0.04	0.42						0.44	0.44
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1124		66	1474						2068	597
v/s Ratio Prot		c0.46		c0.03	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		1.38		0.82	0.52						1.08dl	1.11
Uniform Delay, d1		30.1		43.0	19.5						24.5	25.2
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		178.3		50.1	1.3						12.0	70.7
Delay (s)		208.5		93.1	20.8						36.5	96.0
Level of Service		F		F	C						D	F
Approach Delay (s)		208.5			25.6			0.0			52.3	
Approach LOS		F			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	96.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



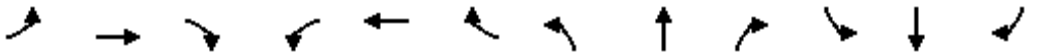
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	330	1280	1700	1270	1180	130
Future Volume (vph)	330	1280	1700	1270	1180	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2787	3433	5085	5085	1566
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2787	3433	5085	5085	1566
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.92
Adj. Flow (vph)	359	1347	1789	1337	1283	141
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	359	1347	1789	1337	1283	136
Confl. Peds. (#/hr)			3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	23.0	88.0	65.0	99.0	30.0	53.0
Effective Green, g (s)	23.0	88.0	65.0	99.0	30.0	53.0
Actuated g/C Ratio	0.18	0.68	0.50	0.76	0.23	0.41
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	1972	1716	3872	1173	686
v/s Ratio Prot	c0.20	0.34	c0.52	0.26	c0.25	0.04
v/s Ratio Perm		0.14				0.05
v/c Ratio	1.15	0.68	1.04	0.35	1.09	0.20
Uniform Delay, d1	53.5	12.6	32.5	5.0	50.0	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	96.8	1.0	33.7	0.2	55.7	0.1
Delay (s)	150.3	13.6	66.2	5.3	105.7	25.0
Level of Service	F	B	E	A	F	C
Approach Delay (s)	42.4			40.2	97.7	
Approach LOS	D			D	F	

Intersection Summary			
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	250	520	0	0	940	640	40	0	120	250	30	420
Future Volume (vph)	250	520	0	0	940	640	40	0	120	250	30	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.91	0.91	
Frt	1.00	1.00			1.00	0.85		0.90		1.00	0.87	
Flt Protected	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	3539			3539	1583		1653		1610	2933	
Flt Permitted	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	3539			3539	1583		1653		1610	2933	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	272	565	0	0	1022	696	43	0	130	272	33	457
RTOR Reduction (vph)	0	0	0	0	0	427	0	111	0	0	399	0
Lane Group Flow (vph)	272	565	0	0	1022	269	0	62	0	245	118	0
Turn Type	Prot	NA			NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6						
Actuated Green, G (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Effective Green, g (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Actuated g/C Ratio	0.12	0.56			0.39	0.39		0.14		0.13	0.13	
Clearance Time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5		2.0		2.0	2.0	
Lane Grp Cap (vph)	214	1994			1366	611		238		204	372	
v/s Ratio Prot	c0.15	0.16			c0.29			c0.04		c0.15	0.04	
v/s Ratio Perm						0.17						
v/c Ratio	1.27	0.28			0.75	0.44		0.26		1.20	0.32	
Uniform Delay, d1	38.4	9.9			23.1	19.8		33.2		38.1	34.7	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	153.3	0.4			3.8	2.3		0.2		127.8	0.2	
Delay (s)	191.7	10.3			26.9	22.1		33.4		165.9	34.8	
Level of Service	F	B			C	C		C		F	C	
Approach Delay (s)		69.2			25.0			33.4			77.0	
Approach LOS		E			C			C			E	

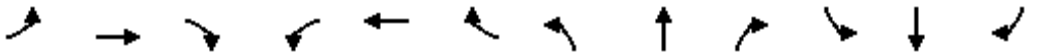
Intersection Summary			
HCM 2000 Control Delay	47.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	87.3	Sum of lost time (s)	19.3
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



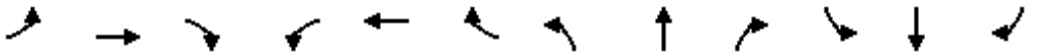
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	410	70	650	670	0	0	0	0	350	40	370
Future Volume (vph)	0	410	70	650	670	0	0	0	0	350	40	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.5					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3453		1770	1863					1681	1701	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3453		1770	1863					1681	1701	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	446	76	707	728	0	0	0	0	380	43	402
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	504	0	707	728	0	0	0	0	201	222	329
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Split	NA					Split	NA	custom
Protected Phases		7		8	8					6	6	6
Permitted Phases												7
Actuated Green, G (s)		14.3		30.3	30.3					10.6	10.6	24.9
Effective Green, g (s)		14.3		30.6	31.0					12.8	12.8	29.3
Actuated g/C Ratio		0.21		0.44	0.45					0.18	0.18	0.42
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		711		780	832					310	313	709
v/s Ratio Prot		c0.15		c0.40	0.39					0.12	c0.13	0.09
v/s Ratio Perm												0.12
v/c Ratio		0.71		0.91	0.88					0.65	0.71	0.46
Uniform Delay, d1		25.6		18.1	17.4					26.2	26.6	14.4
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2		13.8	9.9					4.6	7.2	0.5
Delay (s)		28.9		31.9	27.3					30.8	33.7	14.9
Level of Service		C		C	C					C	C	B
Approach Delay (s)		28.9			29.6			0.0			23.8	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	69.4	Sum of lost time (s)	11.7
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



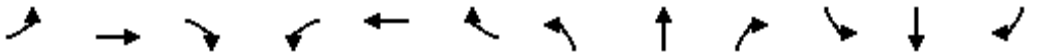
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Future Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.4	5.6		4.0	4.0		6.2	7.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1624		1770	4945		1770	5052	
Flt Permitted	0.45	1.00		0.55	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	831	1809		1020	1624		1770	4945		1770	5052	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	250	33	1728	391	272	576	22
RTOR Reduction (vph)	0	6	0	0	165	0	0	30	0	0	3	0
Lane Group Flow (vph)	43	190	0	413	128	0	33	2089	0	272	595	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.1	43.1		42.4	42.4		3.6	46.1		19.0	60.8	
Effective Green, g (s)	43.1	43.1		42.7	41.5		3.6	47.5		16.8	59.9	
Actuated g/C Ratio	0.35	0.35		0.35	0.34		0.03	0.39		0.14	0.49	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	294	641		358	554		52	1931		244	2488	
v/s Ratio Prot		0.11			0.08		0.02	c0.42		c0.15	0.12	
v/s Ratio Perm	0.05			c0.41								
v/c Ratio	0.15	0.30		1.15	0.23		0.63	1.08		1.11	0.24	
Uniform Delay, d1	26.7	28.3		39.4	28.6		58.3	37.0		52.4	17.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		96.3	0.2		17.1	46.6		91.9	0.2	
Delay (s)	26.8	28.4		135.7	28.9		75.4	83.6		144.3	18.0	
Level of Service	C	C		F	C		E	F		F	B	
Approach Delay (s)		28.1			91.4			83.5			57.5	
Approach LOS		C			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	75.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	16.6
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



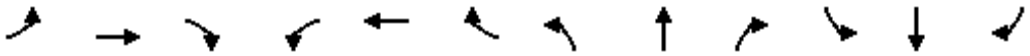
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	610	1050	280	250	960	170	450	1050	240	190	700	330
Future Volume (vph)	610	1050	280	250	960	170	450	1050	240	190	700	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.2		4.0	4.1		4.0	3.9		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3428		1770	3450		1770	4930		1770	5085	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3428		1770	3450		1770	4930		1770	5085	1569
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	663	1141	304	272	1043	185	489	1141	261	207	761	359
RTOR Reduction (vph)	0	16	0	0	9	0	0	25	0	0	0	50
Lane Group Flow (vph)	663	1429	0	272	1219	0	489	1377	0	207	761	309
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	38.6	58.2		22.2	41.2		28.6	42.1		8.6	22.0	60.6
Effective Green, g (s)	39.0	59.2		22.6	42.9		29.0	43.1		9.0	23.0	61.4
Actuated g/C Ratio	0.26	0.39		0.15	0.29		0.19	0.29		0.06	0.15	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	460	1352		266	986		342	1416		106	779	642
v/s Ratio Prot	c0.37	0.42		0.15	c0.35		c0.28	c0.28		c0.12	0.15	0.13
v/s Ratio Perm												0.07
v/c Ratio	1.44	1.06		1.02	1.24		1.43	0.97		1.95	0.98	0.48
Uniform Delay, d1	55.5	45.4		63.7	53.5		60.5	52.9		70.5	63.2	32.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	210.6	41.1		61.1	115.0		209.6	18.2		461.1	27.1	0.2
Delay (s)	266.1	86.5		124.8	168.6		270.1	71.1		531.6	90.3	32.8
Level of Service	F	F		F	F		F	E		F	F	C
Approach Delay (s)		143.0			160.6			122.5			143.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	141.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.2
Intersection Capacity Utilization	119.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	910	290	230	370	80	270	240	630	70	110	70
Future Volume (vph)	160	910	290	230	370	80	270	240	630	70	110	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.71	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	989	315	250	402	87	293	261	685	76	120	76
RTOR Reduction (vph)	0	0	172	0	0	56	0	0	58	0	0	58
Lane Group Flow (vph)	174	989	143	250	402	31	293	261	627	76	120	18
Confl. Peds. (#/hr)			27	27		170	23		15	15		23
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	10.8	33.2	41.1	10.1	32.5	32.5	7.9	24.0	34.1	6.6	22.7	22.7
Effective Green, g (s)	11.7	34.1	41.9	10.5	33.4	33.4	8.3	23.4	31.9	7.0	22.2	22.2
Actuated g/C Ratio	0.13	0.37	0.45	0.11	0.36	0.36	0.09	0.25	0.34	0.08	0.24	0.24
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	223	1304	1227	389	1277	408	308	471	536	133	1220	368
v/s Ratio Prot	0.10	c0.28	0.01	0.07	0.11		c0.09	0.14	c0.11	0.04	0.02	
v/s Ratio Perm			0.04			0.03			0.29			0.01
v/c Ratio	0.78	0.76	0.12	0.64	0.31	0.08	0.95	0.55	1.17	0.57	0.10	0.05
Uniform Delay, d1	39.2	25.6	14.6	39.2	21.3	19.4	41.9	30.0	30.3	41.3	27.4	27.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.9	4.2	0.0	2.7	0.6	0.4	38.0	2.1	95.3	3.6	0.1	0.1
Delay (s)	54.1	29.8	14.6	41.9	21.9	19.8	79.9	32.1	125.6	44.9	27.4	27.1
Level of Service	D	C	B	D	C	B	E	C	F	D	C	C
Approach Delay (s)		29.4			28.5			95.1			32.2	
Approach LOS		C			C			F			C	

Intersection Summary			
HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	92.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.94			0.95			0.93	
Flt Protected		0.97			1.00			0.99			0.99	
Satd. Flow (prot)		1784			1727			1722			1698	
Flt Permitted		0.62			0.92			0.86			0.79	
Satd. Flow (perm)		1147			1592			1495			1365	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	174	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	3	0	0	17	0	0	19	0	0	32	0
Lane Group Flow (vph)	0	1029	0	0	342	0	0	308	0	0	55	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		79.2			79.2			21.0			21.0	
Effective Green, g (s)		80.1			80.1			21.9			21.9	
Actuated g/C Ratio		0.73			0.73			0.20			0.20	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		835			1159			297			271	
v/s Ratio Prot												
v/s Ratio Perm		c0.90			0.22			c0.21			0.04	
v/c Ratio		1.23			0.30			1.04			0.20	
Uniform Delay, d1		15.0			5.2			44.0			36.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		115.1			0.6			62.0			0.1	
Delay (s)		130.0			5.8			106.0			36.9	
Level of Service		F			A			F			D	
Approach Delay (s)		130.0			5.8			106.0			36.9	
Approach LOS		F			A			F			D	

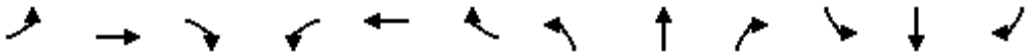
Intersection Summary			
HCM 2000 Control Delay	96.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1110	500	240	500	180	270
Future Volume (vph)	1110	500	240	500	180	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.7		3.1	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.95		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4686		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4686		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1207	543	261	543	196	293
RTOR Reduction (vph)	90	0	0	0	0	228
Lane Group Flow (vph)	1660	0	261	543	196	65
Confl. Peds. (#/hr)		53	53		46	81
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.6		12.6	46.6	14.8	14.8
Effective Green, g (s)	31.8		13.9	47.5	15.7	15.7
Actuated g/C Ratio	0.45		0.20	0.67	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2092		345	2360	390	349
v/s Ratio Prot	c0.35		c0.15	0.15	c0.11	0.04
v/s Ratio Perm						
v/c Ratio	0.79		0.76	0.23	0.50	0.19
Uniform Delay, d1	16.9		27.1	4.7	24.3	22.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2		8.1	0.2	0.4	0.1
Delay (s)	20.1		35.2	4.9	24.7	22.6
Level of Service	C		D	A	C	C
Approach Delay (s)	20.1			14.7	23.5	
Approach LOS	C			B	C	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	9.8
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		

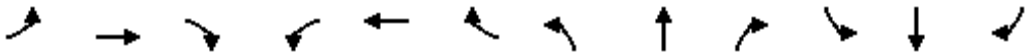
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	30	20	60	40	130	30	90	190	70
Future Volume (vph)	20	20	20	30	20	60	40	130	30	90	190	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	33	22	65	43	141	33	98	207	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	217	381
Volume Left (vph)	22	33	43	98
Volume Right (vph)	22	65	33	76
Hadj (s)	-0.10	-0.24	-0.02	-0.03
Departure Headway (s)	5.4	5.2	4.9	4.7
Degree Utilization, x	0.10	0.17	0.29	0.49
Capacity (veh/h)	576	614	701	743
Control Delay (s)	9.0	9.3	9.9	12.1
Approach Delay (s)	9.0	9.3	9.9	12.1
Approach LOS	A	A	A	B

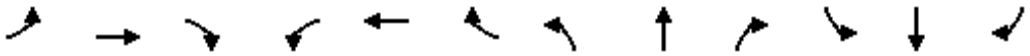
Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	20	30	40	20	30	130	30	40	130	70
Future Volume (vph)	40	20	20	30	40	20	30	130	30	40	130	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	22	33	43	22	33	141	33	43	141	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	87	98	207	260
Volume Left (vph)	43	33	33	43
Volume Right (vph)	22	22	33	76
Hadj (s)	-0.02	-0.03	-0.03	-0.11
Departure Headway (s)	5.1	5.1	4.7	4.5
Degree Utilization, x	0.12	0.14	0.27	0.33
Capacity (veh/h)	630	635	732	753
Control Delay (s)	8.9	8.9	9.4	9.7
Approach Delay (s)	8.9	8.9	9.4	9.7
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.4			
Level of Service	A			
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	85	20	20	30	260	300	10	100	20
Future Volume (vph)	20	20	20	85	20	20	30	260	300	10	100	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	92	22	22	33	283	326	11	109	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	136	316	326	142
Volume Left (vph)	22	92	33	0	11
Volume Right (vph)	22	22	0	326	22
Hadj (s)	-0.10	0.07	0.09	-0.67	-0.04
Departure Headway (s)	5.7	5.7	5.3	4.6	5.2
Degree Utilization, x	0.10	0.22	0.47	0.41	0.21
Capacity (veh/h)	568	579	659	764	649
Control Delay (s)	9.3	10.2	11.8	9.6	9.6
Approach Delay (s)	9.3	10.2	10.7		9.6
Approach LOS	A	B	B		A

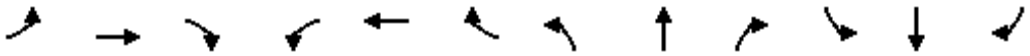
Intersection Summary				
Delay	10.4			
Level of Service	B			
Intersection Capacity Utilization	41.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	40	40	60	50	60	110
Future Volume (vph)	40	40	60	50	60	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	43	65	54	65	120

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	86	119	185
Volume Left (vph)	0	65	65
Volume Right (vph)	43	0	120
Hadj (s)	-0.27	0.14	-0.28
Departure Headway (s)	4.2	4.5	4.1
Degree Utilization, x	0.10	0.15	0.21
Capacity (veh/h)	818	751	840
Control Delay (s)	7.6	8.3	8.2
Approach Delay (s)	7.6	8.3	8.2
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		



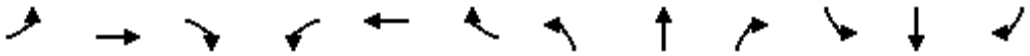
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	30	30	50	30	20	80	160	140	20	80	20
Future Volume (vph)	30	30	30	50	30	20	80	160	140	20	80	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	33	33	54	33	22	87	174	152	22	87	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	99	109	413	131
Volume Left (vph)	33	54	87	22
Volume Right (vph)	33	22	152	22
Hadj (s)	-0.10	0.01	-0.14	-0.03
Departure Headway (s)	5.3	5.4	4.5	4.9
Degree Utilization, x	0.14	0.16	0.52	0.18
Capacity (veh/h)	607	600	773	676
Control Delay (s)	9.2	9.4	12.2	9.0
Approach Delay (s)	9.2	9.4	12.2	9.0
Approach LOS	A	A	B	A

Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	50.7%	ICU Level of Service	A	
Analysis Period (min)	15			

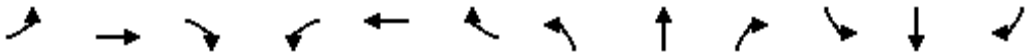
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	40	110	20	60	50	120	300	30	20	70	170
Future Volume (vph)	270	40	110	20	60	50	120	300	30	20	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.99		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1737			1742		1765	1833		1764	1637	
Flt Permitted		0.76			0.92		0.57	1.00		0.47	1.00	
Satd. Flow (perm)		1357			1608		1068	1833		873	1637	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	43	120	22	65	54	130	326	33	22	76	185
RTOR Reduction (vph)	0	26	0	0	32	0	0	4	0	0	104	0
Lane Group Flow (vph)	0	430	0	0	109	0	130	355	0	22	157	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		20.7			20.7		22.5	22.5		22.5	22.5	
Effective Green, g (s)		20.7			20.7		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.40			0.40		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		548			650		469	805		383	719	
v/s Ratio Prot								c0.19			0.10	
v/s Ratio Perm		c0.32			0.07		0.12			0.03		
v/c Ratio		0.79			0.17		0.28	0.44		0.06	0.22	
Uniform Delay, d1		13.3			9.7		9.2	10.0		8.3	8.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		6.7			0.0		1.5	1.7		0.3	0.7	
Delay (s)		20.1			9.8		10.6	11.7		8.5	9.6	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		20.1			9.8			11.4			9.5	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1060	250	300	590	20	130	20	220	30	20	20
Future Volume (vph)	70	1060	250	300	590	20	130	20	220	30	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	4.1		2.7	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	1.00			0.92			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1765	4898		1769	3517			1668			1745	
Flt Permitted	0.40	1.00		0.15	1.00			0.86			0.77	
Satd. Flow (perm)	743	4898		279	3517			1464			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1152	272	326	641	22	141	22	239	33	22	22
RTOR Reduction (vph)	0	50	0	0	3	0	0	89	0	0	16	0
Lane Group Flow (vph)	76	1374	0	326	660	0	0	313	0	0	61	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	25.3	22.2		35.9	28.4			16.4			16.4	
Effective Green, g (s)	27.1	23.1		37.6	29.3			17.3			17.3	
Actuated g/C Ratio	0.44	0.37		0.61	0.47			0.28			0.28	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	390	1821		430	1659			407			382	
v/s Ratio Prot	0.01	0.28		c0.13	0.19							
v/s Ratio Perm	0.07			c0.33				c0.21			0.04	
v/c Ratio	0.19	0.75		0.76	0.40			0.77			0.16	
Uniform Delay, d1	10.3	17.0		11.3	10.7			20.6			16.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	3.0		6.7	0.7			7.7			0.1	
Delay (s)	10.4	20.0		18.0	11.4			28.3			17.0	
Level of Service	B	B		B	B			C			B	
Approach Delay (s)		19.5			13.6			28.3			17.0	
Approach LOS		B			B			C			B	

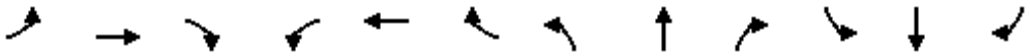
Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	11.5
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Future Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	22	33	11	22	22	22	120	33	43	174	98

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	175	55	175	315
Volume Left (vph)	120	11	22	43
Volume Right (vph)	33	22	33	98
Hadj (s)	0.06	-0.17	-0.05	-0.13
Departure Headway (s)	5.2	5.2	4.9	4.6
Degree Utilization, x	0.25	0.08	0.24	0.40
Capacity (veh/h)	631	608	692	739
Control Delay (s)	10.0	8.6	9.4	10.7
Approach Delay (s)	10.0	8.6	9.4	10.7
Approach LOS	A	A	A	B

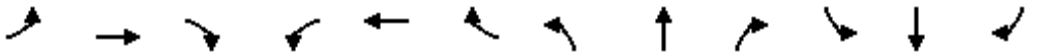
Intersection Summary			
Delay	10.1		
Level of Service	B		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	60	10	20	20	40	100	20	20	140	50
Future Volume (vph)	40	20	60	10	20	20	40	100	20	20	140	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	65	11	22	22	43	109	22	22	152	54

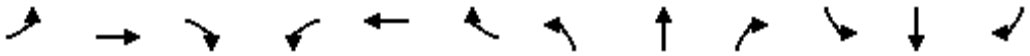
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	130	55	174	228
Volume Left (vph)	43	11	43	22
Volume Right (vph)	65	22	22	54
Hadj (s)	-0.20	-0.17	0.01	-0.09
Departure Headway (s)	4.7	4.9	4.6	4.5
Degree Utilization, x	0.17	0.07	0.22	0.28
Capacity (veh/h)	699	665	737	762
Control Delay (s)	8.7	8.2	9.0	9.2
Approach Delay (s)	8.7	8.2	9.0	9.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.9			
Level of Service	A			
Intersection Capacity Utilization	36.6%	ICU Level of Service	A	
Analysis Period (min)	15			



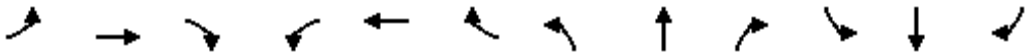
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	670	60	30	580	160	0	0	30	220	160	330
Future Volume (vph)	580	670	60	30	580	160	0	0	30	220	160	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3487		1770	3412				1611	1681	1736	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3487		1770	3412				1611	1681	1736	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	728	65	33	630	174	0	0	33	239	174	359
RTOR Reduction (vph)	0	7	0	0	28	0	0	0	0	0	0	258
Lane Group Flow (vph)	630	786	0	33	776	0	0	0	33	127	286	101
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	13.5	36.5		2.0	25.0				71.4	18.3	18.3	18.3
Effective Green, g (s)	13.9	37.4		2.4	25.9				71.4	19.6	19.6	19.6
Actuated g/C Ratio	0.19	0.52		0.03	0.36				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	668	1826		59	1237				1611	461	476	428
v/s Ratio Prot	c0.18	0.23		0.02	c0.23					0.08	c0.16	
v/s Ratio Perm									0.02			0.06
v/c Ratio	0.94	0.43		0.56	0.63				0.02	0.28	0.60	0.24
Uniform Delay, d1	28.4	10.5		34.0	18.8				0.0	20.3	22.5	20.1
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	21.6	0.7		6.4	2.4				0.0	0.5	2.7	0.5
Delay (s)	50.0	11.2		40.4	21.2				0.0	20.9	25.2	20.6
Level of Service	D	B		D	C				A	C	C	C
Approach Delay (s)		28.4			21.9			0.0			22.3	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1440	110	70	1010	60	120	110	140	40	90	20
Future Volume (vph)	70	1440	110	70	1010	60	120	110	140	40	90	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			3.9	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3403		1671	3405		1646	1575			1704	
Flt Permitted	0.95	1.00		0.95	1.00		0.49	1.00			0.45	
Satd. Flow (perm)	1678	3403		1671	3405		849	1575			773	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1565	120	76	1098	65	130	120	152	43	98	22
RTOR Reduction (vph)	0	3	0	0	3	0	0	34	0	0	4	0
Lane Group Flow (vph)	76	1682	0	76	1160	0	130	238	0	0	159	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	10.9	94.7		10.0	93.8		26.1	26.1			26.1	
Effective Green, g (s)	11.3	95.6		10.4	94.7		27.0	27.0			27.1	
Actuated g/C Ratio	0.08	0.66		0.07	0.65		0.19	0.19			0.19	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	130	2243		119	2223		158	293			144	
v/s Ratio Prot	0.05	c0.49		c0.05	0.34			0.15				
v/s Ratio Perm							0.15				c0.21	
v/c Ratio	0.58	0.75		0.64	0.52		0.82	0.81			1.10	
Uniform Delay, d1	64.6	16.6		65.5	13.2		56.7	56.6			58.9	
Progression Factor	1.00	1.00		1.00	0.82		1.00	1.00			1.00	
Incremental Delay, d2	4.3	2.4		3.0	0.3		26.8	14.8			105.5	
Delay (s)	68.9	19.0		68.7	11.2		83.5	71.4			164.5	
Level of Service	E	B		E	B		F	E			F	
Approach Delay (s)		21.1			14.7			75.3			164.5	
Approach LOS		C			B			E			F	

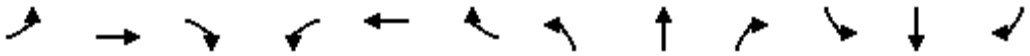
Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Future Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	3.4		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3464		1770	3380		1770	3539	1526	1770	3180	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3464		1770	3380		1770	3539	1526	1770	3180	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	1533	174	239	913	239	109	467	261	337	239	174
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	62	0	90	0
Lane Group Flow (vph)	478	1701	0	239	1136	0	109	467	199	337	323	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	31.6	59.1		15.6	42.6		12.5	25.9	41.5	25.7	39.2	
Effective Green, g (s)	32.5	60.6		16.0	44.0		12.9	26.9	42.3	26.1	40.1	
Actuated g/C Ratio	0.22	0.42		0.11	0.30		0.09	0.19	0.29	0.18	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	396	1447		195	1025		157	656	445	318	879	
v/s Ratio Prot	c0.27	c0.49		0.14	0.34		0.06	c0.13	0.05	c0.19	0.10	
v/s Ratio Perm									0.08			
v/c Ratio	1.21	1.18		1.23	1.11		0.69	0.71	0.45	1.06	0.37	
Uniform Delay, d1	56.2	42.2		64.5	50.5		64.1	55.4	41.8	59.5	42.2	
Progression Factor	1.07	0.95		1.10	0.93		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	111.0	85.2		133.9	61.0		10.2	3.9	0.3	67.1	0.2	
Delay (s)	171.4	125.4		204.6	107.7		74.4	59.3	42.1	126.6	42.4	
Level of Service	F	F		F	F		E	E	D	F	D	
Approach Delay (s)		135.5			124.4			55.9			80.2	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	111.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	15.5
Intersection Capacity Utilization	105.8%	ICU Level of Service	G
Analysis Period (min)	15		

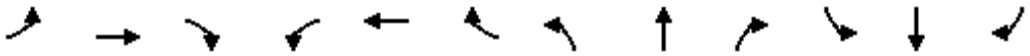
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1930	100	160	1280	60	100	20	220	50	20	20
Future Volume (vph)	10	1930	100	160	1280	60	100	20	220	50	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5039		1770	3512			1788	1553		1742	
Flt Permitted	0.95	1.00		0.95	1.00			0.67	1.00		0.63	
Satd. Flow (perm)	1770	5039		1770	3512			1248	1553		1126	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	2098	109	174	1391	65	109	22	239	54	22	22
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	202	0	8	0
Lane Group Flow (vph)	11	2204	0	174	1454	0	0	131	37	0	90	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	2.0	90.1		18.6	106.7			21.7	21.7		21.7	
Effective Green, g (s)	2.4	91.4		19.0	108.0			22.6	22.6		22.6	
Actuated g/C Ratio	0.02	0.63		0.13	0.74			0.16	0.16		0.16	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	29	3176		231	2615			194	242		175	
v/s Ratio Prot	0.01	c0.44		c0.10	0.41							
v/s Ratio Perm								c0.10	0.02		0.08	
v/c Ratio	0.38	0.69		0.75	0.56			0.68	0.15		0.52	
Uniform Delay, d1	70.6	17.6		60.7	8.1			57.7	52.9		56.2	
Progression Factor	0.86	1.21		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.3	0.1		11.6	0.9			7.1	0.1		1.1	
Delay (s)	61.0	21.4		72.4	8.9			64.8	53.0		57.3	
Level of Service	E	C		E	A			E	D		E	
Approach Delay (s)		21.6			15.7			57.2			57.3	
Approach LOS		C			B			E			E	

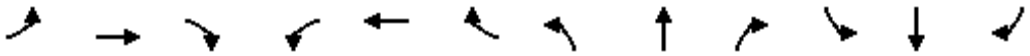
Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	370	2040	0	0	0	0	0	350	190
Future Volume (vph)	0	0	0	370	2040	0	0	0	0	0	350	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					3.8						3.8	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.95	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5039						4778	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5039						4778	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	402	2217	0	0	0	0	0	380	207
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2607	0	0	0	0	0	587	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.3						19.1	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3544						1013	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.52							
v/c Ratio					0.74						0.58	
Uniform Delay, d1					8.2						31.8	
Progression Factor					1.00						0.93	
Incremental Delay, d2					1.4						0.0	
Delay (s)					9.6						29.7	
Level of Service					A						C	
Approach Delay (s)		0.0			9.6			0.0			29.7	
Approach LOS		A			A			A			C	

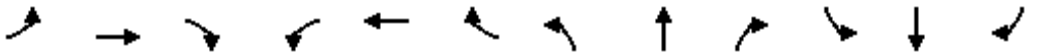
Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	7.6
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1650	160	0	0	0	0	0	0	310	430	0
Future Volume (vph)	0	1650	160	0	0	0	0	0	0	310	430	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									3.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5007									4939	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5007									4939	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1793	174	0	0	0	0	0	0	337	467	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	15	0
Lane Group Flow (vph)	0	1956	0	0	0	0	0	0	0	0	789	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		58.8									22.2	
Effective Green, g (s)		58.8									24.2	
Actuated g/C Ratio		0.65									0.27	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3271									1328	
v/s Ratio Prot		c0.39										
v/s Ratio Perm											0.16	
v/c Ratio		0.60									0.59	
Uniform Delay, d1		8.9									28.6	
Progression Factor		0.39									0.77	
Incremental Delay, d2		0.5									0.6	
Delay (s)		4.0									22.8	
Level of Service		A									C	
Approach Delay (s)		4.0			0.0			0.0			22.8	
Approach LOS		A			A			A			C	

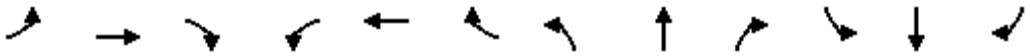
Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	7.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1270	120	150	1410	120	120	50	130	80	80	210
Future Volume (vph)	240	1270	120	150	1410	120	120	50	130	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1380	130	163	1533	130	130	54	141	87	87	228
RTOR Reduction (vph)	0	6	0	0	0	121	0	0	118	0	0	136
Lane Group Flow (vph)	261	1504	0	163	1533	9	130	54	23	87	87	92
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	7.0	40.8		9.0	42.9	5.7	7.0	12.2	12.2	5.7	11.8	11.8
Effective Green, g (s)	7.0	42.3		9.0	44.3	5.7	7.0	14.0	14.0	5.7	12.7	12.7
Actuated g/C Ratio	0.08	0.49		0.10	0.51	0.07	0.08	0.16	0.16	0.07	0.15	0.15
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	276	1698		183	1802	102	142	299	254	224	271	228
v/s Ratio Prot	0.08	0.43		c0.09	c0.43		c0.07	0.03		0.03	0.05	
v/s Ratio Perm						0.01			0.01			c0.06
v/c Ratio	0.95	0.89		0.89	0.85	0.08	0.92	0.18	0.09	0.39	0.32	0.40
Uniform Delay, d1	39.8	20.2		38.5	18.5	38.2	39.7	31.5	31.1	39.0	33.3	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	39.0	7.2		36.8	5.3	0.1	49.8	0.1	0.1	0.4	0.7	1.2
Delay (s)	78.8	27.4		75.3	23.8	38.3	89.5	31.6	31.1	39.4	34.0	34.9
Level of Service	E	C		E	C	D	F	C	C	D	C	C
Approach Delay (s)		35.0			29.4			54.6			35.7	
Approach LOS		C			C			D			D	

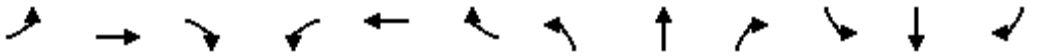
Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	200	1800	210	340	570	0	0	350	120
Future Volume (vph)	0	0	0	200	1800	210	340	570	0	0	350	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		2.9	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6262		1770	3539			3389	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6262		1770	3539			3389	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	211	1895	221	358	600	0	0	368	126
RTOR Reduction (vph)	0	0	0	0	15	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	0	0	0	2312	0	358	600	0	0	463	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					51.5		25.6	48.7			18.2	
Effective Green, g (s)					51.5		27.1	48.7			18.2	
Actuated g/C Ratio					0.47		0.25	0.44			0.17	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					2931		436	1566			560	
v/s Ratio Prot							c0.20	0.17			c0.14	
v/s Ratio Perm					0.37							
v/c Ratio					0.79		0.82	0.38			0.83	
Uniform Delay, d1					24.7		39.2	20.6			44.4	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					2.2		11.8	0.2			9.5	
Delay (s)					26.9		50.9	20.7			53.9	
Level of Service					C		D	C			D	
Approach Delay (s)		0.0			26.9			32.0			53.9	
Approach LOS		A			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	13.2
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1220	100	0	0	0	0	800	420	140	330	0
Future Volume (vph)	130	1220	100	0	0	0	0	800	420	140	330	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.7		4.2	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5059	1532					4775		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5059	1532					4775		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	1326	109	0	0	0	0	870	457	152	359	0
RTOR Reduction (vph)	0	0	65	0	0	0	0	83	0	0	0	0
Lane Group Flow (vph)	0	1467	44	0	0	0	0	1244	0	152	359	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		35.1	35.1					25.1		15.6	45.1	
Effective Green, g (s)		36.0	36.0					25.3		15.8	45.1	
Actuated g/C Ratio		0.40	0.40					0.28		0.18	0.50	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2023	612					1342		310	2548	
v/s Ratio Prot								c0.26		c0.09	0.07	
v/s Ratio Perm		0.29	0.03									
v/c Ratio		0.73	0.07					0.93		0.49	0.14	
Uniform Delay, d1		22.8	16.7					31.4		33.5	12.1	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		2.3	0.2					12.3		5.5	0.1	
Delay (s)		25.1	16.9					43.8		38.9	12.2	
Level of Service		C	B					D		D	B	
Approach Delay (s)		24.6			0.0			43.8			20.1	
Approach LOS		C			A			D			C	

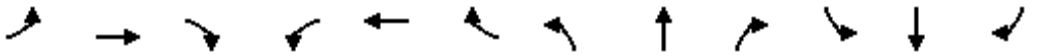
Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1430	760	510	1490	460	260
Future Volume (vph)	1430	760	510	1490	460	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.9	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1569	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1569	3433	3539	3433	1418
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1554	826	554	1620	500	283
RTOR Reduction (vph)	0	3	0	0	0	217
Lane Group Flow (vph)	1554	823	554	1620	500	66
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	40.6	60.1	15.8	61.6	19.5	19.5
Effective Green, g (s)	42.8	64.5	16.3	63.0	21.7	21.7
Actuated g/C Ratio	0.46	0.70	0.18	0.68	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1633	1159	603	2405	803	331
v/s Ratio Prot	c0.44	c0.17	c0.16	0.46	0.15	
v/s Ratio Perm		0.36				0.05
v/c Ratio	0.95	0.71	0.92	0.67	0.62	0.20
Uniform Delay, d1	24.0	8.5	37.5	8.8	31.8	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.4	1.7	18.7	1.5	1.1	0.1
Delay (s)	37.4	10.2	56.3	10.3	32.9	28.6
Level of Service	D	B	E	B	C	C
Approach Delay (s)	27.9			22.0	31.4	
Approach LOS	C			C	C	

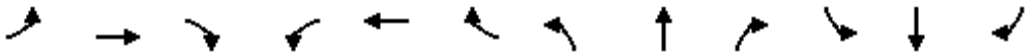
Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	92.7	Sum of lost time (s)	11.9
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



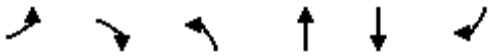
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1080	330	360	350	0	0	0	0	390	0	1180
Future Volume (vph)	0	1080	330	360	350	0	0	0	0	390	0	1180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1174	359	391	380	0	0	0	0	424	0	1283
RTOR Reduction (vph)	0	0	229	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1174	130	391	380	0	0	0	0	424	0	1283
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		26.2	26.2	13.6	44.0					21.4		75.0
Effective Green, g (s)		27.2	27.2	13.8	45.0					22.0		75.0
Actuated g/C Ratio		0.36	0.36	0.18	0.60					0.29		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1283	565	631	2123					519		1583
v/s Ratio Prot		0.33		0.11	0.11					0.24		
v/s Ratio Perm			0.08									c0.81
v/c Ratio		0.92	0.23	0.62	0.18					0.82		0.81
Uniform Delay, d1		22.8	16.6	28.2	6.7					24.6		0.0
Progression Factor		1.00	1.00	0.86	1.39					1.00		1.00
Incremental Delay, d2		11.6	1.0	0.7	0.1					9.2		4.6
Delay (s)		34.4	17.6	25.1	9.4					33.8		4.6
Level of Service		C	B	C	A					C		A
Approach Delay (s)		30.5			17.4			0.0			11.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	880	720	0	0	600	500	190	20	450	0	0	0
Future Volume (vph)	880	720	0	0	600	500	190	20	450	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			3.6	3.9			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (prot)	3433	3539			3274			1782	1583			
Flt Permitted	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (perm)	3433	3539			3274			1782	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	957	783	0	0	652	543	207	22	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	185	0	0	0	231	0	0	0
Lane Group Flow (vph)	957	783	0	0	1010	0	0	229	258	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	20.8	54.5			29.5			10.4	10.4			
Effective Green, g (s)	21.0	55.0			30.0			11.4	11.1			
Actuated g/C Ratio	0.28	0.73			0.40			0.15	0.15			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	961	2595			1309			270	234			
v/s Ratio Prot	c0.28	0.22			c0.31			0.13				
v/s Ratio Perm									c0.16			
v/c Ratio	1.00	0.30			0.77			0.85	1.10			
Uniform Delay, d1	27.0	3.4			19.5			31.0	31.9			
Progression Factor	1.38	0.64			1.00			1.00	1.00			
Incremental Delay, d2	21.9	0.2			4.4			20.4	89.2			
Delay (s)	59.2	2.4			24.0			51.4	121.1			
Level of Service	E	A			C			D	F			
Approach Delay (s)		33.7			24.0			98.9			0.0	
Approach LOS		C			C			F			A	

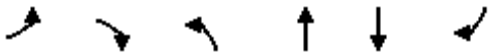
Intersection Summary			
HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	200	150	870	890	180
Future Volume (vph)	230	200	150	870	890	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1700		1770	3539	3450	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1700		1770	3539	3450	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	217	163	946	967	196
RTOR Reduction (vph)	26	0	0	0	11	0
Lane Group Flow (vph)	441	0	163	946	1152	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	37.9		16.0	83.1	62.6	
Effective Green, g (s)	37.9		16.0	83.1	62.6	
Actuated g/C Ratio	0.29		0.12	0.64	0.48	
Clearance Time (s)	4.5		4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	495		217	2262	1661	
v/s Ratio Prot	c0.26		c0.09	0.27	c0.33	
v/s Ratio Perm						
v/c Ratio	0.89		0.75	0.42	0.69	
Uniform Delay, d1	44.1		55.1	11.5	26.2	
Progression Factor	1.00		1.04	1.25	1.00	
Incremental Delay, d2	18.0		12.4	0.5	2.4	
Delay (s)	62.1		69.8	14.9	28.6	
Level of Service	E		E	B	C	
Approach Delay (s)	62.1			23.0	28.6	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

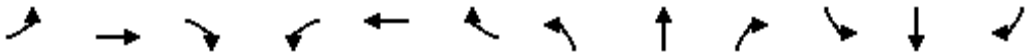
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	430	0	0	360	160
Future Volume (Veh/h)	0	430	0	0	360	160
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	467	0	0	391	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				897	1285	
pX, platoon unblocked						
vC, conflicting volume	478	282	565			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	478	282	565			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	35	100			
cM capacity (veh/h)	516	714	1003			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	467	261	304
Volume Left	0	0	0
Volume Right	467	0	174
cSH	714	1700	1700
Volume to Capacity	0.65	0.15	0.18
Queue Length 95th (ft)	122	0	0
Control Delay (s)	19.0	0.0	0.0
Lane LOS	C		
Approach Delay (s)	19.0	0.0	
Approach LOS	C		

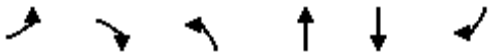
Intersection Summary			
Average Delay	8.6		
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	30	260	320	290	0	0	0	0	50	720	70
Future Volume (vph)	0	30	260	320	290	0	0	0	0	50	720	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.88		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1638		1770	1863						3485	
Flt Permitted		1.00		0.50	1.00						1.00	
Satd. Flow (perm)		1638		931	1863						3485	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	33	283	348	315	0	0	0	0	54	783	76
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	283	0	348	315	0	0	0	0	0	904	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		26.1		26.1	26.1						25.6	
Effective Green, g (s)		26.1		26.1	26.1						25.6	
Actuated g/C Ratio		0.44		0.44	0.44						0.43	
Clearance Time (s)		4.0		4.0	4.0						4.0	
Vehicle Extension (s)		3.0		3.0	3.0						3.0	
Lane Grp Cap (vph)		716		407	814						1494	
v/s Ratio Prot		0.17			0.17							
v/s Ratio Perm				c0.37							0.26	
v/c Ratio		0.40		0.86	0.39						0.61	
Uniform Delay, d1		11.4		15.1	11.4						13.2	
Progression Factor		1.00		1.00	1.00						1.00	
Incremental Delay, d2		0.4		15.9	0.3						1.8	
Delay (s)		11.8		31.0	11.7						15.0	
Level of Service		B		C	B						B	
Approach Delay (s)		11.8			21.8			0.0			15.0	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	59.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

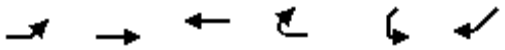
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	200	180	370	480	220
Future Volume (vph)	120	200	180	370	480	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.96	
Flt Protected	0.98			0.98	1.00	
Satd. Flow (prot)	1674			1833	1784	
Flt Permitted	0.98			0.51	1.00	
Satd. Flow (perm)	1674			942	1784	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	217	196	402	522	239
RTOR Reduction (vph)	89	0	0	0	22	0
Lane Group Flow (vph)	258	0	0	598	739	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	13.9			47.0	47.0	
Effective Green, g (s)	13.9			47.0	47.0	
Actuated g/C Ratio	0.20			0.68	0.68	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	337			642	1216	
v/s Ratio Prot	c0.15				0.41	
v/s Ratio Perm				c0.63		
v/c Ratio	0.77			0.93	0.61	
Uniform Delay, d1	26.0			9.5	5.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	10.0			22.2	2.3	
Delay (s)	36.0			31.7	8.2	
Level of Service	D			C	A	
Approach Delay (s)	36.0			31.7	8.2	
Approach LOS	D			C	A	

Intersection Summary			
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	68.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.0%	ICU Level of Service	F
Analysis Period (min)	15		

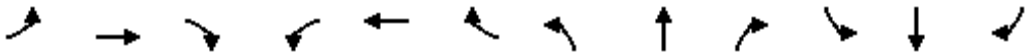
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	60	1090	1200	70	160	240
Future Volume (vph)	60	1090	1200	70	160	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	0.99		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3510		1678	
Flt Permitted	0.13	1.00	1.00		0.98	
Satd. Flow (perm)	237	3539	3510		1678	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1185	1304	76	174	261
RTOR Reduction (vph)	0	0	7	0	27	0
Lane Group Flow (vph)	65	1185	1373	0	408	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)	31.5	31.5	31.5		22.1	
Effective Green, g (s)	31.5	31.5	31.5		22.1	
Actuated g/C Ratio	0.51	0.51	0.51		0.36	
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	121	1809	1794		602	
v/s Ratio Prot		0.33	c0.39		c0.24	
v/s Ratio Perm	0.27					
v/c Ratio	0.54	0.66	0.77		0.68	
Uniform Delay, d1	10.1	11.1	12.1		16.7	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.5	0.9	2.0		6.0	
Delay (s)	14.7	11.9	14.1		22.8	
Level of Service	B	B	B		C	
Approach Delay (s)		12.1	14.1		22.8	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

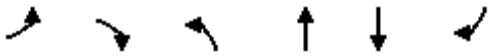
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	20	80	60	110	280	160	510	370	210	520	150
Future Volume (vph)	110	20	80	60	110	280	160	510	370	210	520	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.95			0.92		1.00	0.94		1.00	0.97	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1722			1695		1770	3316		1770	3420	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1722			1695		1770	3316		1770	3420	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	22	87	65	120	304	174	554	402	228	565	163
RTOR Reduction (vph)	0	22	0	0	59	0	0	131	0	0	26	0
Lane Group Flow (vph)	0	207	0	0	430	0	174	825	0	228	702	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		14.7			25.5		12.8	26.4		13.9	27.5	
Effective Green, g (s)		14.7			25.5		12.8	26.4		13.9	27.5	
Actuated g/C Ratio		0.15			0.26		0.13	0.27		0.14	0.28	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		256			438		230	888		249	954	
v/s Ratio Prot		c0.12			c0.25		0.10	c0.25		c0.13	0.21	
v/s Ratio Perm												
v/c Ratio		0.81			0.98		0.76	0.93		0.92	0.74	
Uniform Delay, d1		40.5			36.3		41.3	35.1		41.7	32.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		16.8			38.2		13.2	15.6		35.0	3.0	
Delay (s)		57.4			74.5		54.6	50.7		76.7	35.2	
Level of Service		E			E		D	D		E	D	
Approach Delay (s)		57.4			74.5			51.3			45.1	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

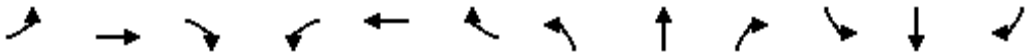
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	180	260	190	140	270	320
Future Volume (vph)	180	260	190	140	270	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.93	
Flt Protected	0.98			0.97	1.00	
Satd. Flow (prot)	1680			1811	1726	
Flt Permitted	0.98			0.42	1.00	
Satd. Flow (perm)	1680			776	1726	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	283	207	152	293	348
RTOR Reduction (vph)	82	0	0	0	63	0
Lane Group Flow (vph)	397	0	0	359	578	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	17.4			38.1	38.1	
Effective Green, g (s)	17.4			38.1	38.1	
Actuated g/C Ratio	0.27			0.60	0.60	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	460			465	1035	
v/s Ratio Prot	c0.24				0.33	
v/s Ratio Perm				c0.46		
v/c Ratio	0.86			0.77	0.56	
Uniform Delay, d1	21.9			9.5	7.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	15.3			11.8	2.2	
Delay (s)	37.2			21.2	9.8	
Level of Service	D			C	A	
Approach Delay (s)	37.2			21.2	9.8	
Approach LOS	D			C	A	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	63.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

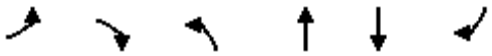
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	200	100	90	100	80	100	2790	240	200	2210	50
Future Volume (vph)	100	200	100	90	100	80	100	2790	240	200	2210	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.93		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3362		1770	3304		1770	5025		1770	5069	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3362		1770	3304		1770	5025		1770	5069	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	217	109	98	109	87	109	3033	261	217	2402	54
RTOR Reduction (vph)	0	41	0	0	78	0	0	7	0	0	1	0
Lane Group Flow (vph)	109	285	0	98	118	0	109	3287	0	217	2455	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Effective Green, g (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Actuated g/C Ratio	0.06	0.11		0.06	0.11		0.08	0.63		0.09	0.64	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	358		106	352		149	3182		165	3254	
v/s Ratio Prot	c0.06	c0.08		0.06	0.04		0.06	c0.65		c0.12	0.48	
v/s Ratio Perm												
v/c Ratio	1.03	0.80		0.92	0.34		0.73	1.03		1.32	0.75	
Uniform Delay, d1	70.5	65.4		70.2	62.1		67.0	27.5		68.0	18.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	95.2	16.6		63.3	2.6		16.8	25.3		178.1	1.7	
Delay (s)	165.7	82.0		133.5	64.6		83.8	52.8		246.1	20.3	
Level of Service	F	F		F	E		F	D		F	C	
Approach Delay (s)		103.0			87.6			53.8			38.6	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.4%	ICU Level of Service	F
Analysis Period (min)	15		

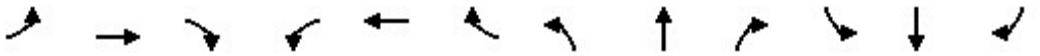
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	0	370	490	0	0
Future Volume (vph)	100	0	370	490	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	402	533	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	109	0	402	533	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.06			0.15		
v/s Ratio Perm			c0.23			
v/c Ratio	0.15		0.57	0.38		
Uniform Delay, d1	7.7		9.3	8.5		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		3.3	0.8		
Delay (s)	8.1		12.6	9.2		
Level of Service	A		B	A		
Approach Delay (s)	8.1			10.7	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Peak Hour Intersection Calculation Worksheets - Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1150	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1150	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	5085	1531	3433	1863	1565	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	5085	1531	3433	1863	1565	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1250	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	123	0	0	65	0	0	35	0	12	0
Lane Group Flow (vph)	65	1250	312	174	1446	131	522	435	128	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	6.2	43.7	69.2	11.1	48.5	76.4	25.5	34.8	45.9	27.9	35.4	
Effective Green, g (s)	6.6	45.0	71.8	11.5	49.9	79.2	25.9	35.6	47.5	26.9	36.6	
Actuated g/C Ratio	0.05	0.33	0.53	0.09	0.37	0.59	0.19	0.26	0.35	0.20	0.27	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	86	1695	871	292	1879	916	658	491	592	684	480	
v/s Ratio Prot	0.04	0.25	0.07	c0.05	c0.28	0.03	0.15	0.23	0.02	c0.18	c0.24	
v/s Ratio Perm			0.13			0.05			0.06			
v/c Ratio	0.76	0.74	0.36	0.60	0.77	0.14	0.79	0.89	0.22	0.92	0.88	
Uniform Delay, d1	63.4	39.8	18.3	59.5	37.5	12.6	52.0	47.7	30.7	53.0	47.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	27.9	2.9	0.1	2.2	3.1	0.0	6.1	17.6	0.1	17.6	16.0	
Delay (s)	91.3	42.7	18.4	61.7	40.6	12.6	58.1	65.4	30.8	70.6	63.1	
Level of Service	F	D	B	E	D	B	E	E	C	E	E	
Approach Delay (s)		38.4			39.6			56.9			67.5	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	47.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

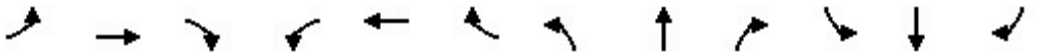
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	550	1190	370	0	0	650
Future Volume (vph)	550	1190	370	0	0	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	1293	402	0	0	707
RTOR Reduction (vph)	0	475	0	0	0	0
Lane Group Flow (vph)	598	818	402	0	0	707
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	11.0	11.0	12.2			12.2
Effective Green, g (s)	11.0	11.0	12.2			12.2
Actuated g/C Ratio	0.30	0.30	0.33			0.33
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1015	1067	1160			1160
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.23				
v/c Ratio	0.59	0.77	0.35			0.61
Uniform Delay, d1	11.2	11.9	9.5			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.6	3.0	0.1			0.6
Delay (s)	11.7	15.0	9.5			11.1
Level of Service	B	B	A			B
Approach Delay (s)	13.9		9.5			11.1
Approach LOS	B		A			B

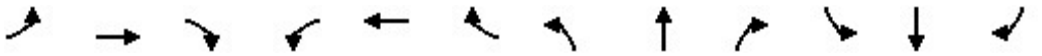
Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	37.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



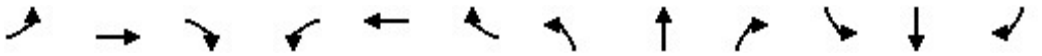
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	300	270	30	140	300	180	460	50	440	510	250
Future Volume (vph)	440	300	270	30	140	300	180	460	50	440	510	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1565	1770	3539	1572	3433	3482		3433	3539	1565
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1565	1770	3539	1572	3433	3482		3433	3539	1565
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	326	293	33	152	326	196	500	54	478	554	272
RTOR Reduction (vph)	0	0	66	0	0	45	0	6	0	0	0	131
Lane Group Flow (vph)	478	326	227	33	152	281	196	548	0	478	554	141
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	20.8	36.9	48.8	3.2	19.2	40.0	11.9	22.7		20.8	31.6	52.4
Effective Green, g (s)	21.7	37.8	50.6	4.2	20.2	40.0	12.8	23.6		21.7	32.5	52.4
Actuated g/C Ratio	0.21	0.37	0.50	0.04	0.20	0.39	0.13	0.23		0.21	0.32	0.52
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	734	694	780	73	705	620	433	810		734	1134	808
v/s Ratio Prot	c0.14	c0.18	0.04	0.02	0.04	0.09	0.06	c0.16		c0.14	0.16	0.04
v/s Ratio Perm			0.11			0.09						0.05
v/c Ratio	0.65	0.47	0.29	0.45	0.22	0.45	0.45	0.68		0.65	0.49	0.17
Uniform Delay, d1	36.4	24.2	14.9	47.5	34.0	22.6	41.1	35.4		36.4	27.8	13.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.1	0.2	0.2	4.4	0.7	0.5	0.8	2.3		2.1	0.8	0.1
Delay (s)	38.5	24.4	15.1	51.9	34.6	23.2	41.8	37.7		38.5	28.6	13.1
Level of Service	D	C	B	D	C	C	D	D		D	C	B
Approach Delay (s)		28.0			28.4			38.8			29.0	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	101.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Future Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6280		3433	6408	1544	1770	3539	1545	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6280		3433	6408	1544	1770	3539	1545	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	370	1957	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	17	0	0	0	77	0	0	74	0	0	80
Lane Group Flow (vph)	239	1755	0	370	1957	249	130	359	154	250	304	116
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.8	39.3		13.4	44.0	53.5	9.5	24.0	37.4	9.5	24.0	32.8
Effective Green, g (s)	9.2	40.4		13.8	45.0	53.5	9.9	24.9	39.2	9.9	24.9	34.6
Actuated g/C Ratio	0.09	0.38		0.13	0.43	0.51	0.09	0.24	0.37	0.09	0.24	0.33
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	2416		451	2746	786	166	839	628	323	839	512
v/s Ratio Prot	0.07	c0.28		0.11	c0.31	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.80	0.73		0.82	0.71	0.32	0.78	0.43	0.25	0.77	0.36	0.23
Uniform Delay, d1	47.0	27.6		44.4	24.7	15.1	46.5	34.0	22.7	46.5	33.4	25.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	1.9		10.9	1.6	0.1	19.6	0.1	0.1	10.1	0.1	0.1
Delay (s)	59.8	29.5		55.3	26.3	15.2	66.1	34.1	22.8	56.5	33.5	25.6
Level of Service	E	C		E	C	B	E	C	C	E	C	C
Approach Delay (s)		33.1			29.0			36.3			39.1	
Approach LOS		C			C			D			D	

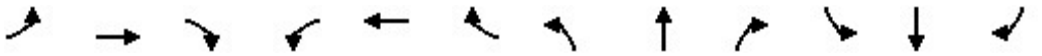
Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	340	190	540	520	0	0	0	0	280	360	410
Future Volume (vph)	0	340	190	540	520	0	0	0	0	280	360	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3358	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3358	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	207	587	565	0	0	0	0	304	391	446
RTOR Reduction (vph)	0	0	90	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	370	117	587	565	0	0	0	0	213	482	114
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		30.2	30.2	16.1	50.7					19.5	19.5	19.5
Effective Green, g (s)		31.1	31.1	16.5	51.6					20.4	20.4	20.4
Actuated g/C Ratio		0.39	0.39	0.21	0.65					0.25	0.25	0.25
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1375	615	708	2282					410	856	710
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.07							0.13	0.14	0.04
v/c Ratio		0.27	0.19	0.83	0.25					0.52	0.56	0.16
Uniform Delay, d1		16.7	16.1	30.4	6.0					25.6	25.9	23.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	7.6	0.3					0.5	0.5	0.0
Delay (s)		17.2	16.8	38.0	6.3					26.1	26.4	23.2
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.0			22.4			0.0			25.1	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

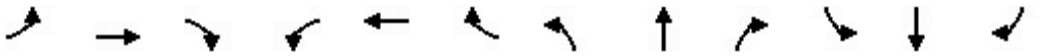


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	680	80	40	510	0	0	0	0	540	340	510
Future Volume (vph)	0	680	80	40	510	0	0	0	0	540	340	510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		5005		1770	3539						4663	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		5005		1770	3539						4663	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	739	87	43	554	0	0	0	0	587	370	554
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	0	118
Lane Group Flow (vph)	0	805	0	43	554	0	0	0	0	0	957	436
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.1		2.8	27.6						25.4	25.4
Effective Green, g (s)		20.3		3.2	27.5						24.5	26.8
Actuated g/C Ratio		0.31		0.05	0.42						0.38	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1563		87	1497						1757	561
v/s Ratio Prot		c0.16		0.02	c0.16							
v/s Ratio Perm											0.21	c0.32
v/c Ratio		0.51		0.49	0.37						0.93dl	0.78
Uniform Delay, d1		18.3		30.1	12.8						15.9	16.5
Progression Factor		1.00		1.34	0.83						1.00	1.00
Incremental Delay, d2		1.2		1.5	0.6						0.2	6.1
Delay (s)		19.5		41.7	11.3						16.1	22.6
Level of Service		B		D	B						B	C
Approach Delay (s)		19.5			13.5			0.0			18.5	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

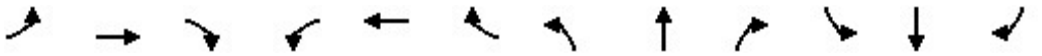
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Future Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1697		1770	4981		3433	4955	
Flt Permitted	0.47	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	868	1710		1326	1697		1770	4981		3433	4955	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1446	228	152	804	141
RTOR Reduction (vph)	0	21	0	0	59	0	0	23	0	0	26	0
Lane Group Flow (vph)	22	45	0	478	235	0	43	1651	0	152	919	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	33.8	33.8		33.1	33.1		3.5	33.3		8.6	38.2	
Effective Green, g (s)	33.8	33.8		33.5	33.5		3.5	34.7		9.1	40.3	
Actuated g/C Ratio	0.38	0.38		0.37	0.37		0.04	0.39		0.10	0.45	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	327	645		495	634		69	1929		348	2228	
v/s Ratio Prot		0.03			0.14		0.02	c0.33		c0.04	0.19	
v/s Ratio Perm	0.03			c0.36								
v/c Ratio	0.07	0.07		0.97	0.37		0.62	0.86		0.44	0.41	
Uniform Delay, d1	17.8	17.8		27.5	20.4		42.4	25.2		37.8	16.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		31.5	0.4		11.9	5.1		0.9	0.6	
Delay (s)	17.9	17.9		59.0	20.8		54.3	30.3		38.7	17.2	
Level of Service	B	B		E	C		D	C		D	B	
Approach Delay (s)		17.9			44.4			30.9			20.2	
Approach LOS		B			D			C			C	

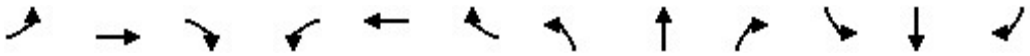
Intersection Summary			
HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	89.6	Sum of lost time (s)	12.3
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Future Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4933		1770	4926		3433	5085	1562	1770	5085	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4933		1770	4926		3433	5085	1562	1770	5085	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	707	609	152	163	793	185	326	750	109	120	772	272
RTOR Reduction (vph)	0	42	0	0	41	0	0	0	84	0	0	45
Lane Group Flow (vph)	707	719	0	163	937	0	326	750	25	120	772	227
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	20.3	33.3		12.6	25.0		9.6	22.0	22.0	7.4	19.7	40.0
Effective Green, g (s)	20.7	34.5		13.0	26.8		10.0	22.9	22.0	7.8	20.7	40.8
Actuated g/C Ratio	0.22	0.37		0.14	0.28		0.11	0.24	0.23	0.08	0.22	0.43
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	754	1806		244	1401		364	1236	364	146	1117	679
v/s Ratio Prot	c0.21	0.15		0.09	c0.19		c0.09	0.15		0.07	c0.15	0.07
v/s Ratio Perm									0.02			0.07
v/c Ratio	0.94	0.40		0.67	0.67		0.90	0.61	0.07	0.82	0.69	0.33
Uniform Delay, d1	36.1	22.1		38.6	29.8		41.6	31.7	28.1	42.5	33.8	17.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.8	0.2		5.3	1.2		22.9	2.2	0.4	28.4	3.5	0.1
Delay (s)	54.9	22.3		43.8	30.9		64.5	33.9	28.5	70.9	37.3	17.8
Level of Service	D	C		D	C		E	C	C	E	D	B
Approach Delay (s)		38.0			32.8			41.8			36.2	
Approach LOS		D			C			D			D	

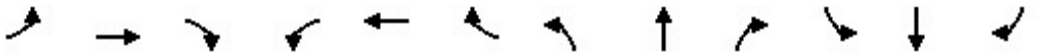
Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	94.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Future Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.91			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1787		1770	1695			1690			1728	
Flt Permitted	0.95	1.00		0.95	1.00			0.96			0.81	
Satd. Flow (perm)	1770	1787		1770	1695			1633			1412	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	228	54	196	272	22	22	33
RTOR Reduction (vph)	0	13	0	0	66	0	0	53	0	0	23	0
Lane Group Flow (vph)	152	313	0	22	314	0	0	469	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.5	36.4		1.5	26.0			22.4			22.4	
Effective Green, g (s)	11.9	37.3		2.4	26.9			23.3			23.3	
Actuated g/C Ratio	0.16	0.50		0.03	0.36			0.31			0.31	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	284	899		57	615			513			443	
v/s Ratio Prot	c0.09	0.17		0.01	c0.19							
v/s Ratio Perm								c0.29			0.04	
v/c Ratio	0.54	0.35		0.39	0.51			0.91			0.12	
Uniform Delay, d1	28.6	11.1		35.1	18.5			24.4			18.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.1		4.3	3.0			20.4			0.0	
Delay (s)	29.5	12.1		39.4	21.5			44.8			18.2	
Level of Service	C	B		D	C			D			B	
Approach Delay (s)		17.7			22.5			44.8			18.2	
Approach LOS		B			C			D			B	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	74.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

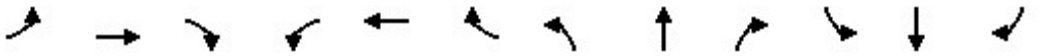
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	660	90	170	1240	70	70	130	110	260	380	250
Future Volume (vph)	180	660	90	170	1240	70	70	130	110	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4963		1770	5030		1770	3539	1550	1770	3267	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4963		1770	5030		1770	3539	1550	1770	3267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	717	98	185	1348	76	76	141	120	283	413	272
RTOR Reduction (vph)	0	14	0	0	5	0	0	0	45	0	91	0
Lane Group Flow (vph)	196	801	0	185	1419	0	76	141	75	283	594	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	10.0	39.6		16.3	45.4		7.6	21.4	37.7	24.0	37.9	
Effective Green, g (s)	10.4	40.5		16.7	46.8		8.0	22.4	38.5	24.4	38.8	
Actuated g/C Ratio	0.09	0.34		0.14	0.39		0.07	0.19	0.32	0.20	0.32	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	297	1675		246	1961		118	660	497	359	1056	
v/s Ratio Prot	0.06	0.16		c0.10	c0.28		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.03			
v/c Ratio	0.66	0.48		0.75	0.72		0.64	0.21	0.15	0.79	0.56	
Uniform Delay, d1	53.1	31.4		49.7	31.1		54.6	41.3	29.1	45.3	33.6	
Progression Factor	1.28	0.72		1.05	0.78		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.8	0.9		9.0	1.9		8.7	0.2	0.1	10.1	0.6	
Delay (s)	71.6	23.5		61.2	26.2		63.3	41.6	29.1	55.5	34.2	
Level of Service	E	C		E	C		E	D	C	E	C	
Approach Delay (s)		32.8			30.2			42.0			40.4	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1680	570	120	1170	360	460	350	180	300	260	40
Future Volume (vph)	90	1680	570	120	1170	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1567	3433	5085	1528	3433	1863	1558	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1567	3433	5085	1528	3433	1863	1558	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1826	620	130	1272	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	69	0	0	90	0	0	60	0	4	0
Lane Group Flow (vph)	98	1826	551	130	1272	301	500	380	136	326	322	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	12.2	66.9	92.0	8.5	63.1	84.5	25.1	35.7	44.2	21.4	30.2	
Effective Green, g (s)	12.6	68.2	94.6	8.9	64.5	87.3	25.5	36.5	45.8	20.4	31.4	
Actuated g/C Ratio	0.08	0.45	0.63	0.06	0.43	0.58	0.17	0.24	0.31	0.14	0.21	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	148	2311	988	203	2186	889	583	453	475	466	381	
v/s Ratio Prot	c0.06	c0.36	0.10	0.04	0.25	0.05	0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.25			0.15			0.07			
v/c Ratio	0.66	0.79	0.56	0.64	0.58	0.34	0.86	0.84	0.29	0.70	0.85	
Uniform Delay, d1	66.6	34.8	15.8	69.0	32.5	16.3	60.5	54.0	39.6	61.9	57.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.3	2.8	0.4	5.1	1.1	0.1	11.5	13.2	0.1	3.7	15.1	
Delay (s)	75.0	37.7	16.2	74.1	33.6	16.4	72.0	67.2	39.8	65.6	72.1	
Level of Service	E	D	B	E	C	B	E	E	D	E	E	
Approach Delay (s)		33.9			32.8			64.4			68.8	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1790	930	0	0	870
Future Volume (vph)	830	1790	930	0	0	870
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1946	1011	0	0	946
RTOR Reduction (vph)	0	7	0	0	0	0
Lane Group Flow (vph)	902	1939	1011	0	0	946
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	71.1	71.1	41.5			41.5
Effective Green, g (s)	71.1	71.1	41.5			41.5
Actuated g/C Ratio	0.56	0.56	0.33			0.33
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1928	2027	1160			1160
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.54				
v/c Ratio	0.47	0.96	0.87			0.82
Uniform Delay, d1	16.5	26.3	40.0			39.0
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	11.3	7.2			4.3
Delay (s)	16.6	37.5	47.2			43.3
Level of Service	B	D	D			D
Approach Delay (s)	30.9		47.2			43.3
Approach LOS	C		D			D

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	126.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	410	310	80	540	700	460	510	130	420	700	390
Future Volume (vph)	380	410	310	80	540	700	460	510	130	420	700	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1568	1770	3539	1569	3433	3432		3433	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1568	1770	3539	1569	3433	3432		3433	3539	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	446	337	87	587	761	500	554	141	457	761	424
RTOR Reduction (vph)	0	0	47	0	0	45	0	17	0	0	0	51
Lane Group Flow (vph)	413	446	290	87	587	716	500	678	0	457	761	373
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	18.1	42.2	67.1	8.0	32.1	70.5	24.9	31.7		38.4	45.2	63.3
Effective Green, g (s)	19.0	43.1	68.9	9.0	33.1	70.5	25.8	32.6		39.3	46.1	63.3
Actuated g/C Ratio	0.14	0.31	0.49	0.06	0.24	0.50	0.18	0.23		0.28	0.33	0.45
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	465	573	816	113	836	845	632	799		963	1165	706
v/s Ratio Prot	c0.12	0.24	0.07	0.05	0.17	c0.23	0.15	c0.20		0.13	0.22	0.07
v/s Ratio Perm			0.12			0.22						0.17
v/c Ratio	0.89	0.78	0.36	0.77	0.70	0.85	0.79	0.85		0.47	0.65	0.53
Uniform Delay, d1	59.5	44.1	21.9	64.5	48.9	30.1	54.5	51.3		41.8	40.1	27.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	17.8	10.0	0.3	37.4	4.9	8.9	6.7	8.4		0.9	2.0	0.3
Delay (s)	77.3	54.1	22.2	101.9	53.8	39.0	61.3	59.8		42.7	42.1	27.9
Level of Service	E	D	C	F	D	D	E	E		D	D	C
Approach Delay (s)		53.1			48.9			60.4			38.6	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	49.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

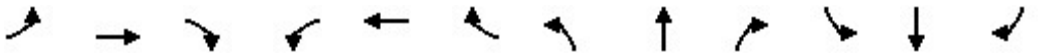
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.93	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6238		3433	6408	1468	1770	3539	1526	3433	3539	1520
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6238		3433	6408	1468	1770	3539	1526	3433	3539	1520
Peak-hour factor, PHF	0.92	0.95	0.92	0.92	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	1968	217	554	1632	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	13	0	0	0	39	0	0	52	0	0	56
Lane Group Flow (vph)	413	2172	0	554	1632	385	250	696	394	380	576	259
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	21.2	52.6		24.0	55.5	74.4	20.9	30.7	54.7	18.9	28.7	49.9
Effective Green, g (s)	21.6	53.7		24.4	56.5	74.4	21.3	31.6	56.5	19.3	29.6	51.7
Actuated g/C Ratio	0.15	0.37		0.17	0.39	0.51	0.15	0.22	0.39	0.13	0.20	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	511	2310		577	2496	753	260	771	631	456	722	541
v/s Ratio Prot	0.12	c0.35		c0.16	0.25	0.07	0.14	c0.20	0.11	0.11	c0.16	0.07
v/s Ratio Perm						0.20			0.15			0.10
v/c Ratio	0.81	0.94		0.96	0.65	0.51	0.96	0.90	0.62	0.83	0.80	0.48
Uniform Delay, d1	59.7	44.1		59.8	36.2	23.3	61.4	55.2	35.7	61.3	54.9	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.6	9.2		27.5	0.7	0.2	44.8	13.6	1.4	11.8	5.7	0.2
Delay (s)	68.3	53.3		87.3	36.9	23.5	106.2	68.8	37.1	73.1	60.6	36.4
Level of Service	E	D		F	D	C	F	E	D	E	E	D
Approach Delay (s)		55.7			45.4			65.3			58.3	
Approach LOS		E			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	54.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	690	290	430	480	0	0	0	0	400	550	1080
Future Volume (vph)	0	690	290	430	480	0	0	0	0	400	550	1080
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	750	315	467	522	0	0	0	0	435	598	1174
RTOR Reduction (vph)	0	0	153	0	0	0	0	0	0	0	0	175
Lane Group Flow (vph)	0	750	162	467	522	0	0	0	0	435	598	999
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		32.9	32.9	16.4	53.7					56.5	56.5	56.5
Effective Green, g (s)		33.8	33.8	16.8	54.6					57.4	57.4	57.4
Actuated g/C Ratio		0.28	0.28	0.14	0.46					0.48	0.48	0.48
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		996	445	480	1610					770	1621	1333
v/s Ratio Prot		c0.21		c0.14	0.15							
v/s Ratio Perm			0.10							0.27	0.18	c0.36
v/c Ratio		0.75	0.36	0.97	0.32					0.56	0.37	0.75
Uniform Delay, d1		39.3	34.5	51.4	20.9					22.4	19.8	25.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		5.3	2.3	33.8	0.5					0.6	0.1	2.1
Delay (s)		44.6	36.8	85.2	21.4					22.9	19.9	27.5
Level of Service		D	D	F	C					C	B	C
Approach Delay (s)		42.3			51.5			0.0			24.5	
Approach LOS		D			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1100	360	50	700	0	0	0	0	730	1100	660
Future Volume (vph)	0	1100	360	50	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		4897		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		4897		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1196	391	54	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	1553	0	54	761	0	0	0	0	0	1989	665
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		31.2		3.4	37.3						40.7	40.7
Effective Green, g (s)		29.4		3.8	37.2						39.8	42.1
Actuated g/C Ratio		0.33		0.04	0.41						0.44	0.47
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1599		74	1462						2083	637
v/s Ratio Prot		c0.32		0.03	c0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		0.97		0.73	0.52						1.07dl	1.04
Uniform Delay, d1		29.9		42.6	19.7						24.2	23.9
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		16.7		26.0	1.3						10.8	47.8
Delay (s)		46.6		68.6	21.1						35.1	71.8
Level of Service		D		E	C						D	E
Approach Delay (s)		46.6			24.2			0.0			44.8	
Approach LOS		D			C			A			D	

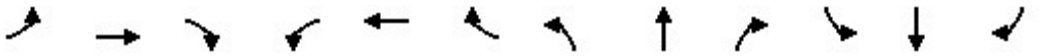
Intersection Summary			
HCM 2000 Control Delay	42.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

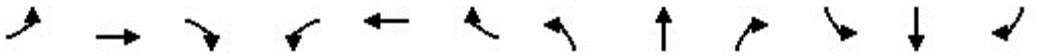
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Future Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1624		1770	4945		3433	5052	
Flt Permitted	0.45	1.00		0.56	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	842	1809		1042	1624		1770	4945		3433	5052	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	250	33	1728	391	272	576	22
RTOR Reduction (vph)	0	6	0	0	99	0	0	30	0	0	3	0
Lane Group Flow (vph)	43	190	0	413	194	0	33	2089	0	272	595	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	46.6	46.6		45.9	45.9		3.6	49.6		12.0	57.3	
Effective Green, g (s)	46.6	46.6		46.3	46.3		3.6	51.0		9.8	59.4	
Actuated g/C Ratio	0.38	0.38		0.38	0.38		0.03	0.42		0.08	0.49	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	322	693		396	618		52	2073		276	2467	
v/s Ratio Prot		0.10			0.12		0.02	c0.42		c0.08	0.12	
v/s Ratio Perm	0.05			c0.40								
v/c Ratio	0.13	0.27		1.04	0.31		0.63	1.01		0.99	0.24	
Uniform Delay, d1	24.4	25.8		37.6	26.5		58.3	35.3		55.8	18.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		56.8	0.3		17.1	21.6		49.6	0.2	
Delay (s)	24.4	25.9		94.5	26.8		75.4	56.9		105.5	18.3	
Level of Service	C	C		F	C		E	E		F	B	
Approach Delay (s)		25.7			66.4			57.2			45.5	
Approach LOS		C			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	54.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	610	1050	280	250	960	170	450	1050	240	190	700	330
Future Volume (vph)	610	1050	280	250	960	170	450	1050	240	190	700	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4925		1770	4958		3433	5085	1562	1770	5085	1567
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4925		1770	4958		3433	5085	1562	1770	5085	1567
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	663	1141	304	272	1043	185	489	1141	261	207	761	359
RTOR Reduction (vph)	0	44	0	0	23	0	0	0	201	0	0	42
Lane Group Flow (vph)	663	1401	0	272	1205	0	489	1141	60	207	761	317
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	21.6	34.9		17.6	30.3		16.3	25.1	25.1	12.8	21.5	43.1
Effective Green, g (s)	22.0	36.1		18.0	32.1		16.7	26.0	25.1	13.2	22.5	43.9
Actuated g/C Ratio	0.20	0.33		0.16	0.29		0.15	0.24	0.23	0.12	0.21	0.40
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	690	1626		291	1456		524	1209	358	213	1046	629
v/s Ratio Prot	c0.19	c0.28		0.15	0.24		c0.14	c0.22		0.12	0.15	0.10
v/s Ratio Perm									0.04			0.10
v/c Ratio	0.96	0.86		0.93	0.83		0.93	0.94	0.17	0.97	0.73	0.50
Uniform Delay, d1	43.2	34.3		45.1	36.0		45.7	40.9	33.7	47.9	40.5	24.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	24.7	5.1		35.2	4.0		23.5	15.5	1.0	53.1	4.4	0.2
Delay (s)	67.9	39.4		80.3	40.0		69.3	56.4	34.7	101.0	45.0	24.8
Level of Service	E	D		F	D		E	E	C	F	D	C
Approach Delay (s)		48.4			47.3			56.8			48.2	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	50.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	109.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.93			0.95			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1800		1770	1709			1724			1696	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.84	
Satd. Flow (perm)	1770	1800		1770	1709			1538			1437	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	174	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	8	0	0	35	0	0	24	0	0	33	0
Lane Group Flow (vph)	630	394	0	22	302	0	0	303	0	0	54	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	32.0	53.8		1.5	22.9			18.7			18.7	
Effective Green, g (s)	32.4	54.7		2.4	23.8			19.6			19.6	
Actuated g/C Ratio	0.37	0.62		0.03	0.27			0.22			0.22	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	653	1121		48	463			343			320	
v/s Ratio Prot	c0.36	0.22		0.01	c0.18							
v/s Ratio Perm								c0.20			0.04	
v/c Ratio	0.96	0.35		0.46	0.65			0.88			0.17	
Uniform Delay, d1	27.1	8.0		42.1	28.3			33.0			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	26.3	0.9		6.8	7.0			21.9			0.1	
Delay (s)	53.5	8.9		48.9	35.3			54.9			27.6	
Level of Service	D	A		D	D			D			C	
Approach Delay (s)		36.1			36.1			54.9			27.6	
Approach LOS		D			D			D			C	

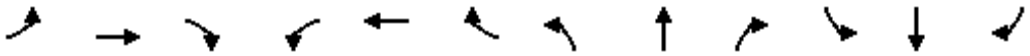
Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	87.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Future Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4976		1770	4857		1770	3539	1533	1770	3180	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4976		1770	4857		1770	3539	1533	1770	3180	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	1533	174	239	913	239	109	467	261	337	239	174
RTOR Reduction (vph)	0	10	0	0	31	0	0	0	38	0	89	0
Lane Group Flow (vph)	478	1697	0	239	1121	0	109	467	223	337	324	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	22.6	51.9		20.2	49.0		13.0	25.1	45.3	29.1	41.3	
Effective Green, g (s)	23.0	52.8		20.6	50.4		13.4	26.1	46.1	29.5	42.2	
Actuated g/C Ratio	0.16	0.36		0.14	0.35		0.09	0.18	0.32	0.20	0.29	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	544	1811		251	1688		163	637	487	360	925	
v/s Ratio Prot	0.14	c0.34		c0.14	0.23		0.06	c0.13	0.07	c0.19	0.10	
v/s Ratio Perm									0.08			
v/c Ratio	0.88	0.94		0.95	0.66		0.67	0.73	0.46	0.94	0.35	
Uniform Delay, d1	59.6	44.5		61.7	40.1		63.7	56.2	39.5	56.8	40.6	
Progression Factor	1.02	0.90		0.91	1.01		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.1	9.0		39.2	1.8		7.8	4.6	0.3	30.9	0.2	
Delay (s)	73.0	49.3		95.3	42.1		71.4	60.8	39.7	87.7	40.8	
Level of Service	E	D		F	D		E	E	D	F	D	
Approach Delay (s)		54.5			51.2			55.6			61.8	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

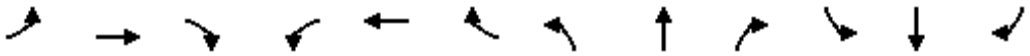
Peak Hour Intersection Calculation Worksheets - Partial Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1150	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1150	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1250	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	117	0	0	42	0	0	31	0	11	0
Lane Group Flow (vph)	65	1250	318	174	1446	154	522	435	132	630	423	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	5.6	41.3	65.4	20.2	55.8	83.2	24.1	33.6	53.8	27.4	35.1	
Effective Green, g (s)	6.0	42.6	68.0	20.6	57.2	86.0	24.5	34.4	55.4	26.4	36.3	
Actuated g/C Ratio	0.04	0.30	0.49	0.15	0.41	0.61	0.18	0.25	0.40	0.19	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	75	1547	797	505	1445	955	600	457	660	647	459	
v/s Ratio Prot	c0.04	0.25	0.07	0.05	c0.41	0.03	0.15	0.23	0.03	c0.18	c0.24	
v/s Ratio Perm			0.13			0.07			0.05			
v/c Ratio	0.87	0.81	0.40	0.34	1.00	0.16	0.87	0.95	0.20	0.97	0.92	
Uniform Delay, d1	66.6	44.9	23.0	53.6	41.4	11.6	56.2	52.0	27.8	56.5	50.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	58.9	4.6	0.1	0.1	23.8	0.0	12.4	30.2	0.1	28.6	23.6	
Delay (s)	125.5	49.6	23.1	53.8	65.2	11.6	68.6	82.2	27.8	85.0	74.1	
Level of Service	F	D	C	D	E	B	E	F	C	F	E	
Approach Delay (s)		45.8			58.4			67.9			80.5	
Approach LOS		D			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	60.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1680	570	120	1170	360	460	350	180	300	260	40
Future Volume (vph)	90	1680	570	120	1170	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	3539	1534	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	3539	1534	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1826	620	130	1272	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	114	0	0	94	0	0	47	0	5	0
Lane Group Flow (vph)	98	1826	506	130	1272	297	500	380	149	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.2	48.6	66.2	6.2	46.5	63.3	17.6	30.9	37.1	16.8	28.3	
Effective Green, g (s)	8.6	49.9	68.8	6.6	47.9	66.1	18.0	31.7	38.7	15.8	29.5	
Actuated g/C Ratio	0.07	0.42	0.57	0.05	0.40	0.55	0.15	0.26	0.32	0.13	0.25	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	126	2114	898	188	1412	844	514	492	503	452	447	
v/s Ratio Prot	c0.06	0.36	0.09	0.04	c0.36	0.05	c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.23			0.14			0.08			
v/c Ratio	0.78	0.86	0.56	0.69	0.90	0.35	0.97	0.77	0.30	0.72	0.72	
Uniform Delay, d1	54.8	32.0	16.1	55.7	33.8	15.0	50.8	40.8	30.5	50.0	41.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	23.5	5.0	0.5	8.5	9.5	0.1	32.4	7.7	0.1	4.8	4.6	
Delay (s)	78.2	36.9	16.6	64.2	43.4	15.1	83.2	48.5	30.6	54.8	46.0	
Level of Service	E	D	B	E	D	B	F	D	C	D	D	
Approach Delay (s)		33.6			38.7			61.4			50.4	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	41.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix J
VMT Analysis Worksheet – Adopted Plan

2035a - Adopted GP - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	3,087	-	3,087	4,336,442
CHULA VISTA TOTAL	5,601,350	7,698	-	7,698	5,593,652
CORONADO TOTAL	466,994	1,344	-	1,344	465,650
DEL MAR TOTAL	101,376	60	-	60	101,316
EL CAJON TOTAL	2,442,502	3,987	-	3,987	2,438,515
ENCINITAS TOTAL	2,556,112	3,788	-	3,788	2,552,324
ESCONDIDO TOTAL	3,482,331	1,991	-	1,991	3,480,340
External TOTAL	526,485	428	-	428	526,057
IMPERIAL BEACH TOTAL	131,328	26	-	26	131,302
LA MESA TOTAL	2,089,142	6,352	-	6,352	2,082,790
LEMON GROVE TOTAL	959,602	1,726	-	1,726	957,876
NATIONAL CITY TOTAL	1,962,160	6,474	-	6,474	1,955,686
OCEANSIDE TOTAL	4,088,716	1,017	-	1,017	4,087,699
POWAY TOTAL	1,304,035	615	-	615	1,303,420
SAN DIEGO TOTAL	47,221,594	277,444	18,009	259,435	46,944,150
SAN MARCOS TOTAL	2,642,965	296	-	296	2,642,669
SANTEE TOTAL	1,347,654	846	-	846	1,346,808
SOLANA BEACH TOTAL	715,186	1,390	-	1,390	713,796
Unincorporated TOTAL	24,605,963	12,944	-	12,944	24,593,019
VISTA TOTAL	1,899,984	104	-	104	1,899,880
REGIONWIDE TOTAL	108,485,008	331,617	18,009	313,608	108,153,391

2035a - Adopted GP - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	13,654	-	13,654	4,325,875
CHULA VISTA TOTAL	5,601,350	32,436	-	32,436	5,568,914
CORONADO TOTAL	466,994	6,103	-	6,103	460,891
DEL MAR TOTAL	101,376	232	-	232	101,144
EL CAJON TOTAL	2,442,502	15,077	-	15,077	2,427,425
ENCINITAS TOTAL	2,556,112	16,034	-	16,034	2,540,078
ESCONDIDO TOTAL	3,482,331	8,349	-	8,349	3,473,982
External TOTAL	526,485	2,332	-	2,332	524,153
IMPERIAL BEACH TOTAL	131,328	293	-	293	131,035
LA MESA TOTAL	2,089,142	23,565	-	23,565	2,065,577
LEMON GROVE TOTAL	959,602	7,337	-	7,337	952,265
NATIONAL CITY TOTAL	1,962,160	27,348	-	27,348	1,934,812
OCEANSIDE TOTAL	4,088,716	5,026	-	5,026	4,083,690
POWAY TOTAL	1,304,035	2,464	-	2,464	1,301,571
SAN DIEGO TOTAL	47,221,594	1,228,648	204,475	1,024,173	45,992,946
SAN MARCOS TOTAL	2,642,965	1,173	-	1,173	2,641,792
SANTEE TOTAL	1,347,654	3,470	-	3,470	1,344,184
SOLANA BEACH TOTAL	715,186	5,763	-	5,763	709,423
Unincorporated TOTAL	24,605,963	59,614	-	59,614	24,546,349
VISTA TOTAL	1,899,984	657	-	657	1,899,327
REGIONWIDE TOTAL	108,485,008	832,025 2,291,600	204,475	1,255,100	107,025,433

Midway-Pacific Highway & Old Town Mobility Element Updates

Transportation Impact Study

Midway-Pacific Highway: Alternative 1 With Sports Arena
Old Town: Alternative 2

Draft Report

December 2017

Prepared for:

The City of SAN DIEGO

Prepared by:

CHEN RYAN
3900 Fifth Avenue, Suite 210
San Diego, CA 92103

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1.0 Introduction

1.1 Purpose of the Report

This Transportation Impact Study (TIS) serves to identify and document potential traffic impacts related to the buildout of the Preferred Plan alternative of the Midway-Pacific Highway and Old Town Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway impacts. This technical report also provides vehicle miles traveled (VMT) for the Existing conditions and buildout of the Community Plan Updates and compares these to the projected 2035 VMT per person and average trip length for the entire Region.

Figure 1-1 displays the project study area for both the Midway-Pacific Highway Corridor and Old Town communities. This report identifies significant traffic impacts and potential mitigation measures associated with the implementation of the Preferred Plan for the Midway-Pacific Highway and Old Town Community Plan Updates and is intended to support the Environmental Impact Report (EIR).

Study Scenarios

Two (2) scenarios were evaluated for this Mobility Element Update transportation impact study, including:

- Existing Conditions – utilized to establish the existing base line traffic operations within the project study area.
- Preferred Plan – represents the preferred land use plan and proposed roadway network. Improvements resulting in the preferred plan roadway network were developed in collaboration between community members, City staff, and the project consultant team. Initially, the mobility issues and needs identified in the Existing Conditions Report were compared to the mobility issues and needs identified in other on-going or recent planning efforts. The Preferred Plan was modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the Preferred Plan Community Plan land uses and adopted Year 2035 land uses outside of the study communities for regional growth.

1.2 Report Organization

Following this introductory chapter, the report is organized into the following chapters:

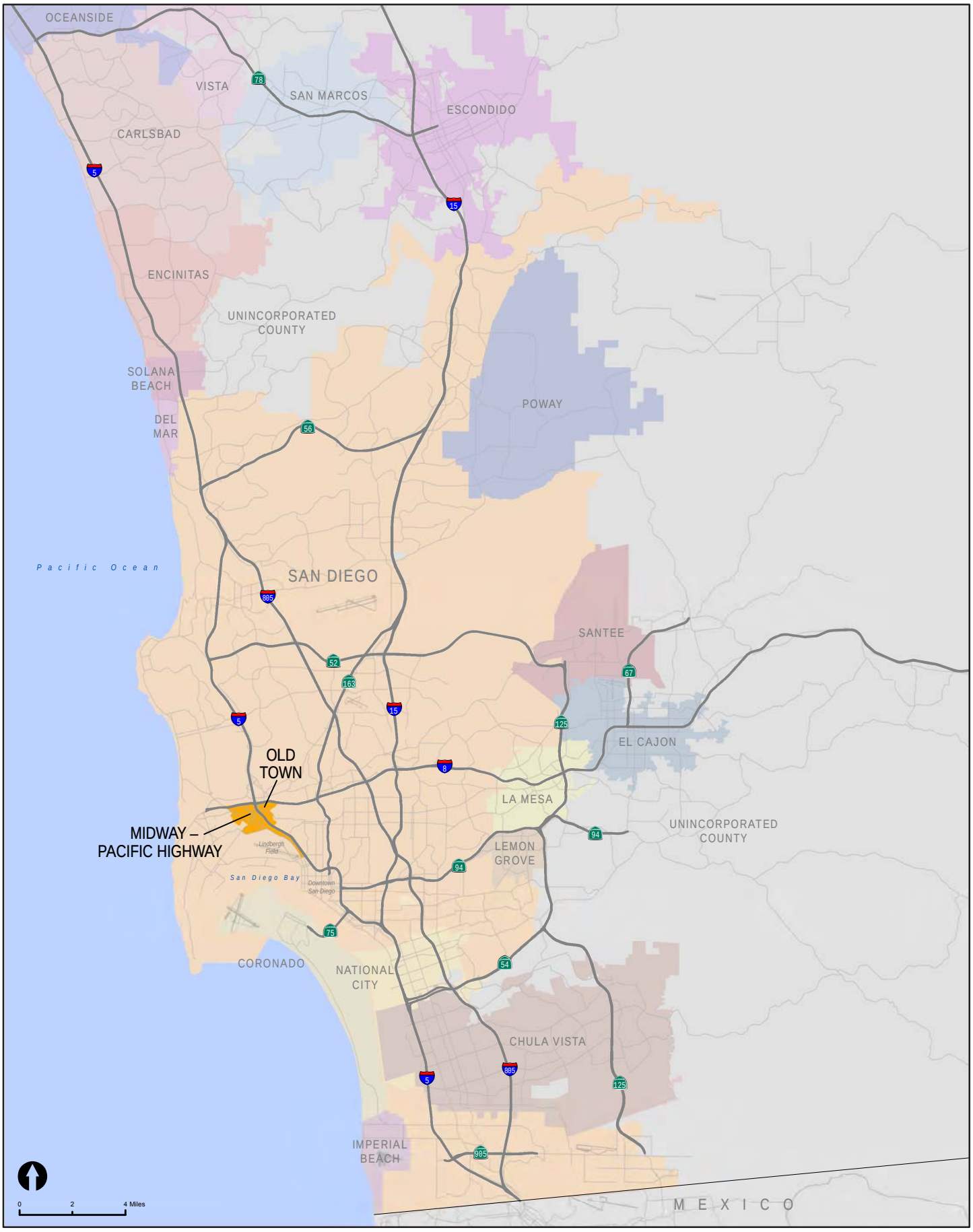
2.0 *Analysis Methodology* – This chapter describes the methodologies and standards utilized to analyze roadway, intersection, and freeway segment and freeway ramp meter traffic conditions.

3.0 *Existing Conditions* - This chapter describes the existing traffic network within the study area and provides analysis results for existing traffic conditions.

4.0 *Preferred Plan* – This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to the Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters were evaluated. Mitigation measures for significant impacts identified, if feasible.

5.0 *Adopted Plan* – This chapter is included for informational purposes and includes a description and high-level analysis of the currently adopted plan for both the Midway-Pacific Highway Corridor and Old Town communities. No impact analyses were conducted for this scenario.

6.0 *Summary* – This chapter summarizes the analysis and impact findings outlined in chapters three through five.



Midway-Pacific Highway and Old Town Community Plan Update

CHEN RYAN

Figure 1-1
Midway-Pacific Highway and Old Town within the Region

2.0 Analysis Methodology

This chapter describes the various methodologies utilized to analyze the mobility network within the Midway-Pacific Highway and Old Town communities. Analysis of the vehicular systems – roadways, intersections and freeways – were prepared for this study in accordance with the *City of San Diego Traffic Impact Study Guidelines,* SANTEC/ITE Guidelines, and the enhanced California Environmental Quality Act (CEQA) project review process.

2.1 Selection of the Study Area

This section describes the process used to identify roadway segments and intersections for analysis.

2.1.1 Roadway Segments

Roadway segments were evaluated if one or more of the following circumstances applied:

- The roadway segment is an existing or planned circulation element roadway as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The roadway segment provides freeway access to/from the Midway-Pacific Highway or Old Town communities.
- The roadway segment is located outside of either study community; however, it may influence or impact the flow of transportation within either of the communities.

2.1.2 Intersections

Intersections were evaluated if one or more of the following circumstances applied:

- The intersection is comprised of a circulation element roadway intersecting with another circulation element roadway. This includes existing and future/planned circulation element roadways as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The intersection is at a freeway ramp interchange located within the Midway-Pacific Highway or Old Town communities or is a major gateway to either community.
- The intersection is a major intersection located outside of either community, however, it may influence or impact the flow of transportation within the communities.
- The intersection meets criteria used in previous studies, whereby both streets meet one of the following:
    - 4 lanes or greater
    - 3 lanes and carries over 15,000 ADT
    - 2 lanes and carries over 10,000 ADT
- Intersections at freeway access ramps.
- Significant intersections where travel time analysis is performed.

A total of 59 intersections were identified based on the criteria listed above, which include 11 intersections located outside the study communities. These intersections were added to the study area because of their proximity to the communities, and the likelihood that changes within the communities could directly affect traffic in/out of the communities. Figure 2-1 displays the location of the 59 study intersections and roadway segments.

2.2 Level of Service Definition

Vehicular level of service (LOS) is a quantitative measure that represents quality of service for the driver. These conditions are generally described in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents the best operating conditions from a driver's perspective, while LOS F represents the worst. Table 2-1 describes generalized definitions of auto LOS A through F.

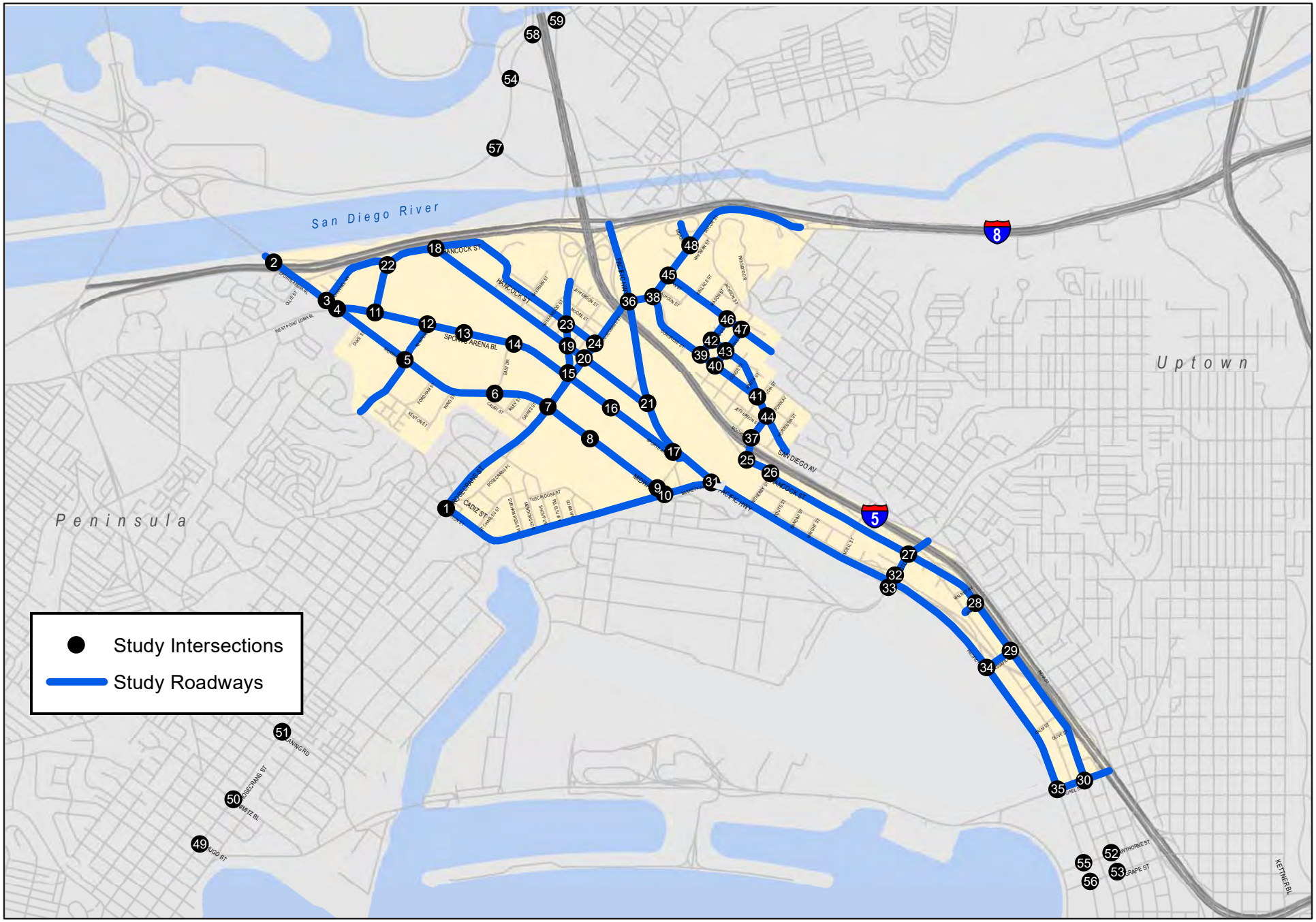
Table 2-1 Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual (2010)

2.2.1 Roadway Segment Level of Service Standards and Thresholds

Roadway segment level of service standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment level of service is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted Average Daily Traffic (ADT) volumes. Table 2-2 presents the roadway segment capacity and LOS standards utilized to analyze roadways in this report.



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Figure 2-1
Project Study Area

Table 2-2 City of San Diego Roadway Segment Daily Capacity and Level of Service Standards

Roadway Functional Classification	Lanes	Level of Service				
		A	B	C	D	E
Freeway	8	60,000	84,000	120,000	140,000	150,000
Freeway	6	45,000	63,000	90,000	110,000	120,000
Freeway	4	30,000	42,000	60,000	70,000	80,000
Expressway	6	30,000	42,000	60,000	70,000	80,000
Prime Arterial	8	35,000	50,000	70,000	75,000	80,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
Major Arterial	7	22,500	31,500	45,000	50,000	55,000
Major Arterial	6	20,000	28,000	40,000	45,000	50,000
Major Arterial	5	17,500	24,500	35,000	40,000	45,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Major Arterial	3	11,250	15,750	22,500	26,250	30,000
Major Arterial	2	7,500	10,500	15,000	17,500	20,000
Major Arterial (one-way)	3	12,500	16,500	22,500	25,000	27,500
Major Arterial (one-way)	2	10,000	13,000	17,500	20,000	22,500
Collector (w/ two-way left turn lane)	4	10,000	14,000	20,000	25,000	30,000
Collector (w/ two-way left turn lane)	3	7,500	10,500	15,000	18,750	22,500
Collector (w/ two-way left turn lane)	2	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	4	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	3	4,000	5,000	7,500	10,000	11,000
Collector (w/o two-way left turn lane)	2	2,500	3,500	5,000	6,500	8,000
Collector (w/o two-way left turn lane) – no fronting property	2	4,000	5,500	7,500	9,000	10,000
Collector (one-way)	3	11,000	14,000	19,000	22,500	26,000
Collector (one-way)	2	7,500	9,500	12,500	15,000	17,500
Collector (one-way)	1	2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2	-	-	2,200	-	-

Source: City of San Diego Traffic Impact Study Manual (1998);
Updated with input from City of San Diego Planning Department Mobility Staff (2017)

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. LOS D is considered acceptable for Mobility Element roadway segments in the City of San Diego. Often, a roadway segment that is analyzed to be LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized (or intersection analysis, if arterial analysis is not applicable) to provide a more accurate indication of LOS.

2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Based on existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all study area.
- Peak Hour Factor: Based on existing peak hour counts.
- Existing Conditions Signal Timing: Based on existing signal timing plans (as of November 2012).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in *2000 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209*. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (sec/veh).

The *2000 HCM* methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections, based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The level of service criteria used for this technique is described in Table 2-3. The computerized analysis of intersection operations was performed utilizing the *Synchro 9.0 (2000 HCM methodology)* traffic analysis software (by Trafficware, 2011).

Table 2-3 Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board Special Report 209 (2000)

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections, were analyzed using the *2000 HCM* unsignalized intersection analysis methodology. The Synchro 8.0 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor

movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or measured average control delay of all movements. Table 2-4 summarizes the level of service criteria for unsignalized intersections.

Table 2-4 Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: Highway Capacity Manual (2000)

The City of San Diego considers LOS D or better during the AM and PM peak hours to be acceptable intersection LOS.

2.2.3 Freeway/State Highway Level of Service Standards and Thresholds

Freeway LOS analysis is based upon procedures developed by Caltrans District 11. The procedure for calculating freeway LOS involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour ("K"), directional ("D") and truck ("T") factors to Average Daily Traffic (ADT) volumes. The base capacities were assumed to be 2,350 passenger-cars per hour per main lane (pc/h/ln) and 1,410 pc/h/ln for auxiliary lanes. A 0.95 peak-hour factor (PHF) is utilized for this analysis.

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in Table 2-5. The corresponding level of service represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour. LOS D or better is used in this study as the threshold for acceptable freeway operations based upon Caltrans and the SANDAG Regional Growth Management Strategy (RGMS) requirements.

2.2.4 Ramp Metering Analysis

Ramp metering is a means of controlling the volume of traffic entering the freeway with the goal of improving freeway main lane traffic operations and flow. Freeway ramp meter analyses estimate peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location.

Meter rates, which represent the number of vehicles permitted through the signal, onto the ramp and freeway, were obtained from Caltrans for use in the analysis. Ramp metering analyses to calculate delays at study area freeway ramps were conducted following the procedures outlined in the *City of San Diego Traffic Impact Study Manual (1998)*.

Table 2-5 Caltrans District 11 Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways and conventional highways			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for conventional highways			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
Used for freeways and expressways			
"F0"	1.01–1.25	Considerable (0-1 hour delay)	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe (1-2 hour delay)	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe (2-3 hour delay)	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe (3+ hours of delay)	Gridlock.

Source: SANTEC/ITE Guidelines for TIS in the San Diego Region.

2.2.5 Determination of Significant Impacts

This section outlines the thresholds for determining significant project-related impacts to roadways, intersections, and freeways in the City of San Diego. Generally, a significant impact is identified when the addition of project traffic results in a level of service dropping from LOS D or better to substandard LOS E or F. Table 2-6 summarizes the significant impact thresholds for facilities operating at a substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the (V/C) ratio.

Table 2-6 City of San Diego Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering*
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E	0.01	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Source: CEQA Significance Determination Thresholds, City of San Diego Development Services Department (2007)

Note:
* For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

3.0 Existing Conditions

This section describes study area intersections, roadways and freeway segments, as well as existing peak hour intersection traffic volumes, and daily roadway and freeway traffic volumes. A Vehicle Miles Traveled (VMT) comparison is also presented. Level of service analysis results for all study area facilities under Existing Conditions are presented separately below.

3.1 Vehicle Miles Traveled

The VMT generated within the communities were estimated using the SANDAG Series 12 Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to/from and within the community. Table 3-1 displays the total VMT generated within the Midway-Pacific Highway and Old Town communities and the average trip length under both the Base Year conditions. VMT calculations for the Midway-Pacific Highway and Old Town communities are included as Appendix A.

As shown, the Midway-Pacific Highway community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.5 miles vs. 5.2 miles; VMT of 156 miles vs. 27 miles, respectively).

The Old Town community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.6 miles vs. 5.2 miles; VMT of 182 miles vs. 27 miles, respectively).

Table 3-1 Vehicle Miles Traveled (VMT) Comparison Existing Conditions

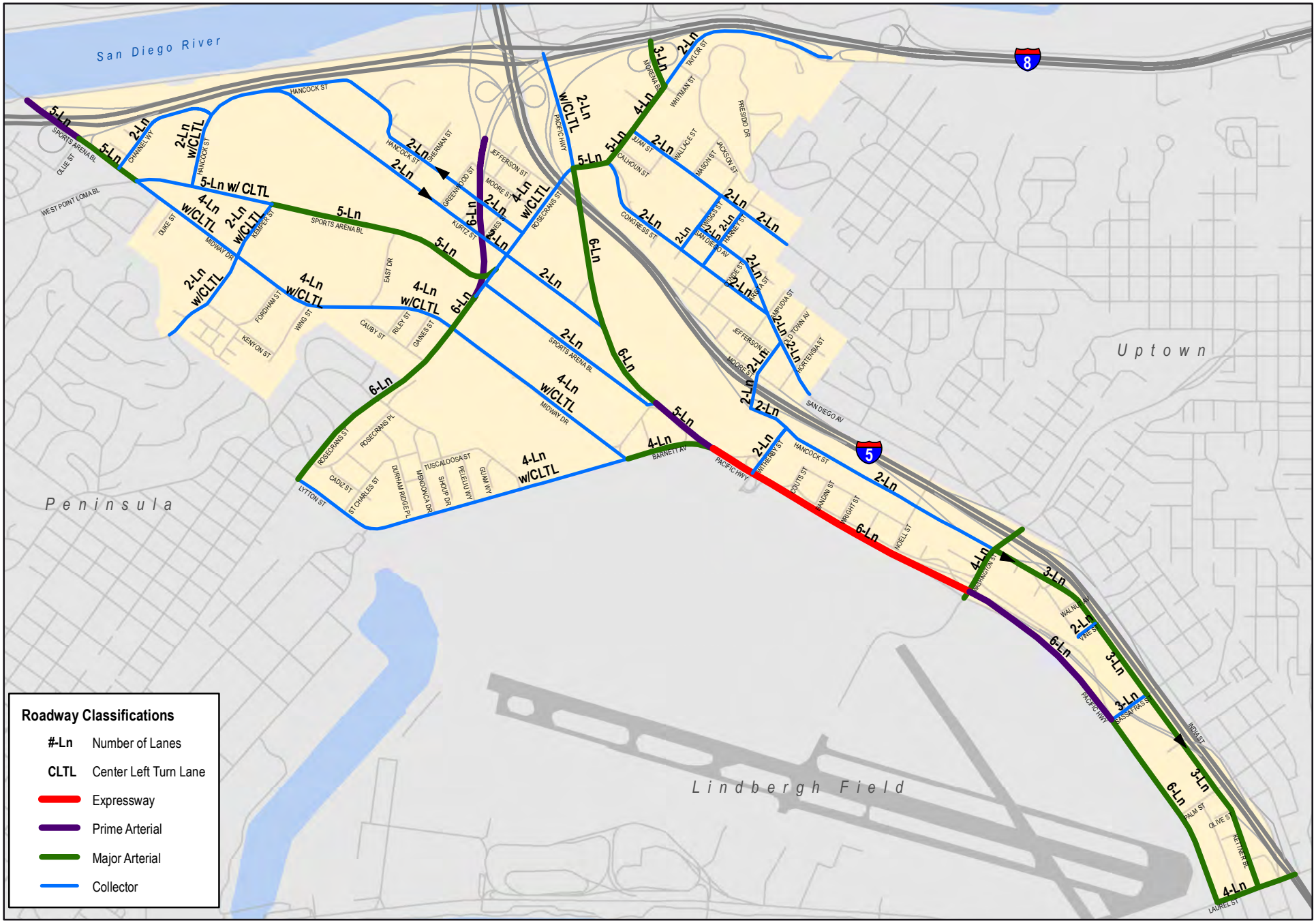
Measure	Midway-Pacific Highway	Old Town	San Diego Region
	Base Year	Base Year	Base Year
Total VMT (miles)	730,121	151,300	85,182,063
Total # of Auto Trips	294,796	57,898	16,458,692
Average Trip Length[1] (miles)	2.5	2.6	5.2
Population	4,670	830	3,130,717
Daily VMT by Population (miles)	156	182	27

Source: SANDAG (2017); Chen Ryan Associates (2017)

Note:
[1]Average trip length is estimated by dividing the total VMT by the total # of auto trips.

3.2 Roadway Segment Analysis

Chapter 2 documents the selection of study area roadway segments and study intersections. The roadway network is comprised of regional facilities such as I-5 and I-8, as well as numerous arterials and local streets. Roadways outside the boundary of the Midway-Pacific Highway and Old Town communities were included in this assessment due to their location within the sphere of influence and will be required for the environmental studies. Figure 3-1 displays the functional classification for study area roadway segments. Table 3-2 provides a description of the study area roadway segments.



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Figure 3-1
Existing Roadway Classifications

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
North-South									
Midway/Pacific Highway Corridor									
Lytton St / Barnett Ave	Rosecrans St	Midway Dr	4-Lane Collector w/ CLTL	Commercial & Military Use	None	40	Yes	Class II	76'/86'
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76
	Kemper St	East Dr	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76'
	East Dr	Rosecrans St	4-Lane Collector w/ CLTL	Commercial	Parallel (NE Side)	35	Yes	None	60'/80'
	Rosecrans St	Barnett Ave	4-Lane Collector w/ CLTL	Commercial & Industrial	None	35	Yes	None	56'/72'
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	None	None	35	Yes	Class III	72'/84
	I-8 EB Ramps	W. Point Loma Blvd/ Sports Arena Blvd	6-Lane Major Arterial	Commercial & Multi-Family Residential	Parallel (SW Side)	35	Yes	Class III	76'/88'
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector w/ CLTL	Commercial & Multi-Family Residential	Parallel (Both)	35	Yes	None	96'/106'
	Kemper St	East Dr	5-Lane Major Arterial	Commercial & Private Recreation	Parallel (SW Side)	35	Yes	None	96'/106'
	East Dr	Rosecrans St	5-Lane Major Arterial	Commercial	None	35	Yes	None	82'/92'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	35	Intermittent	None	52'/82'
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	Commercial & Industrial	Parallel (Both)	30	Yes	None	40'/48'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	30	Gutter Only	None	48'/48'
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector w/ CLTL	Industrial	Parallel (Both)	30	Only on south side	None	62'/78'
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	Industrial	Parallel (Both)	30	Yes	None	40'/50'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Hancock St	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	Industrial	None	30	Yes	None	40'/50'
	Old Town Ave	Witherby St	2-Lane Collector	Industrial	None	30	Curb Only	None	44'/44'
	Witherby St	Washington St	2-Lane Collector	Industrial	Parallel (North) Diagonal (south)	30	Yes	None	60'/70'
Kettner Blvd	Washington St	Vine St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	None	40	Sidewalk on SW Side	None	42'/58'
	Vine St	Sassafras St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Sidewalk on SW Side	None	52'/58'
	Sassafras St	Laurel St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Yes	None	52'/68'
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector w/ CLTL	Transportation Related Utilities	Parallel (Both)	45	Yes	Class II	86'/108'
	Taylor St	Kurtz St	6-Lane Major Arterial	Institutional & Industrial	None	45	Yes	Class II	88'/110'
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	Industrial	None	45	Yes	Class II	88'/110'
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	Commercial & Industrial	None	45	Sidewalk on NE Side	Class III	92'/110'
	Barnett Ave	Washington St	Expressway	Commercial & Industrial	None	55	None	Class II	118'/118'
	Washington St	Sassafras St	6-Lane Prime Arterial	Commercial & Industrial	None	45	None	Class III	42' SB / 46' NB
	Sassafras St	Laurel St	6-Lane Major Arterial	Commercial & Industrial	None	45	Yes	Class III	98'/110'
Old Town									
Congress St	Taylor St	Twiggs St	2-Lane Collector	Commercial & Transit Station	Parallel (Both)	25	Yes	Class III	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	Class III	36'/48'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Congress St	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	Commercial, Single Family Residential & School	Parallel (Both)	25	Yes	Class III	36'/48'
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	52'/70'
	Harney St	Ampudia St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	40'/52'
	Ampudia St	Old Town Ave	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	Class III	42'/54'
	Old Town Ave	Hortensia St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	Class III	40'/56'
Juan St	Taylor St	Twiggs St	2-Lane Collector	Institutional, Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Harney St	San Juan Rd	2-Lane Collector	Commercial & Park	Parallel (Both)	30	Yes	None	36'/48'
Morena Boulevard	I-8 EB Ramps	Taylor Street	3-Lane Major	Commercial	None	Not Posted	Yes	None	56'/68'
East-West									
Midway/Pacific Highway Corridor									
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	None	40'/50'
Kemper St	Kenyon St	Midway Dr	2-Lane Collector w/ CLTL	Commercial & Industrial	Parallel (NW Side)	25	NW side only	None	62'/76'
	Midway Dr	Sports Arena Blvd	2-Lane Collector w/ CLTL	Commercial	Parallel (Both)	25	Yes	None	50'/60'
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	Commercial	None	35	Yes	None	106'/120'
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	Commercial, Multi-Family Residential & Industrial	None	35	Yes	None	106'/120'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	Commercial	None	35	Yes	None	106'/120'
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector w/ CLTL	Commercial & Institutional	Parallel (Both)	35	NW side only	None	82'/100'
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	Commercial & Industrial	None	40	Yes	Class III	92'/108'
Washington St	Frontage Rd	Pacific Hwy	4-Lane Major Arterial	None	None	25	Yes	None	62'/70'
	Pacific Hwy	Hancock St	4-Lane Major Arterial	Commercial	Parallel (SE Side)	25	Yes	None	60'/74'
Vine St	California St	Kettner Blvd	2-Lane Collector	Industrial	Diagonal (SE Side)	25	Yes	None	50'/78'
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	Institutional	None	25	Yes	None	52'/74'
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	Commercial	None	25	Yes	Class III	54'/70'
Old Town									
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	Transit Station	None	35	Yes	None	94'/118'
	Congress St	Juan St	5-Lane Major Arterial	Institutional	None	35	Yes	None	80'/98'
	Juan St	Morena Blvd	4-Lane Major Arterial	Commercial & Park	None	35	Yes	None	80'/100'
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	Commercial & Park	None	35	Curb Only	Class II	42'/42'
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	30'/42'
	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (Both)	25	Yes	None	30'/50'
Harney St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	None	30/42'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Harney St	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (SE Side)	25	Yes	None	30'/46'
Old Town Ave	Hancock St	Moore St	2-Lane Collector	None	None	25	SE Side Only	None	28'/36'
	Moore St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	38'/48'

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Figure 3-2 displays existing average daily traffic volumes for the study roadway segments, along with the current LOS. Table 3-3 displays existing roadway segment ADT and LOS for the Midway-Pacific Highway and Old Town San Diego communities. Appendix B contains the average daily traffic counts utilized in this report.

It should be noted that the existing conditions report was completed in November 2012; therefore, the traffic counts conducted to evaluate Existing conditions were collected in year 2012 as well. To ensure the counts used to evaluate existing conditions are still relevant to current conditions, a sampling of the 2012 counts were validated with recently conducted counts (collected in 2015 and 2016). Through the validation process limited growth was observed in the traffic volumes between year 2012 and year 2015/2016 conditions. Therefore, the counts used to evaluate existing conditions would still be considered valid.

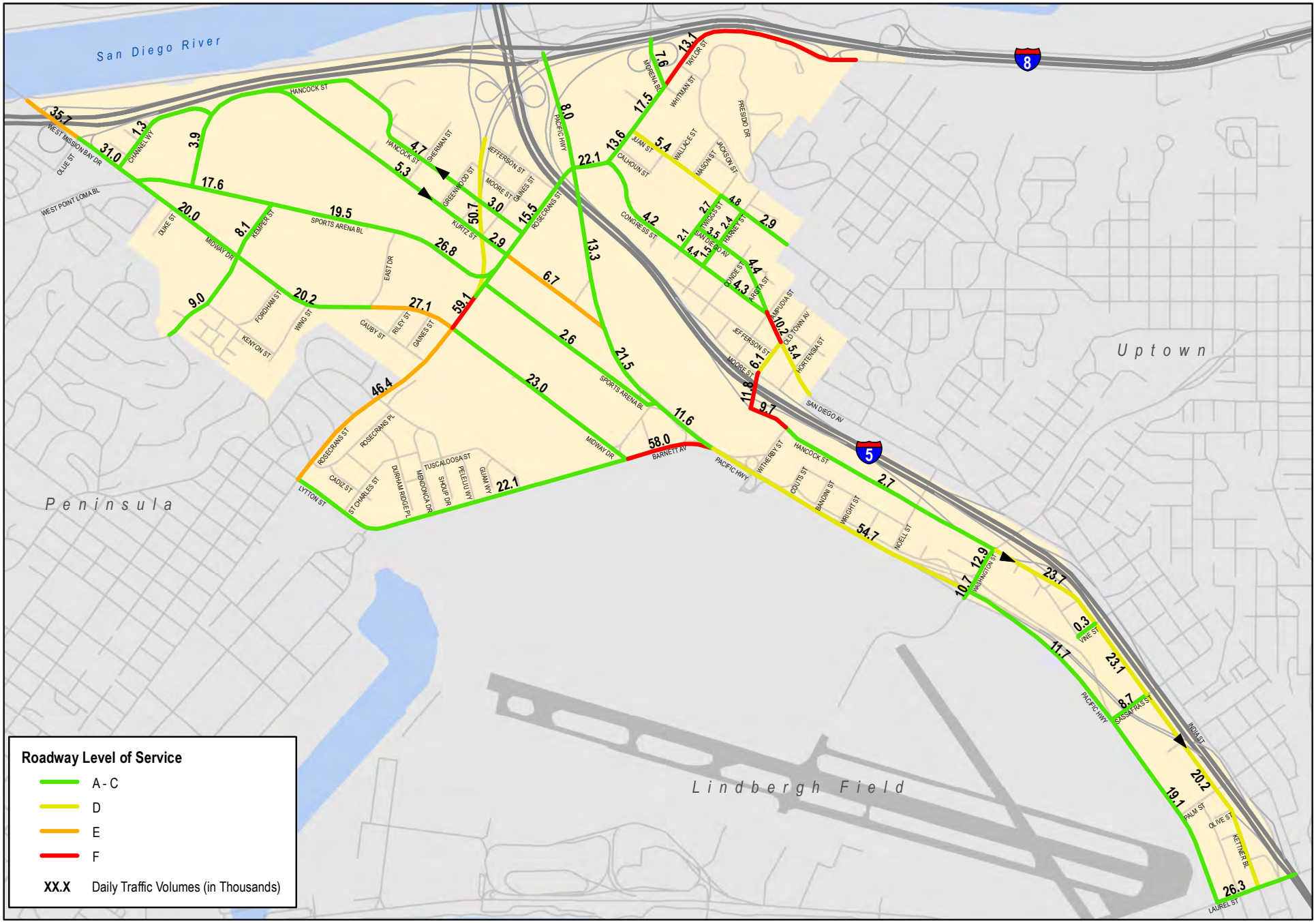
As shown in Table 3-2, the following nine (9) roadway segments operate at LOS E or F under Existing Conditions:

Midway/Pacific Highway Corridor

- Midway Drive, between East Drive and Rosecrans Street (LOS E)
- Kurtz Street, between Rosecrans Street and Pacific Highway (LOS E)
- Hancock Street, between Old Town Avenue and Witherby Street (LOS F)
- Rosecrans Street between Lytton Street and Midway Drive (LOS E)
- Rosecrans Street, between Midway Drive and Sports Arena Boulevard (LOS F)
- Barnett Avenue, between Midway Drive and Pacific Highway (LOS F)

Old Town

- San Diego Avenue, between Ampudia Street and Old Town Avenue (LOS F)
- Taylor Street, between Morena Blvd and I-8 EB Ramps (LOS F)
- Old Town Avenue, Hancock Street to Moore Street (LOS F)



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Figure 3-2
Existing Roadway Segment Traffic Volumes and Level of Service

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
North-South							
Midway/Pacific Highway Corridor							
Lytton Street/ Barnett Avenue	Rosecrans St	Midway Dr	4-Lane Collector (CLTL)	30,000	22,070	0.74	D
Midway Dr	W. Point Loma Blvd/Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	19,960	0.67	C
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,240	0.67	D
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	27,600	0.92	**E**
	Rosecrans St	Barnett Ave	4-Lane Collector (CLTL)	30,000	23,000	0.77	D
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	50,000	35,670	0.71	C
	I-8 EB Ramps	W. Point Loma Blvd/Sports Arena Blvd	6-Lane Major Arterial	50,000	31,010	0.62	C
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector (CLTL)	37,500	17,600	0.47	B
	Kemper St	East Dr	5-Lane Major Arterial	45,000	19,520	0.43	B
	East Dr	Rosecrans St	5-Lane Major Arterial	45,000	26,800	0.6	C
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	2,600	0.33	B
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	5,340	0.31	A
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	6,690	0.84	**E**
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	3,930	0.26	A
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	17,500	4,710	0.27	A
	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	17,500	2,990	0.17	A
	Old Town Ave	Witherby St	2-Lane Collector	8,000	9,680	1.21	**F**
	Witherby St	Washington St	2-Lane Collector	8,000	2,740	0.34	B
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	23,720	0.86	D
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	23,080	0.84	D
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	20,150	0.73	C
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	7,460	0.5	C
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	13,300	0.27	A
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	21,470	0.43	B
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	50,000	11,600	0.23	A
	Barnett Ave	Washington St	Expressway	80,000	54,690	0.68	C
	Washington St	Sassafras St	6-Lane Prime Arterial	60,000	11,650	0.19	A

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Pacific Hwy	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	19,160	0.38	B
Old Town							
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	4,230	0.53	C
	Twiggs St	Harney St	2-Lane Collector	8,000	4,380	0.55	C
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	4,280	0.54	C
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	3,540	0.44	C
	Conde St	Arista Ave	2-Lane Collector	8,000	4,350	0.54	C
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	10,160	1.27	**F**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	5,400	0.68	D
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	5,430	0.68	D
	Twiggs St	Harney St	2-Lane Collector	8,000	4,810	0.6	C
	Harney St	San Juan Rd	2-Lane Collector	8,000	4,230	0.53	C
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	7,585	.25	A
East-West							
Midway/Pacific Highway Corridor							
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	8,000	1,280	0.16	A
Kemper St	Kenyon St	Midway Dr	2-Lane Collector (CLTL)	15,000	9,010	0.6	C
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,120	0.54	C
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	50,700	0.85	D
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	50,000	46,400	0.93	**E**
	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	50,000	59,100	1.18	**F**
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector (CLTL)	30,000	15,500	0.52	C
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	40,000	57,954	1.45	**F**
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	10,680	0.27	A
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	12,870	0.32	A
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	250	0.03	A
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	8,700	0.79	D
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	26,290	0.66	C
Old Town							
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	22,100	0.55	C
	Congress St	Juan St	5-Lane Major Arterial	45,000	13,560	0.30	A
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	17,530	0.44	B
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	13,140	1.64	**F**
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,080	0.26	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,670	0.33	B

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,520	0.19	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,350	0.29	A
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	11,750	1.47	**F**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,120	0.77	D

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

3.3 Intersection Analysis

As described in Chapter 2, a total of fifty-nine (59) study intersections were analyzed as part of the Existing Conditions assessment, including thirty-five (35) intersections located within Midway-Pacific Highway, thirteen (13) intersections located within Old Town, and eleven (11) intersections in adjacent communities.

Figure 3-3 displays current intersection geometries, while Figure 3-4 shows existing AM and PM peak period turning movements. The study area intersection traffic counts are provided in Appendix D.

Table 3-4 displays the existing AM and PM peak hour LOS analysis results for the key study area intersections. LOS analyses were conducted using the methodologies described in Chapter 2.0. Intersection LOS calculation worksheets for Existing Conditions are provided in Appendix E. As shown, the following four (4) study intersections currently operate at LOS E or F:

Midway-Pacific Highway

- Lytton Street & Rosecrans Street (LOS E – AM peak hour)
- West Mission Bay Drive & I-8 WB Off-Ramp (LOS E – PM peak hour)

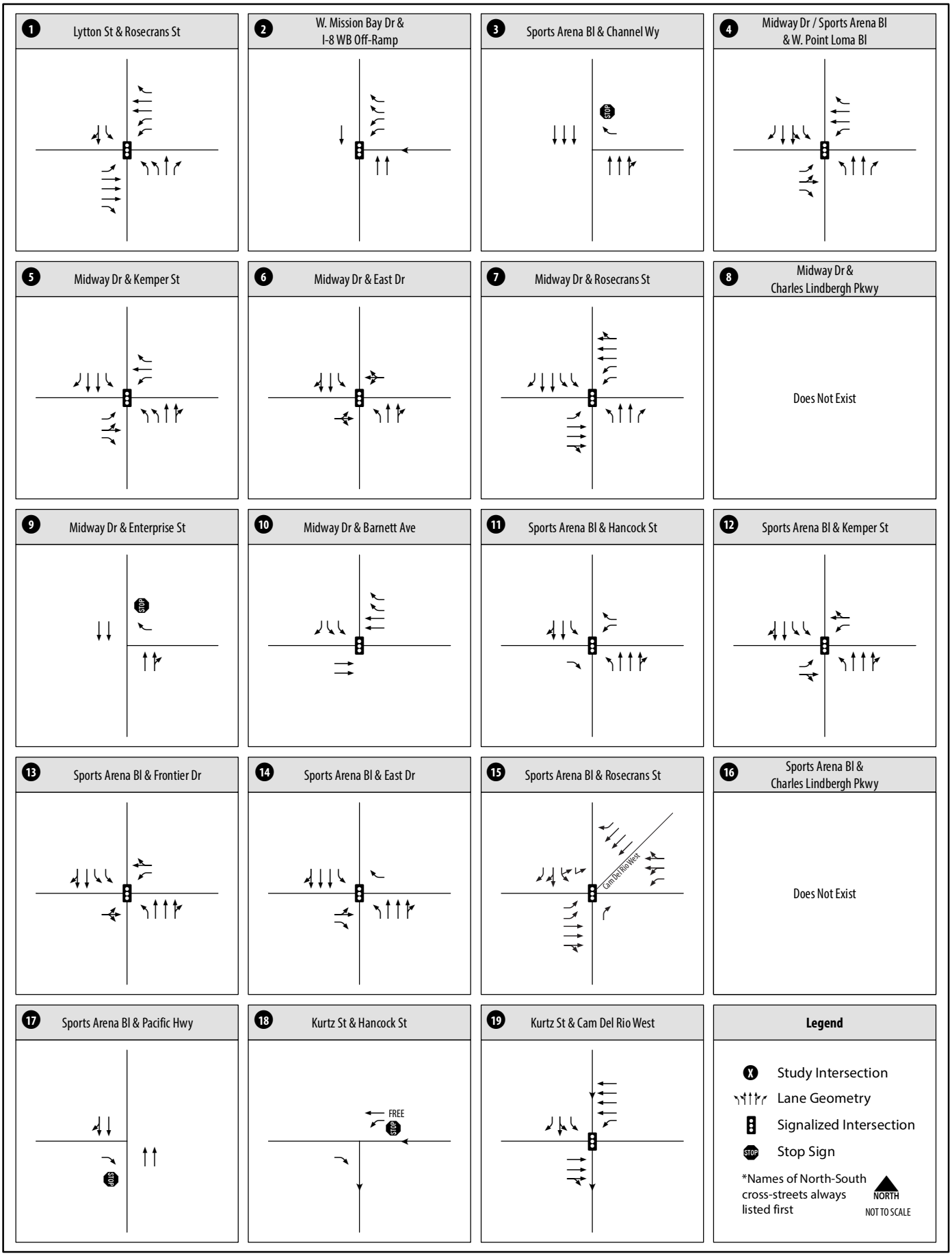
Old Town

- Pacific Highway & Taylor Street (LOS E – AM peak hour)

Intersections Outside of Study Communities

- Lowell Street/Nimitz Boulevard & Rosecrans Street (LOS E – PM peak hour)

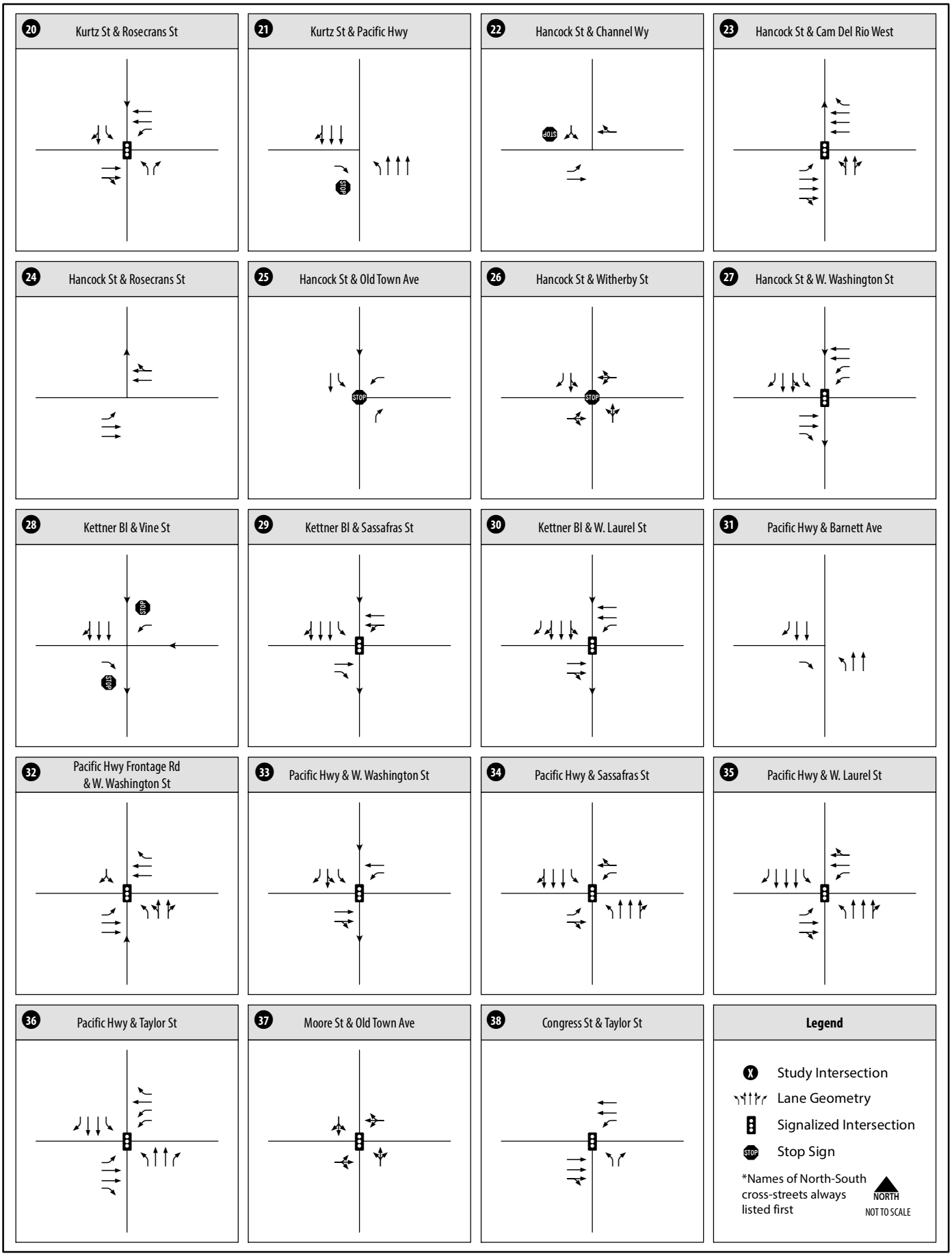
Figure 3-5 graphically displays the existing AM and PM peak hour intersection LOS results.



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Figure 3-3
Existing Intersection Geometrics (Intersections 1-19)



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Figure 3-3
Existing Intersection Geometrics (Intersections 20-38)

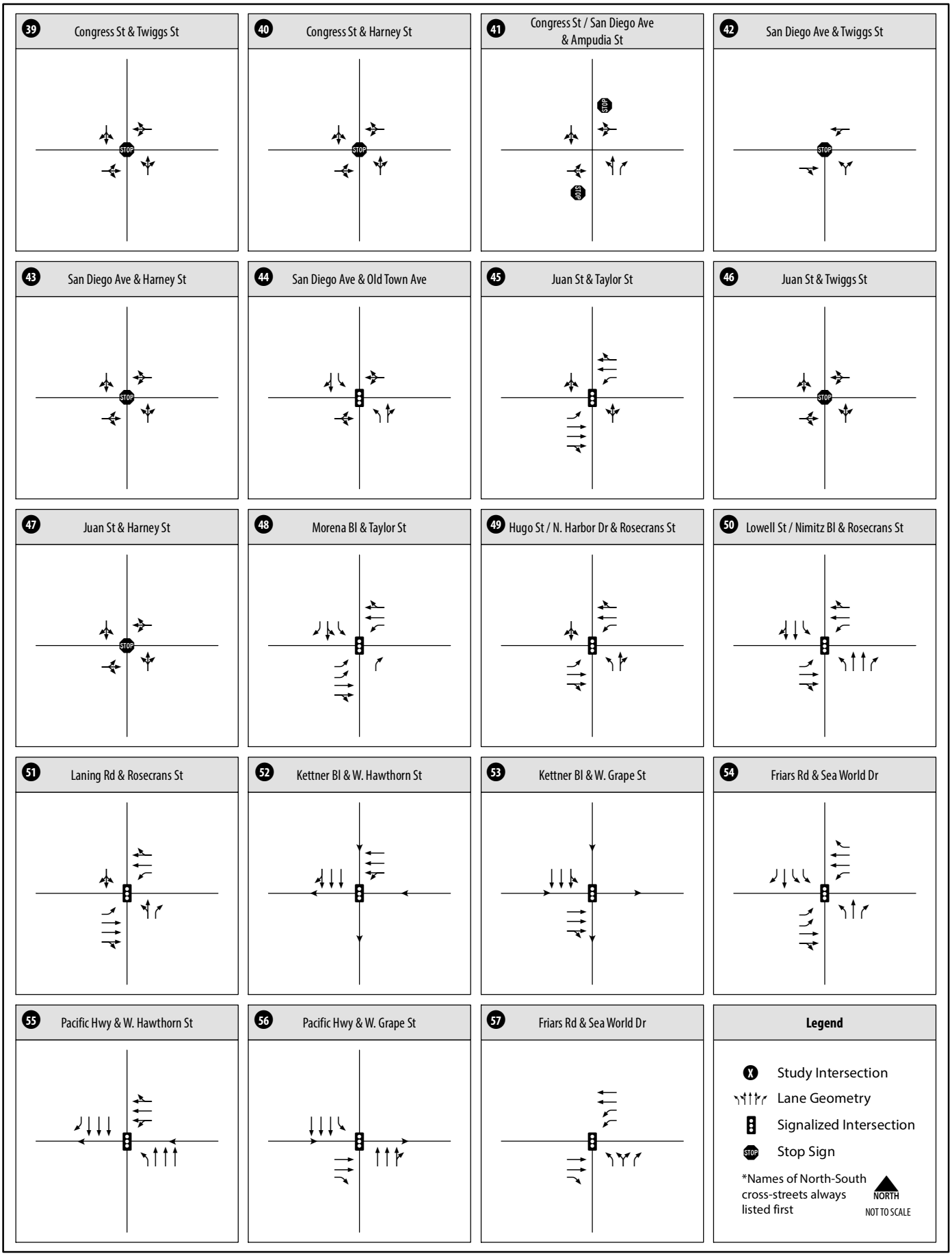
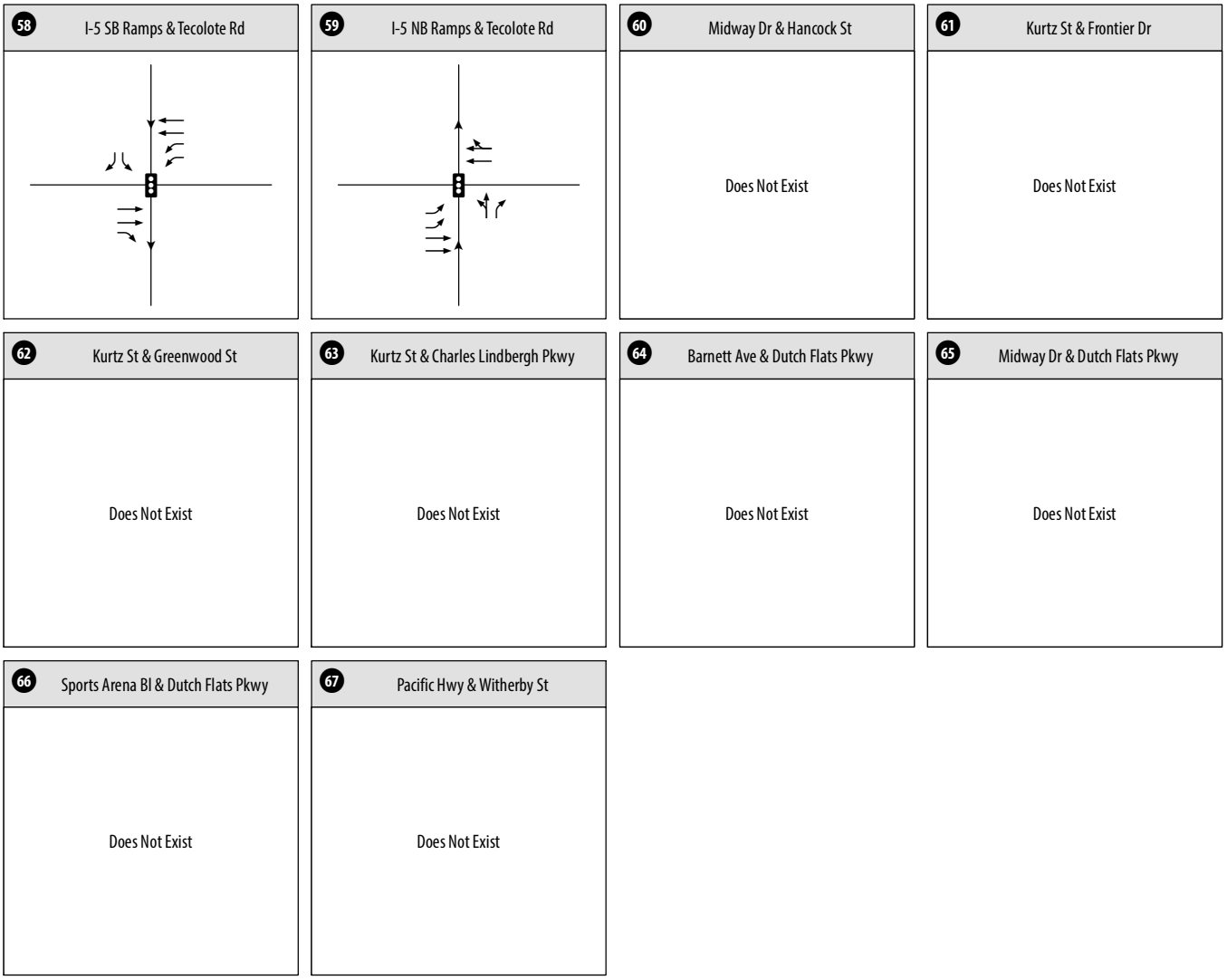


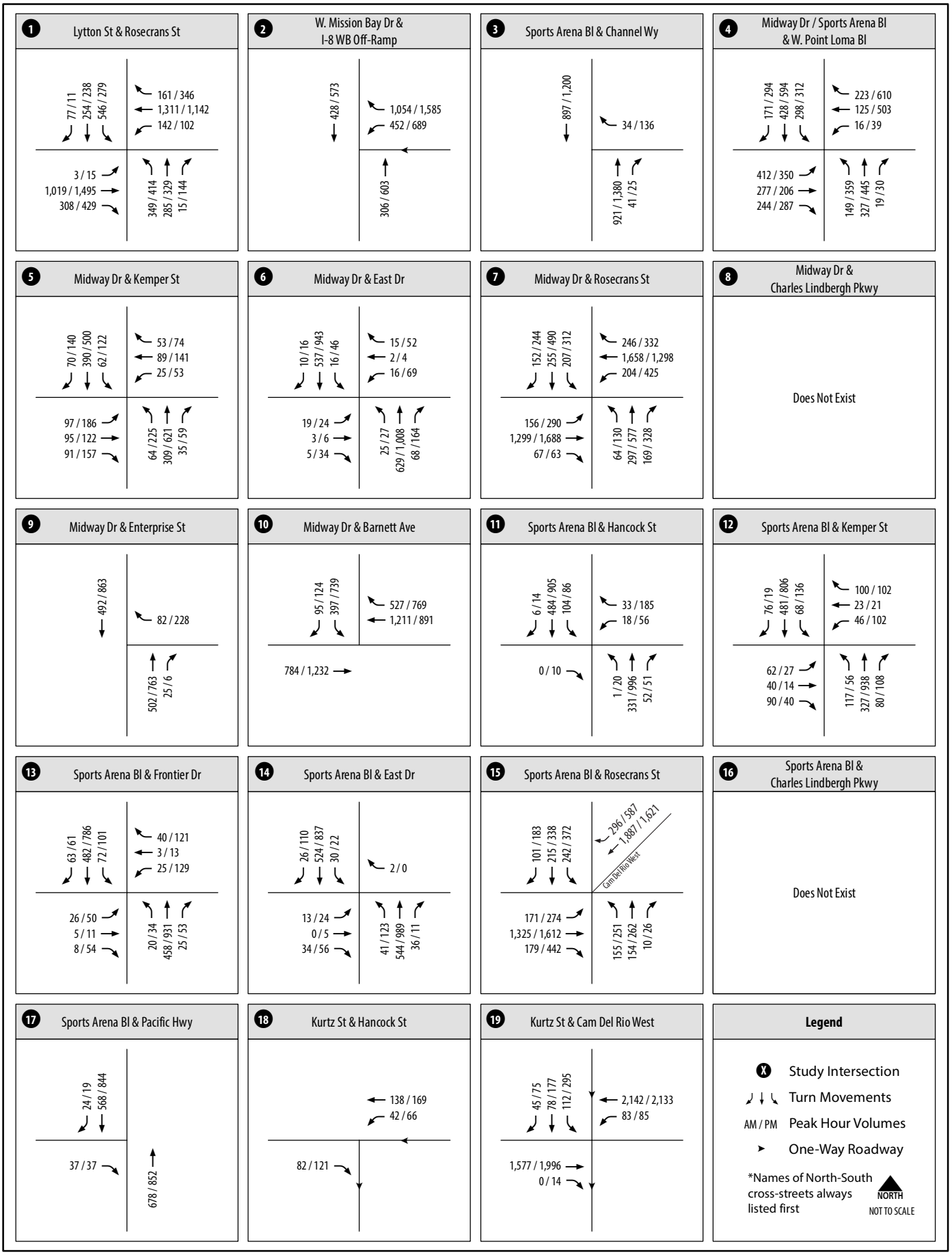
Figure 3-3
Existing Intersection Geometrics (Intersections 39-57)



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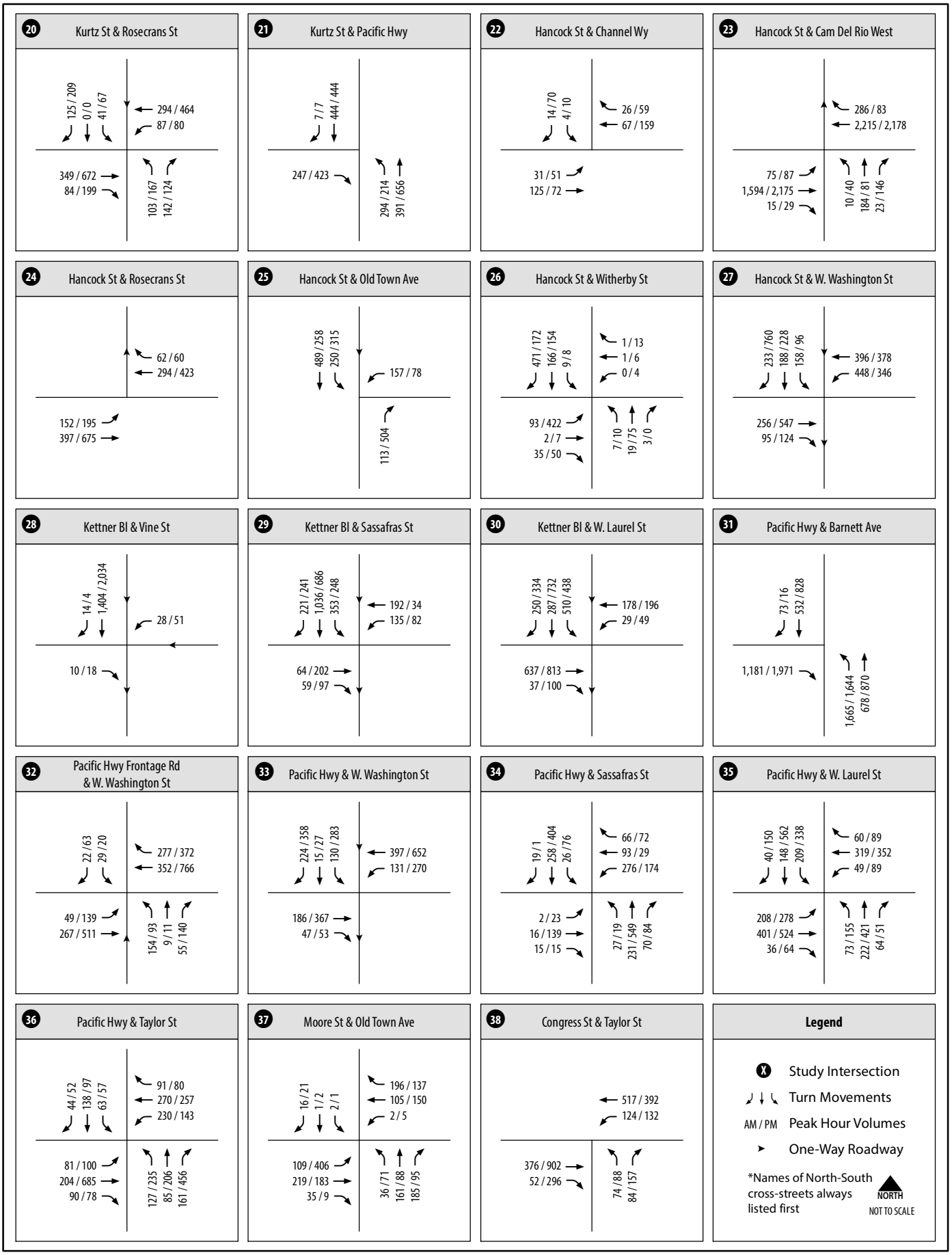
Figure 3-3
Existing Intersection Geometrics (Intersections 58-67)



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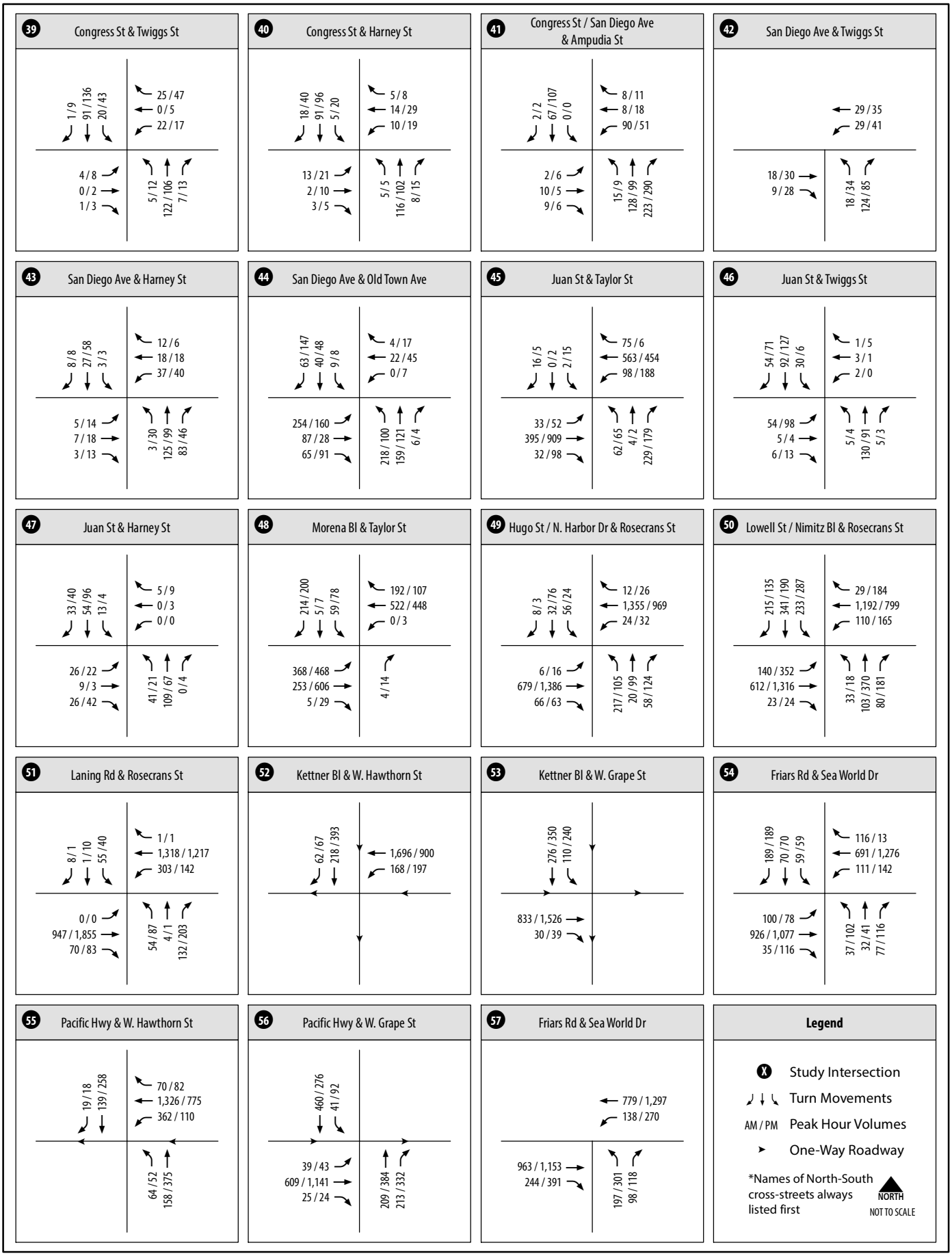
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 1-19)



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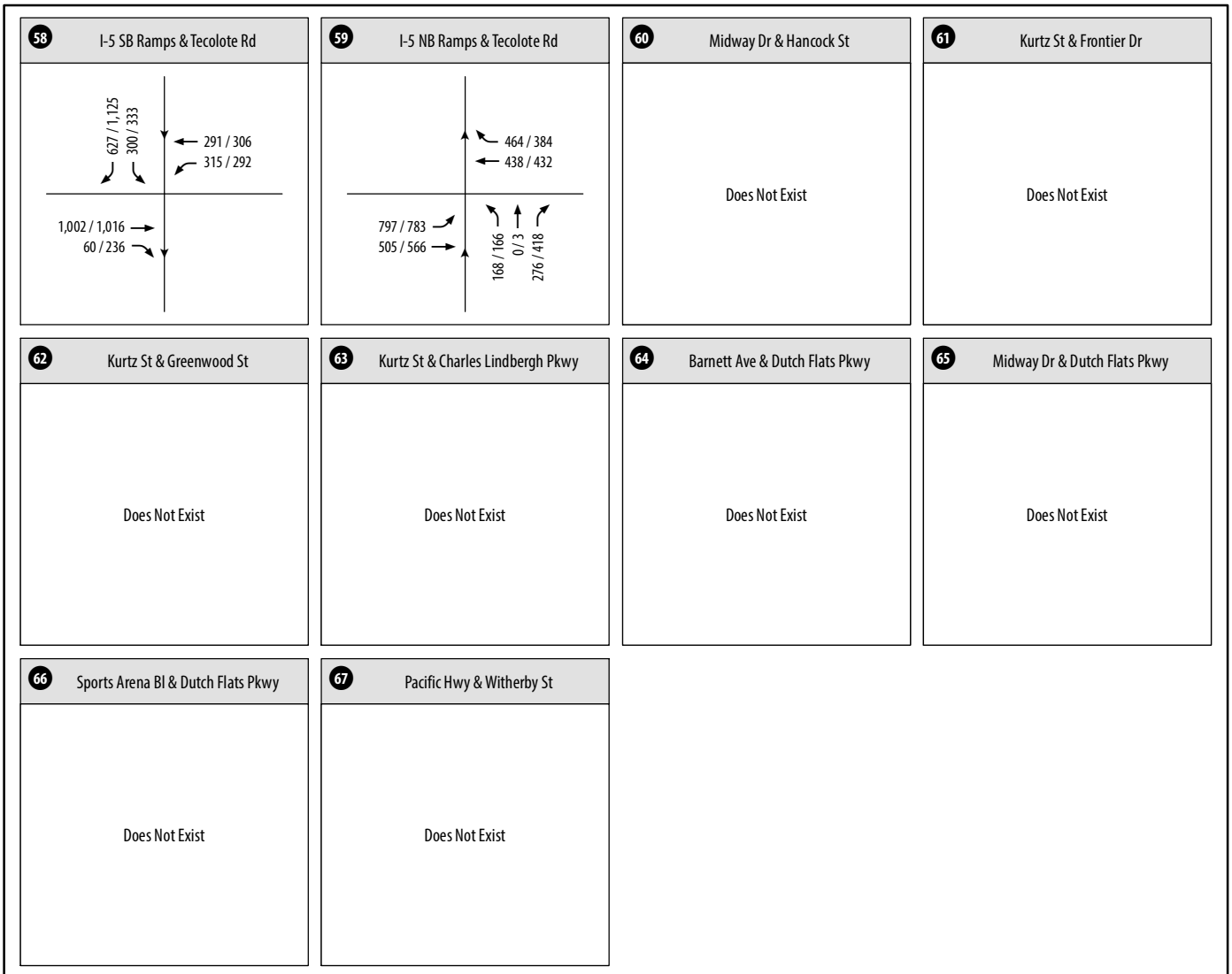
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 20-38)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movement (Intersections 39-57)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 58-67)

Table 3-4 Existing AM/PM Peak Hour Level of Service

No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
Midway-Pacific Highway						
1	Lytton St and Rosecrans St	Signal	**65.4**	**E**	44.5	D
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	14.8	B	**59.5**	**E**
3	Sports Arena Blvd and Channel Way	OWSC	11.2	B	14.7	B
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	36.6	D	47.2	D
5	Midway Dr and Kemper St	Signal	22.7	C	37.3	D
6	Midway Dr and East Dr	Signal	4.8	A	13.0	B
7	Midway Dr and Rosecrans St	Signal	34.9	C	49.1	D
8	Midway Dr and Unknown Future Connector 1	Unknown	*Does Not Exist*			
9	Midway Dr and Enterprise St	OWSC	11.0	B	18.1	C
10	Midway Dr and Barnett Ave	Signal	13.8	B	19.8	B
11	Sports Arena Blvd and Hancock St	Signal	10.0	A	13.1	B
12	Sports Arena Blvd and Kemper St	Signal	18.8	B	17.5	B
13	Sports Arena Blvd and Sports Arena Driveway	Signal	17.1	B	24.8	C
14	Sports Arena Blvd and East Dr	Signal	26.0	C	11.9	B
15	Sports Arena Blvd and Rosecrans St	Signal	35.7	D	43.2	D
16	Sports Arena Blvd and Unknown Future Connector 1	Unknown	*Does Not Exist*			
17	Sports Arena Blvd and Pacific Hwy	OWSC	10.6	B	12.0	B
18	Kurtz St and Hancock St	OWSC	*No Control Delay*			
19	Kurtz St and Camino Del Rio West	Signal	9.4	A	20.2	C
20	Kurtz St and Rosecrans St	Signal	20.0	B	31.7	C
21	Kurtz St and Pacific Hwy	OWSC	11.2	B	13.7	B
22	Hancock St and Channel Wy	OWSC	9.3	A	10.5	B
23	Hancock St and Camino Del Rio West	Signal	24.3	C	20.3	C
24	Hancock St and Rosecrans St	Unsignalized	*No Conflicting Movements*			
25	Hancock St and Old Town Ave	AWSC	16.9	C	14.6	B
26	Hancock St and Witherby St	AWSC	16.0	C	23.5	C
27	Hancock St and Washington St	Signal	22.8	C	25.9	C
28	Kettner Blvd and Vine St	TWSC	14.3	B	23.2	C
29	Kettner Blvd and Sassafras St	Signal	12.0	B	11.9	B
30	Kettner Blvd and West Laurel St	Signal	20.0	B	29.7	C
31	Pacific Hwy and Barnett Ave	Grade Separated	*No Control Delay*			
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	19.4	B	36.0	D
33	Pacific Hwy and Washington St @ Pacific St	Signal	18.7	B	31.2	C
34	Pacific Hwy and Sassafras St	Signal	14.4	B	27.3	C
35	Pacific Hwy and West Laurel St	Signal	48.4	D	42.9	D
Old Town						
36	Pacific Hwy and Taylor St	Signal	**64.6**	**E**	33.5	C
37	Moore St and Old Town Ave	Signal	16.4	B	16.4	B

Table 3-4 Existing AM/PM Peak Hour Level of Service

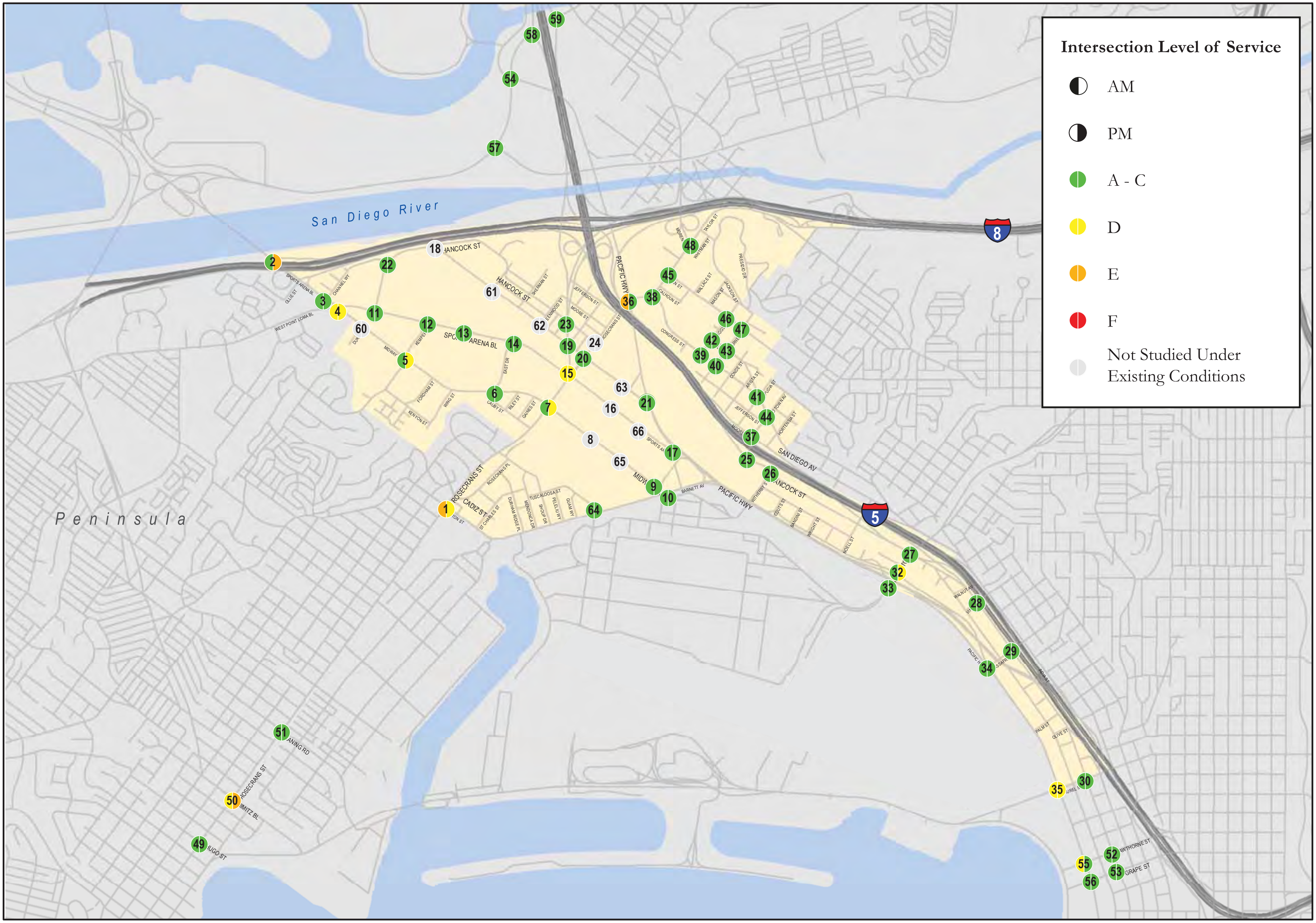
No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
38	Congress St and Taylor St	Signal	19.9	B	21.7	C
39	Congress St and Twiggs St	AWSC	8.1	A	8.6	A
40	Congress St and Harney St	AWSC	8.1	A	8.3	A
41	Congress St and San Diego Ave/Ampudia St	TWSC	12.3	B	11.5	B
42	San Diego Ave and Twiggs St	AWSC	7.9	A	8.0	A
43	San Diego Ave and Harney St	AWSC	8.2	A	8.2	A
44	San Diego Ave and Old Town Ave	Signal	18.4	B	11.6	B
45	Juan St and Taylor St	Signal	10.4	B	10.7	B
46	Juan St and Twiggs St	AWSC	8.8	A	8.5	A
47	Juan St and Harney St	AWSC	8.3	A	7.9	A
48	Morena Blvd and Taylor St	Signal	22.4	C	16.4	B
Intersections Outside of Study Communities						
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	14.7	B	20.7	C
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	41.2	D	**63.3**	**E**
51	Laning Rd and Rosecrans St	Signal	15.5	B	12.9	B
52	Kettner Blvd and West Hawthorn St	Signal	11.1	B	15.0	B
53	Kettner Blvd and West Grape St	Signal	7.4	A	8.7	A
54	Pacific Hwy and Sea World Dr	Signal	19.9	B	25.6	C
55	Pacific Hwy and West Hawthorn St	Signal	35.4	D	20.2	C
56	Pacific Hwy and West Grape St	Signal	16.8	B	24.2	C
57	Friars Rd and Sea World Dr	Signal	11.5	B	13.8	B
58	I-5 SB Ramps and Sea World Dr	Signal	15.5	B	16.3	B
59	I-5 NB Ramps and Sea World Dr	Signal	21.4	C	28.4	C

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Notes:

Bold letter indicates substandard LOS.

1 Signal = Traffic Signal; OWSC = One-Way Stop-Control; 3WSC = Three-Way Stop-Control; AWSC = All-Way Stop-Control;



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Figure 3-5
Existing AM/PM Peak Hour Intersection LOS Results

3.4 Freeway Segment Analysis

Two regional corridors run adjacent to the Midway-Pacific Highway and Old Town communities, providing regional access to and from the communities.

Interstate 5 (I-5) is a north-south freeway that traverses the United States from the Mexican to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the major metropolitan areas of San Diego, Los Angeles, Sacramento and the eastern portion of the San Francisco Bay Area. I-5 bisects the two study communities and can be accessed via the following roadway interchanges:

Midway-Pacific Highway

- Camino Del Rio West (NB on & SB off only)
- Pacific Highway (SB on & NB off only)
- Washington Street
- Palm Street (SB on only)
- Sassafras Street (NB & SB off only)

Old Town

- Old Town Avenue

Interstate 8 (I-8) is an east-west freeway that extends from the western coast of San Diego to central Arizona. I-8 runs just north of the study communities, with access provided via the following roadway interchanges:

Midway-Pacific Highway

- West Mission Bay Drive (EB & WB off only)
- Camino Del Rio West (EB on & WB off only)

Old Town

- Taylor Street

Table 3-5 displays freeway segment LOS analysis results for key freeway segments in the vicinity of the Midway-Pacific Highway and Old Town communities. Caltrans freeway volume worksheets are provided in Appendix F.

As shown, all key freeway segments are currently operating at LOS D or better with the exception of the following three (3) segments:

- I-5 NB, between Sea World Drive and I-8 (LOS E: PM Peak Period)
- I-5 SB, between I-8 and Old Town Avenue (LOS E: PM Peak Period)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: PM Peak Period)

Table 3-5 Existing Freeway Segment Level of Service Results

Freeway	Segment	ADT	Heavy Vehicle	Dir	Lanes	Capacity	AM Peak Hr %	AM Split	AM Peak Hr Vol	AM V/C	AM LOS	PM Peak Hr %	PM Split	PM Peak Hr Vol	PM V/C	PM LOS
I-8	Beginning of Freeway to Sports Arena Blvd	46,500	1.2%	EB	2M + 0A	4,700	6.3%	60%	1,900	0.40	A	8.5%	72%	3,200	0.68	C
				WB	2M + 0A	4,700		40%	1,300	0.28	A		28%	1,300	0.28	A
	Sports Arena Blvd to I-5	102,000	2.8%	EB	3M + 1A	8,450	6.4%	60%	4,400	0.52	B	7.8%	63%	5,600	0.66	C
				WB	3M + 1A	8,450		40%	2,900	0.34	A		37%	3,400	0.40	A
	I-5 to Morena Blvd	132,000	2.8%	EB	4M + 1A	10,800	6.4%	41%	3,900	0.36	A	7.2%	51%	5,500	0.51	B
				WB	5M + 0A	11,750		59%	5,500	0.47	B		49%	5,200	0.44	B
	Morena Blvd to Hotel Circle	191,000	2.8%	EB	4M + 1A	10,800	6.5%	47%	6,500	0.60	B	8.2%	55%	9,700	0.90	D
				WB	5M + 0A	11,750		53%	7,400	0.63	C		45%	8,000	0.68	C
I-5	Clairemont Dr to Sea World Dr	220,000	4.5%	NB	5M + 0A	11,750	6.4%	61%	10,000	0.85	D	8.3%	51%	10,700	0.91	D
				SB	5M + 0A	11,750		39%	6,200	0.53	B		49%	10,300	0.88	D
	Sea World Dr to I-8	199,000	4.5%	NB	4M + 1A	10,800	6.4%	62%	9,000	0.83	D	8.4%	52%	10,000	0.93	**E**
				SB	4M + 2A	12,200		38%	5,400	0.44	B		48%	9,200	0.75	C
	I-8 to Old Town Ave	199,000	4.1%	NB	4M + 1A	10,800	6.9%	49%	7,700	0.71	C	8.2%	39%	7,300	0.68	C
				SB	5M + 0A	11,750		51%	7,900	0.67	C		61%	11,400	0.97	**E**
	Old Town Ave to Washington St	192,000	4.1%	NB	4M + 0A	9,400	6.9%	49%	7,500	0.80	D	8.0%	51%	9,000	0.96	**E**
				SB	5M + 0A	11,750		51%	7,700	0.66	C		49%	8,600	0.73	C
	Washington St to Pacific Highway	142,000	4.1%	NB	4M + 0A	9,400	6.9%	54%	6,000	0.64	C	8.1%	36%	4,800	0.51	B
				SB	4M + 0A	9,400		46%	5,200	0.55	B		64%	8,400	0.89	D
	Pacific Highway to Laurel Street	147,000	4.1%	NB	4M + 1A	10,800	6.7%	58%	6,600	0.61	B	7.0%	49%	5,800	0.54	B
				SB	4M + 1A	10,800		42%	4,700	0.44	B		51%	6,100	0.56	B
	Laurel Street to Hawthorne Street	183,000	4.1%	NB	4M + 1A	10,800	6.7%	57%	8,100	0.75	C	7.3%	46%	7,100	0.66	C
				SB	4M + 1A	10,800		43%	6,000	0.56	B		54%	8,200	0.76	C

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (2016)

3.5 Freeway Ramp Metering Analysis

Table 3-6 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 3-6 Existing Freeway Ramp Meter Analysis

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Volume	Excess Demand	Delay (Minutes)	Queue (Feet)
I-8 EB / Sports Arena Boulevard	PM	2	1	490	913	423	51.8	12,267
I-5 SB / Sea World Drive	AM	1	1	318	375	57	10.8	1,653
	PM	1	1	318	528	210	39.6	6,090
I-5 NB / Sea World Drive	AM	2	0	1,118	1,261	143	7.7	4,147
	PM	2	0	1,320	1,170	0	0.0	0
I-5 SB / Old Town Avenue	PM	1	0	352	360	8	1.4	232
I-5 NB / Old Town Avenue	AM	2	0	670	466	0	0.0	0
	PM	2	0	636	631	0	0.0	0

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

As shown in Table 3-6, the following ramp meters within the study communities experience delays in excess of 15 minutes:

- I-8 EB / Sports Arena Boulevard (PM Peak) – 51.8 minute delay and 12,267 feet of queue
- I-5 SB / Sea World Drive (PM Peak) – 39.6 minute delay and 6,090 feet of queue

4.0 Preferred Plan

This chapter assess the potential traffic impacts of the Preferred Plan by comparing Preferred Plan conditions to Existing Conditions. Evaluations are provided for vehicle miles traveled (VMT), roadway segment and intersection peak hour operations, and freeway segment and ramp meter operations.

The Preferred Plan forecast traffic volumes were developed utilizing the SANDAG Series 12 Preferred Plan Future Year 2035. The modeling methodology and assumptions are provided in Chapter 5 of the Midway-Pacific Highway and Old Town Community Plan Update Mobility Report. Final SANDAG Series 12 Forecast Model Results for Year 2035, including manual adjustments, are provided in Appendix F.

4.1 Vehicle Miles Traveled

The vehicle miles traveled (VMT) within the communities were estimated using the SANDAG Series 12 Preferred Plan Future Year 2035 and Base Year models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to, from, and within the communities. Table 4-1A and Table 4-1B display the total VMT generated and average trip length within the Midway-Pacific Highway and Old Town communities, respectively, under both Preferred Plan and Base Year conditions. The results for the San Diego region are also presented in the tables for comparison purposes. VMT calculations are provided as Appendix G.

Table 4-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	764,628	34,507	4.7%	85,182,063	108,802,407	23,620,344	27.7%
Total # of Auto Trips	294,796	285,771	-9,025	-3.1%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	8.0%	5.2	5.4	0.2	3.7%
Population	4,670	12,505	7,835	167.8%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	61	-95	-60.9%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:
1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Preferred Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 8.0%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-60.9%).

Table 4-1B Vehicle Miles Traveled Comparison – Old Town Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	172,916	21,616	14.3%	85,182,063	108,802,407	23,620,344	27.7%
Total # of Auto Trips	57,898	59,412	1,514	2.6%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	11.4%	5.2	5.4	0.2	3.7%
Population	830	1,280	450	54.2%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	182	135	-47	-25.9%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region. With the implementation of the Preferred Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 11.4%. However, the anticipated population increase within the community results in an overall decrease in the daily VMT by population (-25.9%).

4.2 Roadway Segment Analysis

The majority of roadways within the Midway-Pacific Highway and Old Town communities will remain unchanged from existing conditions, however, the Preferred Plan includes roadway improvements and new roadway segments intended to accommodate anticipated future traffic demands. Table 4-2 identifies the proposed roadway segment modifications, including new roadways, in the Midway-Pacific Highway community.

Due to the historic nature of the Old Town community, the Preferred Plan does not propose any roadway widenings or other roadway capacity improvements. However, San Diego Avenue, between Twiggs Street and Conde Street, has a large curb-to-curb width (50 feet) for a standard two-lane collector roadway (typically 40 feet wide). Therefore, in order to better utilize the curb-to-curb right-of-way, it is recommended that the parallel parking on the east side of the roadway be converted to angled parking. The recommended improvement will not affect the capacity of the roadway and will increase the already constrained parking capacity within the Old Town community.

Table 4-2 Summary of Roadway Improvements

Roadway	Segment	Existing Configuration	Recommended Classification
Segment Modifications			
Lytton St / Barnett Ave	Rosecrans St and Midway Dr	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Sports Arena Blvd	I-8 WB Ramps and I-8 EB Ramps	5-Lane Prime Arterial	6-Lane Prime Arterial
Sports Arena Blvd	I-8 EB Ramps and Rosecrans St	5-Lane Major Arterial	6-Lane Major Arterial
Sports Arena Blvd	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Kurtz St	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Rosecrans St	Lytton St and Sports Arena Blvd	6-Lane Major Arterial	6-Lane Prime Arterial
Rosecrans St	Sports Arena Blvd and Taylor St	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Hancock St	Kurtz St and Rosecrans Street	2-Lane Collector (One-Way)	3-Lane Major (One-Way)
Hancock St	Old Town Ave and Witherby St	2-Lane Collector	4-Lane Collector
Barnett Ave	Midway Dr and Pacific Hwy	4-Lane Major Arterial	6-Lane Prime Arterial
Midway Drive	Rosecrans St and Barnett Avenue	4-Lane Collector W/CLTL	4-Lane Major Arterial
New Roadways			
Kemper St	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Frontier Dr	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Greenwood St	Kurtz St and Sports Arena Blvd	Does Not Exist	2-Lane Collector
Charles Lindbergh Pkwy	Kurtz St and Midway Dr	Does Not Exist	2-Lane Collector W/ CLTL
Dutch Flats Pkwy	Sports Arena Blvd and Barnett Ave	Does Not Exist	2-Lane Collector W/ CLTL

Source: Chen Ryan Associates (June 2016)

Table 4-3 displays the level of service analysis results for the study area roadway segments under both the Preferred Plan and Existing Conditions within the Midway-Pacific Highway and Old Town communities. The proposed roadway classifications and forecast ADT and LOS under buildout of the Preferred Plan are shown in Figure 4-1 and Figure 4-2.

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
North-South														
Midway Pacific Highway														
Lytton Street/ Barnett Ave	Rosecrans St	Midway Dr	4-Lane Major Arterial	40,000	23,900	0.60	C	4-Lane Collector (CLTL)	30,000	22,070	0.74	D	-0.14	No
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	24,100	0.80	D	4-Lane Collector (CLTL)	30,000	19,960	0.67	C	0.13	No
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,100	0.67	D	4-Lane Collector (CLTL)	30,000	20,240	0.67	D	0.00	No
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	26,800	0.89	E	4-Lane Collector (CLTL)	30,000	27,600	0.92	E	-0.03	No
	Rosecrans St	Barnett Ave	4-Lane Major Arterial	40,000	28,400	0.71	C	4-Lane Collector (CLTL)	30,000	23,000	0.77	D	-0.06	No
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	6-Lane Prime Arterial	60,000	46,400	0.77	C	5-Lane Prime Arterial	50,000	35,670	0.71	C	0.06	No
	I-8 EB Ramps	W. Point Loma Blvd	6-Lane Major Arterial	50,000	40,400	0.81	D	6-Lane Major Arterial	50,000	31,010	0.62	C	0.19	No
	W. Point Loma Blvd/Midway Dr	Kemper St	6-Lane Major Arterial	50,000	19,000	0.38	A	5-Lane Collector (CLTL)	37,500	17,600	0.47	B	-0.09	No
	Kemper St	East Dr	6-Lane Major Arterial	50,000	24,900	0.50	B	5-Lane Major Arterial	45,000	19,520	0.43	B	0.07	No
	East Dr	Rosecrans St	6-Lane Major Arterial	50,000	19,400	0.39	A	5-Lane Major Arterial	45,000	26,800	0.60	C	-0.21	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	10,500	0.70	D	2-Lane Collector	8,000	2,600	0.33	B	0.37	No
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	11,100	0.63	C	2-Lane Collector (One-Way)	17,500	5,340	0.31	A	0.32	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	6,600	0.44	B	2-Lane Collector	8,000	6,690	0.84	E	-0.40	No

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Hancock St	Sports Arena Blvd	Kurtz St	4-Lane Collector	15,000	1,200	0.08	A	2-Lane Collector (CLTL)	15,000	3,930	0.26	A	-0.18	No
	Kurtz St	Camino Del Rio West	3-Lane Major (One-Way)	27,500	12,400	0.45	A	2-Lane Collector (One-Way)	17,500	4,710	0.27	A	0.18	No
	Camino Del Rio West	Rosecrans St	3-Lane Major (One-Way)	27,500	6,500	0.24	A	2-Lane Collector (One-Way)	17,500	2,990	0.17	A	0.07	No
	Old Town Ave	Witherby St	4-Lane Collector	15,000	10,800	0.72	D	2-Lane Collector	8,000	9,680	1.21	F	-0.49	No
	Witherby St	Washington St	2-Lane Collector	8,000	4,600	0.58	C	2-Lane Collector	8,000	2,740	0.34	B	0.24	No
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	33,300	1.21	F	3-Lane Major (One-Way)	27,500	23,720	0.86	D	0.35	Yes
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	33,000	1.20	F	3-Lane Major (One-Way)	27,500	23,080	0.84	D	0.36	Yes
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	31,800	1.16	F	3-Lane Major (One-Way)	27,500	20,150	0.73	C	0.43	Yes
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	10,700	0.71	D	2-Lane Collector (CLTL)	15,000	7,460	0.50	C	0.21	No
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	19,000	0.38	A	6-Lane Major Arterial	50,000	13,300	0.27	A	0.11	No
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	23,500	0.47	B	6-Lane Major Arterial	50,000	21,470	0.43	B	0.04	No
	Sports Arena Blvd	Barnett Ave	5-Lane Major Arterial	45,000	17,500	0.39	B	5-Lane Prime Arterial	50,000	11,600	0.23	A	0.16	No
	Barnett Ave	Washington St	Expressway	80,000	50,400	0.63	C	Expressway	80,000	54,690	0.68	C	-0.05	No
	Washington St	Sassafras St	6-Lane Major Arterial	50,000	18,300	0.37	A	6-Lane Prime Arterial	60,000	11,650	0.19	A	0.18	No
	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	27,600	0.55	B	6-Lane Major Arterial	50,000	19,160	0.38	B	0.17	No
Old Town														
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,200	0.90	E	2-Lane Collector	8,000	4,230	0.53	C	0.37	Yes

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Congress St	Twiggs St	Harney St	2-Lane Collector	8,000	6,400	0.80	D	2-Lane Collector	8,000	4,380	0.55	C	0.25	No
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	6,000	0.75	D	2-Lane Collector	8,000	4,280	0.54	C	0.21	No
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	4,800	0.60	C	2-Lane Collector	8,000	3,540	0.44	C	0.16	No
	Conde St	Arista Ave	2-Lane Collector	8,000	4,600	0.58	C	2-Lane Collector	8,000	4,350	0.54	C	0.04	No
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	12,100	1.51	**F**	2-Lane Collector	8,000	10,160	1.27	**F**	0.24	**Yes**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	6,600	0.83	**E**	2-Lane Collector	8,000	5,400	0.68	D	0.15	**Yes**
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	6,900	0.86	**E**	2-Lane Collector	8,000	5,430	0.68	D	0.18	**Yes**
	Twiggs St	Harney St	2-Lane Collector	8,000	6,600	0.83	**E**	2-Lane Collector	8,000	4,810	0.60	C	0.23	**Yes**
	Harney St	San Juan Rd	2-Lane Collector	8,000	3,800	0.48	C	2-Lane Collector	8,000	2,930	0.37	B	0.11	No
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	21,600	0.72	C	3-lane Major Arterial	30,000	7,585	0.25	A	0.47	No
East-West														
Midway Pacific Highway														
Channel Wy	W. Mission Bay Dr	Hancock St	4-Lane Collector	15,000	6,100	0.41	B	2-Lane Collector	8,000	1,280	0.16	A	0.25	No
Kemper St	Kenyon St	Midway Dr	4-Lane Collector	15,000	9,500	0.63	C	2-Lane Collector (CLTL)	15,000	9,010	0.60	C	0.03	No
	Midway Dr	Sports Arena Blvd	4-Lane Collector	15,000	8,200	0.55	C	2-Lane Collector (CLTL)	15,000	8,120	0.54	C	0.01	No
	Sports Arena Blvd	Hancock St	2-Lane Collector (CLTL)	15,000	8,600	0.57	C	*Does Not Exist*						No
Frontier Dr	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	9,900	0.66	C	*Does Not Exist*						No
Greenwood St	Sports Arena Blvd	Kurtz St	2-Lane Collector	8,000	6,500	0.81	D	*Does Not Exist*						No
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	65,000	1.08	**F**	6-Lane Prime Arterial	60,000	50,700	0.85	D	0.23	**Yes**
Rosecrans St	Lytton St	Midway Dr	6-Lane Prime Arterial	60,000	53,200	0.89	D	6-Lane Major Arterial	50,000	46,400	0.93	**E**	-0.04	No

Table 4-3 Roadway Segment Level of Service Results

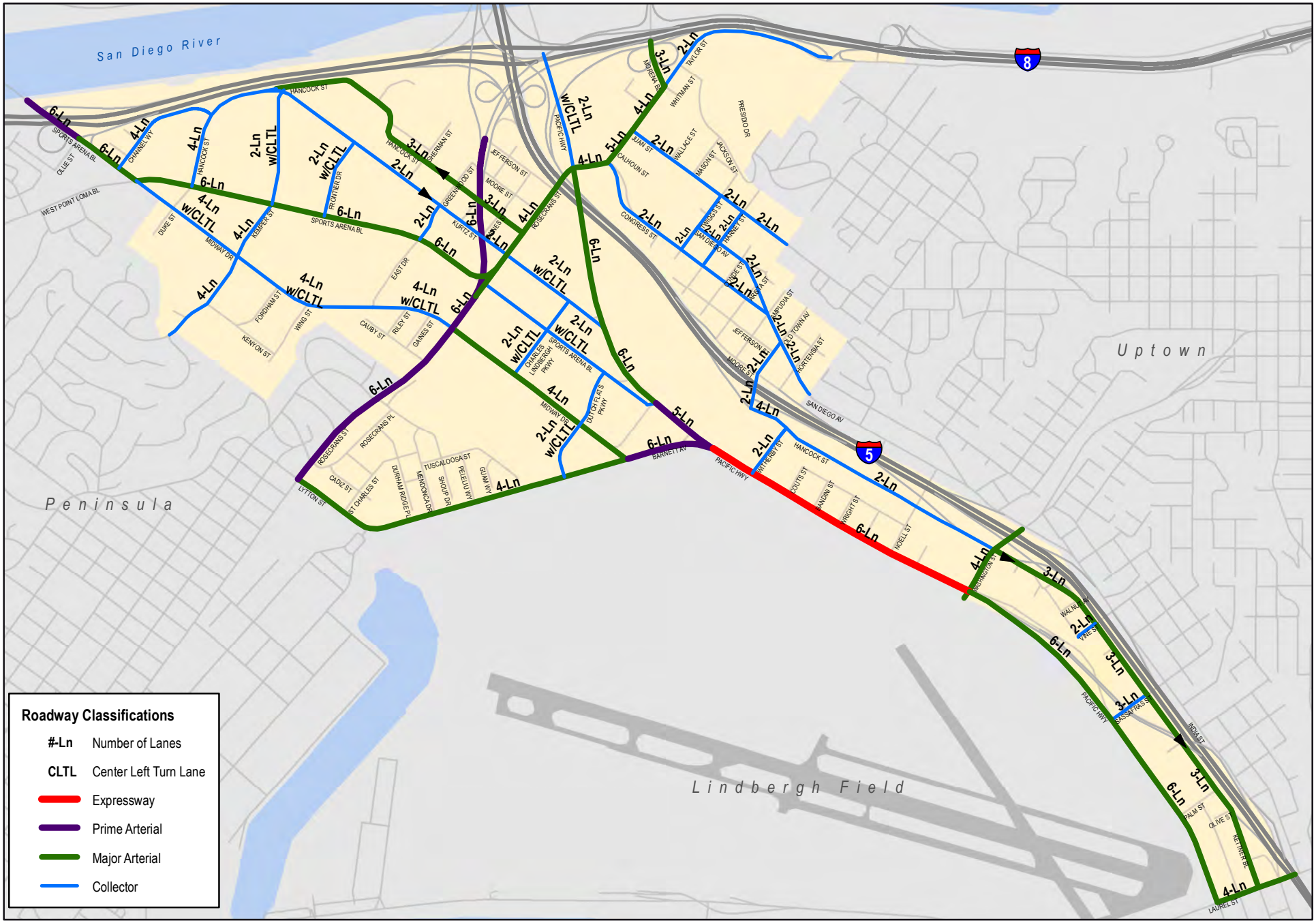
			Preferred Plan Conditions					Existing Conditions						
Roadway	**From**	**To**	**Roadway Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Functional Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Δ V/C**	**SI?**
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Prime Arterial	60,000	56,400	0.94	**E**	6-Lane Major Arterial	50,000	59,100	1.18	**F**	-0.24	No
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Major Arterial	40,000	21,200	0.53	C	4-Lane Collector (CLTL)	30,000	15,500	0.52	C	0.01	No
Charles Lindbergh Pkwy	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	5,700	0.38	B	*Does Not Exist*						No
	Sports Arena Blvd	Kurtz Street	2-Lane Collector (CLTL)	15,000	8,100	0.54	C	*Does Not Exist*						No
Dutch Flats Pkwy	Barnett Avenue	Midway Dr	2-Lane Collector (CLTL)	15,000	12,700	0.85	D	*Does Not Exist*						No
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,500	0.57	C	*Does Not Exist*						No
Barnett Ave	Midway Dr	Pacific Hwy	6-Lane Prime Arterial	60,000	51,100	0.85	D	4-Lane Major Arterial	40,000	57,954	1.45	**F**	-0.6	No
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	15,400	0.39	B	4-Lane Major Arterial	40,000	10,680	0.27	A	0.12	No
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	22,300	0.56	C	4-Lane Major Arterial	40,000	12,870	0.32	A	0.24	No
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	1,200	0.15	A	2-Lane Collector	8,000	250	0.03	A	0.12	No
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	20,500	1.86	**F**	3-Lane Collector	11,000	8,700	0.79	D	1.07	**Yes**
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	31,100	0.78	D	4-Lane Major Arterial	40,000	26,290	0.66	C	0.12	No
Old Town														
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	29,600	0.74	C	4-Lane Major Arterial	40,000	22,100	0.55	C	0.19	No
	Congress St	Juan St	5-Lane Major Arterial	45,000	20,700	0.46	B	5-Lane Major Arterial	45,000	13,560	0.30	A	0.16	No
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	25,200	0.63	C	4-Lane Major Arterial	40,000	17,530	0.44	B	0.19	No
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	15,000	1.88	**F**	2-Lane Collector	8,000	13,140	1.64	**F**	0.24	**Yes**

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,700	0.34	B	2-Lane Collector	8,000	2,080	0.26	A	0.08	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,500	0.44	C	2-Lane Collector	8,000	2,670	0.33	B	0.11	No
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,700	0.21	A	2-Lane Collector	8,000	1,520	0.19	A	0.02	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,200	0.40	B	2-Lane Collector	8,000	2,350	0.29	A	0.11	No
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	12,300	1.54	**F**	2-Lane Collector	8,000	11,750	1.47	**F**	0.07	**Yes**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,800	0.85	**E**	2-Lane Collector	8,000	6,120	0.77	D	0.08	**Yes**

Source: Chen Ryan Associates (May 2017)

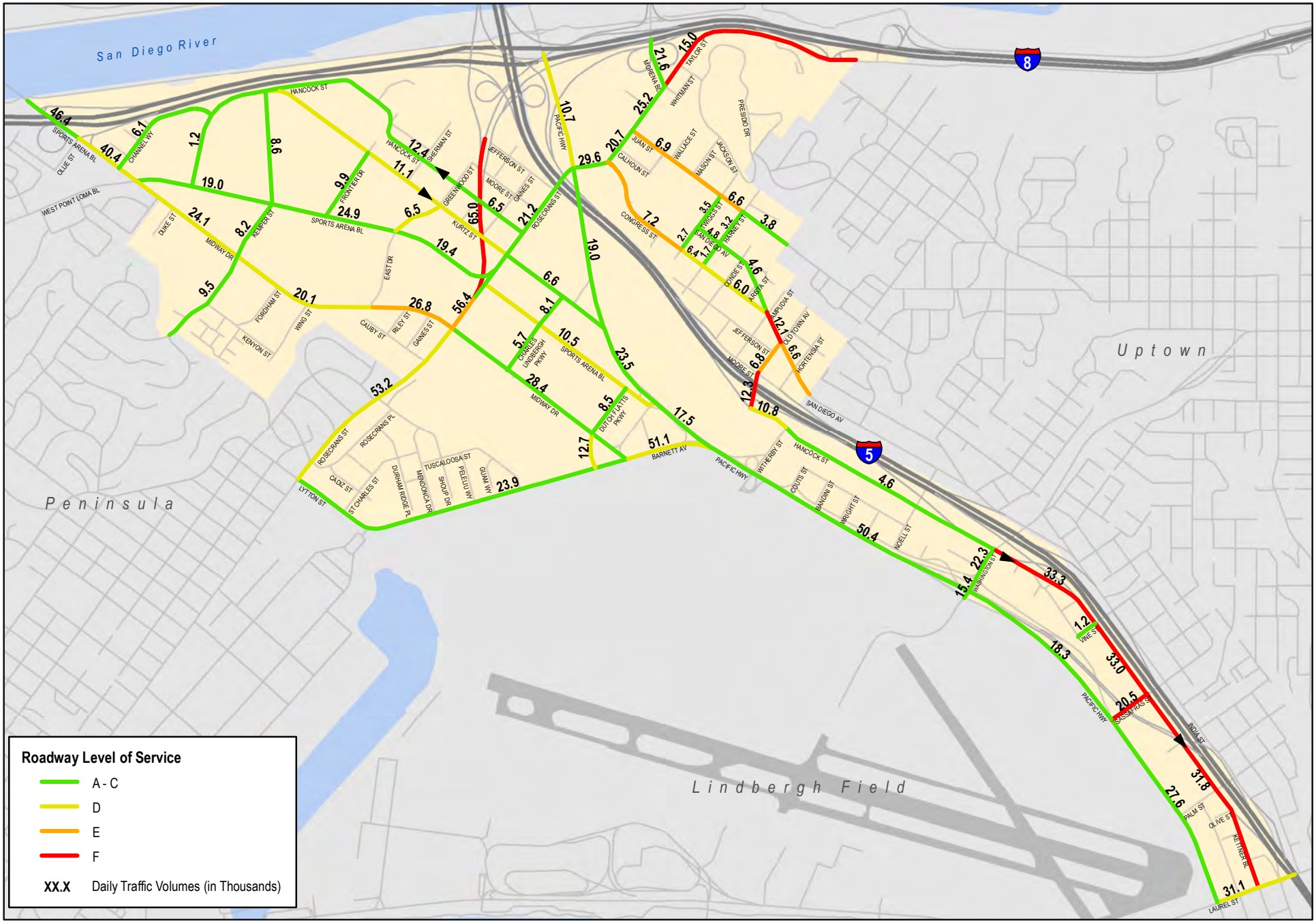
Note:
Bold letter indicates LOS E or F



Midway-Pacific Highway and
Old Town Community Plan Update

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Figure 4-1
Roadway Classifications -
Preferred Plan Conditions



Midway-Pacific Highway and
Old Town Community Plan Update
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Figure 4-2
Daily Roadway Segment Traffic Volumes and LOS - Preferred Plan Conditions

Based on the criteria documented in Chapter 2, the following roadway segments will have a significant impact under buildout of the Preferred Plan:

Midway-Pacific Highway Community

- Kettner Boulevard, between Washington Street and Vine Street (LOS F, ΔVC 0.35)
- Kettner Boulevard, between Vine Street and Sassafras Street (LOS F, ΔVC 0.36)
- Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F, ΔVC 0.43)
- Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F, ΔVC 0.23)
- Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F, ΔVC 1.07)

Old Town Community

- Congress Street between Taylor Street and Twiggs Street (LOS E, ΔVC 0.37)
- San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F, ΔVC 0.24)
- San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E, ΔVC 0.15)
- Juan Street, between Taylor Street and Twiggs Street (LOS E, ΔVC 0.18)
- Juan Street, between Twiggs Street and Harney Street (LOS E, ΔVC 0.23)
- Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F, ΔVC 0.24)
- Old Town Avenue, between Hancock Street and Moore Street (LOS F, ΔVC 0.07)
- Old Town Avenue, between Moore Street and San Diego Avenue (LOS E, ΔVC 0.08)

4.3 Intersection Analysis

AM and PM peak hour intersection LOS analyses were conducted under Preferred Plan and Existing Conditions. The following intersection improvements were assumed under buildout of the Preferred Plan:

Rosecrans Street / Sports Arena Boulevard / Camino Del Rio West:

- Remove the southbound free right-turn movement from Camino Del Rio West onto Sports Arena Boulevard and replace it with an exclusive right-turn lane.
- Allow southbound movements to continue on Sports Arena Boulevard through the intersection. It should be noted that you would still not be able to access the southern leg of Sports Arena Boulevard from westbound Rosecrans Street or southwest bound Camino del Rio West.

Sports Arena Boulevard / Pacific Highway:

- Move intersection approximately 500 feet to the north.
- Re-align Sports Arena Boulevard to create a right-angle with Pacific Highway.
- Signalize the intersection.
- Provide an exclusive eastbound left-turn lane from Sports Arena Boulevard onto Pacific Highway.
- Provide an exclusive northbound left-turn lane from Pacific Highway onto Sports Arena Boulevard.

Sports Arena Boulevard / West Point Loma Boulevard / Midway Drive

- Remove the westbound free right-turn movement from Sports Arena Boulevard onto Sports Arena Boulevard. The right-of-way will be used to extend the curb and create a curb bulb-out to reduce the pedestrian crossing distance. Right-turn movements will be permitted from the outside through lane.
- Square up and control the northbound free right-turn movement from Midway Drive onto Sports Arena Boulevard with the intersection.

West Washington Street / Pacific Highway

- Further analyze operations at this intersection to determine if additional improvements would be beneficial.

Congress Street / San Diego Avenue / Ampudia Street:

- Convert intersection to all-way stop control
- Implement bulb-outs on all legs of the intersection
- Widen the sidewalks along the north side of San Diego Avenue

Seven new intersections are recommended for the Midway-Pacific Highway community. Additionally, the roadway network was evaluated to identify intersection locations, both existing and new intersections, that would benefit from the implementation of a roundabout or signalization. A summary of recommended intersection improvements are displayed in Table 4-4. It is not known at this time if the implementation of roundabout will be feasible at any or all intersections. A roundabout feasibility analysis will need to be performed once the new intersections and roadways are designed. Therefore, to be conservative the analysis assumed that all new intersections would be signalized, unless otherwise noted. However, it is recommended that a roundabout be implemented in lieu of a signal at all new intersections, where feasible.

With the exception of the intersection of Congress Street / San Diego Avenue, / Ampudia Street, no other operational intersection improvements were identified for the Old Town community. Traffic signal warrants were conducted at the intersections where signalization is recommended. Figure 4C-103 (CA) of the California Manual on Uniform Traffic Control Devices (MUTCD) 2012 Edition was utilized for the signal warrant. All intersections where signalization is recommended met the warrants. Signal warrant worksheets are provided in Appendix H of the Mobility Report.

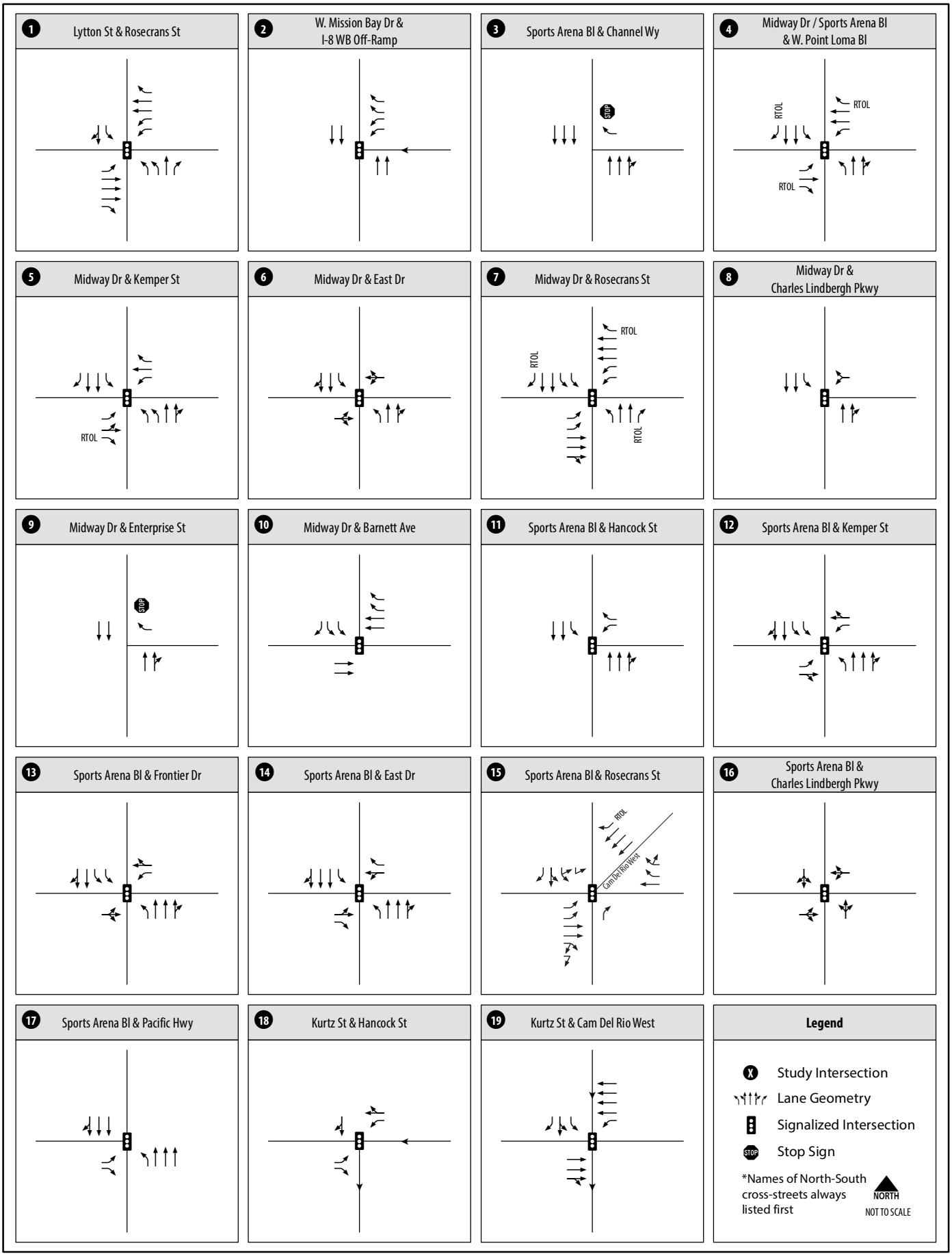
Table 4-4 Summary of Intersection Improvements

No.	Intersection	Improvement	Control
8	Midway Drive / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
12	Kemper Street / Sports Arena Boulevard	Add north leg	Signalized
13	Sports Arena Boulevard / Frontier Drive	Add north leg	Signalized
14	Sports Arena Boulevard / Greenwood Street	Add north leg	Signalized
16	Sports Arena Boulevard / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
17	Sports Arena Boulevard / Pacific Highway	Relocate intersection and signalize	Signalized
18	Kurtz Street / Hancock Street	Add south leg and signalize	Signalized
21	Kurtz Street / Pacific Highway	Signalize	Signalized
61	Kurtz Street / Frontier Drive	New intersection	Roundabout/SSSC
62	Kurtz Street / Greenwood Street	Add south leg and signalize	Signalized
63	Kurtz Street / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
64	Barnett Avenue / Dutch Flats Parkway	New intersection	Roundabout/Signalized
65	Midway Drive / Dutch Flats Parkway	New intersection	Roundabout/Signalized
66	Sports Arena Boulevard / Dutch Flats Parkway	New intersection	Roundabout/Signalized
N/A	Hancock Street / Greenwood Street	Signalize	Signalized

Source: Chen Ryan Associates (June 2016)

The proposed intersection geometrics and forecast AM/PM peak hour turning movement volumes under Preferred Plan buildout conditions are provided in Figure 4-3 and Figure 4-4, respectively.

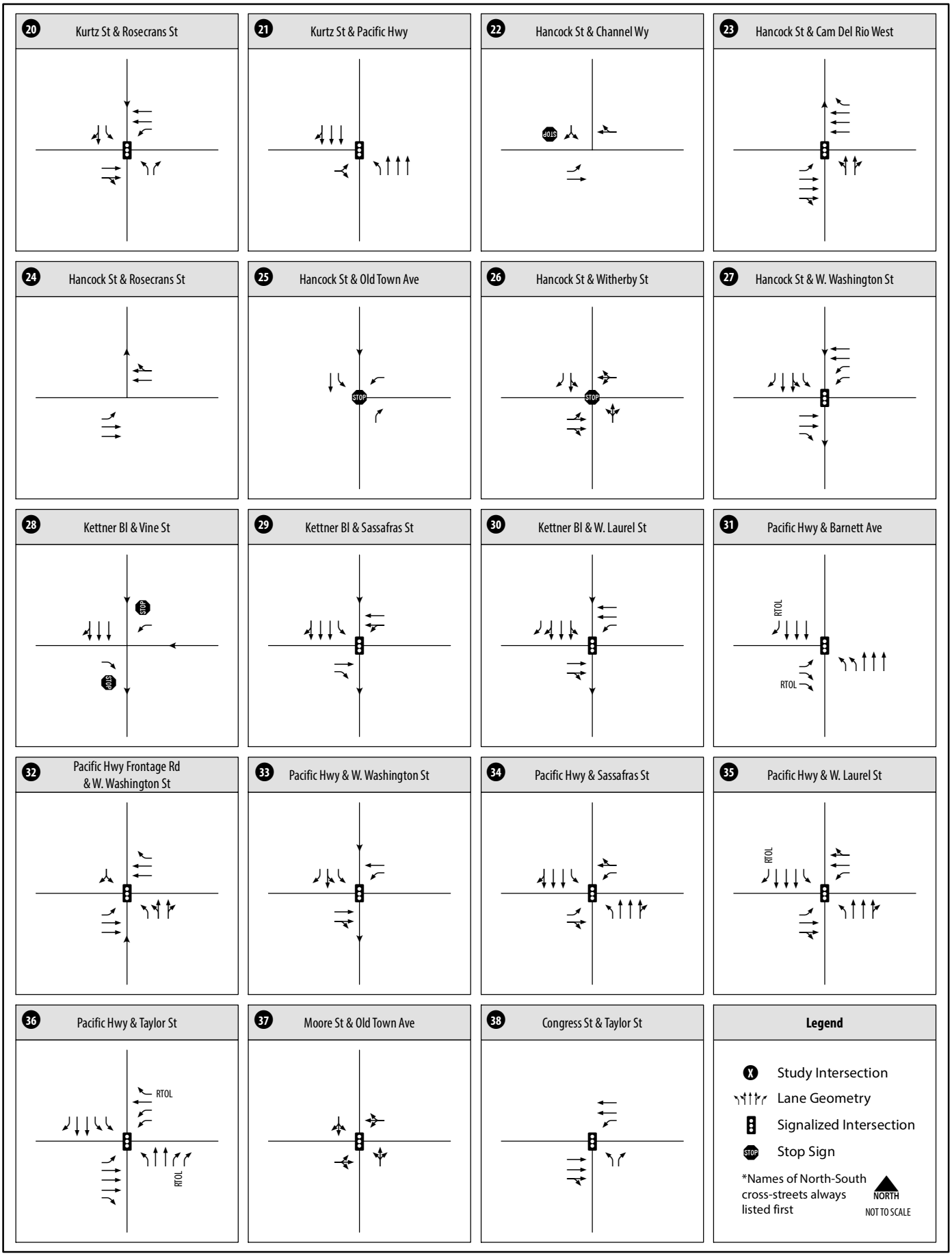
Table 4-5 displays intersection level of service and average vehicle delay results for study area intersections under Preferred Plan and Existing Conditions. Level of service calculation worksheets are provided in Appendix I.



Midway-Pacific Highway and Old Town Community Plan Update

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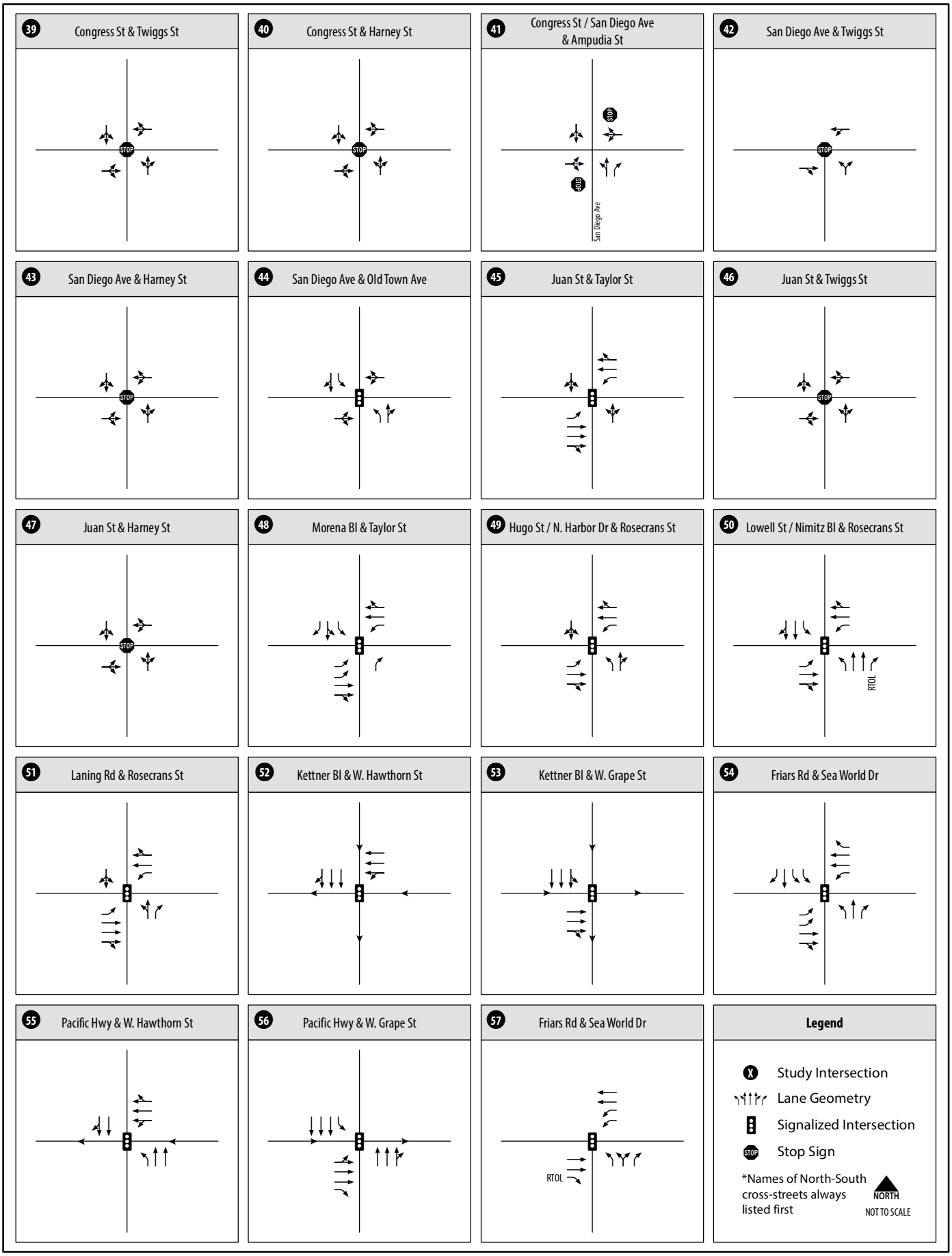
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 1-19)



Midway-Pacific Highway and Old Town Community Plan Update

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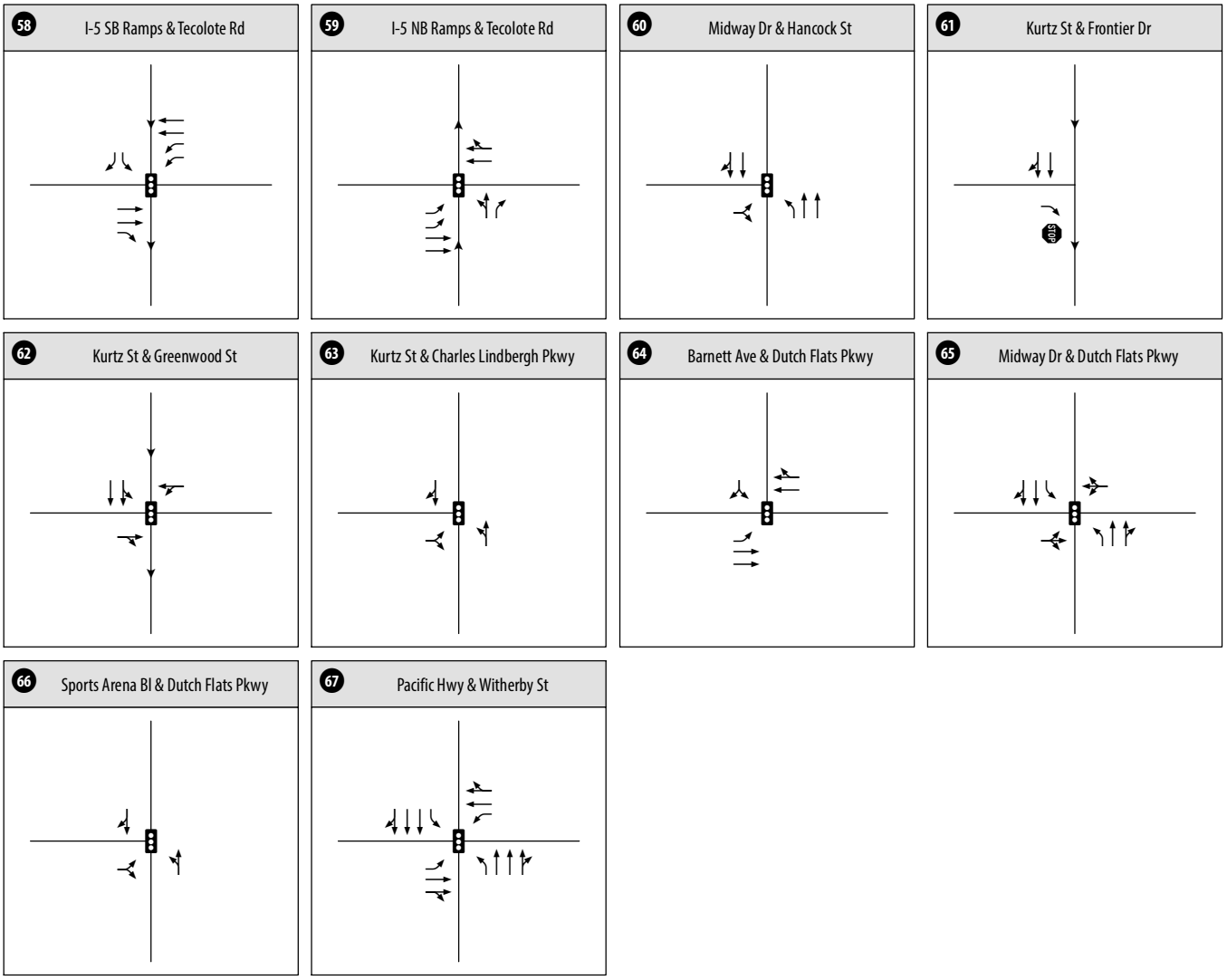
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 20-38)



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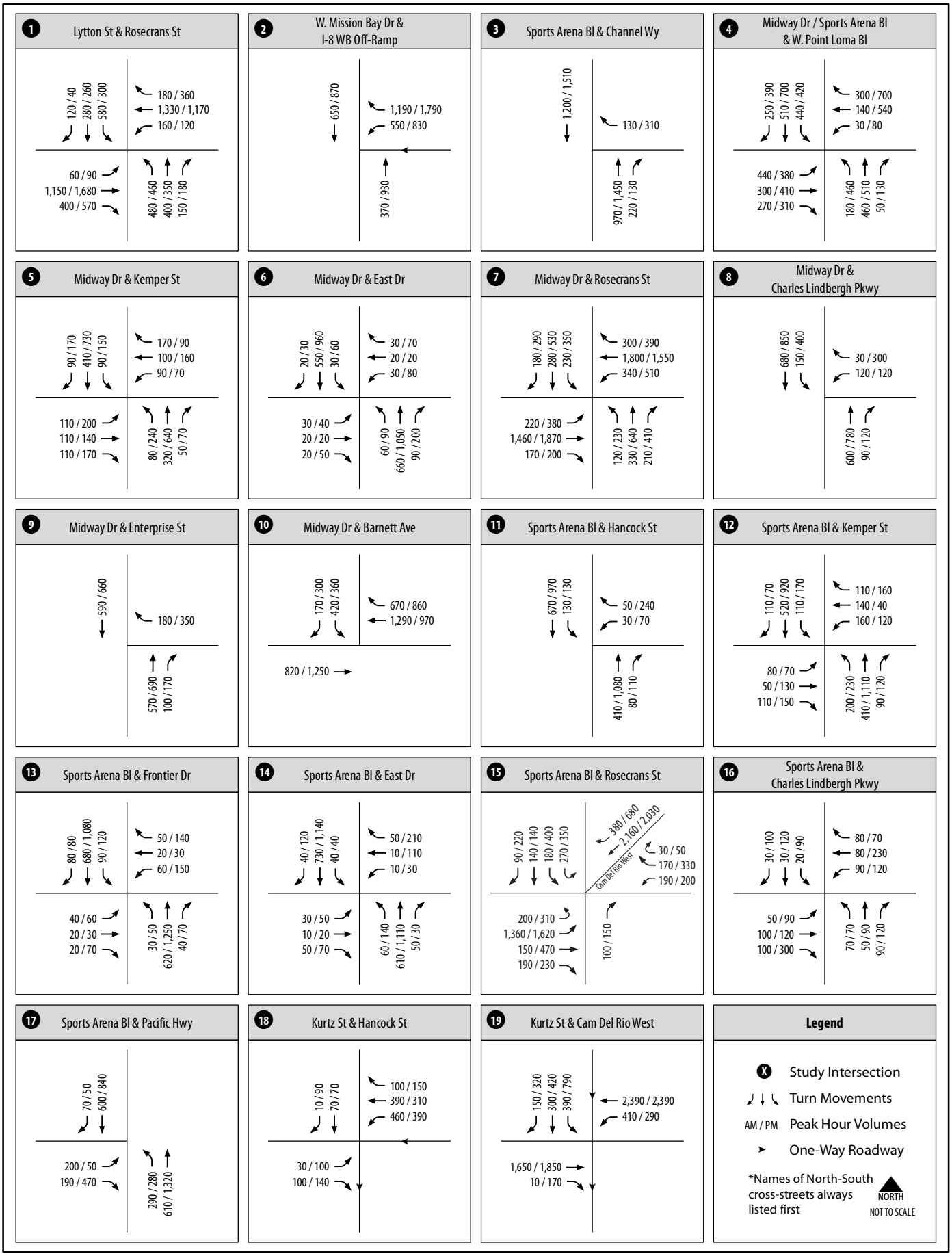
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 39-57)



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Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 58-67)

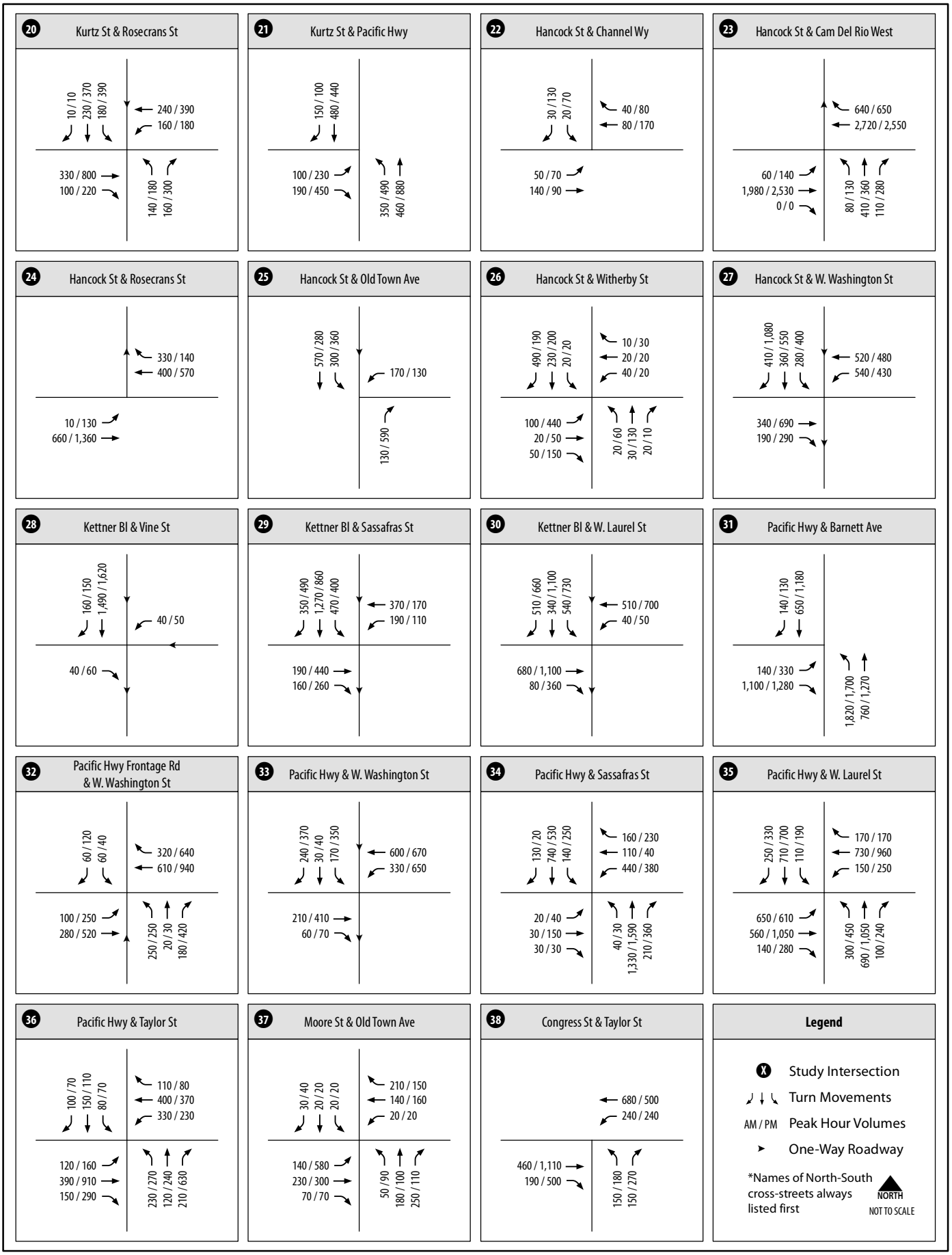


Midway-Pacific Highway and Old Town Community Plan Update

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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 1-19)

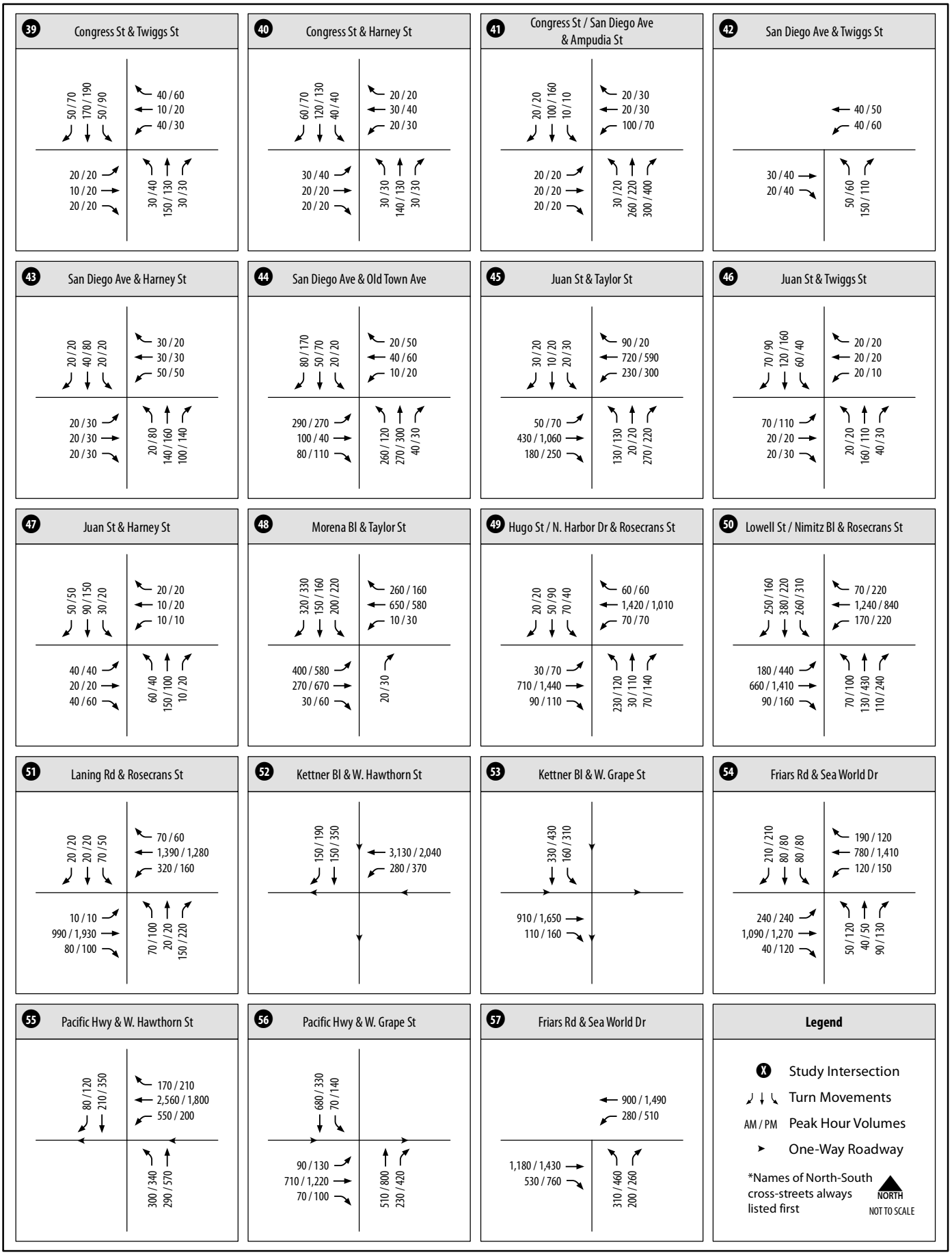


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 20-38)



Midway-Pacific Highway and Old Town Community Plan Update

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Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 39-57)

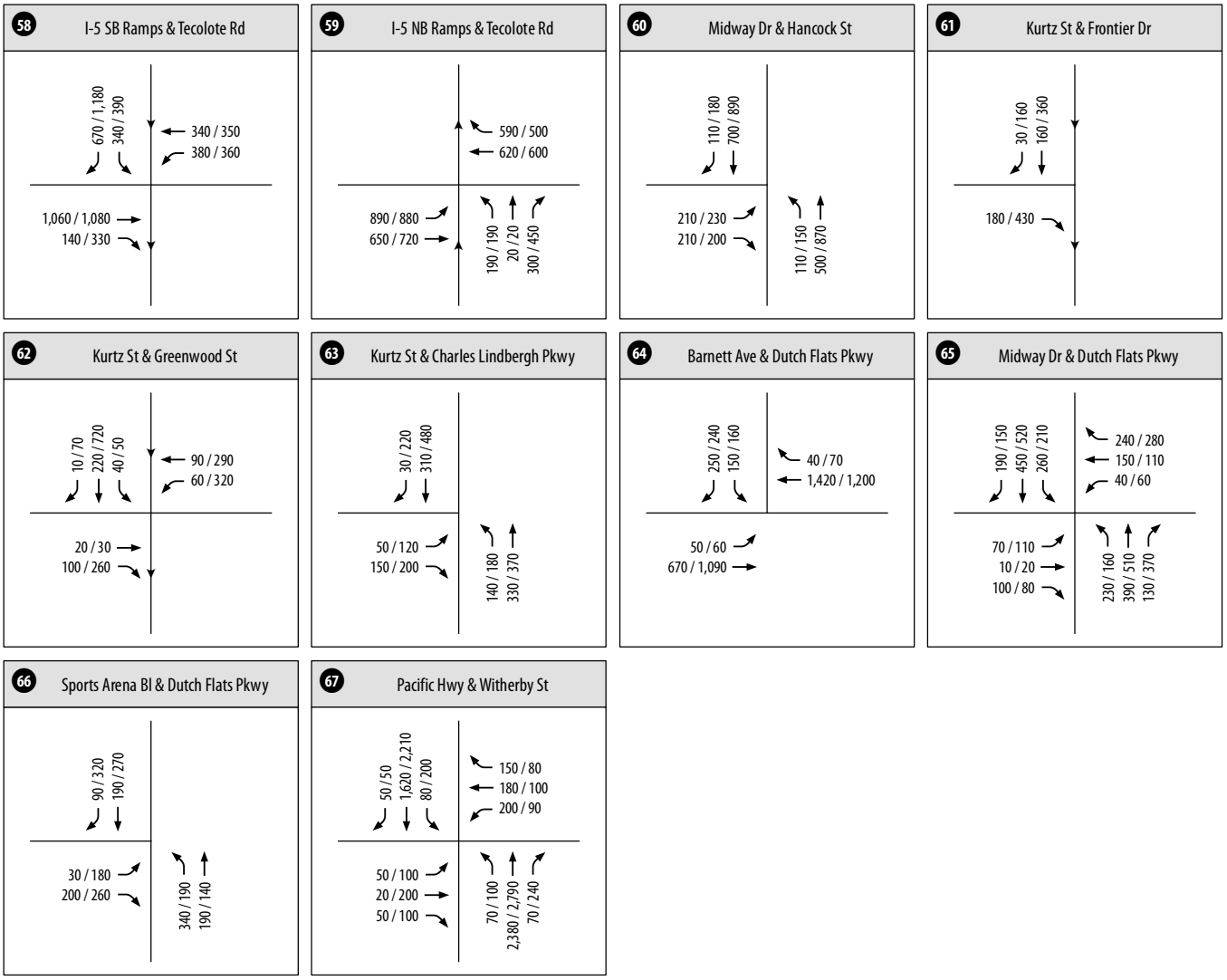


Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 58-67)

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Midway-Pacific Highway													
1	Lytton St and Rosecrans St	Signal	96.9	**F**	55.1	**E**	65.4	**E**	44.5	D	31.5	10.6	**Yes**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	15.4	B	68.5	**E**	14.8	B	59.5	**E**	0.6	9.0	**Yes**
3	Sports Arena Blvd and Channel Way	SSSC[2]	14.0	B	31.9	D	11.2	B	14.7	B	2.8	17.2	No
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	51.1	D	77.9	**E**	36.6	D	47.2	D	14.5	30.7	**Yes**
5	Midway Dr and Kemper St	Signal	32.0	C	40.5	D	22.7	C	37.3	D	9.3	3.2	No
6	Midway Dr and East Dr	Signal	7.0	A	17.8	B	4.8	A	13.0	B	2.2	4.8	No
7	Midway Dr and Rosecrans St	Signal	36.3	D	65.4	**E**	34.9	C	49.1	D	1.4	16.3	**Yes**
8	Midway Dr and Charles Lindbergh Pkwy	Signal	11.5	B	25.6	C	*Intersection does not currently exist*						No
9	Midway Dr and Enterprise St	SSSC[2]	12.9	B	26.0	D	11.0	B	18.1	C	1.9	7.9	No
10	Midway Dr and Barnett Ave	Signal	13.6	B	12.0	B	13.8	B	19.8	B	-0.2	-7.8	No
11	Sports Arena Blvd and Hancock St	Signal	14.8	B	18.6	B	10.0	A	13.1	B	4.8	5.5	No
12	Sports Arena Blvd and Kemper St	Signal	34.6	C	36.3	D	18.8	B	17.5	B	15.8	18.8	No
13	Sports Arena Blvd and Sports Arena Driveway	Signal	17.9	B	27.9	C	17.1	B	24.8	C	0.8	3.1	No
14	Sports Arena Blvd and East Dr	Signal	6.8	A	23.9	C	26.0	C	11.9	B	-19.2	12.0	No
15	Sports Arena Blvd and Rosecrans St	Signal	36.7	D	53.9	D	35.7	D	43.2	D	1.0	10.7	No
16	Sports Arena Blvd and Charles Lindbergh Pkwy	Signal	13.9	B	16.0	B	*Intersection does not currently exist*						No
17	Sports Arena Blvd and Pacific Hwy	Signal	26.9	C	17.6	B	10.6	B	12.0	B	16.3	5.6	No
18	Kurtz St and Hancock St	Signal	13.5	B	12.1	B	*Intersection does not currently exist*						No
19	Kurtz St and Camino Del Rio West	Signal	19.2	B	28.6	C	9.4	A	20.2	C	9.8	8.4	No
20	Kurtz St and Rosecrans St	Signal	24.2	C	29.2	C	20.0	B	31.7	C	4.2	-2.5	No
21	Kurtz St and Pacific Hwy	Signal	27.9	C	47.5	D	11.2	B	13.7	B	16.7	33.8	No
22	Hancock St and Channel Wy	SSSC[2]	10.0	B	12.9	B	9.3	A	10.5	B	0.7	2.4	No
23	Hancock St and Camino Del Rio West	Signal	30.2	C	26.1	C	24.3	C	20.3	C	5.9	5.8	No
24	Hancock St and Rosecrans St	*No Conflicting Movements*											

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
25	Hancock St and Old Town Ave	AWSC[3]	24.8	C	20.9	C	16.9	C	14.6	B	7.9	6.3	No
26	Hancock St and Witherby St	AWSC[3]	13.9	B	33.6	D	16.0	C	23.5	C	-2.1	10.1	No
27	Hancock St and Washington St	Signal	22.4	C	76.1	**E**	22.8	C	25.9	C	-0.4	50.2	**Yes**
28	Kettner Blvd and Vine St	SSSC[2]	16.0	C	18.5	C	14.3	B	23.2	C	1.7	-4.7	No
29	Kettner Blvd and Sassafras St	Signal	14.3	B	14.9	B	12.0	B	11.9	B	2.3	3.0	No
30	Kettner Blvd and West Laurel St	Signal	19.5	B	89.0	**F**	20.0	B	29.7	C	-0.5	59.3	**Yes**
31	Pacific Hwy and Barnett Ave	*No Conflicting Movements*											
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	25.8	C	45.4	D	19.4	B	36.0	D	6.4	9.4	No
33	Pacific Hwy and Washington St	Signal	19.6	B	26.6	C	18.7	B	31.2	C	0.9	-4.6	No
34	Pacific Hwy and Sassafras St	Signal	27.9	C	58.2	**E**	14.4	B	27.3	C	13.5	30.9	**Yes**
35	Pacific Hwy and West Laurel St	Signal	88.1	**F**	133.0	**F**	48.4	D	42.9	D	39.7	90.1	**Yes**
Old Town													
36	Pacific Hwy and Taylor St	Signal	30.8	C	50.5	D	64.6	**E**	33.5	C	-33.8	17.0	No
37	Moore St and Old Town Ave	Signal	23.2	C	98.9	**F**	16.4	B	16.4	B	6.8	82.5	**Yes**
38	Congress St and Taylor St	Signal	13.5	B	18.2	B	19.9	B	21.7	C	-6.4	-3.5	No
39	Congress St and Twiggs St	AWSC[3]	9.7	A	10.8	B	8.1	A	8.6	A	1.6	2.2	No
40	Congress St and Harney St	AWSC[3]	9.0	A	9.3	A	8.1	A	8.3	A	0.9	1.0	No
41	Congress St and San Diego Ave/Ampudia St	AWSC[3]	9.7	A	11.6	B	12.3	B	11.5	B	-2.6	0.1	No
42	San Diego Ave and Twiggs St	AWSC[3]	7.9	A	8.0	A	7.9	A	8.0	A	0.0	0.0	No
43	San Diego Ave and Harney St	AWSC[3]	8.9	A	10.8	B	8.2	A	8.2	A	0.7	2.6	No
44	San Diego Ave and Old Town Ave	Signal	18.5	B	14.1	B	18.4	B	11.6	B	0.1	2.5	No
45	Juan St and Taylor St	Signal	14.6	B	17.4	B	10.4	B	10.7	B	4.2	6.7	No
46	Juan St and Twiggs St	AWSC[3]	9.7	A	10.0	B	8.8	A	8.5	A	0.9	1.5	No
47	Juan St and Harney St	AWSC[3]	8.8	A	8.8	A	8.3	A	7.9	A	0.5	0.9	No
48	Morena Blvd and Taylor St	Signal	21.8	C	23.5	C	22.4	C	16.4	B	-0.6	7.1	No

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Intersections Outside of Study Communities													
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	30.0	C	32.1	C	14.7	B	20.7	C	15.3	11.4	No
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	59.9	**E**	110.6	**F**	41.2	D	63.3	**E**	18.7	47.3	**Yes**
51	Laning Rd and Rosecrans St	Signal	25.6	C	23.2	C	15.5	B	12.9	B	10.1	10.3	No
52	Kettner Blvd and West Hawthorn St	Signal	41.2	D	13.3	B	11.1	B	15.0	B	30.1	-1.7	No
53	Kettner Blvd and West Grape St	Signal	10.3	B	10.0	B	7.4	A	8.7	A	2.9	1.3	No
54	Pacific Hwy and Sea World Dr	Signal	23.9	C	33.4	C	19.9	B	25.6	C	4.0	7.8	No
55	Pacific Hwy and West Hawthorn St	Signal	35.3	D	32.4	C	35.4	D	20.2	C	-0.1	12.2	No
56	Pacific Hwy and West Grape St	Signal	17.9	B	31.6	C	16.8	B	24.2	C	1.1	7.4	No
57	Friars Rd and Sea World Dr	Signal	15.1	B	25.7	C	11.5	B	13.8	B	3.6	11.9	No
58	I-5 SB Ramps and Sea World Dr	Signal	18.2	B	20.5	C	15.5	B	16.3	B	2.7	4.2	No
59	I-5 NB Ramps and Sea World Dr	Signal	28.8	C	42.4	D	21.4	C	28.4	C	7.4	14.0	No
New Intersections (Midway-Pacific Highway Community)													
60	Midway Dr & Duke Street / Hancock St	Signal	42.4	D	53.3	D	*Intersection does not currently exist*						No
61	Kurtz St & Frontier Dr	SSSC[2]	9.9	A	14.1	B	*Intersection does not currently exist*						No
62	Kurtz St & Greenwood St	Signal	11.9	B	12.4	B	*Intersection does not currently exist*						No
63	Kurtz St & Charles Lindbergh Pkwy	Signal	8.3	A	17.9	B	*Intersection does not currently exist*						No
64	Barnett Ave & Dutch Flats Pkwy	Signal	24.6	C	14.4	B	*Intersection does not currently exist*						No
65	Midway Dr & Dutch Flats Pkwy	Signal	32.2	C	44.6	D	*Intersection does not currently exist*						No
66	Dutch Flats Pkwy & Sports Arena Bl	Signal	10.8	B	18.3	B	*Intersection does not currently exist*						No

Source: Chen Ryan Associates (May 2017)

Note:
Bold letter indicates LOS E or F.
[1] Significant Impact
[2] Single Side Stop Controlled
[3] All Way Stop Controlled

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following intersections:

Midway-Pacific Highway Community

1. Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)
2. Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)
4. Midway Drive / West Point Loma Drive and Sports Arena Boulevard (LOS E: PM Peak Hour)
7. Midway Drive and Rosecrans Street (LOS E: PM Peak Hour)
27. Hancock Street and Washington Street (LOS E: PM Peak Hour)
30. Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)
34. Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)
35. Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)

Old Town Community

37. Moore Street and Old Town Street (LOS F: PM Peak Hour)

Outside of the Community

50. Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)

It is important to note that three of the ten intersections listed above currently experience LOS E or F during the AM and/or PM peak period under existing conditions. Additionally, two intersections experiencing LOS E or F under existing conditions will be improved to a satisfactory LOS through implementation of the Preferred Plan.

4.4 Freeway Segment Analysis

Neither the Revenue Constrained Alternative of SANDAG's *San Diego Forward Plan* (October 2015) nor the Preferred Plan recommend freeway improvements within the project study area.

Table 4-6A and Table 4-6B display freeway segment analysis results within the project study area for the AM and PM peak hours, respectively.

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following freeway segments:

- I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour)
- I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours)
- I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour)
- I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour)
- I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)
- I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour)
- I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour)

Table 4-6A Freeway Segment Level of Service Comparison (AM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (AM)				Existing Conditions (AM)				Δ in V/C (AM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	6.30%	60%	61,200	2,600	0.55	B	46,500	1,900	0.40	A	0.15	No
			WB	2M + 0A	4,700		40%		1,700	0.36	A		1,300	0.28	A	0.08	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	6.40%	60%	122,400	5,300	0.63	C	102,000	4,400	0.52	B	0.11	No
			WB	3M + 1A	8,450		40%		3,500	0.41	B		2,900	0.34	A	0.07	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	6.40%	41%	183,300	5,400	0.50	B	132,000	3,900	0.36	A	0.14	No
			WB	5M + 0A	11,750		59%		7,600	0.65	C		5,500	0.47	B	0.18	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	6.50%	47%	217,200	7,300	0.68	C	191,000	6,500	0.60	B	0.08	No
			WB	5M + 0A	11,750		53%		8,300	0.71	C		7,400	0.63	C	0.08	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	6.40%	61%	241,500	10,900	0.93	**E**	220,000	10,000	0.85	D	0.08	**Yes**
			SB	5M + 0A	11,750		39%		6,900	0.59	B		6,200	0.53	B	0.06	No
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	6.40%	62%	231,800	10,400	0.96	**E**	199,000	9,000	0.83	D	0.13	**Yes**
			SB	4M + 2A	12,200		38%		6,300	0.52	B		5,400	0.44	B	0.08	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	6.90%	49%	243,000	9,400	0.87	D	199,000	7,700	0.71	C	0.16	No
			SB	5M + 0A	11,750		51%		9,600	0.82	D		7,900	0.67	C	0.15	No
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	6.90%	49%	227,800	8,900	0.95	**E**	192,000	7,500	0.80	D	0.15	**Yes**
			SB	5M + 0A	11,750		51%		9,100	0.77	C		7,700	0.66	C	0.11	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	6.90%	54%	171,500	7,300	0.78	C	142,000	6,000	0.64	C	0.14	No
			SB	4M + 0A	9,400		46%		6,300	0.67	C		5,200	0.55	B	0.12	No
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	6.70%	58%	216,500	9,800	0.91	D	147,000	6,600	0.61	B	0.30	No
			SB	4M + 1A	10,800		42%		7,000	0.65	C		4,700	0.44	B	0.21	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	6.70%	57%	222,200	9,800	0.91	D	183,000	8,100	0.75	C	0.16	No
			SB	4M + 1A	10,800		43%		7,300	0.68	C		6,000	0.56	B	0.12	No

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

Table 4-6B Freeway Segment Level of Service Comparison (PM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (PM)				Existing Conditions (PM)				Δ in V/C (PM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	8.50%	72%	61,200	3,100	0.66	C	46,500	3,200	0.68	C	-0.02	No
			WB	2M + 0A	4,700		28%		2,700	0.57	B		1,300	0.28	A	0.29	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	7.80%	63%	122,400	5,500	0.65	C	102,000	5,600	0.66	C	-0.01	No
			WB	3M + 1A	8,450		37%		5,200	0.62	B		3,400	0.4	A	0.22	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	7.20%	51%	183,300	6,600	0.61	B	132,000	5,500	0.51	B	0.10	No
			WB	5M + 0A	11,750		49%		8,000	0.68	C		5,200	0.44	B	0.24	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	8.20%	55%	217,200	10,900	1.01	**F**	191,000	9,700	0.9	D	0.11	**Yes**
			WB	5M + 0A	11,750		45%		8,900	0.76	C		8,000	0.68	C	0.08	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	8.30%	51%	241,500	11,700	1.00	**E**	220,000	10,700	0.91	D	0.09	**Yes**
			SB	5M + 0A	11,750		49%		11,200	0.95	**E**		10,300	0.88	D	0.07	**Yes**
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	8.40%	52%	231,800	11,500	1.06	**F**	199,000	10,000	0.93	**E**	0.13	**Yes**
			SB	4M + 2A	12,200		48%		10,600	0.87	D		9,200	0.75	C	0.12	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	8.20%	39%	243,000	8,800	0.81	D	199,000	7,300	0.68	C	0.13	No
			SB	5M + 0A	11,750		61%		13,800	1.17	**F**		11,400	0.97	**E**	0.20	**Yes**
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	8.00%	51%	227,800	10,600	1.13	**F**	192,000	9,000	0.96	**E**	0.17	**Yes**
			SB	5M + 0A	11,750		49%		10,200	0.87	D		8,600	0.73	C	0.14	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	8.10%	36%	171,500	5,700	0.61	B	142,000	4,800	0.51	B	0.10	No
			SB	4M + 0A	9,400		64%		10,100	1.07	**F**		8,400	0.89	D	0.18	**Yes**
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	7.00%	49%	216,500	8,200	0.76	C	147,000	5,800	0.54	B	0.22	No
			SB	4M + 1A	10,800		51%		9,300	0.86	D		6,100	0.56	B	0.30	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	7.30%	46%	222,200	8,000	0.74	C	183,000	7,100	0.66	C	0.08	No
			SB	4M + 1A	10,800		54%		10,500	0.97	**E**		8,200	0.76	C	0.21	**Yes**

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

4.5 Ramp Meter Analysis

Table 4-7 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 4-7 Freeway Ramp Meter Analysis Comparison

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Preferred Plan Volume	Preferred Plan Excess Demand	Preferred Plan Delay (Minutes)	Preferred Plan Queue (Feet)	Existing Delay (Minutes)	Δ In Delay
I-8 EB / Sports Arena Boulevard	PM	2	1	641	930	289	27.1	8,381	25.5	1.6
I-5 SB / Sea World Drive	AM	1	1	444	530	86	11.6	2,494	0.0	11.6
	PM	1	1	444	670	226	30.5	6,554	11.4	19.1
I-5 NB / Sea World Drive	AM	2	0	1,555	1,530	0	0.0	0	0.0	0.0
	PM	2	0	1,656	1,250	0	0.0	0	0.0	0.0
I-5 SB / Old Town Avenue	PM	1	0	461	410	0	0.0	0	0.0	0.0
I-5 NB / Old Town Avenue	AM	2	0	905	370	0	0.0	0	0.0	0.0
	PM	2	0	888	690	0	0.0	0	0.0	0.0

Source: Chen Ryan Associates, Inc. (May 2017)

Based on the significance criteria outlined in Section 2.2.5, implementation of the preferred Plan would result in a significant impact to the I-5 SB / Sea World Dive ramp during the PM peak hour.

4.6 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted through implementation of the Preferred Plan.

4.6.1 Roadway Mitigation Measures

Midway-Pacific Highway Community

Kettner Boulevard, between Washington Street and Vine Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Kettner Boulevard, between Vine Street and Sassafras Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing*

features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.

Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F) – Improving this roadway from a 6-Lane Prime Arterial to a 6-Lane Expressway would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *This improvement would require grade separating all intersections along this segment of the roadway which is not consistent with the General Plan & Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F) - Widening the roadway from a 3-Lane Collector to a 4-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way available along this segment of Sassafras Street to accommodate a fourth travel lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

<u>Old Town Community</u>

Congress Street between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Congress Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 26 regular parking spaces and 13 loading/taxi parking spaces would need to be removed in order to accommodate this mitigation measure. Finally, this mitigation measure would be in conflict with the Community Plan, which proposed balancing all travel modes through an enhanced active transportation environment. Therefore, this improvement project is not identified in the Old Town IFS.*

San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 5 regular parking*

spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.

San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 9 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 48 regular parking spaces and 4 loading parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Twiggs Street and Harney Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 11 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F) - Widening the roadway from a 2-Lane Collector to a 4-Lane Major Arterial would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Taylor Street to accommodate two additional through lanes and a center median while maintaining a Class II bicycle facility. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Hancock Street and Moore Street (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the*

Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane while maintaining right-of-way for the proposed Class II bicycle lanes. Therefore, this improvement project is not identified in the Old Town IFS..

Old Town Avenue, between Moore Street and San Diego Avenue (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 18 regular parking spaces and 1 loading parking space would need to be removed in order to accommodate this mitigation measure. Finally, a Class II bicycle facility is proposed along this segment. Therefore, this improvement project is not identified in the Old Town IFS.*

4.6.2 Intersection Mitigation Measures

<u>Midway-Pacific Highway Community</u>

1. *Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)* – The westbound through movement, as well as the southbound left-turn and through movements are projected to be over capacity, under implementation of the Preferred Plan. Implementing the following improvements would allow the intersection to operate at LOS D or better during both peak hours.

    - Add a second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street
    - Add an additional westbound through movement lane on Rosecrans Street (three total)
    - Implement right-turn overlap (RTOL) phases at all legs of the intersection

    The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is currently not enough right-of-way on Rosecrans Street to accommodate a third westbound through lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: If the second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street and RTOL phases at all legs are implemented (feasible improvements) the overall intersection delay would be reduced to the following:

    AM: LOS E
    PM: LOS D

    Implementation of this improvement will partially mitigate the traffic related impact at the intersection. *This improvement project is identified in the Midway Pacific Highway IFS.*

2. *Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)* – The westbound right-turn movement, from I-8 WB to northbound West Mission Bay Drive, is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan.

Providing a third exclusive westbound right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The Preferred Plan is consistent with the CIP Project #S00871: W. Mission Bay Drive Bridge Over San Diego River, which was reviewed by City and Caltrans staff. Further mitigations, beyond what is recommended as part of this CIP project would be inconsistent with Community Plan Policies and Goals for multimodal facilities*. *Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

4. *Midway Drive / West Point Loma Boulevard and Sports Arena Boulevard (LOS E: PM Peak Hour) –* All four left-turn movements at this intersection are projected to be over capacity during the PM peak hour. Providing dual-left turn lanes on Midway Drive in the northbound direction, on Sports Arena Boulevard in the southbound direction, and on West Point Loma Boulevard in the eastbound direction would improve intersection operations to LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way within the intersection to accommodate any of the additional left-turn lanes considering the proposed multi-use urban trails along Midway Drive and Sports Arena Boulevard, and in-road bicycle facilities. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

   Partial Mitigation: None recommended.

7. *Midway Drive and Rosecrans Street* (LOS E: PM Peak Hour) – Rosecrans Street is projected to operate at LOS E during the PM peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches of Rosecrans Street to include a fourth through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen Rosecrans Street to eight lanes through the intersection considering the proposed multi-use urban path improvements. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

   Partial Mitigation: None recommended, limited to no right-of-way is anticipated to be available with proposed Multi-Use Urban Path improvements.

27. *Hancock Street and Washington Street (LOS E: PM Peak Hour) –* The southbound Hancock Street to westbound Washington Street right-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Restriping the southbound approach to include a second southbound right-turn lane would allow the intersection to operate at LOS C during the PM Peak Hour. This improvement is feasible but may require additional engineering study. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *This improvement would require the removal of on-street parking, which is heavily utilized by the businesses and restaurants in this area. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

   Partial Mitigation: None recommended.

30. *Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)* – The eastbound through movement on Laurel Street is projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Widening the eastbound Laurel Street approach of the intersection to include a third through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the eastbound Laurel Street approach to three lanes. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

34. *Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)* – The southbound Pacific Highway to eastbound Sassafras Street left-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Adding a second southbound left-turn lane would allow the intersection to operate at LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the southbound approach of Pacific Hwy to include a second left-turn lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

35. *Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)* – Laurel Street is projected to be over capacity during both peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches to include a second eastbound left-turn lane and a third through lane in each direction along Laurel Street, as well as widening the northbound approach of Pacific Highway to include a second northbound left-turn lane and exclusive right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Laurel Street to widen to three lanes in each direction. Also, there is not enough right-of-way on northbound Pacific Highway with the improvements of the cycle track, multi-use urban path*. Therefore, *this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

<u>Old Town Community</u>

37. *Moore Street and Old Town Avenue (LOS F: PM Peak Hour)* – The eastbound and westbound approaches along Old Town Avenue are projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Implementation of the following improvements would allow the intersection to operate at LOS D during the PM peak hour.

    - Implement exclusive eastbound and westbound left-turn lanes on the Old Town Avenue approaches of the intersection.
    - Convert the eastbound/westbound signal phasing from permitted to protected phasing.

    The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The eastbound approach on the Old Town Avenue bridge*

is not wide enough to accommodate an eastbound left-turn lane. Therefore, this improvement project is not identified in the Old Town IFS.

Partial Mitigation: None recommended.

Outside of the Community

50. *Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour*) – Both the eastbound Rosecrans Street through movement, and the eastbound Rosecrans Street to northbound Nimitz Boulevard left-turn movement are anticipated to be over capacity for both peak hours, under implementation of Preferred Plan. Widening the Rosecrans Street eastbound and westbound approaches of the intersection to include a third through lane, and providing an additional eastbound left-turn lane from Rosecrans Street to Nimitz Boulevard would improve the intersection operations to LOS D or better during both the AM and PM peak hours.

    The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Rosecrans Street to widen to six lanes. Therefore, this improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

    Partial Mitigation: None recommended.

Table 4-8 provides a comparison of Preferred Plan operations at the impacted intersections, with and without mitigation measures.

Table 4-8 Impacted Intersection Level of Service with Mitigation Measures

No.	Intersection	Control (Preferred Plan)	Mitigated Conditions				Preferred Plan			
			AM		PM		AM		PM	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
Midway-Pacific Highway										
1	Lytton St and Rosecrans St	Signal	42.7	D	39.0	D	96.9	F	55.1	E
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	12.5	B	34.1	C	15.4	B	68.5	E
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	30.6	C	43.9	D	51.1	D	74.0	E
7	Midway Dr and Rosecrans St	Signal	40.7	D	48.5	D	36.3	D	65.4	E
27	Hancock St and Washington St	Signal	22.2	C	33.6	C	22.4	C	76.1	E
30	Kettner Blvd and West Laurel St	Signal	17.6	B	41.2	D	19.0	B	89.0	F
34	Pacific Hwy and Sassafras St	Signal	23.2	C	41.1	D	27.9	C	58.2	E
35	Pacific Hwy and West Laurel St	Signal	36.9	D	54.0	D	88.1	F	133.0	F
Old Town										
37	Moore St and Old Town Ave	Signal	28.6	C	38.6	D	23.2	C	98.9	F
Intersections Outside of Study Communities										
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	29.0	C	45.5	D	59.9	E	110.6	F

Source: Chen Ryan Associates (October 2017)

Notes:
Bold letter indicates LOS E or F.

4.6.3 Freeway Segment Mitigation Measures

I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies operational improvements along this segment. These improvements are anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvements and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained

Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through

fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

4.6.4 Ramp Meter Mitigation Measures

I-5 SB / Sea World Drive Ramp (PM Peak Hour) – Ramp meter delays would decrease to less than 15 minutes if the ramp flow rate is increased from 444 cars per hour to 555 cars per hour. Increased ramp meter flow rates can be achieved by either reducing the ramp meter cycle length or providing additional travel lanes on the ramp.

The identified significant traffic related impact to this ramp would be fully mitigated with the implementation of this improvement. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

5.0 Adopted Community Plan (No Project)

This chapter provides a comparison of the buildout of the currently Adopted Community plan or the No Project scenario analysis results to the Existing Conditions. As stated, the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan was adopted in 1991, and the Old Town San Diego Community Plan was adopted in 1987. Since the land uses and roadway network proposed by the Preferred Plan (or an alternative) would supersede the Adopted Community Plan, only a trip generation and VMT generation comparison was conducted for the Adopted Community Plan (No Project) scenario.

5.1 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Future Year 2035 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway Pacific Highway Corridor and communities, including trips to/from and within the community. Table 5-1A and Table 5-1B displays the total VMT generated within the Midway-Pacific Highway Corridor and Old Town communities, respectively, as well as the average trip length under Base Year, and Adopted Plan conditions. VMT calculations for the both communities are provided in Appendix J.

Table 5-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	832,025	101,904	14.0%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	294,796	311,502	16,706	5.7%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.8%	5.2	5.4	0.2	3.7%
Population	4,672	11,775	7,103	152.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	71	-86	-54.8%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Adopted Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.8%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-54.8%).

Table 5-1B Vehicle Miles Traveled Comparison – Old Town – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,581	20,281	13.4%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	57,989	58,192	203	0.4%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	13.0%	5.2	5.4	0.2	3.7%
Population	834	985	151	18.1%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	174	-7	-4.0%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region). With the implementation of the Adopted Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 13.0%. However, with the population increase anticipated within the community, the daily VMT by population is anticipated to decrease (-4.0%).

Appendix A
VMT Analysis Worksheets – Base Year

2008 Base Year - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	2,357	-	2,357	3,333,368
CHULA VISTA TOTAL	3,951,266	7,048	-	7,048	3,944,218
CORONADO TOTAL	431,361	1,275	-	1,275	430,086
DEL MAR TOTAL	96,012	45	-	45	95,967
EL CAJON TOTAL	2,176,865	3,091	-	3,091	2,173,774
ENCINITAS TOTAL	2,065,242	2,987	-	2,987	2,062,255
ESCONDIDO TOTAL	2,793,535	1,506	-	1,506	2,792,029
External TOTAL	347,454	352	-	352	347,102
IMPERIAL BEACH TOTAL	119,764	49	-	49	119,715
LA MESA TOTAL	1,822,392	4,950	-	4,950	1,817,442
LEMON GROVE TOTAL	831,075	1,644	-	1,644	829,431
NATIONAL CITY TOTAL	1,647,424	6,346	-	6,346	1,641,078
OCEANSIDE TOTAL	3,208,748	779	-	779	3,207,969
POWAY TOTAL	1,105,609	492	-	492	1,105,117
OLD TOWN	38,613,579	241,420	16,727	224,693	38,372,159
SAN MARCOS TOTAL	2,020,740	250	-	250	2,020,490
SANTEE TOTAL	860,205	606	-	606	859,599
SOLANA BEACH TOTAL	567,653	1,106	-	1,106	566,547
Unincorporated TOTAL	17,458,561	9,472	-	9,472	17,449,089
VISTA TOTAL	1,728,853	99	-	99	1,728,754
REGIONWIDE TOTAL	85,182,063	151,301 437,175	16,727	269,147	84,896,189

2008 Base Year - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	10,481	-	10,481	3,325,244
CHULA VISTA TOTAL	3,951,266	30,546	-	30,546	3,920,720
CORONADO TOTAL	431,361	6,218	-	6,218	425,143
DEL MAR TOTAL	96,012	206	-	206	95,806
EL CAJON TOTAL	2,176,865	12,696	-	12,696	2,164,169
ENCINITAS TOTAL	2,065,242	12,892	-	12,892	2,052,350
ESCONDIDO TOTAL	2,793,535	6,670	-	6,670	2,786,865
External TOTAL	347,454	1,979	-	1,979	345,475
IMPERIAL BEACH TOTAL	119,764	392	-	392	119,372
LA MESA TOTAL	1,822,392	19,612	-	19,612	1,802,780
LEMON GROVE TOTAL	831,075	7,624	-	7,624	823,451
NATIONAL CITY TOTAL	1,647,424	27,517	-	27,517	1,619,907
OCEANSIDE TOTAL	3,208,748	3,821	-	3,821	3,204,927
POWAY TOTAL	1,105,609	2,103	-	2,103	1,103,506
SAN DIEGO TOTAL	38,613,579	1,087,144	176,404	910,740	37,526,435
SAN MARCOS TOTAL	2,020,740	1,069	-	1,069	2,019,671
SANTEE TOTAL	860,205	2,581	-	2,581	857,624
SOLANA BEACH TOTAL	567,653	4,696	-	4,696	562,957
Unincorporated TOTAL	17,458,561	44,980	-	44,980	17,413,581
VISTA TOTAL	1,728,853	612	-	612	1,728,241
		730,121.50			
REGIONWIDE TOTAL	85,182,063	2,013,961	176,404	1,107,435	83,898,224
	66.7%	(670,292)			

Appendix B
Daily Roadway Traffic Counts

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-094

Location: Lytton St. btwn. Rosecrans St. & Midway Dr.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	11		8					12:00	222		148				
00:15	10		5					12:15	172		138				
00:30	12		5					12:30	163		160				
00:45	7	40	8	26			66	12:45	163	720	151	597			1317
01:00	3		4					13:00	149		147				
01:15	3		5					13:15	173		160				
01:30	3		6					13:30	170		151				
01:45	9	18	6	21			39	13:45	154	646	161	619			1265
02:00	5		4					14:00	154		171				
02:15	2		5					14:15	170		216				
02:30	4		4					14:30	191		219				
02:45	5	16	2	15			31	14:45	228	743	201	807			1550
03:00	4		2					15:00	223		185				
03:15	4		6					15:15	219		212				
03:30	3		2					15:30	236		226				
03:45	12	23	4	14			37	15:45	250	928	262	885			1813
04:00	14		6					16:00	243		275				
04:15	11		6					16:15	217		322				
04:30	14		13					16:30	268		247				
04:45	24	63	12	37			100	16:45	256	984	268	1112			2096
05:00	42		26					17:00	261		243				
05:15	60		24					17:15	235		219				
05:30	93		35					17:30	192		157				
05:45	104	299	47	132			431	17:45	209	897	154	773			1670
06:00	129		56					18:00	202		134				
06:15	179		82					18:15	185		167				
06:30	223		100					18:30	160		121				
06:45	213	744	124	362			1106	18:45	120	667	106	528			1195
07:00	316		159					19:00	135		103				
07:15	286		197					19:15	129		87				
07:30	194		218					19:30	78		79				
07:45	270	1066	201	775			1841	19:45	110	452	69	338			790
08:00	239		200					20:00	85		77				
08:15	247		235					20:15	97		77				
08:30	225		205					20:30	98		72				
08:45	191	902	177	817			1719	20:45	111	391	81	307			698
09:00	176		156					21:00	69		52				
09:15	127		128					21:15	67		63				
09:30	127		117					21:30	61		45				
09:45	134	564	120	521			1085	21:45	63	260	41	201			461
10:00	133		92					22:00	52		50				
10:15	145		127					22:15	54		46				
10:30	159		143					22:30	40		44				
10:45	147	584	120	482			1066	22:45	38	184	28	168			352
11:00	153		123					23:00	30		23				
11:15	148		155					23:15	20		19				
11:30	179		126					23:30	23		21				
11:45	180	660	116	520			1180	23:45	11	84	14	77			161
Total Vol.		4979		3722			**8701**			6956		6412			**13368**

Daily Totals

NB	SB	EB	WB	Combined
11935	10134			**22069**

	AM			PM		
Split %	57.2%	42.8%	**39.4%**	52.0%	48.0%	**60.6%**
Peak Hour	07:00	07:30	**07:00**	16:30	16:00	**16:00**
Volume	1066	854	**1841**	1020	1112	**2096**
P.H.F.	0.84	0.91	**0.95**	0.95	0.86	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-086

Location: Mission Bay Dr. btwn. I-8 WB Off Ramp & I-8 EB On Ramp

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		78					12:00	130		376				
00:15	16		56					12:15	154		409				
00:30	12		54					12:30	139		403				
00:45	8	49	54	242			291	12:45	145	568	475	1663			2231
01:00	9		43					13:00	133		392				
01:15	12		40					13:15	144		423				
01:30	11		45					13:30	142		428				
01:45	10	42	47	175			217	13:45	167	586	456	1699			2285
02:00	2		44					14:00	152		410				
02:15	7		26					14:15	133		431				
02:30	5		36					14:30	126		472				
02:45	5	19	21	127			146	14:45	111	522	441	1754			2276
03:00	3		24					15:00	134		460				
03:15	1		16					15:15	138		494				
03:30	1		18					15:30	129		520				
03:45	6	11	19	77			88	15:45	126	527	506	1980			2507
04:00	7		16					16:00	133		530				
04:15	4		20					16:15	159		552				
04:30	5		22					16:30	125		568				
04:45	6	22	39	97			119	16:45	130	547	574	2224			2771
05:00	9		42					17:00	164		580				
05:15	8		57					17:15	161		643				
05:30	13		64					17:30	140		591				
05:45	18	48	159	322			370	17:45	131	596	621	2435			3031
06:00	22		125					18:00	124		601				
06:15	36		162					18:15	114		578				
06:30	45		222					18:30	141		488				
06:45	51	154	270	779			933	18:45	109	488	412	2079			2567
07:00	67		329					19:00	120		388				
07:15	68		420					19:15	109		390				
07:30	86		469					19:30	109		333				
07:45	100	321	505	1723			2044	19:45	104	442	336	1447			1889
08:00	76		440					20:00	105		334				
08:15	70		451					20:15	95		315				
08:30	98		478					20:30	95		275				
08:45	111	355	424	1793			2148	20:45	70	365	267	1191			1556
09:00	118		398					21:00	63		248				
09:15	118		390					21:15	68		196				
09:30	134		366					21:30	73		192				
09:45	163	533	374	1528			2061	21:45	60	264	198	834			1098
10:00	138		230					22:00	64		159				
10:15	118		332					22:15	51		135				
10:30	102		330					22:30	59		146				
10:45	131	489	346	1238			1727	22:45	58	232	126	566			798
11:00	114		357					23:00	24		135				
11:15	140		359					23:15	22		126				
11:30	123		383					23:30	21		87				
11:45	143	520	380	1479			1999	23:45	19	86	82	430			516
Total Vol.		2563		9580			**12143**			5223		18302			**23525**

Daily Totals

NB	SB	EB	WB	**Combined**
7786	27882			**35668**

	AM			**PM**		
Split %	21.1%	78.9%	**34.0%**	22.2%	77.8%	**66.0%**
Peak Hour	11:45	07:45	**07:45**	13:15	17:15	**17:00**
Volume	566	1874	**2218**	605	2456	**3031**
P.H.F.	0.92	0.93	**0.92**	0.91	0.95	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-088

Location: Midway Dr. btwn. Sports Arena Blvd. & Kemper St.

AM Period	NB	SB	EB		WB		
00:00			15		25		
00:15			17		26		
00:30			14		19		
00:45			12	58	8	78	136
01:00			11		16		
01:15			15		11		
01:30			9		17		
01:45			8	43	14	58	101
02:00			5		13		
02:15			6		6		
02:30			7		8		
02:45			6	24	5	32	56
03:00			3		5		
03:15			5		7		
03:30			6		4		
03:45			1	15	6	22	37
04:00			12		7		
04:15			11		8		
04:30			13		5		
04:45			19	55	11	31	86
05:00			13		17		
05:15			14		17		
05:30			28		24		
05:45			43	98	31	89	187
06:00			34		27		
06:15			43		37		
06:30			58		59		
06:45			71	206	90	213	419
07:00			82		78		
07:15			102		81		
07:30			117		100		
07:45			159	460	91	350	810
08:00			125		94		
08:15			166		113		
08:30			134		112		
08:45			143	568	137	456	1024
09:00			128		143		
09:15			133		133		
09:30			154		130		
09:45			147	562	154	560	1122
10:00			141		174		
10:15			152		152		
10:30			163		163		
10:45			139	595	139	628	1223
11:00			133		133		
11:15			135		154		
11:30			154		178		
11:45			147	569	152	617	1186
Total Vol.				3253		3134	**6387**

PM Period	NB	SB	EB		WB		
12:00			171		174		
12:15			159		166		
12:30			152		196		
12:45			158	640	182	718	1358
13:00			133		187		
13:15			139		169		
13:30			163		170		
13:45			150	585	174	700	1285
14:00			145		154		
14:15			147		165		
14:30			154		199		
14:45			155	601	185	703	1304
15:00			160		187		
15:15			155		198		
15:30			144		178		
15:45			180	639	199	762	1401
16:00			182		219		
16:15			169		193		
16:30			160		221		
16:45			180	691	204	837	1528
17:00			215		223		
17:15			209		244		
17:30			195		230		
17:45			220	839	210	907	1746
18:00			197		189		
18:15			170		216		
18:30			156		202		
18:45			181	704	186	793	1497
19:00			151		186		
19:15			154		150		
19:30			113		184		
19:45			116	534	140	660	1194
20:00			102		158		
20:15			122		131		
20:30			93		134		
20:45			81	398	131	554	952
21:00			76		103		
21:15			86		102		
21:30			62		82		
21:45			61	285	76	363	648
22:00			40		95		
22:15			36		54		
22:30			43		49		
22:45			34	153	49	247	400
23:00			32		54		
23:15			27		30		
23:30			33		40		
23:45			20	112	26	150	262
				6181		7394	**13575**

Daily Totals

NB	SB	EB	WB	Combined
		9434	10528	**19962**

	AM			PM		
Split %	50.9%	49.1%	**32.0%**	45.5%	54.5%	**68.0%**
Peak Hour	11:30	11:45	**11:45**	17:00	17:00	**17:00**
Volume	631	688	**1317**	839	907	**1746**
P.H.F.	0.92	0.88	**0.95**	0.95	0.93	**0.96**

Volumes for: STATION# on Tuesday, March 16, 2010 City: San Diego Project #: 10-4068-018
Location: Midway Dr between Kemper St & Fordham St File No. MC0214-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	16	169			24	211				
12:15	18	185			26	221				
12:30	17	191			17	210				
12:45	10	215	61	760	14	215	81	857	142	1617
1:00	6	179			14	208				
1:15	8	187			10	206				
1:30	13	171			13	172				
1:45	8	145	35	682	22	191	59	777	94	1459
2:00	7	166			14	175				
2:15	7	169			12	205				
2:30	12	177			13	177				
2:45	4	175	30	687	7	165	46	722	76	1409
3:00	16	180			7	197				
3:15	8	148			5	213				
3:30	10	170			5	203				
3:45	4	189	38	687	15	230	32	843	70	1530
4:00	7	186			9	224				
4:15	11	144			9	193				
4:30	5	174			4	181				
4:45	10	174	33	678	14	202	36	800	69	1478
5:00	8	179			16	235				
5:15	28	214			18	209				
5:30	41	166			29	230				
5:45	44	184	121	743	43	166	106	840	227	1583
6:00	30	203			29	182				
6:15	42	185			31	164				
6:30	59	190			39	198				
6:45	71	155	202	733	56	175	155	719	357	1452
7:00	76	150			65	192				
7:15	90	160			58	183				
7:30	110	158			69	164				
7:45	119	105	395	573	91	140	283	679	678	1252
8:00	129	147			86	125				
8:15	111	112			108	138				
8:30	102	113			102	124				
8:45	118	88	460	460	109	135	405	522	865	982
9:00	110	86			108	123				
9:15	129	92			123	81				
9:30	120	72			113	92				
9:45	135	50	494	300	148	80	492	376	986	676
10:00	111	46			142	69				
10:15	135	46			142	52				
10:30	163	47			138	60				
10:45	152	51	561	190	150	50	572	231	1133	421
11:00	152	37			192	45				
11:15	143	18			177	51				
11:30	182	24			190	28				
11:45	169	21	646	100	219	35	778	159	1424	259
Total	3076	6593	3076	6593	3045	7525	3045	7525	6121	14118
Combined Total	9669		9669		10570		10570		20239	
AM Peak	11:45 AM				11:45 AM					
Vol.	714				861					
P.H.F.	0.935				0.974					
PM Peak		12:30 PM				4:45 PM				
Vol.		772				876				
P.H.F.		0.898				0.932				
Percentage	31.8%	68.2%			28.8%	71.2%				

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
MIDWAY DR	[GAINES ST - RILEY ST]	03100 - 03150	1190	EAST	:	14600	6/27/1990	0985-90
				WEST	:	17700	7/20/1990	0986-90
				EAST	:	13800	6/17/1991	0917-91
				WEST	:	16900	6/17/1991	0918-91
				*TOTAL	:	30700		
				EAST	:	14300	6/9/1992	0498-92
				WEST	:	16900	6/9/1992	0499-92
				*TOTAL	:	31200		
				EAST	:	12100	6/2/1995	0663-95
				WEST	:	15100	6/2/1995	0664-95
				*TOTAL	:	27200		
				EAST	:	12600	6/22/1999	0479-99
				WEST	:	14900	6/22/1999	0479-99
				*TOTAL	:	27500		
				EAST	:	10960	6/18/2002	0629-02
				WEST	:	14250	6/25/2002	0630-02
				EAST	:	18590	6/13/2006	0068-06
				WEST	:	14360	6/13/2006	0068-06
				*TOTAL	:	32950		
				EAST	:	12720	8/12/2008	0313-08
				WEST	:	14410	8/12/2008	0313-08
				*TOTAL	:	27130		
				EAST	:	12860	6/16/2009	MC0396-0
				WEST	:	14745	6/16/2009	MC0396-0
				*TOTAL	:	27605		
MIDWAY DR	[KEMPER ST - DUKE ST]	03600 - 03800	1771	EAST	:	12200	6/18/1991	0855-91
				WEST	:	12900	6/18/1991	0856-91
				*TOTAL	:	25100		
				EAST	:	13000	5/26/1993	0418-93
				WEST	:	13300	5/26/1993	0419-93
				*TOTAL	:	26300		
				EAST	:	10800	5/13/1996	0487-96

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Midway Dr (STATION#1860/FILE#MC0443-10)	Project:	10-4169-031	11,737	11,246	0	0	22,983

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	17		24					12:00	237		211				
00:15	27		40					12:15	236		200				
00:30	23		20					12:30	267		215				
00:45	18	85	17	101			186	12:45	215	955	277	903			1858
01:00	9		21					13:00	246		225				
01:15	13		15					13:15	221		182				
01:30	18		11					13:30	225		188				
01:45	14	54	27	74			128	13:45	223	915	234	829			1744
02:00	17		20					14:00	192		203				
02:15	14		13					14:15	209		201				
02:30	6		14					14:30	183		212				
02:45	6	43	9	56			99	14:45	218	802	209	825			1627
03:00	5		3					15:00	211		199				
03:15	11		11					15:15	208		205				
03:30	16		7					15:30	213		207				
03:45	16	48	10	31			79	15:45	212	844	226	837			1681
04:00	17		12					16:00	240		230				
04:15	13		12					16:15	233		193				
04:30	18		13					16:30	247		234				
04:45	19	67	19	56			123	16:45	249	969	204	861			1830
05:00	16		29					17:00	254		209				
05:15	34		28					17:15	294		225				
05:30	38		47					17:30	264		185				
05:45	72	160	38	142			302	17:45	185	997	220	839			1836
06:00	49		58					18:00	175		205				
06:15	57		61					18:15	172		158				
06:30	80		79					18:30	148		175				
06:45	104	290	98	296			586	18:45	144	639	144	682			1321
07:00	97		100					19:00	142		175				
07:15	115		139					19:15	143		147				
07:30	143		124					19:30	127		140				
07:45	136	491	117	480			971	19:45	151	563	169	631			1194
08:00	144		128					20:00	92		127				
08:15	161		113					20:15	102		133				
08:30	129		97					20:30	67		127				
08:45	148	582	106	444			1026	20:45	76	337	120	507			844
09:00	150		107					21:00	79		121				
09:15	182		142					21:15	84		87				
09:30	179		163					21:30	58		99				
09:45	176	687	131	543			1230	21:45	55	276	77	384			660
10:00	159		127					22:00	54		76				
10:15	180		139					22:15	41		53				
10:30	184		148					22:30	35		40				
10:45	189	712	167	581			1293	22:45	31	161	48	217			378
11:00	205		182					23:00	29		41				
11:15	236		178					23:15	20		26				
11:30	265		201					23:30	34		39				
11:45	248	954	228	789			1743	23:45	23	106	32	138			244
Total Vol.	4173		3593				**7766**		7564		7653				**15217**

	NB	SB	EB	WB	Total
Daily Totals :	**11,737**	**11,246**	**0**	**0**	**22,983**

	AM			PM			
Split %	53.7%	46.3%	**33.8%**		49.7%	50.3%	**66.2%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	12:15	**16:30**
Volume	988	854	**1842**	**Volume**	1061	917	**1916**
P.H.F.	0.925	0.936	**0.955**	**P.H.F.**	0.902	0.828	**0.923**
7 - 9 Vol.	1073	924	**1997**	**4 - 6 Vol.**	1966	1700	**3666**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	584	508	**1066**	**Volume**	1061	872	**1916**
P.H.F.	0.907	0.914	**0.973**	**P.H.F.**	0.902	0.932	**0.923**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-087

Location: Mission Bay Dr. btwn. I-8 EB On Ramp & Sports Arena Blvd.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	29		33					12:00	269		213				
00:15	37		32					12:15	297		241				
00:30	25		31					12:30	289		248				
00:45	27	118	14	110			228	12:45	298	1153	252	954			2107
01:00	23		31					13:00	273		249				
01:15	27		22					13:15	314		230				
01:30	21		27					13:30	298		230				
01:45	18	89	23	103			192	13:45	298	1183	253	962			2145
02:00	22		16					14:00	303		239				
02:15	19		12					14:15	295		219				
02:30	20		19					14:30	274		205				
02:45	13	74	8	55			129	14:45	284	1156	224	887			2043
03:00	9		18					15:00	252		235				
03:15	7		9					15:15	296		260				
03:30	18		8					15:30	270		240				
03:45	22	56	11	46			102	15:45	265	1083	262	997			2080
04:00	15		11					16:00	312		251				
04:15	18		12					16:15	306		285				
04:30	16		11					16:30	296		276				
04:45	23	72	25	59			131	16:45	279	1193	257	1069			2262
05:00	28		23					17:00	360		274				
05:15	31		33					17:15	292		320				
05:30	40		25					17:30	288		289				
05:45	64	163	79	160			323	17:45	282	1222	303	1186			2408
06:00	81		60					18:00	276		298				
06:15	95		77					18:15	257		274				
06:30	132		90					18:30	252		228				
06:45	136	444	121	348			792	18:45	263	1048	225	1025			2073
07:00	177		157					19:00	260		215				
07:15	202		183					19:15	212		192				
07:30	233		192					19:30	229		180				
07:45	250	862	246	778			1640	19:45	209	910	170	757			1667
08:00	204		209					20:00	217		153				
08:15	205		199					20:15	197		153				
08:30	208		209					20:30	187		144				
08:45	240	857	200	817			1674	20:45	158	759	136	586			1345
09:00	218		232					21:00	163		140				
09:15	225		213					21:15	136		110				
09:30	262		203					21:30	165		96				
09:45	249	954	235	883			1837	21:45	140	604	98	444			1048
10:00	219		228					22:00	129		71				
10:15	241		244					22:15	111		65				
10:30	222		214					22:30	104		71				
10:45	230	912	230	916			1828	22:45	99	443	64	271			714
11:00	217		233					23:00	67		69				
11:15	214		241					23:15	67		59				
11:30	215		225					23:30	55		42				
11:45	228	874	236	935			1809	23:45	30	219	44	214			433
Total Vol.		5475		5210			**10685**			10973		9352			**20325**

Daily Totals

NB	SB	EB	WB	Combined
16448	14562			**31010**

	AM			PM		
Split %	51.2%	48.8%	**34.5%**	54.0%	46.0%	**65.5%**
Peak Hour	11:45	11:45	**11:45**	16:15	17:15	**17:00**
Volume	1083	938	**2021**	1241	1210	**2408**
P.H.F.	0.91	0.95	**0.94**	0.86	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-090

Location: Sports Arena Blvd. btwn. Midway Dr. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		21			12:00			144		148		
00:15			14		21			12:15			135		137		
00:30			6		16			12:30			163		142		
00:45			5	33	14	72	105	12:45			141	583	141	568	1151
01:00			7		10			13:00			148		167		
01:15			4		7			13:15			137		161		
01:30			4		1			13:30			156		158		
01:45			3	18	9	27	45	13:45			152	593	155	641	1234
02:00			6		9			14:00			150		152		
02:15			5		7			14:15			139		140		
02:30			2		3			14:30			140		133		
02:45			2	15	3	22	37	14:45			147	576	139	564	1140
03:00			7		5			15:00			133		146		
03:15			6		7			15:15			139		180		
03:30			6		4			15:30			163		158		
03:45			6	25	5	21	46	15:45			152	587	166	650	1237
04:00			4		6			16:00			162		169		
04:15			4		4			16:15			142		171		
04:30			6		8			16:30			171		215		
04:45			8	22	8	26	48	16:45			143	618	166	721	1339
05:00			10		7			17:00			155		213		
05:15			12		5			17:15			164		220		
05:30			25		17			17:30			155		194		
05:45			32	79	12	41	120	17:45			173	647	168	795	1442
06:00			32		20			18:00			159		197		
06:15			42		22			18:15			156		175		
06:30			62		32			18:30			178		155		
06:45			71	207	51	125	332	18:45			140	633	150	677	1310
07:00			78		62			19:00			134		152		
07:15			109		61			19:15			153		152		
07:30			115		57			19:30			119		137		
07:45			135	437	57	237	674	19:45			116	522	156	597	1119
08:00			140		65			20:00			117		123		
08:15			139		80			20:15			105		133		
08:30			122		96			20:30			82		120		
08:45			145	546	91	332	878	20:45			74	378	115	491	869
09:00			124		79			21:00			78		103		
09:15			139		109			21:15			55		104		
09:30			133		122			21:30			36		90		
09:45			154	550	126	436	986	21:45			40	209	83	380	589
10:00			147		139			22:00			29		84		
10:15			141		133			22:15			27		59		
10:30			152		130			22:30			30		68		
10:45			133	573	128	530	1103	22:45			19	105	51	262	367
11:00			130		124			23:00			14		143		
11:15			128		147			23:15			20		55		
11:30			124		152			23:30			24		26		
11:45			147	529	163	586	1115	23:45			14	72	17	241	313
Total Vol.				3034		2455	**5489**					5523		6587	**12110**

Daily Totals

NB	SB	EB	WB	Combined
		8557	9042	**17599**

	AM			PM		
Split %	55.3%	44.7%	**31.2%**	45.6%	54.4%	**68.8%**
Peak Hour	09:45	11:15	**11:45**	17:45	16:30	**16:30**
Volume	594	610	**1179**	666	814	**1447**
P.H.F.	0.96	0.94	**0.95**	0.94	0.93	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-091

Location: Sports Arena Blvd. btwn. Kemper St. & East Dr.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			26		15			12:00			122		130		
00:15			14		15			12:15			131		133		
00:30			11		15			12:30			128		139		
00:45			10	61	13	58	119	12:45			133	514	143	545	1059
01:00			5		12			13:00			130		141		
01:15			5		5			13:15			163		147		
01:30			4		3			13:30			139		154		
01:45			8	22	8	28	50	13:45			155	587	166	608	1195
02:00			9		4			14:00			154		196		
02:15			5		3			14:15			174		185		
02:30			1		3			14:30			155		174		
02:45			1	16	0	10	26	14:45			156	639	187	742	1381
03:00			4		3			15:00			166		188		
03:15			0		9			15:15			198		174		
03:30			6		9			15:30			187		154		
03:45			10	20	8	29	49	15:45			174	725	165	681	1406
04:00			12		6			16:00			188		166		
04:15			5		3			16:15			204		158		
04:30			10		10			16:30			218		162		
04:45			9	36	12	31	67	16:45			213	823	165	651	1474
05:00			14		5			17:00			237		185		
05:15			14		6			17:15			246		200		
05:30			20		29			17:30			216		166		
05:45			31	79	39	79	158	17:45			231	930	179	730	1660
06:00			27		32			18:00			222		178		
06:15			30		37			18:15			244		188		
06:30			68		48			18:30			224		171		
06:45			62	187	67	184	371	18:45			206	896	166	703	1599
07:00			78		76			19:00			213		162		
07:15			101		53			19:15			194		129		
07:30			129		77			19:30			191		115		
07:45			117	425	72	278	703	19:45			185	783	101	507	1290
08:00			126		103			20:00			163		97		
08:15			124		83			20:15			159		110		
08:30			132		93			20:30			140		88		
08:45			135	517	98	377	894	20:45			148	610	70	365	975
09:00			148		86			21:00			121		73		
09:15			147		117			21:15			131		61		
09:30			127		122			21:30			135		62		
09:45			128	550	121	446	996	21:45			112	499	51	247	746
10:00			114		120			22:00			103		56		
10:15			128		122			22:15			73		44		
10:30			133		147			22:30			103		45		
10:45			130	505	124	513	1018	22:45			110	389	48	193	582
11:00			128		128			23:00			253		80		
11:15			124		133			23:15			102		36		
11:30			141		139			23:30			55		29		
11:45			143	536	163	563	1099	23:45			29	439	22	167	606
Total Vol.				2954		2596	**5550**					7834		6139	**13973**

Daily Totals

NB	SB	EB	WB	Combined
		10788	8735	**19523**

	AM			PM		
Split %	53.2%	46.8%	**28.4%**	56.1%	43.9%	**71.6%**
Peak Hour	08:30	11:15	**11:30**	17:00	14:00	**17:00**
Volume	562	565	**1102**	930	742	**1660**
P.H.F.	0.95	0.87	**0.90**	0.95	0.95	**0.93**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
SPORTS ARENA BL	[ROSECRANS ST - EAST DR]	03100 - 03300	1211	EAST	:	14780	6/15/2005	0296-05
				WEST	:	14640	6/15/2005	0296-05
				*TOTAL	:	29420		
				EAST	:	13620	7/29/2008	0315-08
				WEST	:	13160	7/29/2008	0315-08
				*TOTAL	:	26780		
SPORTS ARENA BL	[KEMPER ST - HANCOCK ST]	03600 - 03800	1210	EAST	:	11200	6/25/1990	0976-90
				WEST	:	10300	6/25/1990	0977-90
				*TOTAL	:	21500		
				EAST	:	9400	6/18/1991	0853-91
				WEST	:	7900	6/18/1991	0854-91
				*TOTAL	:	17300		
				EAST	:	8400	9/15/1994	0672-94
				WEST	:	8600	9/15/1994	0673-94
				*TOTAL	:	17000		
				EAST	:	9600	6/17/1997	0370-97
				WEST	:	9500	6/17/1997	0371-97
				*TOTAL	:	19100		
				EAST	:	9780	6/9/2005	0292-05
				WEST	:	9590	6/9/2005	0292-05
				*TOTAL	:	19370		
				EAST	:	8105	6/15/2010	MC0511-1
				WEST	:	8655	6/15/2010	MC0511-1
				*TOTAL	:	16760		
				EAST	:	7475	1/11/2011	MC1210-1
				WEST	:	8145	1/11/2011	MC1210-1
				*TOTAL	:	15620		
SPORTS ARENA BL	[HANCOCK ST - W PT LOMA BL]	03800 - 03900	1213	EAST	:	10000	6/25/1990	1001-90
				WEST	:	11200	6/25/1990	1002-90
				*TOTAL	:	21200		
				EAST	:	10600	6/26/1991	0952-91
				WEST	:	16300	6/26/1991	0953-91

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-092

Location: Sports Arena Blvd. btwn. Rosecrans St. & Enterprise St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			44		24		
00:15			2		2			12:15			33		28		
00:30			0		0			12:30			36		24		
00:45			0	2	4	7	9	12:45			37	150	21	97	247
01:00			0		3			13:00			31		28		
01:15			2		0			13:15			31		24		
01:30			0		0			13:30			30		26		
01:45			1	3	1	4	7	13:45			36	128	22	100	228
02:00			0		4			14:00			30		20		
02:15			0		0			14:15			29		24		
02:30			2		2			14:30			20		21		
02:45			0	2	8	14	16	14:45			30	109	14	79	188
03:00			2		1			15:00			17		19		
03:15			0		1			15:15			20		22		
03:30			1		3			15:30			18		20		
03:45			3	6	3	8	14	15:45			19	74	28	89	163
04:00			0		2			16:00			25		24		
04:15			0		4			16:15			33		32		
04:30			2		0			16:30			31		39		
04:45			0	2	2	8	10	16:45			18	107	35	130	237
05:00			2		2			17:00			14		54		
05:15			0		2			17:15			9		74		
05:30			1		8			17:30			15		45		
05:45			4	7	4	16	23	17:45			21	59	50	223	282
06:00			5		5			18:00			14		21		
06:15			2		3			18:15			26		28		
06:30			3		1			18:30			13		21		
06:45			6	16	1	10	26	18:45			16	69	14	84	153
07:00			10		11			19:00			9		16		
07:15			13		10			19:15			11		13		
07:30			15		14			19:30			15		11		
07:45			15	53	8	43	96	19:45			8	43	10	50	93
08:00			13		11			20:00			6		8		
08:15			12		10			20:15			7		7		
08:30			9		14			20:30			6		5		
08:45			18	52	19	54	106	20:45			10	29	3	23	52
09:00			30		13			21:00			2		2		
09:15			15		18			21:15			3		1		
09:30			19		11			21:30			9		4		
09:45			22	86	10	52	138	21:45			4	18	1	8	26
10:00			31		14			22:00			3		5		
10:15			22		42			22:15			3		2		
10:30			22		32			22:30			11		1		
10:45			31	106	28	116	222	22:45			0	17	4	12	29
11:00			28		24			23:00			7		1		
11:15			29		25			23:15			2		5		
11:30			32		24			23:30			3		2		
11:45			33	122	16	89	211	23:45			2	14	3	11	25
Total Vol.				457		421	**878**					817		906	**1723**

Daily Totals

NB	SB	EB	WB	Combined
		1274	1327	**2601**

	AM			PM		
Split %	52.1%	47.9%	**33.8%**	47.4%	52.6%	**66.2%**
Peak Hour	11:45	10:15	**11:45**	12:00	17:00	**17:00**
Volume	146	126	**238**	150	223	**282**
P.H.F.	0.83	0.75	**0.88**	0.85	0.75	**0.85**

Volumes for: Thursday, August 19, 2010 City: San Diego Project #: 10-4243-049

Location: Kurtz St (STATION#1873/FILE#MC0742-10) between Riley St & Greenwood St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		14				12:00		130			
00:15		8				12:15		127			
00:30		15				12:30		107			
00:45		11	48		48	12:45		105	469		469
01:00		9				13:00		110			
01:15		4				13:15		91			
01:30		4				13:30		104			
01:45		6	23		23	13:45		94	399		399
02:00		5				14:00		83			
02:15		6				14:15		100			
02:30		4				14:30		89			
02:45		2	17		17	14:45		90	362		362
03:00		5				15:00		109			
03:15		5				15:15		110			
03:30		8				15:30		117			
03:45		5	23		23	15:45		115	451		451
04:00		13				16:00		145			
04:15		22				16:15		116			
04:30		15				16:30		128			
04:45		12	62		62	16:45		121	510		510
05:00		12				17:00		154			
05:15		9				17:15		113			
05:30		14				17:30		105			
05:45		18	53		53	17:45		97	469		469
06:00		23				18:00		93			
06:15		21				18:15		71			
06:30		34				18:30		53			
06:45		28	106		106	18:45		47	264		264
07:00		39				19:00		43			
07:15		45				19:15		38			
07:30		66				19:30		45			
07:45		57	207		207	19:45		27	153		153
08:00		61				20:00		30			
08:15		68				20:15		42			
08:30		60				20:30		30			
08:45		69	258		258	20:45		21	123		123
09:00		57				21:00		21			
09:15		73				21:15		25			
09:30		86				21:30		27			
09:45		77	293		293	21:45		26	99		99
10:00		92				22:00		18			
10:15		89				22:15		19			
10:30		116				22:30		18			
10:45		98	395		395	22:45		15	70		70
11:00		105				23:00		18			
11:15		102				23:15		16			
11:30		103				23:30		12			
11:45		116	426		426	23:45		10	56		56
Total Vol.			1911		**1911**				3425		**3425**

Daily Totals

NB	SB	EB	WB	Combined
	5336			**5336**

	AM		PM	
Split %	100.0%	**35.8%**	100.0%	**64.2%**
Peak Hour	11:45	**11:45**	16:15	**16:15**
Volume	480	**480**	519	**519**
P.H.F.	0.92	**0.92**	0.84	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-084

Location: Kurtz St. btwn. Rosecrans St. & Pacific Highway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		8					12:00	82		48				
00:15	8		1					12:15	54		71				
00:30	6		2					12:30	68		59				
00:45	7	23	1	12			35	12:45	58	262	88	266			528
01:00	3		9					13:00	73		68				
01:15	3		1					13:15	38		88				
01:30	2		4					13:30	54		81				
01:45	5	13	5	19			32	13:45	50	215	91	328			543
02:00	2		4					14:00	53		73				
02:15	4		2					14:15	42		80				
02:30	5		1					14:30	49		67				
02:45	7	18	4	11			29	14:45	51	195	79	299			494
03:00	7		1					15:00	56		78				
03:15	10		6					15:15	49		63				
03:30	7		2					15:30	65		55				
03:45	6	30	2	11			41	15:45	65	235	50	246			481
04:00	2		5					16:00	60		54				
04:15	11		4					16:15	61		41				
04:30	3		7					16:30	53		45				
04:45	18	34	3	19			53	16:45	58	232	65	205			437
05:00	9		8					17:00	67		51				
05:15	18		4					17:15	66		38				
05:30	23		3					17:30	49		46				
05:45	36	86	5	20			106	17:45	52	234	46	181			415
06:00	41		3					18:00	44		35				
06:15	58		19					18:15	41		54				
06:30	52		22					18:30	47		34				
06:45	72	223	24	68			291	18:45	28	160	69	192			352
07:00	50		24					19:00	30		66				
07:15	62		29					19:15	16		37				
07:30	58		33					19:30	31		45				
07:45	71	241	30	116			357	19:45	27	104	44	192			296
08:00	59		54					20:00	25		42				
08:15	59		41					20:15	27		28				
08:30	59		45					20:30	23		48				
08:45	62	239	55	195			434	20:45	19	94	23	141			235
09:00	47		42					21:00	12		33				
09:15	57		24					21:15	9		25				
09:30	48		29					21:30	12		24				
09:45	49	201	33	128			329	21:45	16	49	22	104			153
10:00	54		47					22:00	11		24				
10:15	56		37					22:15	8		20				
10:30	54		60					22:30	7		22				
10:45	64	228	31	175			403	22:45	11	37	13	79			116
11:00	63		58					23:00	8		8				
11:15	65		45					23:15	8		5				
11:30	54		65					23:30	4		6				
11:45	72	254	65	233			487	23:45	5	25	3	22			47
Total Vol.		1590		1007			**2597**			1842		2255			**4097**

Daily Totals

NB	SB	EB	WB	Combined
3432	3262			**6694**

	AM			PM		
Split %	61.2%	38.8%	**38.8%**	45.0%	55.0%	**61.2%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:15	**12:45**
Volume	276	249	**519**	262	333	**548**
P.H.F.	0.84	0.88	**0.95**	0.80	0.91	**0.94**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-001

Location: Hancock St(STATION#1878/FILE#MC0592-10) between Channel Wy & Sports Arena Blvd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	60		36				
00:15	5		3					12:15	53		44				
00:30	3		2					12:30	66		41				
00:45	0	11	1	12			23	12:45	41	220	42	163			383
01:00	0		2					13:00	33		51				
01:15	1		1					13:15	43		42				
01:30	1		1					13:30	42		33				
01:45	1	3	1	5			8	13:45	46	164	30	156			320
02:00	3		1					14:00	49		42				
02:15	0		2					14:15	56		34				
02:30	1		0					14:30	42		40				
02:45	1	5	2	5			10	14:45	42	189	37	153			342
03:00	2		3					15:00	46		40				
03:15	2		0					15:15	54		32				
03:30	1		2					15:30	51		24				
03:45	3	8	1	6			14	15:45	41	192	26	122			314
04:00	1		1					16:00	56		29				
04:15	1		4					16:15	38		19				
04:30	2		2					16:30	47		23				
04:45	2	6	8	15			21	16:45	60	201	23	94			295
05:00	3		6					17:00	51		21				
05:15	2		2					17:15	48		17				
05:30	3		2					17:30	48		23				
05:45	4	12	16	26			38	17:45	28	175	21	82			257
06:00	6		10					18:00	30		18				
06:15	7		14					18:15	39		19				
06:30	6		21					18:30	25		18				
06:45	11	30	24	69			99	18:45	24	118	14	69			187
07:00	20		27					19:00	25		21				
07:15	17		23					19:15	16		15				
07:30	21		24					19:30	11		19				
07:45	18	76	37	111			187	19:45	17	69	14	69			138
08:00	20		50					20:00	14		10				
08:15	21		36					20:15	14		9				
08:30	18		28					20:30	12		13				
08:45	21	80	35	149			229	20:45	7	47	13	45			92
09:00	29		41					21:00	11		9				
09:15	29		29					21:15	9		4				
09:30	23		27					21:30	9		9				
09:45	30	111	24	121			232	21:45	6	35	12	34			69
10:00	43		35					22:00	8		13				
10:15	39		40					22:15	6		10				
10:30	30		25					22:30	6		7				
10:45	41	153	31	131			284	22:45	4	24	3	33			57
11:00	47		28					23:00	1		2				
11:15	40		33					23:15	8		2				
11:30	38		32					23:30	4		5				
11:45	51	176	31	124			300	23:45	2	15	2	11			26
Total Vol.		671		774			**1445**			1449		1031			**2480**

Daily Totals

NB	SB	EB	WB	Combined
2120	1805			**3925**

	AM			PM		
Split %	46.4%	53.6%	**36.8%**	58.4%	41.6%	**63.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:00**
Volume	230	152	**382**	220	178	**383**
P.H.F.	0.87	0.86	**0.89**	0.93	0.87	**0.89**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-076

Location: Hancock St. btwn. Greenwood St. & Riley St. (one way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	12					12:00	72				
00:15	12					12:15	105				
00:30	5					12:30	83				
00:45	9	38			38	12:45	106	366			366
01:00	7					13:00	93				
01:15	9					13:15	89				
01:30	11					13:30	80				
01:45	9	36			36	13:45	80	342			342
02:00	10					14:00	69				
02:15	19					14:15	75				
02:30	17					14:30	77				
02:45	11	57			57	14:45	67	288			288
03:00	9					15:00	82				
03:15	10					15:15	90				
03:30	8					15:30	76				
03:45	25	52			52	15:45	91	339			339
04:00	4					16:00	67				
04:15	16					16:15	72				
04:30	7					16:30	67				
04:45	22	49			49	16:45	42	248			248
05:00	20					17:00	58				
05:15	21					17:15	54				
05:30	31					17:30	52				
05:45	54	126			126	17:45	47	211			211
06:00	42					18:00	41				
06:15	55					18:15	44				
06:30	50					18:30	35				
06:45	79	226			226	18:45	52	172			172
07:00	89					19:00	24				
07:15	88					19:15	21				
07:30	69					19:30	21				
07:45	108	354			354	19:45	32	98			98
08:00	119					20:00	33				
08:15	101					20:15	32				
08:30	105					20:30	19				
08:45	97	422			422	20:45	26	110			110
09:00	96					21:00	28				
09:15	81					21:15	17				
09:30	62					21:30	18				
09:45	92	331			331	21:45	25	88			88
10:00	98					22:00	19				
10:15	81					22:15	13				
10:30	74					22:30	20				
10:45	78	331			331	22:45	17	69			69
11:00	70					23:00	18				
11:15	72					23:15	27				
11:30	85					23:30	9				
11:45	68	295			295	23:45	9	63			63
Total Vol.		2317			**2317**		2394				**2394**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
	4711				**4711**

	AM		PM	
Split %	100.0%	**49.2%**	100.0%	**50.8%**
Peak Hour	07:45	**07:45**	12:15	**12:15**
Volume	433	**433**	387	**387**
P.H.F.	0.91	**0.91**	0.91	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-077

Location: Hancock St. btwn. Gaines St. & Rosecrans St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	4					12:00	57				
00:15	8					12:15	69				
00:30	3					12:30	64				
00:45	6	21			21	12:45	69	259			259
01:00	3					13:00	49				
01:15	4					13:15	66				
01:30	5					13:30	42				
01:45	3	15			15	13:45	60	217			217
02:00	3					14:00	47				
02:15	6					14:15	52				
02:30	7					14:30	62				
02:45	5	21			21	14:45	67	228			228
03:00	5					15:00	73				
03:15	6					15:15	78				
03:30	1					15:30	63				
03:45	8	20			20	15:45	66	280			280
04:00	4					16:00	62				
04:15	9					16:15	76				
04:30	3					16:30	78				
04:45	12	28			28	16:45	71	287			287
05:00	6					17:00	70				
05:15	12					17:15	64				
05:30	17					17:30	41				
05:45	24	59			59	17:45	48	223			223
06:00	14					18:00	64				
06:15	22					18:15	38				
06:30	27					18:30	34				
06:45	33	96			96	18:45	33	169			169
07:00	32					19:00	25				
07:15	40					19:15	20				
07:30	45					19:30	24				
07:45	38	155			155	19:45	26	95			95
08:00	65					20:00	21				
08:15	42					20:15	15				
08:30	7					20:30	20				
08:45	0	114			114	20:45	16	72			72
09:00	0					21:00	20				
09:15	5					21:15	14				
09:30	30					21:30	19				
09:45	43	78			78	21:45	9	62			62
10:00	55					22:00	11				
10:15	54					22:15	13				
10:30	42					22:30	11				
10:45	53	204			204	22:45	6	41			41
11:00	39					23:00	5				
11:15	51					23:15	13				
11:30	64					23:30	5				
11:45	59	213			213	23:45	8	31			31
Total Vol.		1024			**1024**		1964				**1964**

Daily Totals

NB	SB	EB	WB	**Combined**
2988				**2988**

	AM		PM	
Split %	100.0%	**34.3%**	100.0%	**65.7%**
Peak Hour	11:30	**11:30**	16:15	**16:15**
Volume	249	**249**	295	**295**
P.H.F.	0.90	**0.90**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Hancock St (STATION#2603/FILE#MC0428-10)	Project:	10-4169-016	0	0	5,774	3,903	9,677

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			7	9		12:00			81	65	
00:15			5	9		12:15			88	68	
00:30			6	3		12:30			94	66	
00:45			3 21	7 28	49	12:45			90 353	54 253	606
01:00			5	6		13:00			66	68	
01:15			1	7		13:15			101	71	
01:30			3	2		13:30			85	67	
01:45			4 13	1 16	29	13:45			88 340	57 263	603
02:00			2	0		14:00			60	73	
02:15			0	6		14:15			65	92	
02:30			4	1		14:30			70	53	
02:45			3 9	0 7	16	14:45			75 270	73 291	561
03:00			4	2		15:00			65	72	
03:15			2	3		15:15			70	92	
03:30			6	2		15:30			74	94	
03:45			6 18	1 8	26	15:45			77 286	95 353	639
04:00			9	2		16:00			97	154	
04:15			14	2		16:15			92	114	
04:30			18	3		16:30			88	112	
04:45			26 67	3 10	77	16:45			88 365	92 472	837
05:00			36	4		17:00			97	106	
05:15			44	4		17:15			113	74	
05:30			71	6		17:30			111	80	
05:45			80 231	7 21	252	17:45			69 390	68 328	718
06:00			113	9		18:00			68	83	
06:15			148	12		18:15			58	70	
06:30			168	15		18:30			48	85	
06:45			198 627	15 51	678	18:45			60 234	58 296	530
07:00			151	25		19:00			48	46	
07:15			168	33		19:15			46	35	
07:30			165	37		19:30			43	48	
07:45			153 637	30 125	762	19:45			27 164	53 182	346
08:00			110	38		20:00			45	57	
08:15			86	36		20:15			30	53	
08:30			97	32		20:30			47	40	
08:45			90 383	39 145	528	20:45			30 152	67 217	369
09:00			90	39		21:00			32	39	
09:15			85	41		21:15			28	26	
09:30			80	45		21:30			19	27	
09:45			92 347	34 159	506	21:45			20 99	44 136	235
10:00			70	49		22:00			18	24	
10:15			71	45		22:15			14	12	
10:30			81	52		22:30			14	11	
10:45			81 303	63 209	512	22:45			9 55	7 54	109
11:00			100	68		23:00			11	7	
11:15			89	62		23:15			13	6	
11:30			99	57		23:30			9	2	
11:45			80 368	71 258	626	23:45			9 42	6 21	63
Total Vol.			3024	1037	**4061**				2750	2866	**5616**

	NB	SB	EB	WB	Total
Daily Totals :	0	0	5,774	3,903	9,677

	AM			PM		
Split %	74.5%	25.5%	**42.0%**	49.0%	51.0%	**58.0%**
AM				**PM**		
Peak Hr.	06:30	11:45	**06:45**	**Peak Hr.**	16:45	15:45	**16:00**
Volume	685	270	**792**	**Volume**	409	475	**837**
P.H.F.	0.865	0.951	**0.930**	**P.H.F.**	0.905	0.771	**0.834**
7 - 9 Vol.	1020	270	**1290**	**4 - 6 Vol.**	755	800	**1555**
Peak Hr.	07:00	08:00	**07:00**	**Peak Hr.**	16:45	16:00	**16:00**
Volume	637	145	**762**	**Volume**	409	472	**837**
P.H.F.	0.948	0.929	**0.943**	**P.H.F.**	0.905	0.766	**0.834**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-078

Location: Hancock St. btwn. Witherby St. & Noell St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		2					12:00	19		31				
00:15	1		2					12:15	17		42				
00:30	0		2					12:30	20		34				
00:45	0	3	1	7			10	12:45	16	72	26	133			205
01:00	1		1					13:00	22		29				
01:15	0		0					13:15	18		38				
01:30	2		0					13:30	12		42				
01:45	0	3	4	5			8	13:45	20	72	38	147			219
02:00	1		1					14:00	19		33				
02:15	0		0					14:15	17		32				
02:30	0		1					14:30	10		36				
02:45	0	1	1	3			4	14:45	11	57	29	130			187
03:00	0		1					15:00	19		47				
03:15	2		1					15:15	18		22				
03:30	2		1					15:30	8		42				
03:45	1	5	7	10			15	15:45	16	61	44	155			216
04:00	1		6					16:00	29		28				
04:15	2		1					16:15	25		20				
04:30	2		0					16:30	19		27				
04:45	0	5	3	10			15	16:45	14	87	39	114			201
05:00	1		6					17:00	18		54				
05:15	2		1					17:15	15		34				
05:30	5		6					17:30	19		24				
05:45	4	12	15	28			40	17:45	12	64	29	141			205
06:00	4		21					18:00	21		21				
06:15	1		18					18:15	45		23				
06:30	4		20					18:30	11		23				
06:45	5	14	25	84			98	18:45	11	88	18	85			173
07:00	11		23					19:00	7		21				
07:15	12		23					19:15	10		22				
07:30	5		46					19:30	11		18				
07:45	14	42	23	115			157	19:45	6	34	17	78			112
08:00	18		17					20:00	17		6				
08:15	7		31					20:15	9		9				
08:30	7		45					20:30	3		10				
08:45	11	43	20	113			156	20:45	7	36	4	29			65
09:00	9		49					21:00	6		6				
09:15	13		23					21:15	4		4				
09:30	10		38					21:30	13		10				
09:45	19	51	33	143			194	21:45	7	30	4	24			54
10:00	18		27					22:00	4		8				
10:15	17		33					22:15	4		5				
10:30	27		20					22:30	7		1				
10:45	21	83	19	99			182	22:45	1	16	1	15			31
11:00	18		28					23:00	1		2				
11:15	18		23					23:15	2		1				
11:30	20		34					23:30	0		4				
11:45	11	67	31	116			183	23:45	0	3	2	9			12
Total Vol.		329		733			**1062**			620		1060			**1680**

Daily Totals

NB	SB	EB	WB	Combined
949	1793			**2742**

	AM			PM		
Split %	31.0%	69.0%	**38.7%**	36.9%	63.1%	**61.3%**
Peak Hour	10:30	08:15	**11:30**	17:30	15:00	**13:15**
Volume	84	145	**205**	97	155	**220**
P.H.F.	0.78	0.74	**0.87**	0.54	0.82	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-079

Location: Kettner Blvd. btwn. Washington St. & Vine St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		55				12:00		380			
00:15		43				12:15		381			
00:30		28				12:30		400			
00:45		37	163		163	12:45		316	1477		1477
01:00		20				13:00		342			
01:15		19				13:15		341			
01:30		10				13:30		306			
01:45		14	63		63	13:45		303	1292		1292
02:00		18				14:00		326			
02:15		9				14:15		319			
02:30		6				14:30		304			
02:45		8	41		41	14:45		316	1265		1265
03:00		10				15:00		310			
03:15		10				15:15		281			
03:30		32				15:30		325			
03:45		22	74		74	15:45		306	1222		1222
04:00		63				16:00		333			
04:15		75				16:15		470			
04:30		141				16:30		470			
04:45		232	511		511	16:45		409	1682		1682
05:00		238				17:00		460			
05:15		298				17:15		439			
05:30		239				17:30		356			
05:45		279	1054		1054	17:45		356	1611		1611
06:00		233				18:00		348			
06:15		231				18:15		335			
06:30		255				18:30		299			
06:45		265	984		984	18:45		331	1313		1313
07:00		251				19:00		280			
07:15		284				19:15		271			
07:30		309				19:30		268			
07:45		360	1204		1204	19:45		279	1098		1098
08:00		367				20:00		253			
08:15		355				20:15		267			
08:30		378				20:30		244			
08:45		382	1482		1482	20:45		239	1003		1003
09:00		356				21:00		216			
09:15		381				21:15		221			
09:30		360				21:30		180			
09:45		407	1504		1504	21:45		179	796		796
10:00		344				22:00		148			
10:15		350				22:15		156			
10:30		353				22:30		147			
10:45		375	1422		1422	22:45		119	570		570
11:00		370				23:00		119			
11:15		396				23:15		77			
11:30		400				23:30		69			
11:45		379	1545		1545	23:45		81	346		346
Total Vol.			10047		**10047**				13675		**13675**

Daily Totals

NB	SB	EB	WB	Combined
	23722			**23722**

	AM		PM	
Split %	100.0%	**42.4%**	100.0%	**57.6%**
Peak Hour	11:15	**11:15**	16:15	**16:15**
Volume	1555	**1555**	1809	**1809**
P.H.F.	0.97	**0.97**	0.96	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-080

Location: Kettner Blvd. btwn. Vine St. & Sassafras St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		53				12:00		373			
00:15		47				12:15		377			
00:30		27				12:30		403			
00:45		36	163		163	12:45		382	1535		1535
01:00		23				13:00		349			
01:15		20				13:15		341			
01:30		11				13:30		305			
01:45		15	69		69	13:45		305	1300		1300
02:00		20				14:00		343			
02:15		10				14:15		324			
02:30		6				14:30		312			
02:45		9	45		45	14:45		317	1296		1296
03:00		10				15:00		300			
03:15		9				15:15		283			
03:30		28				15:30		318			
03:45		17	64		64	15:45		297	1198		1198
04:00		54				16:00		328			
04:15		68				16:15		463			
04:30		126				16:30		469			
04:45		216	464		464	16:45		399	1659		1659
05:00		213				17:00		450			
05:15		273				17:15		428			
05:30		207				17:30		353			
05:45		242	935		935	17:45		376	1607		1607
06:00		212				18:00		342			
06:15		215				18:15		329			
06:30		234				18:30		280			
06:45		239	900		900	18:45		320	1271		1271
07:00		238				19:00		266			
07:15		249				19:15		254			
07:30		292				19:30		250			
07:45		343	1122		1122	19:45		270	1040		1040
08:00		351				20:00		249			
08:15		333				20:15		273			
08:30		342				20:30		238			
08:45		364	1390		1390	20:45		231	991		991
09:00		342				21:00		211			
09:15		362				21:15		200			
09:30		357				21:30		192			
09:45		381	1442		1442	21:45		191	794		794
10:00		349				22:00		147			
10:15		339				22:15		154			
10:30		349				22:30		138			
10:45		369	1406		1406	22:45		124	563		563
11:00		366				23:00		114			
11:15		371				23:15		75			
11:30		402				23:30		64			
11:45		348	1487		1487	23:45		81	334		334
Total Vol.			9487		**9487**				13588		**13588**

Daily Totals

NB	SB	EB	WB	Combined
	23075			**23075**

	AM		PM	
Split %	100.0%	**41.1%**	100.0%	**58.9%**
Peak Hour	10:45	**10:45**	16:15	**16:15**
Volume	1508	**1508**	1781	**1781**
P.H.F.	0.94	**0.94**	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-081

Location: Kettner Blvd. btwn. Redwood St. & Palm St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		42				12:00		280			
00:15		32				12:15		337			
00:30		30				12:30		275			
00:45		23	127		127	12:45		310	1202		1202
01:00		17				13:00		291			
01:15		12				13:15		269			
01:30		11				13:30		276			
01:45		16	56		56	13:45		280	1116		1116
02:00		9				14:00		264			
02:15		8				14:15		276			
02:30		7				14:30		267			
02:45		9	33		33	14:45		264	1071		1071
03:00		9				15:00		247			
03:15		27				15:15		275			
03:30		20				15:30		272			
03:45		53	109		109	15:45		294	1088		1088
04:00		72				16:00		414			
04:15		100				16:15		397			
04:30		168				16:30		354			
04:45		177	517		517	16:45		410	1575		1575
05:00		222				17:00		383			
05:15		190				17:15		326			
05:30		214				17:30		290			
05:45		195	821		821	17:45		304	1303		1303
06:00		182				18:00		302			
06:15		230				18:15		240			
06:30		232				18:30		272			
06:45		209	853		853	18:45		235	1049		1049
07:00		232				19:00		239			
07:15		257				19:15		214			
07:30		317				19:30		222			
07:45		317	1123		1123	19:45		200	875		875
08:00		335				20:00		212			
08:15		304				20:15		208			
08:30		326				20:30		194			
08:45		316	1281		1281	20:45		187	801		801
09:00		297				21:00		177			
09:15		314				21:15		164			
09:30		357				21:30		144			
09:45		306	1274		1274	21:45		132	617		617
10:00		302				22:00		155			
10:15		281				22:15		133			
10:30		329				22:30		122			
10:45		317	1229		1229	22:45		106	516		516
11:00		331				23:00		57			
11:15		320				23:15		57			
11:30		311				23:30		69			
11:45		318	1280		1280	23:45		47	230		230
Total Vol.			8703		**8703**				11443		**11443**

Daily Totals

NB	SB	EB	WB	Combined
	20146			**20146**

	AM		PM	
Split %	100.0%	**43.2%**	100.0%	**56.8%**
Peak Hour	10:30	**10:30**	16:00	**16:00**
Volume	1297	**1297**	1575	**1575**
P.H.F.	0.98	**0.98**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just N/o Taylor St	Project:	10-4143-036	4,318	3,139	0	0	7,457

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		6					12:00	88		58				
00:15	11		3					12:15	58		67				
00:30	7		3					12:30	68		69				
00:45	5	32	1	13			45	12:45	84	298	57	251			549
01:00	5		3					13:00	50		43				
01:15	1		2					13:15	70		52				
01:30	2		3					13:30	69		32				
01:45	4	12	1	9			21	13:45	74	263	65	192			455
02:00	3		1					14:00	75		41				
02:15	6		3					14:15	62		55				
02:30	4		0					14:30	61		44				
02:45	1	14	1	5			19	14:45	69	267	50	190			457
03:00	3		0					15:00	75		43				
03:15	2		1					15:15	66		71				
03:30	3		3					15:30	70		59				
03:45	8	16	5	9			25	15:45	96	307	61	234			541
04:00	2		7					16:00	136		52				
04:15	3		4					16:15	154		60				
04:30	10		5					16:30	129		49				
04:45	7	22	11	27			49	16:45	139	558	42	203			761
05:00	10		5					17:00	103		66				
05:15	9		12					17:15	110		69				
05:30	15		20					17:30	120		65				
05:45	24	58	19	56			114	17:45	87	420	64	264			684
06:00	28		19					18:00	63		67				
06:15	22		32					18:15	46		40				
06:30	31		47					18:30	45		43				
06:45	46	127	53	151			278	18:45	30	184	30	180			364
07:00	41		53					19:00	33		28				
07:15	31		47					19:15	33		23				
07:30	51		64					19:30	44		21				
07:45	50	173	63	227			400	19:45	32	142	17	89			231
08:00	38		61					20:00	31		18				
08:15	48		44					20:15	23		12				
08:30	44		50					20:30	33		16				
08:45	44	174	52	207			381	20:45	26	113	8	54			167
09:00	46		61					21:00	34		15				
09:15	60		53					21:15	33		8				
09:30	64		62					21:30	31		8				
09:45	56	226	59	235			461	21:45	33	131	8	39			170
10:00	59		59					22:00	38		8				
10:15	59		58					22:15	40		11				
10:30	79		52					22:30	20		9				
10:45	81	278	40	209			487	22:45	25	123	11	39			162
11:00	58		54					23:00	30		8				
11:15	79		55					23:15	13		6				
11:30	86		77					23:30	14		4				
11:45	73	296	49	235			531	23:45	27	84	3	21			105
Total Vol.		1428		1383			**2811**			2890		1756			**4646**

	NB	SB	EB	WB	Total
Daily Totals :	**4,318**	**3,139**	**0**	**0**	**7,457**

	AM			PM			
Split %	50.8%	49.2%	**37.7%**	62.2%	37.8%		**62.3%**
AM				**PM**			
Peak Hr.	11:15	11:30	**11:15**	**Peak Hr.**	16:00	17:15	**16:00**
Volume	326	251	**565**	**Volume**	558	265	**761**
P.H.F.	0.926	0.815	**0.867**	**P.H.F.**	0.906	0.960	**0.889**
7 - 9 Vol.	347	434	**781**	**4 - 6 Vol.**	978	467	**1445**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:00	17:00	**16:00**
Volume	187	235	**419**	**Volume**	558	264	**761**
P.H.F.	0.917	0.918	**0.911**	**P.H.F.**	0.906	0.957	**0.889**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just S/o Taylor St	Project: 10-4143-037	8,122	5,199	0	0	13,321

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		3					12:00	120		82				
00:15	11		2					12:15	111		80				
00:30	11		5					12:30	103		82				
00:45	10	38	8	18			56	12:45	105	439	93	337			776
01:00	4		5					13:00	101		91				
01:15	3		5					13:15	96		86				
01:30	4		2					13:30	108		84				
01:45	2	13	2	14			27	13:45	121	426	85	346			772
02:00	4		4					14:00	108		84				
02:15	7		0					14:15	133		73				
02:30	3		1					14:30	150		84				
02:45	0	14	5	10			24	14:45	170	561	82	323			884
03:00	4		2					15:00	188		85				
03:15	4		2					15:15	194		81				
03:30	6		4					15:30	251		112				
03:45	12	26	6	14			40	15:45	224	857	90	368			1225
04:00	4		8					16:00	284		90				
04:15	1		6					16:15	263		88				
04:30	7		13					16:30	288		97				
04:45	9	21	26	53			74	16:45	289	1124	83	358			1482
05:00	23		19					17:00	283		82				
05:15	20		26					17:15	322		83				
05:30	34		34					17:30	242		75				
05:45	44	121	86	165			286	17:45	175	1022	82	322			1344
06:00	33		66					18:00	151		72				
06:15	53		109					18:15	113		58				
06:30	77		111					18:30	94		53				
06:45	70	233	115	401			634	18:45	80	438	57	240			678
07:00	91		121					19:00	83		44				
07:15	89		133					19:15	62		40				
07:30	86		120					19:30	54		42				
07:45	85	351	115	489			840	19:45	52	251	33	159			410
08:00	87		95					20:00	61		31				
08:15	95		82					20:15	50		38				
08:30	93		83					20:30	40		28				
08:45	96	371	95	355			726	20:45	39	190	28	125			315
09:00	92		77					21:00	28		26				
09:15	89		72					21:15	39		16				
09:30	104		82					21:30	33		17				
09:45	91	376	57	288			664	21:45	31	131	18	77			208
10:00	94		59					22:00	30		11				
10:15	101		68					22:15	37		16				
10:30	99		80					22:30	23		19				
10:45	110	404	91	298			702	22:45	24	114	16	62			176
11:00	113		71					23:00	25		14				
11:15	148		82					23:15	19		8				
11:30	138		84					23:30	11		13				
11:45	132	531	100	337			868	23:45	15	70	5	40			110
Total Vol.		2499		2442			**4941**			5623		2757			**8380**

	NB	SB	EB	WB	Total
Daily Totals :	8,122	5,199	0	0	13,321

	AM			PM			
Split %	50.6%	49.4%	**37.1%**		67.1%	32.9%	**62.9%**
AM				**PM**			
Peak Hr.	11:15	06:45	**11:15**	**Peak Hr.**	16:30	15:30	**16:30**
Volume	538	489	**886**	**Volume**	1182	380	**1527**
P.H.F.	0.909	0.919	**0.955**	**P.H.F.**	0.918	0.848	**0.943**
7 - 9 Vol.	722	844	**1566**	**4 - 6 Vol.**	2146	680	**2826**
Peak Hr.	08:00	07:00	**07:00**	**Peak Hr.**	16:30	16:00	**16:30**
Volume	371	489	**840**	**Volume**	1182	358	**1527**
P.H.F.	0.966	0.919	**0.946**	**P.H.F.**	0.918	0.923	**0.943**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-045

Location: Pacific Hy (STATION#2653/FILE#MC1190-10) between Sports Arena Blvd & Kurtz St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	12		12					12:00	164		209				
00:15	7		9					12:15	168		221				
00:30	10		9					12:30	157		269				
00:45	7	36	13	43			79	12:45	157	646	247	946			1592
01:00	12		22					13:00	181		246				
01:15	14		10					13:15	168		233				
01:30	4		10					13:30	173		215				
01:45	6	36	10	52			88	13:45	146	668	211	905			1573
02:00	5		7					14:00	154		209				
02:15	13		4					14:15	155		209				
02:30	6		0					14:30	159		215				
02:45	10	34	6	17			51	14:45	165	633	224	857			1490
03:00	6		9					15:00	174		204				
03:15	13		2					15:15	194		231				
03:30	9		16					15:30	224		256				
03:45	11	39	7	34			73	15:45	196	788	243	934			1722
04:00	9		12					16:00	218		253				
04:15	20		27					16:15	194		252				
04:30	15		28					16:30	227		296				
04:45	33	77	27	94			171	16:45	232	871	287	1088			1959
05:00	17		36					17:00	223		268				
05:15	35		41					17:15	274		233				
05:30	51		64					17:30	256		204				
05:45	86	189	91	232			421	17:45	195	948	195	900			1848
06:00	56		90					18:00	139		191				
06:15	77		98					18:15	112		153				
06:30	90		126					18:30	91		156				
06:45	145	368	151	465			833	18:45	91	433	146	646			1079
07:00	130		128					19:00	77		127				
07:15	141		146					19:15	62		99				
07:30	150		178					19:30	57		98				
07:45	162	583	193	645			1228	19:45	55	251	92	416			667
08:00	183		188					20:00	62		83				
08:15	180		192					20:15	43		69				
08:30	163		144					20:30	52		74				
08:45	148	674	156	680			1354	20:45	47	204	68	294			498
09:00	145		127					21:00	50		77				
09:15	149		145					21:15	33		71				
09:30	138		143					21:30	50		72				
09:45	165	597	156	571			1168	21:45	39	172	60	280			452
10:00	141		150					22:00	28		43				
10:15	135		169					22:15	40		60				
10:30	158		133					22:30	30		44				
10:45	137	571	169	621			1192	22:45	24	122	38	185			307
11:00	173		166					23:00	28		28				
11:15	190		175					23:15	23		22				
11:30	152		204					23:30	17		47				
11:45	149	664	212	757			1421	23:45	18	86	20	117			203
Total Vol.		3868		4211			**8079**			5822		7568			**13390**

Daily Totals

NB	SB	EB	WB	Combined
9690	11779			**21469**

	AM			PM		
Split %	47.9%	52.1%	**37.6%**	43.5%	56.5%	**62.4%**
Peak Hour	07:45	11:45	**11:45**	16:45	16:15	**16:30**
Volume	688	911	**1549**	985	1103	**2040**
P.H.F.	0.94	0.85	**0.91**	0.92	0.93	**0.98**

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-001
Location: Pacific Hwy between Barnett Ave & Enterprise St File No. MC0305-10

Start	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	0			16	195				
12:15	0	0			12	204				
12:30	0	0			15	196				
12:45	0	0			16	189	59	784		
1:00	0	0			9	198				
1:15	0	0			7	175				
1:30	0	0			8	195				
1:45	0	0			6	177	30	745		
2:00	0	0			12	212				
2:15	0	0			5	200				
2:30	0	0			3	282				
2:45	0	0			5	219	25	913		
3:00	0	0			8	260				
3:15	0	0			6	206				
3:30	0	0			4	278				
3:45	0	0			8	253	26	997		
4:00	0	0			13	300				
4:15	0	0			19	259				
4:30	0	0			28	343				
4:45	0	0			15	308	75	1210		
5:00	0	0			20	290				
5:15	0	0			27	236				
5:30	0	0			38	207				
5:45	0	0			33	196	118	929		
6:00	0	0			45	209				
6:15	0	0			35	173				
6:30	0	0			53	176				
6:45	0	0			66	190	199	748		
7:00	0	0			85	167				
7:15	0	0			92	167				
7:30	0	0			97	149				
7:45	0	0			102	165	376	648		
8:00	0	0			98	136				
8:15	0	0			108	152				
8:30	0	0			105	135				
8:45	0	0			101	122	412	545		
9:00	0	0			107	160				
9:15	0	0			110	124				
9:30	0	0			124	132	0			
9:45	0	0			132	114	473	530		
10:00	0	0			139	95				
10:15	0	0			146	89				
10:30	0	0			139	79				
10:45	0	0			160	74	584	337		
11:00	0	0			167	49				
11:15	0	0			165	34				
11:30	0	0			191	58				
11:45	0	0			147	28	670	169		
Total	0	0	0	0	3047	8555	3047	8555	0	0
Combined Total	0		0		11602		11602		0	
AM Peak					11:45 AM					
Vol.					742					
P.H.F.					0.909					
PM Peak						4:00 PM				
Vol.						1210				
P.H.F.						0.882				
Percentage					26.3%	73.7%				

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-073

Location: Pacific Highway btwn. Barnett Ave. & Washington St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	40		69					12:00	471		401				
00:15	35		43					12:15	456		459				
00:30	44		31					12:30	424		443				
00:45	22	141	36	179			320	12:45	417	1768	470	1773			3541
01:00	19		33					13:00	382		438				
01:15	21		33					13:15	391		482				
01:30	15		20					13:30	431		426				
01:45	17	72	18	104			176	13:45	378	1582	478	1824			3406
02:00	22		22					14:00	369		459				
02:15	16		17					14:15	379		493				
02:30	14		19					14:30	398		524				
02:45	30	82	15	73			155	14:45	439	1585	525	2001			3586
03:00	22		19					15:00	445		582				
03:15	31		14					15:15	440		555				
03:30	30		25					15:30	449		709				
03:45	56	139	25	83			222	15:45	482	1816	721	2567			4383
04:00	46		30					16:00	459		775				
04:15	100		87					16:15	431		699				
04:30	108		104					16:30	434		748				
04:45	158	412	133	354			766	16:45	464	1788	649	2871			4659
05:00	208		139					17:00	443		697				
05:15	322		166					17:15	479		583				
05:30	289		185					17:30	425		560				
05:45	355	1174	210	700			1874	17:45	407	1754	534	2374			4128
06:00	347		228					18:00	335		488				
06:15	420		221					18:15	310		404				
06:30	494		185					18:30	301		387				
06:45	543	1804	215	849			2653	18:45	282	1228	339	1618			2846
07:00	607		242					19:00	221		353				
07:15	573		260					19:15	201		308				
07:30	546		319					19:30	205		288				
07:45	613	2339	302	1123			3462	19:45	190	817	262	1211			2028
08:00	592		308					20:00	160		249				
08:15	550		353					20:15	169		244				
08:30	496		411					20:30	165		243				
08:45	476	2114	304	1376			3490	20:45	126	620	224	960			1580
09:00	404		322					21:00	121		204				
09:15	375		296					21:15	112		198				
09:30	335		312					21:30	124		186				
09:45	417	1531	304	1234			2765	21:45	126	483	154	742			1225
10:00	355		304					22:00	109		146				
10:15	380		358					22:15	104		142				
10:30	346		343					22:30	113		112				
10:45	380	1461	326	1331			2792	22:45	101	427	87	487			914
11:00	360		354					23:00	62		80				
11:15	398		369					23:15	79		66				
11:30	412		400					23:30	53		94				
11:45	454	1624	408	1531			3155	23:45	63	257	62	302			559
Total Vol.		12893		8937			**21830**			14125		18730			**32855**

Daily Totals

NB	SB	EB	WB	Combined
27018	27667			**54685**

	AM			PM		
Split %	59.1%	40.9%	**39.9%**	43.0%	57.0%	**60.1%**
Peak Hour	07:00	11:45	**07:45**	15:15	15:45	**15:45**
Volume	2339	1711	**3625**	1830	2943	**4749**
P.H.F.	0.95	0.93	**0.99**	0.95	0.95	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-074

Location: Pacific Highway btwn. Washington St. & Sassafras St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	14		6					12:00	145		67				
00:15	12		6					12:15	148		92				
00:30	15		2					12:30	147		88				
00:45	10	51	5	19			70	12:45	139	579	75	322			901
01:00	7		7					13:00	130		90				
01:15	9		2					13:15	120		92				
01:30	6		5					13:30	115		80				
01:45	8	30	2	16			46	13:45	133	498	91	353			851
02:00	5		2					14:00	124		77				
02:15	3		1					14:15	116		72				
02:30	4		6					14:30	130		102				
02:45	2	14	3	12			26	14:45	143	513	94	345			858
03:00	6		5					15:00	117		83				
03:15	7		2					15:15	114		98				
03:30	1		2					15:30	109		65				
03:45	7	21	5	14			35	15:45	146	486	95	341			827
04:00	6		2					16:00	117		102				
04:15	11		8					16:15	131		87				
04:30	10		13					16:30	130		96				
04:45	14	41	16	39			80	16:45	116	494	81	366			860
05:00	18		14					17:00	128		118				
05:15	22		21					17:15	175		94				
05:30	20		28					17:30	134		95				
05:45	24	84	16	79			163	17:45	125	562	80	387			949
06:00	27		16					18:00	110		97				
06:15	33		15					18:15	87		73				
06:30	59		31					18:30	97		64				
06:45	58	177	37	99			276	18:45	73	367	54	288			655
07:00	56		32					19:00	81		50				
07:15	55		36					19:15	88		55				
07:30	89		67					19:30	82		61				
07:45	91	291	56	191			482	19:45	66	317	67	233			550
08:00	82		40					20:00	59		50				
08:15	84		66					20:15	62		43				
08:30	89		66					20:30	79		47				
08:45	100	355	49	221			576	20:45	46	246	47	187			433
09:00	112		71					21:00	41		50				
09:15	79		60					21:15	52		29				
09:30	103		75					21:30	54		29				
09:45	119	413	73	279			692	21:45	45	192	28	136			328
10:00	108		53					22:00	49		29				
10:15	120		81					22:15	53		21				
10:30	100		62					22:30	45		12				
10:45	126	454	74	270			724	22:45	46	193	12	74			267
11:00	117		73					23:00	32		13				
11:15	136		83					23:15	25		9				
11:30	137		79					23:30	24		12				
11:45	150	540	83	318			858	23:45	13	94	10	44			138
Total Vol.		2471		1557			**4028**			4541		3076			**7617**

Daily Totals

NB	SB	EB	WB	Combined
7012	4633			**11645**

	AM			PM		
Split %	61.3%	38.7%	**34.6%**	59.6%	40.4%	**65.4%**
Peak Hour	11:45	11:45	**11:45**	12:00	16:30	**17:00**
Volume	590	330	**920**	579	389	**949**
P.H.F.	0.98	0.90	**0.96**	0.98	0.82	**0.88**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-044

Location: Pacific Hy (STATION#2657/FILE#MC1189-10) between Palm St & Sassafras St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	38		24					12:00	169		184				
00:15	17		20					12:15	154		151				
00:30	31		22					12:30	168		189				
00:45	26	112	31	97			209	12:45	150	641	178	702			1343
01:00	38		22					13:00	157		165				
01:15	26		20					13:15	170		172				
01:30	17		9					13:30	182		181				
01:45	8	89	8	59			148	13:45	149	658	178	696			1354
02:00	11		8					14:00	171		133				
02:15	6		3					14:15	154		140				
02:30	7		5					14:30	168		165				
02:45	4	28	3	19			47	14:45	165	658	152	590			1248
03:00	2		7					15:00	151		123				
03:15	1		1					15:15	170		153				
03:30	3		8					15:30	149		137				
03:45	7	13	16	32			45	15:45	192	662	142	555			1217
04:00	14		18					16:00	154		173				
04:15	15		33					16:15	156		172				
04:30	19		49					16:30	168		174				
04:45	30	78	71	171			249	16:45	159	637	222	741			1378
05:00	28		79					17:00	167		235				
05:15	30		83					17:15	199		199				
05:30	51		76					17:30	178		194				
05:45	51	160	75	313			473	17:45	141	685	191	819			1504
06:00	55		79					18:00	139		172				
06:15	50		91					18:15	115		147				
06:30	63		105					18:30	92		139				
06:45	63	231	121	396			627	18:45	110	456	121	579			1035
07:00	67		117					19:00	107		129				
07:15	80		131					19:15	92		104				
07:30	93		146					19:30	63		94				
07:45	112	352	151	545			897	19:45	78	340	85	412			752
08:00	116		143					20:00	84		102				
08:15	121		168					20:15	77		73				
08:30	105		144					20:30	73		96				
08:45	124	466	138	593			1059	20:45	91	325	74	345			670
09:00	102		114					21:00	84		76				
09:15	157		158					21:15	90		75				
09:30	119		149					21:30	93		76				
09:45	142	520	131	552			1072	21:45	85	352	64	291			643
10:00	117		134					22:00	94		62				
10:15	155		156					22:15	84		62				
10:30	161		133					22:30	53		51				
10:45	144	577	139	562			1139	22:45	53	284	28	203			487
11:00	164		153					23:00	52		26				
11:15	148		166					23:15	46		23				
11:30	149		196					23:30	37		16				
11:45	155	616	189	704			1320	23:45	31	166	9	74			240
Total Vol.		3242		4043			**7285**			5864		6007			**11871**

Daily Totals

	NB	SB	EB	WB	Combined
	9106	10050			**19156**

	AM			PM		
Split %	44.5%	55.5%	**38.0%**	49.4%	50.6%	**62.0%**
Peak Hour	11:45	11:15	**11:45**	16:45	16:45	**16:45**
Volume	646	735	**1359**	703	850	**1553**
P.H.F.	0.96	0.94	**0.95**	0.91	0.90	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-069

Location: Congress St. btwn. Taylor St. & Twiggs St.

AM Period	NB		SB		EB	WB	PM Period	NB		SB		EB	WB	
00:00	6		4				12:00	45		34				
00:15	4		5				12:15	32		23				
00:30	2		3				12:30	28		24				
00:45	5	17	2	14		31	12:45	37	142	31	112			254
01:00	2		6				13:00	37		38				
01:15	1		2				13:15	32		37				
01:30	2		0				13:30	40		27				
01:45	1	6	1	9		15	13:45	37	146	47	149			295
02:00	2		1				14:00	32		38				
02:15	0		0				14:15	38		40				
02:30	1		4				14:30	33		42				
02:45	1	4	1	6		10	14:45	44	147	44	164			311
03:00	2		0				15:00	37		43				
03:15	0		1				15:15	41		47				
03:30	1		2				15:30	34		40				
03:45	1	4	1	4		8	15:45	34	146	37	167			313
04:00	3		2				16:00	44		40				
04:15	2		1				16:15	35		26				
04:30	3		5				16:30	41		32				
04:45	2	10	1	9		19	16:45	32	152	36	134			286
05:00	3		0				17:00	57		27				
05:15	6		4				17:15	52		34				
05:30	4		4				17:30	47		40				
05:45	11	24	3	11		35	17:45	40	196	40	141			337
06:00	11		4				18:00	36		39				
06:15	5		12				18:15	34		55				
06:30	7		6				18:30	50		46				
06:45	11	34	14	36		70	18:45	37	157	63	203			360
07:00	16		20				19:00	28		58				
07:15	16		14				19:15	31		36				
07:30	27		20				19:30	35		27				
07:45	19	78	29	83		161	19:45	24	118	26	147			265
08:00	26		15				20:00	41		24				
08:15	17		20				20:15	39		19				
08:30	21		13				20:30	49		28				
08:45	25	89	43	91		180	20:45	38	167	16	87			254
09:00	26		31				21:00	39		18				
09:15	30		17				21:15	49		20				
09:30	27		37				21:30	39		11				
09:45	18	101	34	119		220	21:45	21	148	13	62			210
10:00	21		36				22:00	15		17				
10:15	24		25				22:15	16		11				
10:30	23		33				22:30	18		7				
10:45	19	87	29	123		210	22:45	11	60	6	41			101
11:00	25		32				23:00	10		7				
11:15	29		28				23:15	9		4				
11:30	20		37				23:30	11		6				
11:45	28	102	25	122		224	23:45	7	37	6	23			60
Total Vol.		556		627		**1183**			1616		1430			**3046**

Daily Totals

NB	SB	EB	WB	Combined
2172	2057			**4229**

	AM			PM		
Split %	47.0%	53.0%	**28.0%**	53.1%	46.9%	**72.0%**
Peak Hour	11:45	09:30	**11:15**	17:00	18:15	**18:15**
Volume	133	132	**246**	196	222	**371**
P.H.F.	0.74	0.89	**0.78**	0.86	0.88	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-070

Location: Congress St. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	8		6					12:00	49		47				
00:15	1		6					12:15	34		25				
00:30	1		5					12:30	36		25				
00:45	4	14	3	20			34	12:45	30	149	43	140			289
01:00	2		3					13:00	42		51				
01:15	0		2					13:15	24		42				
01:30	1		0					13:30	38		42				
01:45	1	4	1	6			10	13:45	30	134	36	171			305
02:00	1		0					14:00	22		43				
02:15	0		1					14:15	26		30				
02:30	1		3					14:30	31		33				
02:45	2	4	1	5			9	14:45	38	117	39	145			262
03:00	0		1					15:00	32		33				
03:15	4		3					15:15	30		40				
03:30	1		1					15:30	30		48				
03:45	1	6	0	5			11	15:45	32	124	51	172			296
04:00	0		1					16:00	42		46				
04:15	2		1					16:15	27		34				
04:30	1		4					16:30	30		32				
04:45	2	5	2	8			13	16:45	36	135	40	152			287
05:00	4		3					17:00	56		35				
05:15	5		2					17:15	54		35				
05:30	5		4					17:30	41		38				
05:45	10	24	3	12			36	17:45	35	186	45	153			339
06:00	12		5					18:00	29		42				
06:15	5		12					18:15	39		55				
06:30	9		7					18:30	44		55				
06:45	11	37	14	38			75	18:45	37	149	57	209			358
07:00	16		13					19:00	30		65				
07:15	17		16					19:15	31		48				
07:30	26		21					19:30	31		36				
07:45	19	78	24	74			152	19:45	39	131	15	164			295
08:00	19		17					20:00	59		14				
08:15	13		21					20:15	64		12				
08:30	22		17					20:30	67		19				
08:45	23	77	36	91			168	20:45	46	236	16	61			297
09:00	27		31					21:00	52		20				
09:15	34		24					21:15	54		21				
09:30	29		32					21:30	49		14				
09:45	33	123	28	115			238	21:45	36	191	18	73			264
10:00	32		29					22:00	31		13				
10:15	27		31					22:15	21		4				
10:30	24		36					22:30	14		12				
10:45	13	96	13	109			205	22:45	9	75	8	37			112
11:00	54		18					23:00	11		8				
11:15	35		29					23:15	5		3				
11:30	28		43					23:30	9		6				
11:45	38	155	26	116			271	23:45	6	31	6	23			54
Total Vol.		623		599			**1222**			1658		1500			**3158**

Daily Totals

	NB	SB	EB	WB	Combined
	2281	2099			**4380**

	AM			PM		
Split %	51.0%	49.0%	**27.9%**	52.5%	47.5%	**72.1%**
Peak Hour	11:45	11:15	**11:15**	20:00	18:15	**18:15**
Volume	157	145	**295**	236	232	**382**
P.H.F.	0.80	0.77	**0.77**	0.88	0.89	**0.96**

Prepared by NDS/ATD

Volumes for: Thursday, October 28, 2010 | **City: San Diego**

Location: Congress St (STATION#2466/FILE#MC0940-10) | **Project: 10-4300-021**

Daily Totals	NB	SB	EB	WB	Total
	1,891	2,392	0	0	4,283

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		3					12:00	42		38				
00:15	2		4					12:15	37		35				
00:30	3		1					12:30	36		45				
00:45	2	7	0	8	15			12:45	39	154	58	176			330
01:00	0		5					13:00	30		39				
01:15	1		1					13:15	29		47				
01:30	4		3					13:30	37		39				
01:45	0	5	1	10	15			13:45	28	124	54	179			303
02:00	2		0					14:00	19		37				
02:15	0		2					14:15	23		40				
02:30	0		1					14:30	27		46				
02:45	0	2	0	3	5			14:45	34	103	41	164			267
03:00	1		3					15:00	19		36				
03:15	2		5					15:15	36		32				
03:30	5		2					15:30	30		44				
03:45	3	11	4	14	25			15:45	30	115	56	168			283
04:00	0		2					16:00	33		47				
04:15	1		0					16:15	34		38				
04:30	1		0					16:30	46		65				
04:45	2	4	3	5	9			16:45	58	171	58	208			379
05:00	2		0					17:00	48		55				
05:15	2		3					17:15	45		46				
05:30	7		3					17:30	48		54				
05:45	6	17	5	11	28			17:45	40	181	39	194			375
06:00	3		13					18:00	37		44				
06:15	14		12					18:15	52		36				
06:30	10		13					18:30	23		53				
06:45	22	49	17	55	104			18:45	31	143	41	174			317
07:00	11		13					19:00	18		39				
07:15	17		25					19:15	23		42				
07:30	23		35					19:30	16		31				
07:45	17	68	38	111	179			19:45	25	82	40	152			234
08:00	34		18					20:00	16		32				
08:15	23		17					20:15	17		24				
08:30	31		36					20:30	23		26				
08:45	41	129	32	103	232			20:45	15	71	36	118			189
09:00	24		28					21:00	13		30				
09:15	39		28					21:15	9		12				
09:30	30		31					21:30	14		29				
09:45	22	115	31	118	233			21:45	15	51	30	101			152
10:00	30		30					22:00	14		18				
10:15	33		38					22:15	6		16				
10:30	23		19					22:30	7		14				
10:45	36	122	28	115	237			22:45	3	30	10	58			88
11:00	27		33					23:00	3		17				
11:15	26		28					23:15	0		7				
11:30	29		29					23:30	2		3				
11:45	49	131	27	117	248			23:45	1	6	3	30			36
Total Vol.		660		670	**1330**					1231		1722			**2953**

	NB	SB	EB	WB	Total
Daily Totals :	**1,891**	**2,392**	**0**	**0**	**4,283**

	AM			PM			
Split %	49.6%	50.4%	**31.1%**	41.7%	58.3%		**68.9%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	164	145	**309**	**Volume**	199	224	**421**
P.H.F.	0.837	0.806	**0.954**	**P.H.F.**	0.858	0.862	**0.907**
7 - 9 Vol.	197	214	**411**	**4 - 6 Vol.**	352	402	**754**
Peak Hr.	08:00	07:15	**08:00**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	129	116	**232**	**Volume**	199	224	**421**
P.H.F.	0.787	0.763	**0.795**	**P.H.F.**	0.858	0.862	**0.907**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-067

Location: San Diego Ave. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		0					12:00	22		32				
00:15	2		2					12:15	20		39				
00:30	2		1					12:30	17		38				
00:45	3	11	6	9			20	12:45	19	78	37	146			224
01:00	1		4					13:00	13		38				
01:15	1		3					13:15	18		38				
01:30	2		0					13:30	18		34				
01:45	1	5	0	7			12	13:45	17	66	36	146			212
02:00	6		3					14:00	19		33				
02:15	1		0					14:15	33		39				
02:30	1		1					14:30	30		34				
02:45	0	8	0	4			12	14:45	35	117	31	137			254
03:00	0		0					15:00	28		34				
03:15	0		1					15:15	24		38				
03:30	2		1					15:30	29		42				
03:45	0	2	0	2			4	15:45	33	114	40	154			268
04:00	1		0					16:00	30		43				
04:15	1		3					16:15	32		39				
04:30	0		1					16:30	22		34				
04:45	0	2	2	6			8	16:45	36	120	25	141			261
05:00	2		3					17:00	51		27				
05:15	2		1					17:15	60		26				
05:30	6		0					17:30	55		30				
05:45	3	13	1	5			18	17:45	41	207	31	114			321
06:00	2		0					18:00	46		43				
06:15	5		5					18:15	27		36				
06:30	7		1					18:30	38		43				
06:45	5	19	7	13			32	18:45	47	158	40	162			320
07:00	12		5					19:00	29		23				
07:15	10		5					19:15	36		34				
07:30	19		13					19:30	28		21				
07:45	12	53	17	40			93	19:45	31	124	13	91			215
08:00	24		16					20:00	39		15				
08:15	11		18					20:15	34		15				
08:30	22		18					20:30	23		17				
08:45	37	94	23	75			169	20:45	25	121	14	61			182
09:00	31		23					21:00	29		24				
09:15	22		20					21:15	26		13				
09:30	26		20					21:30	19		14				
09:45	35	114	23	86			200	21:45	29	103	7	58			161
10:00	37		28					22:00	23		10				
10:15	28		28					22:15	14		8				
10:30	22		26					22:30	18		7				
10:45	20	107	26	108			215	22:45	19	74	15	40			114
11:00	24		24					23:00	6		7				
11:15	29		20					23:15	9		7				
11:30	22		22					23:30	4		4				
11:45	20	95	19	85			180	23:45	3	22	3	21			43
Total Vol.		523		440			**963**			1304		1271			**2575**

Daily Totals

NB	SB	EB	WB	Combined
1827	1711			**3538**

	AM			PM		
Split %	54.3%	45.7%	**27.2%**	50.6%	49.4%	**72.8%**
Peak Hour	09:30	11:45	**09:45**	17:00	15:30	**17:15**
Volume	126	128	**227**	207	164	**332**
P.H.F.	0.85	0.82	**0.87**	0.86	0.95	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-068

Location: San Diego Ave. btwn. Conde St. & Arista St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		2					12:00	25		29				
00:15	3		3					12:15	21		33				
00:30	1		1					12:30	28		30				
00:45	2	11	6	12			23	12:45	32	106	28	120			226
01:00	3		7					13:00	30		24				
01:15	2		3					13:15	33		21				
01:30	3		4					13:30	29		14				
01:45	3	11	2	16			27	13:45	28	120	19	78			198
02:00	2		2					14:00	32		22				
02:15	1		1					14:15	30		20				
02:30	2		0					14:30	33		24				
02:45	0	5	1	4			9	14:45	39	134	41	107			241
03:00	0		0					15:00	31		52				
03:15	0		1					15:15	44		49				
03:30	1		1					15:30	40		43				
03:45	1	2	0	2			4	15:45	35	150	40	184			334
04:00	2		1					16:00	30		45				
04:15	2		1					16:15	34		47				
04:30	1		2					16:30	32		51				
04:45	6	11	1	5			16	16:45	44	140	55	198			338
05:00	1		5					17:00	54		58				
05:15	3		2					17:15	72		60				
05:30	7		3					17:30	69		52				
05:45	7	18	5	15			33	17:45	61	256	28	198			454
06:00	6		3					18:00	45		48				
06:15	11		1					18:15	33		49				
06:30	14		4					18:30	37		38				
06:45	13	44	19	27			71	18:45	46	161	53	188			349
07:00	24		14					19:00	45		39				
07:15	27		12					19:15	35		42				
07:30	21		18					19:30	38		47				
07:45	35	107	21	65			172	19:45	30	148	46	174			322
08:00	34		15					20:00	36		39				
08:15	23		22					20:15	33		33				
08:30	26		13					20:30	28		38				
08:45	43	126	19	69			195	20:45	28	125	36	146			271
09:00	33		22					21:00	25		45				
09:15	24		30					21:15	24		45				
09:30	38		26					21:30	21		28				
09:45	47	142	13	91			233	21:45	15	85	32	150			235
10:00	35		29					22:00	25		30				
10:15	30		21					22:15	13		13				
10:30	28		19					22:30	16		19				
10:45	29	122	22	91			213	22:45	14	68	23	85			153
11:00	22		16					23:00	9		15				
11:15	20		19					23:15	10		9				
11:30	24		14					23:30	5		11				
11:45	29	95	21	70			165	23:45	3	27	8	43			70
Total Vol.		694		467			**1161**			1520		1671			**3191**

Daily Totals

NB	SB	EB	WB	Combined
2214	2138			**4352**

	AM			PM		
Split %	59.8%	40.2%	**26.7%**	47.6%	52.4%	**73.3%**
Peak Hour	09:30	11:45	**09:15**	17:00	16:45	**16:45**
Volume	150	113	**242**	256	225	**464**
P.H.F.	0.80	0.86	**0.95**	0.89	0.94	**0.88**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: San Diego Ave (STATION#2460/FILE#MC0424-10)	Project:	10-4169-012	5,458	4,702	0	0	10,160

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		16					12:00	106		60				
00:15	7		16					12:15	82		76				
00:30	7		8					12:30	87		72				
00:45	1	20	10	50			70	12:45	92	367	70	278			645
01:00	6		5					13:00	83		69				
01:15	4		4					13:15	86		82				
01:30	3		2					13:30	73		66				
01:45	1	14	1	12			26	13:45	84	326	71	288			614
02:00	2		5					14:00	90		70				
02:15	2		3					14:15	92		83				
02:30	8		5					14:30	111		82				
02:45	0	12	2	15			27	14:45	105	398	87	322			720
03:00	1		2					15:00	99		83				
03:15	4		0					15:15	92		93				
03:30	2		5					15:30	103		87				
03:45	3	10	3	10			20	15:45	113	407	86	349			756
04:00	2		9					16:00	108		86				
04:15	1		2					16:15	123		82				
04:30	4		1					16:30	135		94				
04:45	5	12	3	15			27	16:45	131	497	82	344			841
05:00	3		9					17:00	146		97				
05:15	5		11					17:15	162		100				
05:30	10		9					17:30	119		98				
05:45	11	29	7	36			65	17:45	123	550	100	395			945
06:00	11		9					18:00	122		77				
06:15	16		16					18:15	122		63				
06:30	33		14					18:30	115		77				
06:45	29	89	22	61			150	18:45	96	455	67	284			739
07:00	48		25					19:00	121		90				
07:15	34		28					19:15	82		78				
07:30	50		31					19:30	85		80				
07:45	52	184	32	116			300	19:45	68	356	69	317			673
08:00	58		27					20:00	68		82				
08:15	52		28					20:15	71		65				
08:30	45		32					20:30	65		77				
08:45	78	233	50	137			370	20:45	47	251	105	329			580
09:00	62		39					21:00	31		86				
09:15	59		36					21:15	29		74				
09:30	73		39					21:30	38		101				
09:45	80	274	43	157			431	21:45	27	125	93	354			479
10:00	69		33					22:00	33		106				
10:15	90		49					22:15	27		100				
10:30	81		57					22:30	23		61				
10:45	85	325	57	196			521	22:45	19	102	56	323			425
11:00	79		55					23:00	11		35				
11:15	109		56					23:15	12		19				
11:30	90		59					23:30	5		24				
11:45	110	388	48	218			606	23:45	6	34	18	96			130
Total Vol.		1590		1023			**2613**			3868		3679			**7547**

	NB	SB	EB	WB	Total
Daily Totals :	**5,458**	**4,702**	**0**	**0**	**10,160**

	AM			PM			
Split %	60.8%	39.2%	**25.7%**	51.3%	48.7%		**74.3%**
AM				**PM**			
Peak Hr.	11:15	11:45	**11:45**	**Peak Hr.**	16:30	21:30	**16:30**
Volume	415	256	**641**	**Volume**	574	400	**947**
P.H.F.	0.943	0.842	**0.965**	**P.H.F.**	0.886	0.943	**0.904**
7 - 9 Vol.	417	253	**670**	**4 - 6 Vol.**	1047	739	**1786**
Peak Hr.	08:00	08:00	**08:00**	**Peak Hr.**	16:30	17:00	**16:30**
Volume	233	137	**370**	**Volume**	574	395	**947**
P.H.F.	0.747	0.685	**0.723**	**P.H.F.**	0.886	0.988	**0.904**

Prepared by NDS/ATD

VOLUME

San Diego Ave from Old Town Ave to Witherby St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_004

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	8		2				10		12:00	56		35				91	
00:15	8		7				15		12:15	97		35				132	
00:30	5		3				8		12:30	63		45				108	
00:45	3	24	3	15			6	39	12:45	60	276	54	169			114	445
01:00	2		1				3		13:00	60		44				104	
01:15	4		1				5		13:15	69		39				108	
01:30	1		2				3		13:30	53		30				83	
01:45	2	9	3	7			5	16	13:45	61	243	34	147			95	390
02:00	1		2				3		14:00	39		36				75	
02:15	2		2				4		14:15	48		45				93	
02:30	1		0				1		14:30	53		29				82	
02:45	0	4	2	6			2	10	14:45	58	198	34	144			92	342
03:00	3		0				3		15:00	49		31				80	
03:15	1		0				1		15:15	52		37				89	
03:30	0		1				1		15:30	46		40				86	
03:45	1	5	0	1			1	6	15:45	50	197	32	140			82	337
04:00	1		2				3		16:00	53		29				82	
04:15	2		2				4		16:15	44		33				77	
04:30	4		1				5		16:30	49		38				87	
04:45	3	10	4	9			7	19	16:45	53	199	41	141			94	340
05:00	5		5				10		17:00	59		52				111	
05:15	7		2				9		17:15	60		48				108	
05:30	10		3				13		17:30	53		51				104	
05:45	10	32	3	13			13	45	17:45	47	219	40	191			87	410
06:00	23		4				27		18:00	57		42				99	
06:15	20		8				28		18:15	71		38				109	
06:30	28		9				37		18:30	61		42				103	
06:45	26	97	10	31			36	128	18:45	47	236	44	166			91	402
07:00	26		15				41		19:00	65		45				110	
07:15	39		12				51		19:15	48		36				84	
07:30	52		16				68		19:30	33		42				75	
07:45	77	194	26	69			103	263	19:45	37	183	19	142			56	325
08:00	41		30				71		20:00	34		21				55	
08:15	63		15				78		20:15	44		23				67	
08:30	64		24				88		20:30	29		30				59	
08:45	41	209	28	97			69	306	20:45	22	129	18	92			40	221
09:00	46		33				79		21:00	30		23				53	
09:15	52		26				78		21:15	30		34				64	
09:30	33		35				68		21:30	32		23				55	
09:45	61	192	28	122			89	314	21:45	17	109	17	97			34	206
10:00	45		32				77		22:00	14		16				30	
10:15	45		22				67		22:15	16		13				29	
10:30	47		31				78		22:30	17		12				29	
10:45	44	181	34	119			78	300	22:45	9	56	10	51			19	107
11:00	51		29				80		23:00	14		7				21	
11:15	76		33				109		23:15	15		8				23	
11:30	49		35				84		23:30	7		7				14	
11:45	54	230	32	129			86	359	23:45	4	40	6	28			10	68
TOTALS		1187		618				1805	TOTALS		2085		1508				3593
SPLIT %		65.8%		34.2%				33.4%	SPLIT %		58.0%		42.0%				66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Peak Hour	11:45	11:45	11:45	PM Peak Hour	12:15	16:45	12:15
AM Pk Volume	270	147	417	PM Pk Volume	280	192	458
Pk Hr Factor	0.696	0.817	0.790	Pk Hr Factor	0.722	0.923	0.867
7 - 9 Volume	403	166	569	4 - 6 Volume	418	332	750
7 - 9 Peak Hour	07:45	08:00	07:45	4 - 6 Peak Hour	16:45	16:45	16:45
7 - 9 Pk Volume	245	97	340	4 - 6 Pk Volume	225	192	417
Pk Hr Factor	0.795	0.808	0.825	Pk Hr Factor	0.938	0.923	0.939

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-064

Location: Juan St. btwn. Taylor St. & Mason St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		1			12:00			32		28		
00:15			1		2			12:15			30		24		
00:30			0		1			12:30			29		41		
00:45			1	5	3	7	12	12:45			28	119	45	138	257
01:00			0		0			13:00			32		50		
01:15			3		2			13:15			30		39		
01:30			0		0			13:30			33		35		
01:45			4	7	3	5	12	13:45			41	136	44	168	304
02:00			0		5			14:00			45		46		
02:15			0		2			14:15			48		58		
02:30			1		0			14:30			48		57		
02:45			0	1	0	7	8	14:45			45	186	62	223	409
03:00			2		0			15:00			47		59		
03:15			3		1			15:15			46		70		
03:30			1		0			15:30			38		56		
03:45			0	6	0	1	7	15:45			54	185	73	258	443
04:00			0		4			16:00			47		66		
04:15			1		1			16:15			63		75		
04:30			2		1			16:30			63		52		
04:45			3	6	1	7	13	16:45			66	239	61	254	493
05:00			6		4			17:00			54		69		
05:15			2		7			17:15			50		57		
05:30			3		5			17:30			65		62		
05:45			8	19	14	30	49	17:45			59	228	48	236	464
06:00			6		14			18:00			69		50		
06:15			12		9			18:15			50		50		
06:30			22		18			18:30			44		48		
06:45			20	60	25	66	126	18:45			44	207	46	194	401
07:00			22		31			19:00			44		50		
07:15			21		36			19:15			44		29		
07:30			27		32			19:30			45		34		
07:45			34	104	44	143	247	19:45			34	167	48	161	328
08:00			30		39			20:00			36		28		
08:15			30		52			20:15			22		54		
08:30			26		48			20:30			26		31		
08:45			23	109	46	185	294	20:45			25	109	57	170	279
09:00			34		27			21:00			22		49		
09:15			37		40			21:15			15		25		
09:30			51		31			21:30			16		31		
09:45			33	155	38	136	291	21:45			10	63	25	130	193
10:00			53		49			22:00			11		27		
10:15			48		43			22:15			3		20		
10:30			36		33			22:30			8		19		
10:45			43	180	29	154	334	22:45			8	30	7	73	103
11:00			33		49			23:00			5		13		
11:15			55		38			23:15			3		5		
11:30			49		34			23:30			3		6		
11:45			36	173	20	141	314	23:45			4	15	7	31	46
Total Vol.				825		882	**1707**					1684		2036	**3720**

Daily Totals

NB	SB	EB	W8	**Combined**
		2509	2918	**5427**

	AM			**PM**		
Split %	48.3%	51.7%	**31.5%**	45.3%	54.7%	**68.5%**
Peak Hour	09:30	08:00	**09:30**	16:15	15:30	**16:15**
Volume	185	185	**346**	246	270	**503**
P.H.F.	0.87	0.89	**0.85**	0.93	0.90	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-065

Location: Juan St. btwn. Twiggs St. & Harney St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		4			12:00			39		19		
00:15			0		1			12:15			34		23		
00:30			1		2			12:30			38		20		
00:45			0	3	1	8	11	12:45			42	153	22	84	237
01:00			0		0			13:00			40		18		
01:15			1		4			13:15			43		30		
01:30			0		0			13:30			46		32		
01:45			1	2	2	6	8	13:45			35	164	16	96	260
02:00			1		3			14:00			40		26		
02:15			0		1			14:15			35		27		
02:30			0		0			14:30			44		17		
02:45			0	1	0	4	5	14:45			49	168	27	97	265
03:00			1		1			15:00			49		26		
03:15			1		2			15:15			47		27		
03:30			1		1			15:30			39		22		
03:45			0	3	0	4	7	15:45			40	175	32	107	282
04:00			0		2			16:00			54		32		
04:15			1		2			16:15			58		36		
04:30			1		2			16:30			64		30		
04:45			2	4	2	8	12	16:45			65	241	22	120	361
05:00			3		8			17:00			69		50		
05:15			0		5			17:15			59		52		
05:30			1		2			17:30			63		63		
05:45			7	11	13	28	39	17:45			50	241	41	206	447
06:00			5		7			18:00			70		68		
06:15			10		16			18:15			46		35		
06:30			9		19			18:30			49		57		
06:45			19	43	31	73	116	18:45			38	203	37	197	400
07:00			28		41			19:00			33		53		
07:15			30		41			19:15			41		37		
07:30			38		54			19:30			25		36		
07:45			29	125	53	189	314	19:45			20	119	30	156	275
08:00			33		46			20:00			28		37		
08:15			29		42			20:15			26		35		
08:30			25		52			20:30			27		40		
08:45			23	110	45	185	295	20:45			15	96	20	132	228
09:00			38		43			21:00			16		27		
09:15			30		47			21:15			10		19		
09:30			29		48			21:30			11		25		
09:45			30	127	55	193	320	21:45			8	45	15	86	131
10:00			33		51			22:00			9		14		
10:15			32		56			22:15			7		13		
10:30			44		53			22:30			3		15		
10:45			38	147	71	231	378	22:45			4	23	6	48	71
11:00			39		43			23:00			0		5		
11:15			33		49			23:15			4		7		
11:30			40		41			23:30			2		5		
11:45			34	146	36	169	315	23:45			3	9	7	24	33
Total Vol.				722		1098	**1820**					1637		1353	**2990**

Daily Totals

NB	SB	EB	WB	Combined
		2359	2451	**4810**

	AM			PM		
Split %	39.7%	60.3%	**37.8%**	54.7%	45.3%	**62.2%**
Peak Hour	10:30	10:00	**10:00**	16:30	17:15	**17:15**
Volume	154	231	**378**	257	224	**466**
P.H.F.	0.88	0.81	**0.87**	0.93	0.82	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-066

Location: Juan St. btwn. Harney St. & San Juan Rd.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			1	0		12:00			28	21	
00:15			0	1		12:15			32	24	
00:30			0	2		12:30			30	29	
00:45			0 1	0 3	4	12:45			33 123	30 104	227
01:00			0	3		13:00			29	32	
01:15			1	0		13:15			30	28	
01:30			0	0		13:30			32	21	
01:45			0 1	1 4	5	13:45			24 115	20 101	216
02:00			1	2		14:00			28	26	
02:15			0	1		14:15			27	37	
02:30			0	0		14:30			31	20	
02:45			0 1	0 3	4	14:45			28 114	30 113	227
03:00			0	0		15:00			28	26	
03:15			2	1		15:15			29	33	
03:30			1	0		15:30			22	26	
03:45			0 3	0 1	4	15:45			20 99	24 109	208
04:00			0	2		16:00			19	28	
04:15			1	1		16:15			21	28	
04:30			2	1		16:30			17	24	
04:45			2 5	2 6	11	16:45			15 72	32 112	184
05:00			2	3		17:00			11	31	
05:15			0	3		17:15			15	21	
05:30			0	2		17:30			19	22	
05:45			2 4	7 15	19	17:45			20 65	23 97	162
06:00			2	8		18:00			15	19	
06:15			9	11		18:15			25	22	
06:30			6	11		18:30			24	20	
06:45			12 29	13 43	72	18:45			29 93	17 78	171
07:00			13	27		19:00			22	19	
07:15			18	24		19:15			20	13	
07:30			20	32		19:30			21	11	
07:45			24 75	39 122	197	19:45			14 77	10 53	130
08:00			29	28		20:00			19	14	
08:15			22	25		20:15			13	18	
08:30			20	43		20:30			11	13	
08:45			24 95	29 125	220	20:45			10 53	11 56	109
09:00			26	21		21:00			14	10	
09:15			26	22		21:15			9	8	
09:30			32	25		21:30			7	6	
09:45			28 112	39 107	219	21:45			7 37	6 30	67
10:00			24	29		22:00			5	9	
10:15			29	31		22:15			5	6	
10:30			28	18		22:30			6	5	
10:45			24 105	27 105	210	22:45			2 18	2 22	40
11:00			29	25		23:00			0	2	
11:15			33	19		23:15			3	3	
11:30			30	24		23:30			1	0	
11:45			32 124	18 86	210	23:45			1 5	0 5	10
Total Vol.			555	620	**1175**				871	880	**1751**

Daily Totals

NB	SB	EB	WB	Combined
		1426	1500	**2926**

	AM			PM		
Split %	47.2%	52.8%	**40.2%**	49.7%	50.3%	**59.8%**
Peak Hour	11:00	07:45	**09:30**	12:15	12:30	**12:30**
Volume	124	135	**237**	124	119	**241**
P.H.F.	0.94	0.78	**0.88**	0.94	0.93	**0.96**

Prepared by NDS/ATD

VOLUME

Channel Way between W Mission Bay Dr & Hancock St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Period	NB		SB		EB		WB		TOTAL	
00:00					1		7		8	
00:15					0		1		1	
00:30					0		3		3	
00:45					0	1	2	13	2	14
01:00					1		0		1	
01:15					0		1		1	
01:30					1		2		3	
01:45					0	2	0	3	0	5
02:00					1		0		1	
02:15					0		0		0	
02:30					0		0		0	
02:45					0	1	0		0	1
03:00					1		1		2	
03:15					1		2		3	
03:30					0		0		0	
03:45					0	2	0	3	0	5
04:00					1		0		1	
04:15					1		1		2	
04:30					0		1		1	
04:45					0	2	2	4	2	6
05:00					0		1		1	
05:15					0		1		1	
05:30					1		3		4	
05:45					2	3	5	10	7	13
06:00					3		4		7	
06:15					1		6		7	
06:30					2		2		4	
06:45					3	9	7	19	10	28
07:00					3		5		8	
07:15					4		3		7	
07:30					5		10		15	
07:45					6	18	10	28	16	46
08:00					5		7		12	
08:15					6		12		18	
08:30					7		10		17	
08:45					4	22	10	39	14	61
09:00					6		10		16	
09:15					4		7		11	
09:30					8		12		20	
09:45					9	27	11	40	20	67
10:00					8		12		20	
10:15					10		13		23	
10:30					7		12		19	
10:45					5	30	8	45	13	75
11:00					4		14		18	
11:15					9		12		21	
11:30					7		17		24	
11:45					7	27	20	63	27	90
TOTALS						144		267		411
SPLIT %						35.0%		65.0%		32.1%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					4		9		13	
12:15					7		23		30	
12:30					14		11		25	
12:45					10	35	4	47	14	82
13:00					9		15		24	
13:15					6		22		28	
13:30					12		7		19	
13:45					8	35	13	57	21	92
14:00					4		24		28	
14:15					9		16		25	
14:30					10		22		32	
14:45					7	30	14	76	21	106
15:00					7		22		29	
15:15					5		17		22	
15:30					4		29		33	
15:45					9	25	27	95	36	120
16:00					8		30		38	
16:15					6		26		32	
16:30					11		28		39	
16:45					7	32	23	107	30	139
17:00					9		28		37	
17:15					7		29		36	
17:30					4		18		22	
17:45					8	28	18	93	26	121
18:00					6		14		20	
18:15					5		13		18	
18:30					3		12		15	
18:45					2	16	9	48	11	64
19:00					2		9		11	
19:15					3		11		14	
19:30					2		11		13	
19:45					0	7	7	38	7	45
20:00					1		6		7	
20:15					3		6		9	
20:30					2		6		8	
20:45					1	7	4	22	5	29
21:00					6		6		12	
21:15					2		7		9	
21:30					1		5		6	
21:45					2	11	7	25	9	36
22:00					2		3		5	
22:15					1		6		7	
22:30					4		2		6	
22:45					1	8	4	15	5	23
23:00					3		0		3	
23:15					2		2		4	
23:30					3		1		4	
23:45					0	8	1	4	1	12
TOTALS						242		627		869
SPLIT %						27.8%		72.2%		67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Peak Hour	09:30	11:30	11:45	PM Peak Hour	12:15	15:30	15:45
AM Pk Volume	35	69	95	PM Pk Volume	40	112	145
Pk Hr Factor	0.875	0.750	0.792	Pk Hr Factor	0.714	0.933	0.929
7 - 9 Volume	40	67	107	4 - 6 Volume	60	200	260
7 - 9 Peak Hour	07:45	07:30	07:45	4 - 6 Peak Hour	16:30	16:30	16:30
7 - 9 Pk Volume	24	39	63	4 - 6 Pk Volume	34	108	142
Pk Hr Factor	0.857	0.813	0.875	Pk Hr Factor	0.773	0.931	0.910

Prepared by NDS/ATD

VOLUME

Kemper St from Kenyon St to Midway Dr

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		10				13		12:00	91		101				192	
00:15	4		3				7		12:15	104		110				214	
00:30	3		8				11		12:30	75		93				168	
00:45	3	13	7	28			10	41	12:45	79	349	119	423			198	772
01:00	2		4				6		13:00	85		101				186	
01:15	5		5				10		13:15	85		118				203	
01:30	3		8				11		13:30	82		106				188	
01:45	1	11	2	19			3	30	13:45	72	324	92	417			164	741
02:00	2		2				4		14:00	57		105				162	
02:15	1		4				5		14:15	102		96				198	
02:30	1		5				6		14:30	79		114				193	
02:45	2	6	3	14			5	20	14:45	62	300	87	402			149	702
03:00	7		1				8		15:00	59		83				142	
03:15	1		4				5		15:15	82		86				168	
03:30	4		4				8		15:30	73		79				152	
03:45	1	13	3	12			4	25	15:45	70	284	80	328			150	612
04:00	0		4				4		16:00	68		83				151	
04:15	3		0				3		16:15	66		112				178	
04:30	1		3				4		16:30	70		106				176	
04:45	9	13	2	9			11	22	16:45	68	272	107	408			175	680
05:00	2		0				2		17:00	72		102				174	
05:15	11		3				14		17:15	75		117				192	
05:30	10		4				14		17:30	75		111				186	
05:45	14	37	5	12			19	49	17:45	73	295	93	423			166	718
06:00	19		3				22		18:00	64		98				162	
06:15	26		7				33		18:15	62		93				155	
06:30	50		14				64		18:30	67		92				159	
06:45	44	139	24	48			68	187	18:45	73	266	76	359			149	625
07:00	58		42				100		19:00	45		67				112	
07:15	64		22				86		19:15	44		52				96	
07:30	61		35				96		19:30	49		56				105	
07:45	57	240	40	139			97	379	19:45	40	178	51	226			91	404
08:00	57		42				99		20:00	50		49				99	
08:15	58		39				97		20:15	39		47				86	
08:30	61		46				107		20:30	29		53				82	
08:45	72	248	42	169			114	417	20:45	25	143	45	194			70	337
09:00	66		57				123		21:00	32		36				68	
09:15	84		63				147		21:15	25		35				60	
09:30	81		72				153		21:30	21		25				46	
09:45	61	292	60	252			121	544	21:45	10	88	40	136			50	224
10:00	91		77				168		22:00	16		28				44	
10:15	89		91				180		22:15	17		24				41	
10:30	64		68				132		22:30	10		27				37	
10:45	69	313	77	313			146	626	22:45	10	53	12	91			22	144
11:00	76		68				144		23:00	12		18				30	
11:15	75		71				146		23:15	9		12				21	
11:30	77		92				169		23:30	5		15				20	
11:45	89	317	79	310			168	627	23:45	5	31	7	52			12	83
TOTALS		1642		1325				2967	TOTALS		2583		3459				6042
SPLIT %		55.3%		44.7%				32.9%	SPLIT %		42.8%		57.2%				67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Peak Hour	11:30	11:45	11:30	PM Peak Hour	12:00	12:45	12:45
AM Pk Volume	361	383	743	PM Pk Volume	349	444	775
Pk Hr Factor	0.868	0.870	0.868	Pk Hr Factor	0.839	0.933	0.954
7 - 9 Volume	488	308	796	4 - 6 Volume	567	831	1398
7 - 9 Peak Hour	08:00	08:00	08:00	4 - 6 Peak Hour	17:00	16:45	16:45
7 - 9 Pk Volume	248	169	417	4 - 6 Pk Volume	295	437	727
Pk Hr Factor	0.861	0.918	0.914	Pk Hr Factor	0.983	0.934	0.947

Prepared by NDS/ATD

VOLUME

Kemper St from Midway Dr to Sports Arena Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_002

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		5						8		12:00	87		116						203	
00:15	1		3						4		12:15	93		107						200	
00:30	4		4						8		12:30	86		119						205	
00:45	1	9	3	15					4	24	12:45	72	338	110	452					182	790
01:00	1		2						3		13:00	74		66						140	
01:15	1		3						4		13:15	80		114						194	
01:30	0		2						2		13:30	84		103						187	
01:45	0	2	3	10					3	12	13:45	67	305	70	353					137	658
02:00	1		2						3		14:00	76		78						154	
02:15	0		1						1		14:15	72		96						168	
02:30	1		0						1		14:30	69		82						151	
02:45	1	3	4	7					5	10	14:45	61	278	73	329					134	607
03:00	1		0						1		15:00	62		68						130	
03:15	1		0						1		15:15	65		73						138	
03:30	1		3						4		15:30	61		72						133	
03:45	2	5	0	3					2	8	15:45	61	249	93	306					154	555
04:00	2		4						6		16:00	51		108						159	
04:15	3		1						4		16:15	66		92						158	
04:30	2		4						6		16:30	65		87						152	
04:45	3	10	3	12					6	22	16:45	69	251	77	364					146	615
05:00	5		2						7		17:00	66		90						156	
05:15	3		1						4		17:15	54		82						136	
05:30	12		5						17		17:30	59		73						132	
05:45	10	30	7	15					17	45	17:45	47	226	107	352					154	578
06:00	16		8						24		18:00	44		90						134	
06:15	20		11						31		18:15	59		92						151	
06:30	26		15						41		18:30	47		73						120	
06:45	21	83	33	67					54	150	18:45	42	192	52	307					94	499
07:00	38		27						65		19:00	47		51						98	
07:15	26		29						55		19:15	41		34						75	
07:30	45		43						88		19:30	52		48						100	
07:45	53	162	44	143					97	305	19:45	41	181	49	182					90	363
08:00	46		51						97		20:00	46		41						87	
08:15	43		64						107		20:15	18		32						50	
08:30	56		59						115		20:30	31		44						75	
08:45	61	206	62	236					123	442	20:45	21	116	18	135					39	251
09:00	63		76						139		21:00	23		22						45	
09:15	61		75						136		21:15	12		24						36	
09:30	70		56						126		21:30	11		26						37	
09:45	47	241	68	275					115	516	21:45	7	53	25	97					32	150
10:00	74		74						148		22:00	11		22						33	
10:15	77		108						185		22:15	11		23						34	
10:30	74		75						149		22:30	10		20						30	
10:45	80	305	99	356					179	661	22:45	8	40	14	79					22	119
11:00	75		86						161		23:00	3		9						12	
11:15	92		97						189		23:15	3		7						10	
11:30	80		102						182		23:30	3		6						9	
11:45	81	328	86	371					167	699	23:45	1	10	4	26					5	36
TOTALS		1384		1510						2894	TOTALS		2239		2982						5221
SPLIT %		47.8%		52.2%						35.7%	SPLIT %		42.9%		57.1%						64.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Peak Hour	11:45	11:45	11:45		PM Peak Hour	12:00	12:00	12:00
AM Pk Volume	347	428	775		PM Pk Volume	338	452	790
Pk Hr Factor	0.933	0.899	0.945		Pk Hr Factor	0.909	0.950	0.963
7 - 9 Volume	368	379	747		4 - 6 Volume	477	716	1193
7 - 9 Peak Hour	08:00	08:00	08:00		4 - 6 Peak Hour	16:15	16:00	16:00
7 - 9 Pk Volume	206	236	442		4 - 6 Pk Volume	266	364	615
Pk Hr Factor	0.844	0.922	0.898		Pk Hr Factor	0.964	0.843	0.967

Table 3-2. Roadway Segment Level of Service
Existing Conditions

Roadway	Segment	Class	Lanes	LOS E Capacity	Existing		
					ADT	V/C	LOS
Rosecrans Street	From Pacific Highway to Sports Arena Blvd.	Major	4	40,000	15,503	0.39	B
	From Sports Arena Blvd. to Midway Dr.	Major	6	50,000	59,120	1.18	F
	From Midway Dr. to Lytton St.	Major	6	50,000	46,384	0.93	E
	From Lytton St. to Roosevelt Rd.	Major	5	45,000	42,513	0.94	E
	From Laning Rd. to Nimitz Blvd.	Major	4	40,000	34,259	0.86	D
	From Nimitz Blvd. to N. Harbor Dr.	Major	4	40,000	36,450	0.91	E
	From N. Harbor Dr. to Canon St.	Major	4	40,000	34,390	0.86	D
	From Canon St. to Talbot St.	Major (1)	2	27,000	17,850	0.66	C
	From Talbot St. to Kellogg St.	Major (1)	2	27,000	15,200	0.56	B
Camino Del Rio	North of Sports Arena Blvd.	Prime	7	70,000	50,700	0.72	C
Pacific Highway	North of Rosecrans St.	Major (2)	2	20,000	5,818	0.29	A
	South of Rosecrans St.	Prime	6	60,000	13,070	0.22	A
Sports Arena Blvd.	Northwest of Rosecrans St.	Major	5	45,000	26,780	0.60	C
Midway Drive	Northwest of Rosecrans St.	Major	4	40,000	27,130	0.68	C
	Southeast of Rosecrans St.	Major	4	40,000	29,440	0.74	C
Lytton Street	Northwest of Rosecrans St.	Major (2)	2	20,000	11,797	0.59	C
	Southeast of Rosecrans St.	Major	4	40,000	19,650	0.49	B
Nimitz Boulevard	Northwest of Rosecrans St.	Major	4	40,000	17,264	0.43	B
	Southeast of Rosecrans St.	Major	4	40,000	12,020	0.30	A
North Harbor Drive	Rosecrans St. to Scott Rd.	Major	4	40,000	6,321	0.16	A
Canon Street	Northwest of Rosecrans St.	Collector	2	15,000	12,870	0.86	D
Talbot Street	Northwest of Rosecrans St.	Collector	2	8,000	5,950	0.74	D

(1) LOS E Capacity has been estimated based on results of the Highway Capacity Manual Urban Street Methodology.
(2) Since a published standard capacity for a 2-Lane Major does not exist, capacity is assumed to be half of a 4-Lane Major.

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
CAM RIO	[HANCOCK ST - MOORE ST]	03800W - 03700W	1032	SOUTH	:	35800	6/10/1992	0493-92
				*TOTAL	:	64900		
				NORTH	:	27610	7/27/2005	0408-05
				SOUTH	:	32160	7/27/2005	0408-05
				*TOTAL	:	59770		
				EAST	:	27290	9/16/2008	0346-08
				WEST	:	28560	9/16/2008	0346-08
				*TOTAL	:	55852		
CAM RIO	[SPORTS ARENA BL - KURTZ ST]	03899W - 03850W	9369	NORTH	:	24400	6/4/1987	1019-87
				SOUTH	:	28700	6/4/1987	1020-87
				*TOTAL	:	53100		
				NORTH	:	23900	6/25/1990	1005-90
				SOUTH	:	29100	6/25/1990	1006-90
				*TOTAL	:	53000		
				NORTH	:	24200	6/20/1991	0934-91
				SOUTH	:	30200	6/20/1991	0935-91
				*TOTAL	:	54400		
				NORTH	:	25780	7/25/2002	0814-02
				SOUTH	:	27180	7/25/2002	0815-02
				*TOTAL	:	52960		
				NORTH	:	23720	9/10/2008	0405-08
				SOUTH	:	26980	9/10/2008	0405-08
				*TOTAL	:	50700		
CAM RIO N	[CAM ARR - MSS CTR RD]	00750 - 01200	6721	EAST	:	4400	9/27/1990	1924-90
				WEST	:	5300	9/27/1990	1925-90
				*TOTAL	:	9700		
				EAST	:	3400	10/14/1993	0900-93
				WEST	:	4400	10/25/1993	0901-93
				EAST	:	3700	10/17/1996	1006-96
				WEST	:	4200	10/17/1996	1007-96
				*TOTAL	:	7900		

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION	WK-DAY VOLUME	STARTING DATE	FILE NUMBER
ROSECRANS ST	[MALAGA ST - MADRID ST]	03050 - 03200	9371	SOUTH	20220	7/21/2005	0668-05
				*TOTAL	39770		
				NORTH	21650	9/9/2008	0407-08
				SOUTH	21120	9/9/2008	0407-08
				*TOTAL	42770		
ROSECRANS ST	[MIDWAY DR - SPORTS ARENA BL]	03500 - 03650	9370	NORTH	26900	6/2/1987	0986-87
				SOUTH	27300	6/2/1987	0987-87
				*TOTAL	54200		
				NORTH	28100	6/6/1988	1008-88
				SOUTH	28200	6/6/1988	1009-88
				*TOTAL	56300		
				NORTH	26700	6/25/1990	1009-90
				SOUTH	26700	6/25/1990	1010-90
				*TOTAL	53400		
				NORTH	27400	6/20/1991	0936-91
				SOUTH	28200	6/20/1991	0937-91
				*TOTAL	55600		
				NORTH	31110	7/16/2002	0674-02
				SOUTH	27000	7/16/2002	0675-02
				*TOTAL	58110		
				NORTH	28720	9/9/2008	0406-08
				SOUTH	30400	9/9/2008	0406-08
				*TOTAL	59120		
ROSECRANS ST	[SPORTS ARENA BL - KURTZ ST]	03650 - 03750	1882	NORTH	12000	6/2/1987	0992-87
				SOUTH	9500	6/2/1987	0993-87
				*TOTAL	21500		
				NORTH	14300	6/28/1988	1133-88
				SOUTH	10800	6/28/1988	1134-88
				*TOTAL	25100		
				NORTH	12700	6/9/1989	0693-89
				SOUTH	8300	6/9/1989	0694-89
				*TOTAL	21000		

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-002
Location: Barnett Ave between Midway St & Pacific Hwy File No. MC0306-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	52	359			34	402				
12:15	31	417			34	411				
12:30	30	405			28	417				
12:45	27	395	140	1576	26	388	122	1618	262	3194
1:00	34	408			23	374				
1:15	17	433			19	370				
1:30	30	493			24	400				
1:45	22	479	103	1813	29	364	95	1508	198	3321
2:00	27	414			20	374				
2:15	18	421			15	358				
2:30	19	460			23	397				
2:45	9	475	73	1770	11	443	69	1572	142	3342
3:00	20	477			19	398				
3:15	19	538			14	486				
3:30	23	597			31	495				
3:45	12	701	74	2313	30	501	94	1880	168	4193
4:00	16	663			22	505				
4:15	25	661			26	485				
4:30	54	576			33	518				
4:45	46	572	141	2472	77	513	158	2021	299	4493
5:00	58	583			76	502				
5:15	76	575			113	592				
5:30	88	597			166	575				
5:45	140	567	362	2322	228	515	583	2184	945	4506
6:00	118	565			198	479				
6:15	169	443			345	473				
6:30	208	422			376	463				
6:45	207	451	702	1881	474	454	1393	1869	2095	3750
7:00	275	459			485	441				
7:15	342	422			481	397				
7:30	361	411			493	400				
7:45	339	412	1317	1704	525	362	1984	1600	3301	3304
8:00	331	407			515	322				
8:15	344	362			536	312				
8:30	419	374			473	311				
8:45	351	357	1445	1500	448	266	1972	1211	3417	2711
9:00	355	382			341	314				
9:15	297	365			337	289				
9:30	264	345			342	257				
9:45	246	302	1162	1394	348	265	1368	1125	2530	2519
10:00	289	320			286	260				
10:15	264	310			288	233				
10:30	296	272			304	233				
10:45	292	263	1141	1165	341	262	1219	988	2360	2153
11:00	302	284			348	229				
11:15	356	286			384	241				
11:30	331	263			412	226				
11:45	338	194	1327	1027	383	174	1527	870	2854	1897
Total	7987	20937	7987	20937	10584	18446	10584	18446	18571	39383
Combined Total	28924		28924		29030		29030		57954	
AM Peak	11:45 AM				7:30 AM					
Vol.	1519				2069					
P.H.F.	0.911				0.965					
PM Peak		3:30 PM				5:00 PM				
Vol.		2622				2184				
P.H.F.		0.935				0.922				
Percentage	27.6%	72.4%			36.5%	63.5%				

Day: TUESDAY
Date: 5/11/10

Classification Report / Prepared by: National Data & Surveying Services
Location: Washington St from Pacific Hwy & Frontage Rd

City: San Diego
Project #: 10-4143-030

SUMMARY

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	30	4	2	1	1	0	0	1	0	0	0	0	39
01:00	0	46	8	0	3	0	0	2	1	0	0	0	0	60
02:00	0	43	7	0	1	2	0	2	5	0	0	0	0	60
03:00	2	67	14	2	7	0	0	5	9	0	0	0	0	106
04:00	2	116	37	0	18	1	0	6	5	0	0	0	0	185
05:00	6	271	56	8	24	6	0	15	15	0	3	0	0	404
06:00	9	350	55	21	32	6	0	16	6	0	2	0	0	497
07:00	10	425	49	20	24	5	0	14	8	0	1	0	0	556
08:00	11	475	81	25	35	9	0	18	7	0	3	0	0	664
09:00	4	474	78	15	36	5	0	17	9	0	2	0	0	640
10:00	5	510	65	29	28	2	0	21	7	0	1	0	0	668
11:00	6	526	83	27	31	5	0	20	8	0	3	0	0	709
12:00 PM	6	503	81	29	34	8	0	22	2	0	3	0	0	688
13:00	12	536	68	19	25	1	0	21	4	0	1	0	0	687
14:00	5	563	78	17	30	5	0	14	4	0	2	0	0	718
15:00	7	603	86	22	14	1	0	12	1	0	0	0	0	746
16:00	7	702	82	33	22	7	0	22	1	0	0	0	0	876
17:00	9	636	62	23	23	4	0	16	3	0	0	0	0	776
18:00	4	433	48	8	23	4	0	11	4	0	0	0	0	535
19:00	5	325	34	6	18	2	0	8	3	0	0	0	0	401
20:00	1	250	23	3	5	2	0	0	3	0	0	0	0	287
21:00	1	179	24	1	2	0	0	2	2	0	0	0	0	211
22:00	3	75	14	2	2	0	0	0	1	0	0	0	0	97
23:00	0	59	4	1	2	0	0	0	0	0	0	0	0	66
Totals	**115**	**8197**	**1141**	**313**	**440**	**76**		**264**	**109**		**21**			**10676**
% of Totals	1%	77%	11%	3%	4%	1%		2%	1%		0%			100%
	55	3333	537	149	240	42	0	136	81	0	15	0	0	4588
% AM	1%	31%	5%	1%	2%	0%		1%	1%		0%			43%
AM Peak Hour	08:00	11:00	11:00	10:00	09:00	08:00		10:00	05:00		05:00			11:00
Volume	11	526	83	29	36	9		21	15		3			709
	60	4864	604	164	200	34	0	128	28	0	6	0	0	6088
% PM	1%	46%	6%	2%	2%	0%		1%	0%		0%			57%
PM Peak Hour	13:00	16:00	15:00	16:00	12:00	12:00		12:00	13:00		12:00			16:00
Volume	12	702	86	33	34	8		22	4		3			876

Peak Period Totals	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1220 ⟷	11%	1375 ⟷	13%	1652 ⟷	15%	6429 ⟷	60%

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-106

Location: Washington St. btwn. Frontage St. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		6			12:00			133		132		
00:15			13		8			12:15			133		119		
00:30			12		4			12:30			117		128		
00:45			10	47	2	20	67	12:45			128	511	121	500	1011
01:00			11		6			13:00			143		139		
01:15			7		4			13:15			148		114		
01:30			4		1			13:30			128		109		
01:45			2	24	3	14	38	13:45			129	548	115	477	1025
02:00			4		4			14:00			126		106		
02:15			1		2			14:15			110		110		
02:30			1		1			14:30			158		126		
02:45			6	12	4	11	23	14:45			156	550	117	459	1009
03:00			3		2			15:00			142		121		
03:15			2		7			15:15			141		143		
03:30			3		11			15:30			129		124		
03:45			1	9	7	27	36	15:45			159	571	97	485	1056
04:00			3		6			16:00			134		128		
04:15			4		9			16:15			133		97		
04:30			4		9			16:30			180		108		
04:45			12	23	19	43	66	16:45			136	583	118	451	1034
05:00			19		19			17:00			144		121		
05:15			13		33			17:15			123		108		
05:30			20		47			17:30			119		96		
05:45			24	76	63	162	238	17:45			80	466	55	380	846
06:00			28		70			18:00			68		49		
06:15			20		62			18:15			68		59		
06:30			31		111			18:30			67		53		
06:45			35	114	104	347	461	18:45			68	271	50	211	482
07:00			48		107			19:00			72		44		
07:15			68		112			19:15			65		43		
07:30			75		106			19:30			64		37		
07:45			71	262	138	463	725	19:45			65	266	42	166	432
08:00			87		117			20:00			59		42		
08:15			89		135			20:15			45		31		
08:30			96		123			20:30			50		37		
08:45			103	375	119	494	869	20:45			33	187	28	138	325
09:00			89		125			21:00			55		22		
09:15			89		116			21:15			39		31		
09:30			106		112			21:30			36		25		
09:45			80	364	98	451	815	21:45			37	167	23	101	268
10:00			101		95			22:00			34		15		
10:15			97		80			22:15			29		20		
10:30			89		98			22:30			36		14		
10:45			114	401	111	384	785	22:45			26	125	14	63	188
11:00			112		113			23:00			17		7		
11:15			135		113			23:15			29		10		
11:30			124		121			23:30			21		13		
11:45			113	484	120	467	951	23:45			17	84	7	37	121
Total Vol.				2191		2883	**5074**					4329		3468	**7797**

Daily Totals

NB	SB	EB	WB	Combined
		6520	6351	**12871**

	AM			PM		
Split %	43.2%	56.8%	**39.4%**	55.5%	44.5%	**60.6%**
Peak Hour	11:15	07:45	**11:30**	15:45	12:15	**14:30**
Volume	505	513	**995**	606	507	**1104**
P.H.F.	0.94	0.93	**0.94**	0.84	0.91	**0.97**

Prepared by NDS/ATO

VOLUME

Vine St from California St to Kettner Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0		0		0	12:00	6		0		6
00:15	0		0		0	12:15	7		1		8
00:30	0		0		0	12:30	1		1		2
00:45	0		0		0	12:45	0	14	0	2	0 16
01:00	0		0		0	13:00	2		1		3
01:15	0		0		0	13:15	1		3		4
01:30	0		0		0	13:30	2		1		3
01:45	0		0		0	13:45	4	9	0	5	4 14
02:00	0		0		0	14:00	5		2		7
02:15	0		0		0	14:15	9		2		11
02:30	0		0		0	14:30	8		3		11
02:45	0		0		0	14:45	4	26	2	9	6 35
03:00	0		0		0	15:00	2		2		4
03:15	0		0		0	15:15	0		4		4
03:30	0		0		0	15:30	1		2		3
03:45	0		0		0	15:45	2	5	1	9	3 14
04:00	1		0		1	16:00	1		3		4
04:15	0		0		0	16:15	2		5		7
04:30	0		0		0	16:30	4		6		10
04:45	0	1	0		0 1	16:45	5	12	3	17	8 29
05:00	0		0		0	17:00	3		2		5
05:15	0		1		1	17:15	1		2		3
05:30	0		0		0	17:30	2		1		3
05:45	4	4	0	1	4 5	17:45	1	7	0	5	1 12
06:00	1		0		1	18:00	2		1		3
06:15	3		1		4	18:15	1		0		1
06:30	0		1		1	18:30	0		1		1
06:45	2	6	0	2	2 8	18:45	0	3	0	2	0 5
07:00	0		1		1	19:00	1		1		2
07:15	0		2		2	19:15	1		1		2
07:30	4		2		6	19:30	0		0		0
07:45	1	5	2	7	3 12	19:45	1	3	1	3	2 6
08:00	5		1		6	20:00	1		1		2
08:15	4		1		5	20:15	1		5		6
08:30	2		0		2	20:30	2		0		2
08:45	2	13	0	2	2 15	20:45	0	4	0	6	0 10
09:00	3		1		4	21:00	0		0		0
09:15	3		3		6	21:15	0		0		0
09:30	5		0		5	21:30	0		0		0
09:45	1	12	2	6	3 18	21:45	1	1	0		1 1
10:00	5		3		8	22:00	1		0		1
10:15	2		0		2	22:15	2		1		3
10:30	5		2		7	22:30	0		0		0
10:45	2	14	1	6	3 20	22:45	0	3	0	1	0 4
11:00	3		1		4	23:00	0		0		0
11:15	2		0		2	23:15	2		0		2
11:30	5		2		7	23:30	0		0		0
11:45	4	14	2	5	6 19	23:45	1	3	0		1 3
TOTALS		69		29	98	TOTALS		90		59	149
SPLIT %		70.4%		29.6%	39.7%	SPLIT %		60.4%		39.6%	60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Peak Hour	11:30	09:15	11:30	PM Peak Hour	13:45	16:00	14:00
AM Pk Volume	22	8	27	PM Pk Volume	26	17	35
Pk Hr Factor	0.786	0.667	0.844	Pk Hr Factor	0.722	0.708	0.795
7 - 9 Volume	18	9	27	4 - 6 Volume	19	22	41
7 - 9 Peak Hour	07:30	07:00	07:30	4 - 6 Peak Hour	16:15	16:00	16:15
7 - 9 Pk Volume	14	7	20	4 - 6 Pk Volume	14	17	30
Pk Hr Factor	0.700	0.875	0.833	Pk Hr Factor	0.700	0.708	0.750

Prepared by NDS/ATD

Volumes for: Thursday, May 26, 2011	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Sassafras St between Kettner Blvd & Pacific Hy	Project: 11-4109-048	0	0	3,496	5,220	8,716

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			19		2			12:00			82		94		
00:15			15		1			12:15			77		75		
00:30			15		2			12:30			67		83		
00:45			17	66	1	6	72	12:45			73	299	74	326	625
01:00			13		2			13:00			53		91		
01:15			10		4			13:15			59		65		
01:30			2		5			13:30			66		54		
01:45			4	29	3	14	43	13:45			53	231	68	278	509
02:00			2		1			14:00			48		65		
02:15			3		1			14:15			59		72		
02:30			4		3			14:30			47		58		
02:45			1	10	1	6	16	14:45			78	232	70	265	497
03:00			1		0			15:00			57		54		
03:15			1		3			15:15			49		85		
03:30			1		4			15:30			44		63		
03:45			0	3	2	9	12	15:45			46	196	66	268	464
04:00			6		6			16:00			52		73		
04:15			6		9			16:15			55		57		
04:30			11		31			16:30			54		68		
04:45			10	33	42	88	121	16:45			56	217	65	263	480
05:00			8		59			17:00			60		54		
05:15			15		84			17:15			69		52		
05:30			11		92			17:30			67		67		
05:45			15	49	74	309	358	17:45			58	254	52	225	479
06:00			17		81			18:00			55		62		
06:15			20		84			18:15			40		50		
06:30			19		118			18:30			38		58		
06:45			28	84	100	383	467	18:45			32	165	55	225	390
07:00			23		104			19:00			53		44		
07:15			32		109			19:15			45		35		
07:30			24		125			19:30			67		51		
07:45			33	112	114	452	564	19:45			42	207	67	197	404
08:00			31		106			20:00			50		43		
08:15			47		127			20:15			33		40		
08:30			35		104			20:30			45		35		
08:45			42	155	121	458	613	20:45			40	168	53	171	339
09:00			34		94			21:00			49		33		
09:15			33		85			21:15			38		44		
09:30			36		101			21:30			30		41		
09:45			32	135	99	379	514	21:45			38	155	30	148	303
10:00			35		78			22:00			35		36		
10:15			49		82			22:15			35		29		
10:30			53		80			22:30			35		16		
10:45			53	190	79	319	509	22:45			49	154	14	95	249
11:00			72		83			23:00			39		22		
11:15			51		60			23:15			27		13		
11:30			62		67			23:30			19		8		
11:45			63	248	78	288	536	23:45			19	104	5	48	152

Total Vol.			1114		2711	3825					2382		2991	5373
									NB	SB	EB		WB	Total
								Daily Totals :	0	0	3,496		5,220	8,716
			AM								PM			
Split %			29.1%		70.9%	43.9%					44.3%		55.7%	56.1%
ADT								PHF						
Peak Hr.			11:00		07:00	11:00		Peak Hr.			12:00		12:00	12:00
Volume			268		472	613		Volume			299		326	625
P.H.F.			0.953		0.929	0.879		P.H.F.			0.913		0.837	0.888
7 - 9 Vol.			267		518	1177		4 - 6 Vol.			471		488	959
Peak Hr.			10:00		07:30	08:00		Peak Hr.			17:00		16:30	16:45
Volume			155		472	613		Volume			254		263	480
P.H.F.			0.774		0.929	0.879		P.H.F.			0.913		0.911	0.914

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-109

Location: Laurel St. btwn. Pacific Highway & Kettner Blvd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			36		20			12:00			181		168		
00:15			37		14			12:15			240		195		
00:30			33		17			12:30			239		194		
00:45			18	124	12	63	187	12:45			201	861	200	757	1618
01:00			14		2			13:00			217		210		
01:15			11		8			13:15			173		183		
01:30			13		2			13:30			185		183		
01:45			9	47	5	17	64	13:45			204	779	139	715	1494
02:00			11		2			14:00			280		171		
02:15			4		2			14:15			185		163		
02:30			5		5			14:30			228		163		
02:45			3	23	6	15	38	14:45			175	868	136	633	1501
03:00			4		3			15:00			219		151		
03:15			6		6			15:15			205		145		
03:30			3		20			15:30			186		148		
03:45			4	17	14	43	60	15:45			219	829	158	602	1431
04:00			8		24			16:00			185		163		
04:15			2		45			16:15			203		139		
04:30			23		81			16:30			269		164		
04:45			47	80	147	297	377	16:45			212	869	155	621	1490
05:00			89		195			17:00			219		140		
05:15			130		199			17:15			206		154		
05:30			155		189			17:30			175		116		
05:45			139	513	191	774	1287	17:45			154	754	133	543	1297
06:00			126		151			18:00			157		167		
06:15			105		172			18:15			155		149		
06:30			120		137			18:30			187		214		
06:45			87	438	131	591	1029	18:45			177	676	159	689	1365
07:00			96		147			19:00			170		169		
07:15			100		143			19:15			186		154		
07:30			118		142			19:30			179		180		
07:45			133	447	183	615	1062	19:45			167	702	181	684	1386
08:00			136		188			20:00			207		157		
08:15			161		205			20:15			217		160		
08:30			149		172			20:30			212		147		
08:45			167	613	173	738	1351	20:45			212	848	138	602	1450
09:00			160		191			21:00			186		145		
09:15			173		186			21:15			157		146		
09:30			162		227			21:30			155		145		
09:45			165	660	221	825	1485	21:45			195	693	102	538	1231
10:00			187		221			22:00			135		99		
10:15			210		212			22:15			138		118		
10:30			246		228			22:30			124		109		
10:45			216	859	207	868	1727	22:45			162	559	94	420	979
11:00			218		223			23:00			120		84		
11:15			210		183			23:15			171		72		
11:30			195		216			23:30			124		47		
11:45			192	815	216	838	1653	23:45			74	489	36	239	728
Total Vol.				4636		5684	**10320**					8927		7043	**15970**

Daily Totals

NB	SB	EB	WB	Combined
		13563	12727	**26290**

	AM			PM		
Split %	44.9%	55.1%	**39.3%**	55.9%	44.1%	**60.7%**
Peak Hour	10:15	09:45	**10:15**	16:30	12:15	**12:15**
Volume	890	882	**1760**	906	799	**1696**
P.H.F.	0.90	0.97	**0.93**	0.84	0.95	**0.97**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
TAYLOR ST	[HOTEL CR S - SD 008 R-A, E]	-	2631	EAST	:	7170	6/30/2010	MC0522-1
				WEST	:	7425	6/30/2010	MC0522-1
				*TOTAL	:	14595		
TAYLOR ST	[PACIFIC HY - CONGRESS ST]	04000 - 04010	2493	EAST	:	10500	7/22/1997	0524-97
				WEST	:	11900	7/22/1997	0525-97
				*TOTAL	:	22400		
				EAST	:	9300	6/2/1999	0330-99
				WEST	:	8000	6/2/1999	0330-99
				*TOTAL	:	17300		
				EAST	:	12230	6/20/2002	0648-02
				WEST	:	14880	6/20/2002	0649-02
				*TOTAL	:	27110		
				EAST	:	11780	6/15/2005	0315-05
				WEST	:	10230	6/15/2005	0315-05
				*TOTAL	:	22010		
				EAST	:	11990	8/20/2008	0336-08
				WEST	:	10060	8/20/2008	0336-08
				*TOTAL	:	22050		
TAYLOR ST	[PACIFIC HY - SN DIEGO AV]	04000 - 04010	2625	EAST	:	11700	3/8/1990	0341-90
				WEST	:	9700	3/8/1990	0342-90
				*TOTAL	:	21400		
				EAST	:	11000	3/15/1991	0420-91
				WEST	:	8400	3/15/1991	0421-91
				*TOTAL	:	19400		
				EAST	:	10100	11/3/1994	0810-94
				WEST	:	7500	11/3/1994	0811-94
				*TOTAL	:	17600		
				EAST	:	12500	6/18/1996	0666-96
				WEST	:	7000	6/18/1996	0667-96
				*TOTAL	:	19500		
TAYLOR ST	[CALHOUN ST - JUAN ST]	04030 - 04100	2491	NORTH	:	11300	9/21/1994	0700-94
				SOUTH	:	7700	9/21/1994	0701-94

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-099

Location: Taylor St. btwn. Congress St. & Juan St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		6					12:00	129		107				
00:15	9		9					12:15	140		116				
00:30	10		3					12:30	142		130				
00:45	3	40	7	25			65	12:45	149	560	93	446			1006
01:00	4		0					13:00	135		110				
01:15	3		1					13:15	149		99				
01:30	3		0					13:30	155		129				
01:45	4	14	0	1			15	13:45	140	579	96	434			1013
02:00	6		5					14:00	144		104				
02:15	3		3					14:15	141		95				
02:30	8		3					14:30	152		90				
02:45	1	18	1	12			30	14:45	164	601	87	376			977
03:00	3		1					15:00	185		92				
03:15	2		3					15:15	145		84				
03:30	2		9					15:30	193		119				
03:45	1	8	5	18			26	15:45	229	752	91	386			1138
04:00	5		3					16:00	214		117				
04:15	3		9					16:15	107		111				
04:30	7		12					16:30	117		123				
04:45	6	21	8	32			53	16:45	111	549	113	464			1013
05:00	7		14					17:00	134		122				
05:15	10		24					17:15	102		71				
05:30	13		27					17:30	119		105				
05:45	18	48	51	116			164	17:45	101	456	99	397			853
06:00	22		55					18:00	81		98				
06:15	28		69					18:15	87		66				
06:30	45		73					18:30	110		57				
06:45	49	144	99	296			440	18:45	76	354	69	290			644
07:00	53		125					19:00	82		49				
07:15	75		130					19:15	80		48				
07:30	85		111					19:30	80		46				
07:45	62	275	124	490			765	19:45	70	312	47	190			502
08:00	102		144					20:00	89		54				
08:15	124		110					20:15	75		40				
08:30	112		170					20:30	56		42				
08:45	91	429	224	648			1077	20:45	58	278	31	167			445
09:00	87		184					21:00	61		33				
09:15	115		207					21:15	49		37				
09:30	92		108					21:30	50		23				
09:45	92	386	103	602			988	21:45	41	201	32	125			326
10:00	85		75					22:00	39		22				
10:15	99		92					22:15	38		22				
10:30	101		101					22:30	33		18				
10:45	104	389	95	363			752	22:45	19	129	11	73			202
11:00	118		95					23:00	24		16				
11:15	142		101					23:15	16		12				
11:30	151		103					23:30	16		4				
11:45	121	532	112	411			943	23:45	20	76	11	43			119
Total Vol.		2304		3014			**5318**			4847		3391			**8238**

Daily Totals

NB	SB	EB	WB	Combined
7151	6405			**13556**

	AM			PM		
Split %	43.3%	56.7%	**39.2%**	58.8%	41.2%	**60.8%**
Peak Hour	11:15	08:30	**08:30**	15:15	16:15	**15:15**
Volume	543	785	**1190**	781	469	**1192**
P.H.F.	0.90	0.88	**0.92**	0.85	0.95	**0.90**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-003

Location: Taylor St (STATION#2490/FILE#MC0594-10) between Juan St & Sunset St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	20		8					12:00	203		143				
00:15	23		6					12:15	172		164				
00:30	10		9					12:30	153		132				
00:45	5	58	6	29			87	12:45	172	700	139	578			1278
01:00	15		2					13:00	205		130				
01:15	3		7					13:15	187		139				
01:30	7		4					13:30	179		136				
01:45	2	27	5	18			45	13:45	164	735	134	539			1274
02:00	4		0					14:00	163		125				
02:15	1		1					14:15	175		113				
02:30	3		3					14:30	199		131				
02:45	4	12	6	10			22	14:45	191	728	116	485			1213
03:00	2		2					15:00	196		110				
03:15	4		5					15:15	223		136				
03:30	1		6					15:30	231		132				
03:45	1	8	6	19			27	15:45	213	863	128	506			1369
04:00	4		4					16:00	238		143				
04:15	3		8					16:15	263		116				
04:30	7		6					16:30	257		152				
04:45	7	21	13	31			52	16:45	284	1042	129	540			1582
05:00	12		24					17:00	249		143				
05:15	15		40					17:15	300		135				
05:30	18		30					17:30	231		145				
05:45	21	66	59	153			219	17:45	186	966	133	556			1522
06:00	16		52					18:00	189		138				
06:15	32		83					18:15	179		117				
06:30	40		85					18:30	159		113				
06:45	51	139	107	327			466	18:45	100	627	85	453			1080
07:00	59		112					19:00	142		93				
07:15	59		132					19:15	131		85				
07:30	69		121					19:30	93		88				
07:45	103	290	148	513			803	19:45	125	491	70	336			827
08:00	79		123					20:00	97		67				
08:15	124		132					20:15	99		73				
08:30	99		127					20:30	117		53				
08:45	92	394	149	531			925	20:45	94	407	44	237			644
09:00	87		173					21:00	94		50				
09:15	103		141					21:15	106		29				
09:30	88		136					21:30	86		43				
09:45	101	379	120	570			949	21:45	98	384	33	155			539
10:00	118		116					22:00	76		26				
10:15	112		120					22:15	78		26				
10:30	113		126					22:30	49		29				
10:45	123	466	130	492			958	22:45	36	239	21	102			341
11:00	120		123					23:00	39		12				
11:15	162		132					23:15	24		16				
11:30	148		149					23:30	32		8				
11:45	155	585	164	568			1153	23:45	12	107	11	47			154
Total Vol.		2445		3261			**5706**			7289		4534			**11823**

Daily Totals

NB	SB	EB	WB	Combined
9734	7795			**17529**

	AM			PM		
Split %	42.8%	57.2%	**32.6%**	61.7%	38.3%	**67.4%**
Peak Hour	11:45	11:30	**11:30**	16:30	12:00	**16:30**
Volume	683	620	**1298**	1090	578	**1649**
P.H.F.	0.84	0.95	**0.94**	0.91	0.88	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-100

Location: Taylor St. btwn. Morena Blvd. & I-8 EB Ramps - Hotel Circle

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		7					12:00	118		114				
00:15	7		8					12:15	94		128				
00:30	7		4					12:30	89		124				
00:45	4	27	8	27			54	12:45	98	399	119	485			884
01:00	5		1					13:00	93		105				
01:15	4		1					13:15	102		93				
01:30	0		2					13:30	125		108				
01:45	6	15	0	4			19	13:45	109	429	110	416			845
02:00	4		1					14:00	115		91				
02:15	1		4					14:15	125		99				
02:30	0		1					14:30	121		85				
02:45	3	8	1	7			15	14:45	133	494	84	359			853
03:00	1		2					15:00	147		96				
03:15	1		1					15:15	148		94				
03:30	2		5					15:30	188		100				
03:45	0	4	0	8			12	15:45	189	672	99	389			1061
04:00	5		3					16:00	191		116				
04:15	0		8					16:15	201		113				
04:30	4		10					16:30	196		105				
04:45	1	10	12	33			43	16:45	211	799	113	447			1246
05:00	4		10					17:00	212		100				
05:15	3		21					17:15	205		96				
05:30	8		29					17:30	183		122				
05:45	15	30	41	101			131	17:45	138	738	98	416			1154
06:00	13		61					18:00	112		100				
06:15	17		73					18:15	86		104				
06:30	16		83					18:30	102		108				
06:45	28	74	113	330			404	18:45	79	379	74	386			765
07:00	28		124					19:00	90		51				
07:15	33		132					19:15	78		40				
07:30	43		129					19:30	72		43				
07:45	43	147	132	517			664	19:45	70	310	46	180			490
08:00	56		152					20:00	73		42				
08:15	74		129					20:15	59		51				
08:30	53		252					20:30	48		34				
08:45	74	257	261	794			1051	20:45	56	236	32	159			395
09:00	62		243					21:00	53		27				
09:15	54		249					21:15	62		24				
09:30	73		144					21:30	50		19				
09:45	62	251	128	764			1015	21:45	33	198	21	91			289
10:00	66		113					22:00	27		18				
10:15	63		96					22:15	28		13				
10:30	82		98					22:30	31		11				
10:45	64	275	96	403			678	22:45	23	109	19	61			170
11:00	84		89					23:00	16		10				
11:15	81		122					23:15	17		18				
11:30	127		113					23:30	10		5				
11:45	86	378	98	422			800	23:45	11	54	12	45			99
Total Vol.		1476		3410			**4886**			4817		3434			**8251**

Daily Totals

NB	SB	EB	WB	Combined
6293	6844			**13137**

	AM			PM		
Split %	30.2%	69.8%	**37.2%**	58.4%	41.6%	**62.8%**
Peak Hour	11:30	08:30	**08:30**	16:30	12:00	**16:15**
Volume	425	1005	**1248**	824	485	**1251**
P.H.F.	0.84	0.96	**0.93**	0.97	0.95	**0.97**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Twiggs St (STATION#1589/FILE#MC05334-10)	Project:	10-4169-122	0	0	840	1,240	2,080

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB		
00:00			2	2		12:00			21	19		
00:15			1	3		12:15			16	28		
00:30			2	2		12:30			11	20		
00:45			2	7	0	7	14	12:45			13	61	26	93	154
01:00			3	1		13:00			10	19		
01:15			1	1		13:15			15	23		
01:30			1	1		13:30			12	18		
01:45			0	5	1	4	9	13:45			16	53	14	74	127
02:00			1	1		14:00			13	19		
02:15			0	1		14:15			11	21		
02:30			0	1		14:30			8	22		
02:45			0	1	0	3	4	14:45			14	46	21	83	129
03:00			0	0		15:00			9	26		
03:15			0	0		15:15			12	25		
03:30			1	0		15:30			10	20		
03:45			0	1	1	1	2	15:45			19	50	15	86	136
04:00			1	0		16:00			21	17		
04:15			0	0		16:15			15	23		
04:30			1	0		16:30			23	16		
04:45			0	2	1	1	3	16:45			16	75	22	78	153
05:00			0	0		17:00			17	21		
05:15			0	1		17:15			17	27		
05:30			0	0		17:30			25	27		
05:45			1	1	1	2	3	17:45			24	83	32	107	190
06:00			0	2		18:00			17	36		
06:15			3	1		18:15			23	29		
06:30			3	4		18:30			25	31		
06:45			6	12	1	8	20	18:45			18	83	30	126	209
07:00			3	3		19:00			17	32		
07:15			4	1		19:15			24	30		
07:30			5	5		19:30			12	25		
07:45			10	22	3	12	34	19:45			13	66	21	108	174
08:00			9	7		20:00			9	17		
08:15			6	4		20:15			12	14		
08:30			8	15		20:30			7	18		
08:45			9	32	7	33	65	20:45			15	43	16	65	108
09:00			8	13		21:00			8	13		
09:15			11	9		21:15			7	21		
09:30			7	13		21:30			10	19		
09:45			9	35	13	48	83	21:45			8	33	17	70	103
10:00			10	17		22:00			8	24		
10:15			8	21		22:15			9	16		
10:30			11	17		22:30			6	15		
10:45			10	39	20	75	114	22:45			2	25	6	61	86
11:00			12	13		23:00			6	2		
11:15			13	29		23:15			4	4		
11:30			10	18		23:30			3	2		
11:45			15	50	24	84	134	23:45			2	15	3	11	26
Total Vol.			207		278	**485**					633		962	**1595**

	NB	SB	EB	WB	Total
Daily Totals :	**0**	**0**	**840**	**1,240**	**2,080**

	AM			PM		
Split %	42.7%	57.3%	**23.3%**	39.7%	60.3%	**76.7%**
AM				**PM**		
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	17:30	17:45	**17:45**
Volume	63	91	**154**	**Volume**	89	128	**217**
P.H.F.	0.750	0.813	**0.875**	**P.H.F.**	0.890	0.889	**0.969**
7 - 9 Vol.	54	45	**99**	**4 - 6 Vol.**	158	185	**343**
Peak Hr.	07:45	08:00	**08:00**	**Peak Hr.**	17:00	17:00	**17:00**
Volume	33	33	**65**	**Volume**	83	107	**190**
P.H.F.	0.825	0.550	**0.707**	**P.H.F.**	0.830	0.836	**0.848**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-101

Location: Twiggs St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			4	2		12:00			22	25	
00:15			1	2		12:15			21	32	
00:30			2	1		12:30			21	39	
00:45			2	1		12:45			23	38	
			9	6	15				87	134	221
01:00			1	0		13:00			19	33	
01:15			1	0		13:15			23	28	
01:30			4	0		13:30			15	42	
01:45			1	0		13:45			27	41	
			7	0	7				84	144	228
02:00			0	0		14:00			23	26	
02:15			0	0		14:15			11	28	
02:30			1	0		14:30			16	26	
02:45			0	1		14:45			16	33	
			1	1	2				66	113	179
03:00			0	1		15:00			20	31	
03:15			1	1		15:15			22	29	
03:30			3	0		15:30			29	28	
03:45			2	0		15:45			26	36	
			6	2	8				97	124	221
04:00			1	1		16:00			12	24	
04:15			0	0		16:15			19	24	
04:30			1	1		16:30			22	30	
04:45			1	0		16:45			26	28	
			3	2	5				79	106	185
05:00			2	4		17:00			38	23	
05:15			1	0		17:15			33	19	
05:30			1	1		17:30			37	12	
05:45			5	4		17:45			22	21	
			9	9	18				130	75	205
06:00			4	1		18:00			37	19	
06:15			6	1		18:15			22	25	
06:30			7	3		18:30			31	21	
06:45			6	4		18:45			36	16	
			23	9	32				126	81	207
07:00			8	4		19:00			26	18	
07:15			6	8		19:15			24	16	
07:30			7	11		19:30			18	17	
07:45			16	7		19:45			27	16	
			37	30	67				95	67	162
08:00			12	9		20:00			25	14	
08:15			11	11		20:15			22	16	
08:30			27	12		20:30			19	14	
08:45			20	13		20:45			22	13	
			70	45	115				88	57	145
09:00			15	11		21:00			23	26	
09:15			23	10		21:15			10	10	
09:30			11	10		21:30			13	2	
09:45			22	15		21:45			15	7	
			71	46	117				61	45	106
10:00			12	11		22:00			7	14	
10:15			18	18		22:15			15	5	
10:30			17	15		22:30			13	7	
10:45			34	13		22:45			7	2	
			81	57	138				42	28	70
11:00			22	18		23:00			6	3	
11:15			35	14		23:15			9	2	
11:30			31	15		23:30			5	6	
11:45			31	9		23:45			4	4	
			119	56	175				24	15	39
Total Vol.			436	263	**699**				979	989	**1968**

Daily Totals

NB	SB	EB	WB	Combined
		1415	1252	**2667**

	AM			PM		
Split %	62.4%	37.6%	**26.2%**	49.7%	50.3%	**73.8%**
Peak Hour	10:45	11:45	**11:45**	16:45	13:00	**13:00**
Volume	122	105	**200**	134	144	**228**
P.H.F.	0.87	0.67	**0.83**	0.88	0.86	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-102

Location: Harney St. btwn. Congress St. & San Diego Ave.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			1		2			12:00			7		10		
00:15			1		2			12:15			23		17		
00:30			8		2			12:30			17		8		
00:45			1	11	2	8	19	12:45			16	63	10	45	108
01:00			0		2			13:00			13		14		
01:15			3		0			13:15			5		6		
01:30			0		0			13:30			8		13		
01:45			0	3	0	2	5	13:45			14	40	9	42	82
02:00			0		0			14:00			11		8		
02:15			0		0			14:15			8		11		
02:30			0		0			14:30			13		11		
02:45			0	0	0	0		14:45			18	50	13	43	93
03:00			1		2			15:00			7		13		
03:15			0		2			15:15			10		13		
03:30			0		0			15:30			17		15		
03:45			0	1	0	4	5	15:45			21	55	13	54	109
04:00			0		0			16:00			16		16		
04:15			0		0			16:15			12		14		
04:30			0		1			16:30			13		11		
04:45			1	1	1	2	3	16:45			7	48	3	44	92
05:00			1		0			17:00			19		19		
05:15			2		2			17:15			22		19		
05:30			0		1			17:30			18		16		
05:45			1	4	4	7	11	17:45			5	64	14	68	132
06:00			2		3			18:00			21		14		
06:15			0		4			18:15			10		11		
06:30			1		8			18:30			28		21		
06:45			2	5	7	22	27	18:45			17	76	15	61	137
07:00			1		3			19:00			23		17		
07:15			3		11			19:15			16		15		
07:30			4		6			19:30			18		16		
07:45			4	12	11	31	43	19:45			22	79	15	63	142
08:00			4		11			20:00			12		13		
08:15			3		6			20:15			7		5		
08:30			4		11			20:30			9		3		
08:45			8	19	16	44	63	20:45			8	36	7	28	64
09:00			4		6			21:00			8		7		
09:15			3		3			21:15			13		12		
09:30			9		7			21:30			12		12		
09:45			6	22	2	18	40	21:45			13	46	9	40	86
10:00			10		6			22:00			5		10		
10:15			19		13			22:15			9		7		
10:30			7		3			22:30			8		7		
10:45			5	41	10	32	73	22:45			7	29	2	26	55
11:00			14		11			23:00			10		7		
11:15			7		9			23:15			7		4		
11:30			13		10			23:30			4		0		
11:45			16	50	14	44	94	23:45			3	24	2	13	37
Total Vol.				169		214	**383**					610		527	**1137**

Daily Totals

NB	SB	EB	WB	Combined
		779	741	**1520**

	AM			PM		
Split %	44.1%	55.9%	**25.2%**	53.6%	46.4%	**74.8%**
Peak Hour	11:45	11:30	**11:45**	18:30	17:00	**18:30**
Volume	63	51	**112**	84	68	**152**
P.H.F.	0.68	0.75	**0.70**	0.75	0.89	**0.78**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-103

Location: Harney St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		3			12:00			18		15		
00:15			1		3			12:15			34		13		
00:30			0		3			12:30			21		26		
00:45			2	6	1	10	16	12:45			23	96	14	68	164
01:00			1		1			13:00			15		27		
01:15			0		2			13:15			20		21		
01:30			0		0			13:30			15		32		
01:45			0	1	0	3	4	13:45			13	63	33	113	176
02:00			1		1			14:00			32		18		
02:15			0		1			14:15			27		18		
02:30			0		1			14:30			8		29		
02:45			0	1	0	3	4	14:45			19	86	44	109	195
03:00			0		2			15:00			18		27		
03:15			1		0			15:15			12		37		
03:30			0		1			15:30			12		30		
03:45			0	1	1	4	5	15:45			22	64	35	129	193
04:00			0		0			16:00			18		28		
04:15			0		1			16:15			24		22		
04:30			1		1			16:30			22		21		
04:45			2	3	5	7	10	16:45			30	94	25	96	190
05:00			0		0			17:00			19		23		
05:15			0		3			17:15			24		21		
05:30			1		4			17:30			29		18		
05:45			0	1	7	14	15	17:45			20	92	22	84	176
06:00			0		8			18:00			29		11		
06:15			1		10			18:15			24		12		
06:30			3		11			18:30			24		14		
06:45			1	5	17	46	51	18:45			25	102	11	48	150
07:00			4		7			19:00			17		28		
07:15			6		18			19:15			18		17		
07:30			6		19			19:30			18		19		
07:45			6	22	30	74	96	19:45			11	64	24	88	152
08:00			7		24			20:00			10		22		
08:15			13		19			20:15			7		18		
08:30			8		19			20:30			2		17		
08:45			8	36	28	90	126	20:45			10	29	11	68	97
09:00			5		22			21:00			9		18		
09:15			4		24			21:15			8		11		
09:30			5		20			21:30			7		2		
09:45			9	23	12	78	101	21:45			3	27	7	38	65
10:00			6		19			22:00			6		11		
10:15			16		22			22:15			3		10		
10:30			1		37			22:30			5		9		
10:45			12	35	23	101	136	22:45			2	16	4	34	50
11:00			25		18			23:00			2		6		
11:15			12		22			23:15			0		3		
11:30			21		18			23:30			3		2		
11:45			24	82	22	80	162	23:45			2	7	2	13	20
Total Vol.				216		510	**726**					740		888	**1628**

Daily Totals

NB	SB	EB	WB	Combined
		956	1398	**2354**

	AM			PM		
Split %	29.8%	70.2%	**30.8%**	45.5%	54.5%	**69.2%**
Peak Hour	11:30	10:00	**11:45**	16:45	14:45	**14:45**
Volume	97	101	**173**	102	138	**199**
P.H.F.	0.71	0.68	**0.92**	0.85	0.78	**0.79**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-104

Location: Old Town Ave. btwn. I-5 SB Ramps & I-5 NB Ramps

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		14			12:00			147		97		
00:15			4		4			12:15			109		64		
00:30			9		9			12:30			131		102		
00:45			10	35	16	43	78	12:45			133	520	112	375	895
01:00			7		4			13:00			129		113		
01:15			6		4			13:15			135		102		
01:30			6		1			13:30			118		105		
01:45			4	23	1	10	33	13:45			117	499	71	391	890
02:00			9		5			14:00			120		97		
02:15			8		4			14:15			142		98		
02:30			1		2			14:30			119		99		
02:45			4	22	2	13	35	14:45			123	504	91	385	889
03:00			8		4			15:00			162		95		
03:15			3		8			15:15			140		111		
03:30			4		4			15:30			153		122		
03:45			3	18	4	20	38	15:45			162	617	107	435	1052
04:00			7		7			16:00			168		144		
04:15			2		6			16:15			149		101		
04:30			7		7			16:30			179		106		
04:45			8	24	12	32	56	16:45			169	665	102	453	1118
05:00			10		10			17:00			158		121		
05:15			10		14			17:15			180		74		
05:30			9		6			17:30			145		92		
05:45			27	56	8	38	94	17:45			153	636	78	365	1001
06:00			25		22			18:00			132		84		
06:15			20		24			18:15			122		71		
06:30			34		10			18:30			106		50		
06:45			44	123	38	94	217	18:45			104	464	56	261	725
07:00			51		30			19:00			100		49		
07:15			71		26			19:15			83		59		
07:30			83		50			19:30			85		54		
07:45			91	296	33	139	435	19:45			66	334	58	220	554
08:00			88		44			20:00			69		54		
08:15			90		40			20:15			53		39		
08:30			76		48			20:30			53		41		
08:45			91	345	52	184	529	20:45			48	223	51	185	408
09:00			84		58			21:00			44		50		
09:15			91		63			21:15			47		52		
09:30			105		47			21:30			39		38		
09:45			99	379	63	231	610	21:45			33	163	35	175	338
10:00			89		67			22:00			37		39		
10:15			83		56			22:15			30		27		
10:30			120		60			22:30			24		35		
10:45			118	410	53	236	646	22:45			27	118	21	122	240
11:00			115		53			23:00			25		15		
11:15			123		56			23:15			18		25		
11:30			113		69			23:30			18		30		
11:45			113	464	75	253	717	23:45			9	70	8	78	148
Total Vol.				2195		1293	**3488**					4813		3445	**8258**

Daily Totals

NB	SB	EB	WB	Combined
		7008	4738	**11746**

	AM			PM		
Split %	62.9%	37.1%	**29.7%**	58.3%	41.7%	**70.3%**
Peak Hour	11:45	11:45	**11:45**	16:30	15:15	**16:00**
Volume	500	338	**838**	686	484	**1118**
P.H.F.	0.85	0.83	**0.86**	0.95	0.84	**0.90**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-105

Location: Old Town Ave. btwn. I-5 NB Ramps & Jefferson St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		18			12:00			56		37		
00:15			4		11			12:15			36		61		
00:30			8		14			12:30			56		29		
00:45			4	24	9	52	76	12:45			44	192	51	178	370
01:00			7		8			13:00			60		35		
01:15			5		9			13:15			58		34		
01:30			1		3			13:30			32		43		
01:45			1	14	4	24	38	13:45			58	208	33	145	353
02:00			2		4			14:00			47		36		
02:15			0		2			14:15			38		41		
02:30			1		1			14:30			46		42		
02:45			1	4	0	7	11	14:45			48	179	46	165	344
03:00			3		1			15:00			80		34		
03:15			0		0			15:15			84		37		
03:30			1		3			15:30			56		55		
03:45			1	5	0	4	9	15:45			52	272	53	179	451
04:00			2		3			16:00			55		53		
04:15			3		2			16:15			62		47		
04:30			2		5			16:30			47		58		
04:45			1	8	5	15	23	16:45			63	227	61	219	446
05:00			0		9			17:00			49		57		
05:15			2		7			17:15			39		61		
05:30			1		11			17:30			54		41		
05:45			1	4	16	43	47	17:45			65	207	50	209	416
06:00			6		12			18:00			41		67		
06:15			16		23			18:15			31		72		
06:30			16		27			18:30			39		42		
06:45			17	55	27	89	144	18:45			60	171	38	219	390
07:00			19		32			19:00			33		56		
07:15			33		42			19:15			30		58		
07:30			27		63			19:30			32		55		
07:45			42	121	63	200	321	19:45			28	123	63	232	355
08:00			51		47			20:00			24		49		
08:15			45		38			20:15			21		48		
08:30			45		40			20:30			24		58		
08:45			54	195	43	168	363	20:45			21	90	55	210	300
09:00			45		28			21:00			14		64		
09:15			41		33			21:15			19		58		
09:30			43		46			21:30			22		58		
09:45			75	204	42	149	353	21:45			20	75	43	223	298
10:00			43		38			22:00			21		36		
10:15			61		31			22:15			14		28		
10:30			43		38			22:30			8		27		
10:45			66	213	34	141	354	22:45			11	54	21	112	166
11:00			52		40			23:00			10		28		
11:15			58		38			23:15			8		12		
11:30			56		41			23:30			5		19		
11:45			70	236	45	164	400	23:45			3	26	11	70	96
Total Vol.				1083		1056	**2139**					1824		2161	**3985**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			2907	3217	**6124**

	AM			**PM**		
Split %	50.6%	49.4%	**34.9%**	45.8%	54.2%	**65.1%**
Peak Hour	11:15	07:15	**11:30**	15:00	16:30	**15:00**
Volume	240	215	**402**	272	237	**451**
P.H.F.	0.86	0.85	**0.87**	0.81	0.97	**0.93**

Appendix C
Peak Hour Arterial Analysis Worksheets – Existing Conditions

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	11.6	84.3	0.81	34.5	B
Total	II		72.7	11.6	84.3	0.81	34.5	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.1	34.5	0.17	17.6	D
Rosecrans St.	II	40	72.7	51.1	123.8	0.81	23.5	C
Total	II		92.1	66.2	158.3	0.98	22.2	C

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	31.3	97.6	0.55	20.4	C
Total	III		66.3	31.3	97.6	0.55	20.4	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	57.1	88.7	0.25	10.1	E
Total	III		31.6	57.1	88.7	0.25	10.1	E

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	46.2	106.0	0.50	16.9	D
East Dr	III	35	22.9	5.0	27.9	0.19	24.6	B
Kemper Street	III	35	39.9	21.5	61.4	0.33	19.5	C
Sports Arena	III	35	34.5	47.0	81.5	0.29	12.7	E
Total	III		157.1	119.7	276.8	1.31	17.0	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	21.7	56.2	0.29	18.4	C
East Drive	III	35	39.9	4.7	44.6	0.33	26.8	B
Rosecrans St.	III	35	22.9	43.2	66.1	0.19	10.4	E
Barnett Ave	III	35	59.8	25.2	85.0	0.50	21.1	C
Total	III		157.1	94.8	251.9	1.31	18.7	C

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	13.0	30.6	0.08	9.4	D
San Diego Ave	IV	25	25.0	24.3	49.3	0.11	8.3	E
Total	IV		42.6	37.3	79.9	0.19	8.7	E

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.6	26.3	0.07	9.7	D
Moore St	IV	25	25.0	5.9	30.9	0.11	13.2	C
Total	IV		43.7	13.5	57.2	0.18	11.6	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	12.4	29.5	0.13	16.3	D
Nimitz Blvd	III	35	22.4	42.3	64.7	0.19	10.4	E
Laning Rd	III	35	34.5	8.8	43.3	0.29	23.9	C
Barnett Ave	III	35	97.9	42.2	140.1	0.95	24.5	B
Midway Dr	III	35	58.8	23.7	82.5	0.49	21.4	C
Rosecrans St	III	35	16.7	17.3	34.0	0.13	13.8	E
Total	III		247.4	146.7	394.1	2.18	19.9	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	32.4	49.1	0.13	9.5	F
Lytton St	III	35	58.8	48.2	107.0	0.49	16.5	D
Laning Rd	III	35	97.9	7.9	105.8	0.95	32.4	A
Lowell St	III	35	34.5	35.2	69.7	0.29	14.8	D
Hugo St	III	35	22.4	5.5	27.9	0.19	24.1	B
Total	III		230.3	129.2	359.5	2.05	20.5	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	11.1	25.3	0.05	7.6	E
Total	IV		14.2	11.1	25.3	0.05	7.6	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	5.7	21.8	0.06	10.0	D
Total	IV		16.1	5.7	21.8	0.06	10.0	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	9.8	25.5	0.10	13.4	C
Juan St	IV	35	11.2	11.0	22.2	0.07	11.0	D
	IV	35	18.3	6.1	24.4	0.13	19.3	B
Total	IV		45.2	26.9	72.1	0.29	14.7	C

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	14.6	32.3	0.11	11.9	D
	IV	35	18.3	9.0	27.3	0.13	17.2	C
Congress St	IV	35	11.2	7.1	18.3	0.07	13.4	C
Pacific Highway	IV	35	15.7	20.1	35.8	0.10	9.6	D
Total	IV		62.9	50.8	113.7	0.40	12.7	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	9.8	45.9	0.30	23.6	C
Total	III		36.1	9.8	45.9	0.30	23.6	C

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	13.9	56.1	0.35	22.6	C
Sports Arena	III	35	36.1	46.0	82.1	0.30	13.2	E
Total	III		78.3	59.9	138.2	0.65	17.0	D

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	21.7	94.4	0.81	30.8	B
Total	II		72.7	21.7	94.4	0.81	30.8	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.9	35.3	0.17	17.2	D
Rosecrans St.	II	40	72.7	71.5	144.2	0.81	20.2	D
Total	II		92.1	87.4	179.5	0.98	19.6	D

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	16.7	83.0	0.55	24.0	C
Total	III		66.3	16.7	83.0	0.55	24.0	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	69.2	100.8	0.25	8.9	F
Total	III		31.6	69.2	100.8	0.25	8.9	F

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	71.5	131.3	0.50	13.7	E
East Dr	III	35	22.9	12.7	35.6	0.19	19.3	C
Kemper Street	III	35	39.9	28.0	67.9	0.33	17.6	D
Sport Arena Blvd	III	35	34.5	42.8	77.3	0.29	13.4	E
Total	III		157.1	155.0	312.1	1.31	15.1	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	16.0	50.5	0.29	20.5	C
East Drive	III	35	39.9	14.3	54.2	0.33	22.1	C
Rosecrans St.	III	35	22.9	62.4	85.3	0.19	8.0	F
Barnett Ave	III	35	59.8	32.4	92.2	0.50	19.5	C
Total	III		157.1	125.1	282.2	1.31	16.7	D

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	81.1	98.7	0.08	2.9	F
San Diego Ave	IV	25	25.0	13.9	38.9	0.11	10.5	D
Total	IV		42.6	95.0	137.6	0.19	5.1	F

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.9	26.6	0.07	9.6	D
Moore St	IV	25	25.0	5.3	30.3	0.11	13.5	C
Total	IV		43.7	13.2	56.9	0.18	11.7	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	15.4	32.5	0.13	14.8	D
Nimitz Blvd	III	35	22.4	46.5	68.9	0.19	9.8	F
Laning Rd	III	35	34.5	6.1	40.6	0.29	25.5	B
Barnett Ave	III	35	97.9	37.7	135.6	0.95	25.3	B
Midway Dr	III	35	58.8	20.1	78.9	0.49	22.3	C
Rosecrans St	III	35	16.7	30.8	47.5	0.13	9.9	F
Total	III		247.4	156.6	404.0	2.18	19.4	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	45.1	61.8	0.13	7.6	F
Lytton St	III	35	58.8	27.4	86.2	0.49	20.5	C
Laning Rd	III	35	97.9	5.7	103.6	0.95	33.1	A
Lowell St	III	35	34.5	62.9	97.4	0.29	10.6	E
Hugo St	III	35	22.4	4.1	26.5	0.19	25.4	B
Total	III		230.3	145.2	375.5	2.05	19.6	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	8.6	22.8	0.05	8.5	E
Total	IV		14.2	8.6	22.8	0.05	8.5	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	4.0	20.1	0.06	10.9	D
Total	IV		16.1	4.0	20.1	0.06	10.9	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	12.1	27.8	0.10	12.3	D
Juan St	IV	35	11.2	17.5	28.7	0.07	8.5	E
	IV	35	18.3	7.9	26.2	0.13	17.9	C
Total	IV		45.2	37.5	82.7	0.29	12.8	D

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	15.7	33.4	0.11	11.6	D
	IV	35	18.3	8.7	27.0	0.13	17.4	C
Congress St	IV	35	11.2	6.8	18.0	0.07	13.6	C
Pacific Highway	IV	35	15.7	24.8	40.5	0.10	8.5	E
Total	IV		62.9	56.0	118.9	0.40	12.1	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	34.0	70.1	0.30	15.5	D
Total	III		36.1	34.0	70.1	0.30	15.5	D

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	70.4	112.6	0.35	11.3	E
W Point Loma Blvd	III	35	36.1	65.8	101.9	0.30	10.6	E
Total	III		78.3	136.2	214.5	0.65	11.0	E

Appendix D
Peak Hour Intersection Counts

Vehicle Intersection Counts

(1)

10

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

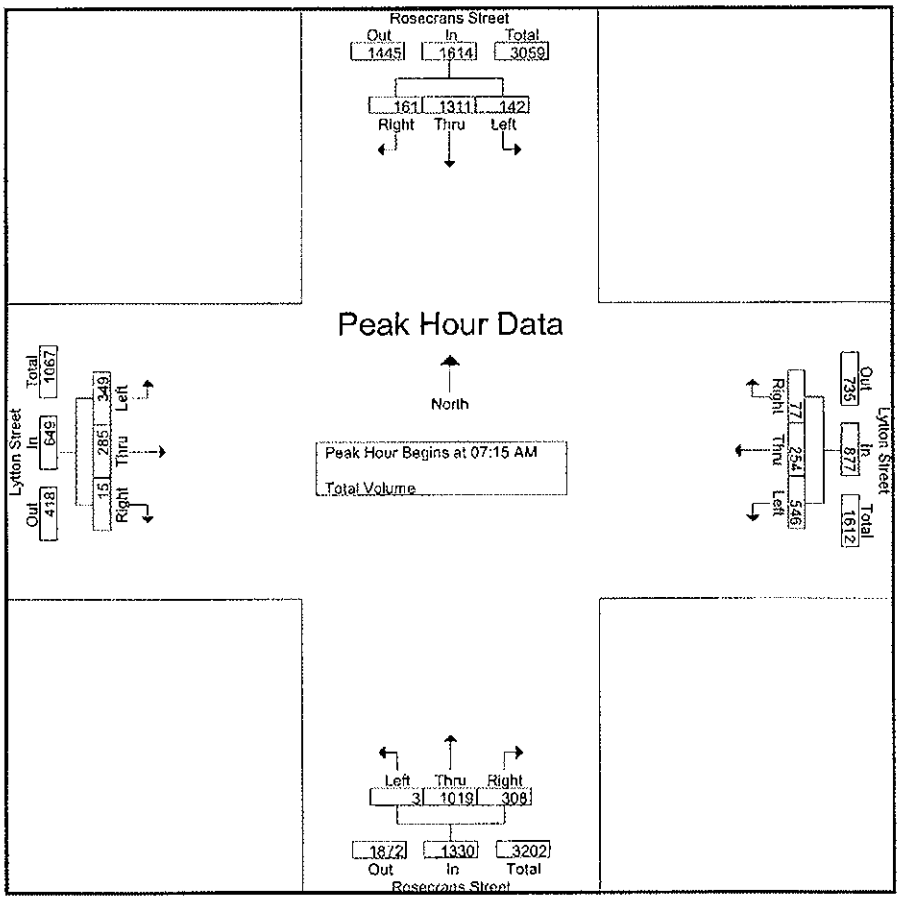
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
Total	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
07:00 AM	25	334	78	437	151	94	4	249	2	160	38	200	51	55	12	118	1004
07:15 AM	35	363	54	452	145	71	9	225	0	263	62	325	100	80	3	183	1185
07:30 AM	36	262	32	330	147	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	38	327	37	402	135	70	27	232	1	247	85	333	101	88	6	195	1162
Total	134	1286	201	1621	578	295	60	933	3	901	259	1163	336	284	23	643	4360
08:00 AM	33	359	38	430	119	53	21	193	2	278	87	367	64	56	4	124	1114
08:15 AM	35	349	60	444	103	72	25	200	3	285	77	365	55	59	1	115	1124
08:30 AM	20	269	46	335	96	52	20	168	1	321	88	410	69	49	1	119	1032
Grand Total	244	2561	409	3214	1059	533	131	1723	10	1976	532	2518	586	502	32	1120	8575
Apprch %	7.6	79.7	12.7		61.5	30.9	7.6		0.4	78.5	21.1		52.3	44.8	2.9		
Total %	2.8	29.9	4.8	37.5	12.3	6.2	1.5	20.1	0.1	23	6.2	29.4	6.8	5.9	0.4	13.1	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	**363**	**54**	**452**	145	71	9	225	0	263	62	325	100	80	3	183	**1185**
07:30 AM	36	262	32	330	**147**	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	**38**	327	37	402	135	70	**27**	**232**	1	247	85	333	**101**	**88**	**6**	**195**	1162
08:00 AM	33	359	38	430	119	53	21	193	**2**	**278**	**87**	**367**	64	56	4	124	1114
Total Volume	142	1311	161	1614	546	254	77	877	3	1019	308	1330	349	285	15	649	4470
% App. Total	8.8	81.2	10		62.3	29	8.8		0.2	76.6	23.2		53.8	43.9	2.3		
PHF	.934	.903	.745	.893	.929	.894	.713	.945	.375	.916	.885	.906	.864	.810	.625	.832	.943

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	25	334	78	437	151	94	4	249	1	247	85	333	100	80	3	183
+15 mins.	35	363	54	452	145	71	9	225	2	278	87	367	84	61	2	147
+30 mins.	36	262	32	330	147	60	20	227	3	285	77	365	101	88	6	195
+45 mins.	38	327	37	402	135	70	27	232	1	321	88	410	64	56	4	124
Total Volume	134	1286	201	1621	578	295	60	933	7	1131	337	1475	349	285	15	649
% App. Total	8.3	79.3	12.4		62	31.6	6.4		0.5	76.7	22.8		53.8	43.9	2.3	
PHF	.882	.886	.644	.897	.957	.785	.556	.937	.583	.881	.957	.899	.864	.810	.625	.832

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

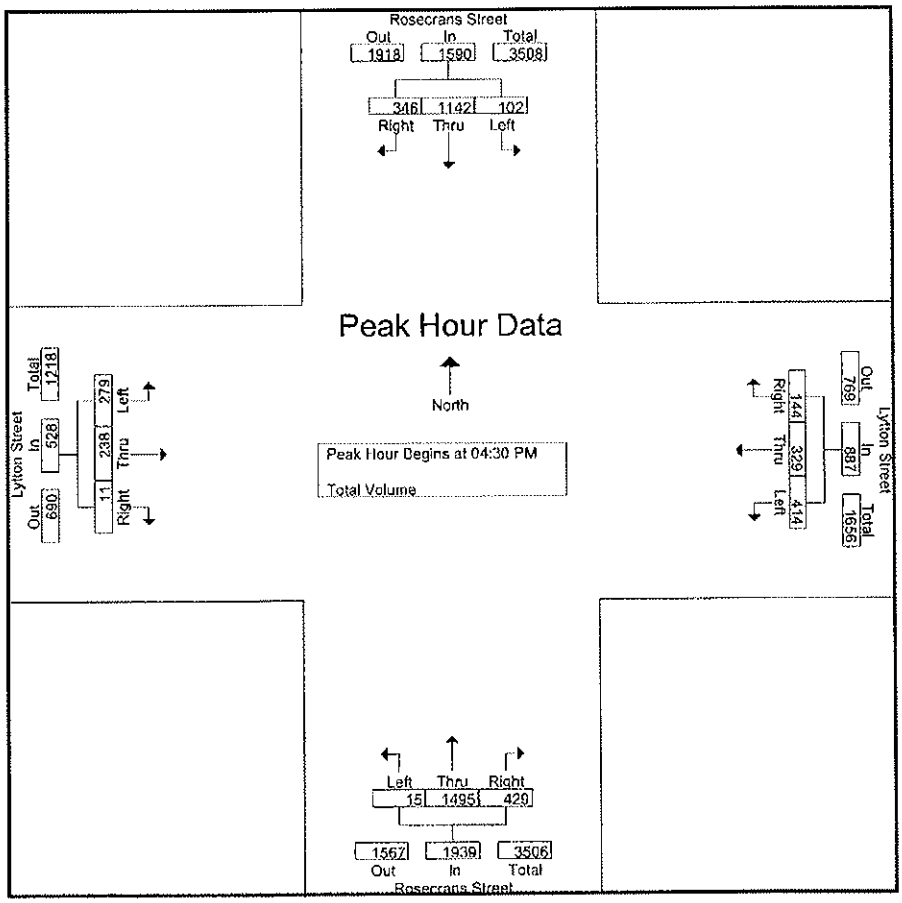
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	250	40	312	108	107	17	232	3	405	98	506	60	81	2	143	1193
04:15 PM	14	255	52	321	116	71	24	211	5	376	107	488	54	43	3	100	1120
04:30 PM	29	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	313	73	409	107	77	42	226	3	347	98	448	70	61	1	132	1215
Total	88	1088	240	1416	424	335	122	881	15	1470	411	1896	249	238	8	495	4688
05:00 PM	22	273	71	366	103	81	37	221	1	433	119	553	76	62	3	141	1281
05:15 PM	28	286	127	441	111	91	26	228	7	373	104	484	68	62	5	135	1288
05:30 PM	14	314	84	412	71	76	28	175	3	362	69	434	55	60	2	117	1138
05:45 PM	11	307	42	360	85	82	25	192	2	307	69	378	50	42	6	98	1028
Total	75	1180	324	1579	370	330	116	816	13	1475	361	1849	249	226	16	491	4735
Grand Total	163	2268	564	2995	794	665	238	1697	28	2945	772	3745	498	464	24	986	9423
Apprch %	5.4	75.7	18.8		46.8	39.2	14		0.7	78.6	20.6		50.5	47.1	2.4		
Total %	1.7	24.1	6	31.8	8.4	7.1	2.5	18	0.3	31.3	8.2	39.7	5.3	4.9	0.3	10.5	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**29**	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	**313**	73	409	107	77	**42**	226	3	347	98	448	70	61	1	132	1215
05:00 PM	22	273	71	366	103	81	37	221	1	**433**	**119**	**553**	**76**	**62**	3	**141**	1281
05:15 PM	28	286	**127**	**441**	**111**	**91**	26	**228**	7	373	104	484	68	62	**5**	135	**1288**
Total Volume	102	1142	346	1590	414	329	144	887	15	1495	429	1939	279	238	11	528	4944
% App. Total	6.4	71.8	21.8		46.7	37.1	16.2		0.8	77.1	22.1		52.8	45.1	2.1		
PHF	.879	.912	.681	.901	.932	.904	.857	.973	.536	.863	.901	.877	.918	.960	.550	.936	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	23	313	73	409	93	80	39	212	5	376	107	488	65	53	2	120
+15 mins.	22	273	71	366	107	77	42	226	4	342	108	454	70	61	1	132
+30 mins.	28	286	127	441	103	81	37	221	3	347	98	448	76	62	3	141
+45 mins.	14	314	84	412	111	91	26	228	1	433	119	553	68	62	5	135
Total Volume	87	1186	355	1628	414	329	144	887	13	1498	432	1943	279	238	11	528
% App. Total	5.3	72.9	21.8		46.7	37.1	16.2		0.7	77.1	22.2		52.8	45.1	2.1	
PHF	.777	.944	.699	.923	.932	.904	.857	.973	.650	.865	.908	.878	.918	.960	.550	.936

(2A)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		66								108		182	356
7:15 AM		59								91		196	346
7:30 AM		70								97		242	409
7:45 AM		73								124		289	486
8:00 AM		83								109		256	448
8:15 AM		80								122		267	469
8:30 AM		108								83		205	396
8:45 AM		97								86		215	398

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	636	0	0	0	0	0	0	0	820	0	1852	3308
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	30.69%	0.00%	69.31%	

[illegible]													
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CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

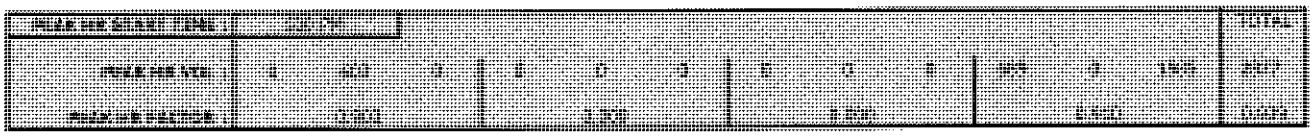
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SDUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		149								167		252	568
4:15 PM		150								176		297	623
4:30 PM		149								168		301	618
4:45 PM		144								157		363	664
5:00 PM		155								161		336	652
5:15 PM		141								180		445	766
5:30 PM		167								167		430	764
5:45 PM		140								181		374	695
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1195	0	0	0	0	0	0	0	1357	0	2798	5350
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	32.66%	0.00%	67.34%	



CONTROL :

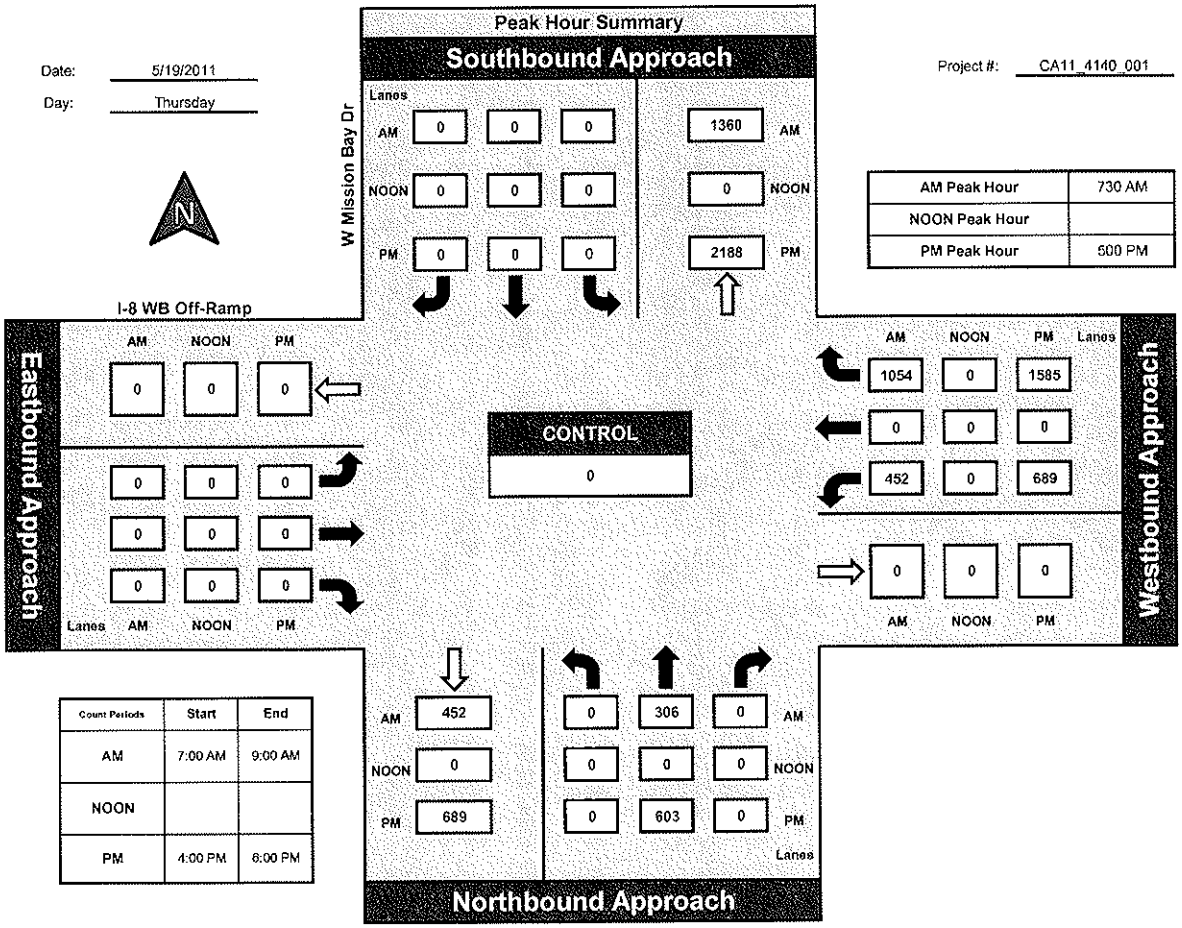
ITM Peak Hour Summary

Prepared by:

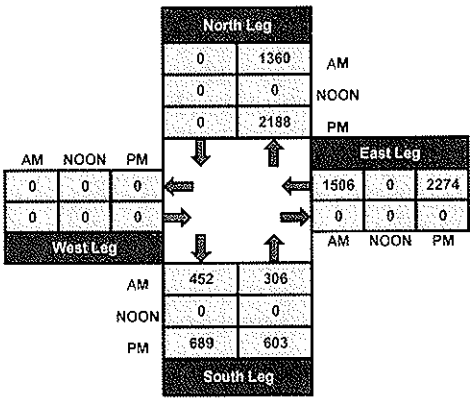
NDS

National Data & Surveying Services

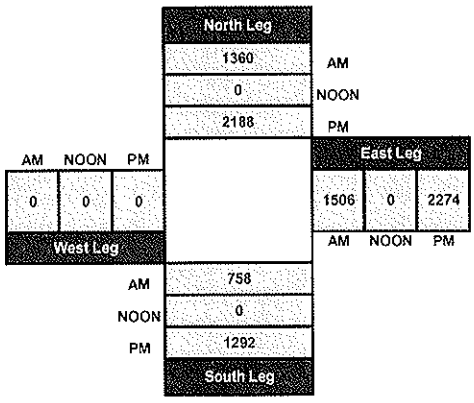
W Mission Bay Dr and I-8 WB Off-Ramp , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(2B)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	57	130		154	6			2				349
7:15 AM	0	67	130		163	2			3				365
7:30 AM	2	63	167		199	3			2				436
7:45 AM	2	80	166		211	9			3				471
8:00 AM	7	76	131		218	4			4				440
8:15 AM	1	86	163		225	1			4				480
8:30 AM	6	103	158		205	7			4				483
8:45 AM	3	101	145		220	0			4				473
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	633	1190	0	1595	32	0	0	26	0	0	0	3497
APPROACH %'s :	1.14%	34.33%	64.53%	0.00%	98.03%	1.97%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	6	152	187		252	9			6				612
4:15 PM	1	146	184		274	10			5				620
4:30 PM	7	154	174		280	16			4				635
4:45 PM	3	152	147		277	13			3				595
5:00 PM	5	147	174		310	15			5				656
5:15 PM	5	145	126		278	16			8				578
5:30 PM	3	164	154		314	10			0				645
5:45 PM	4	141	161		306	13			7				632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	1201	1307	0	2291	102	0	0	38	0	0	0	4973
APPROACH %'s :	1.34%	47.25%	51.42%	0.00%	95.74%	4.26%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sport Arena Blvd and I-8 EB On-Ramp , City of San Diego

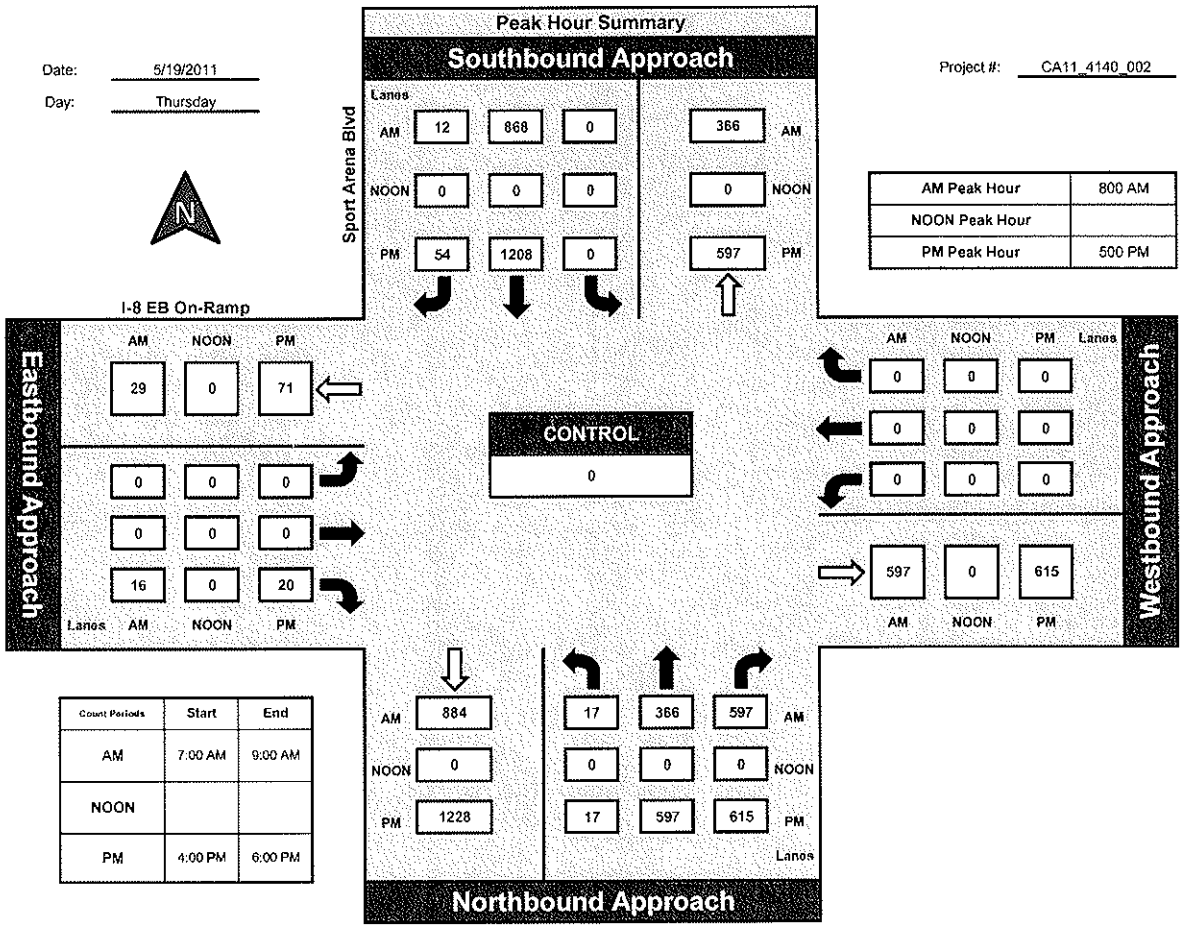
Date: 5/19/2011

Day: Thursday

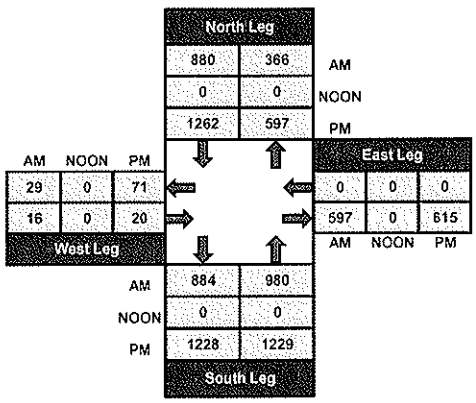
Project #: CA11_4140_002

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

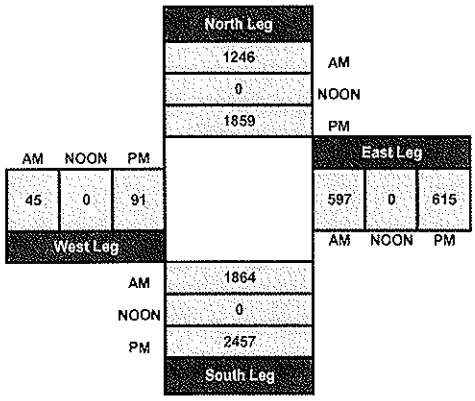
Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Total Ins & Outs



Total Volume Per Leg



③

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001

Day: THURSDAY

City: City of San Diego

Date: 6/9/2011

AM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
7:00 AM						3		137			157	2	299
7:15 AM						6		178			220	0	404
7:30 AM						4		164			250	3	421
7:45 AM						5		217			216	3	441
8:00 AM						8		204			214	1	427
8:15 AM						8		231			245	3	487
8:30 AM						13		190			226	3	432
8:45 AM						7		200			184	5	396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	54	0	1521	0	0	1712	20	3307
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	98.85%	1.15%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001 **Day:** THURSDAY

City: City of San Diego **Date:** 6/9/2011

PM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
4:00 PM						29		266			334	6	635
4:15 PM						21		321			283	10	635
4:30 PM						35		287			319	5	646
4:45 PM						26		291			308	4	629
5:00 PM						36		324			306	9	675
5:15 PM						39		348			308	7	702
5:30 PM						17		334			246	3	600
5:45 PM						16		306			300	10	632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	219	0	2477	0	0	2404	54	5154
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	97.80%	2.20%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

ITM Peak Hour Summary

Prepared by:

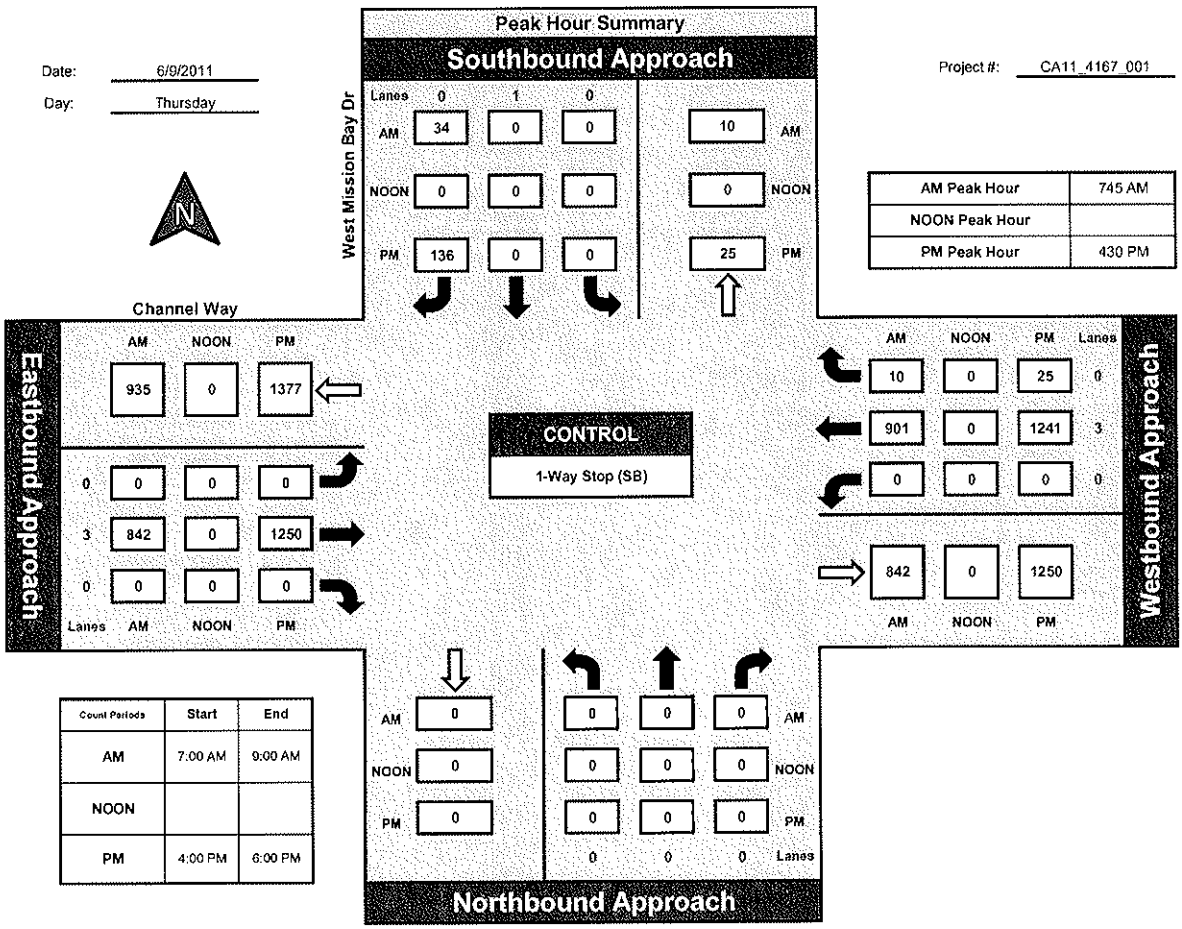
National Data & Surveying Services

West Mission Bay Dr and Channel Way , City of San Diego

Date: 6/9/2011

Day: Thursday

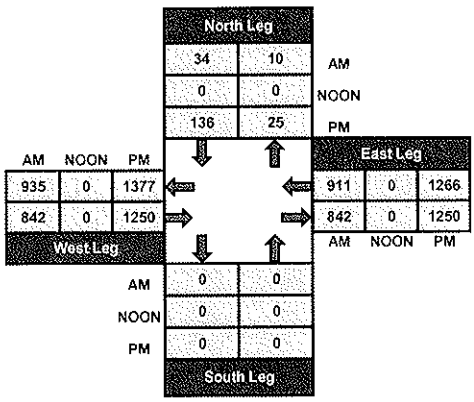
Project #: CA11_4167_001



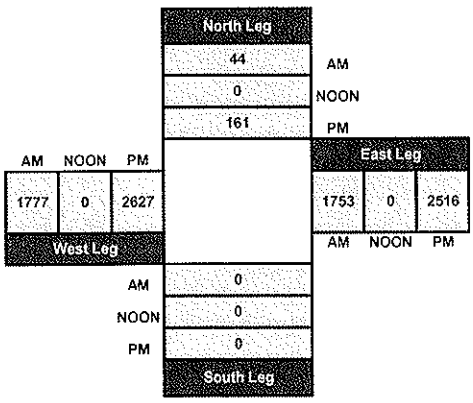
AM Peak Hour	7:45 AM
NOON Peak Hour	
PM Peak Hour	4:30 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(4)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	22	53	0	55	61	34	88	34	48	3	20	38	456
7:15 AM	29	62	1	61	81	49	135	50	57	2	20	45	592
7:30 AM	29	99	1	71	81	68	146	50	62	2	12	47	668
7:45 AM	29	67	2	79	97	54	121	73	62	3	23	47	657
8:00 AM	36	82	4	68	92	44	103	45	66	5	21	46	612
8:15 AM	25	70	8	79	118	36	98	42	51	3	36	52	618
8:30 AM	36	73	4	72	99	51	121	41	60	3	35	56	651
8:45 AM	52	102	3	79	119	40	90	49	67	5	33	69	708
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	258	608	23	564	748	376	902	384	473	26	200	400	4962
APPROACH %'s :	29.02%	68.39%	2.59%	33.41%	44.31%	22.27%	51.28%	21.83%	26.89%	4.15%	31.95%	63.90%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	76	141	4	45	135	46	84	56	86	8	47	103	831
4:15 PM	90	140	2	61	142	54	73	54	76	10	62	97	861
4:30 PM	79	110	6	67	126	62	84	52	66	6	79	133	870
4:45 PM	73	107	4	65	136	52	85	60	59	7	74	98	820
5:00 PM	77	118	7	77	184	74	85	56	70	9	81	134	972
5:15 PM	94	114	3	62	113	65	92	46	75	11	88	104	867
5:30 PM	102	123	10	87	161	79	92	54	68	7	51	82	916
5:45 PM	86	81	10	86	136	76	81	50	74	12	83	90	865
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	677	934	46	550	1133	508	676	428	574	70	565	841	7002
APPROACH %'s :	40.86%	56.37%	2.78%	25.10%	51.71%	23.19%	40.29%	25.51%	34.21%	4.74%	38.28%	56.98%	
[illegible]													

CONTROL :

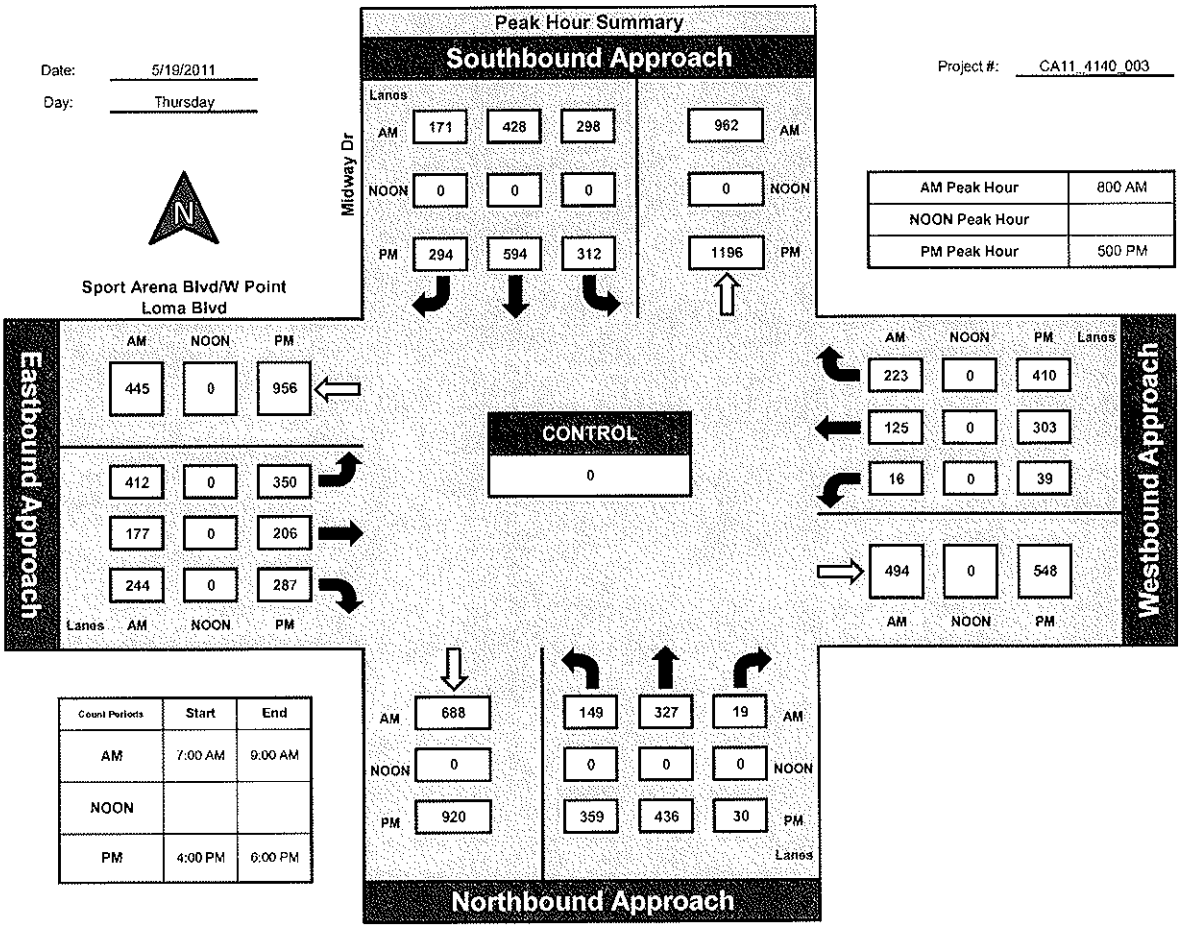
ITM Peak Hour Summary

Prepared by:

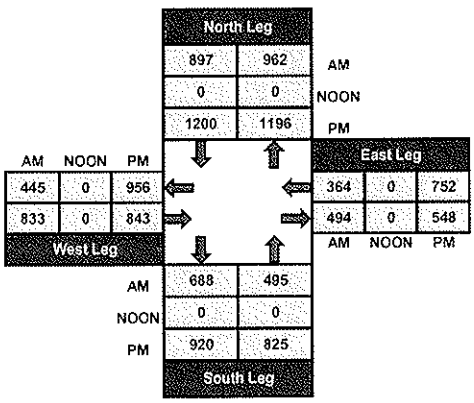
NDS

National Data & Surveying Services

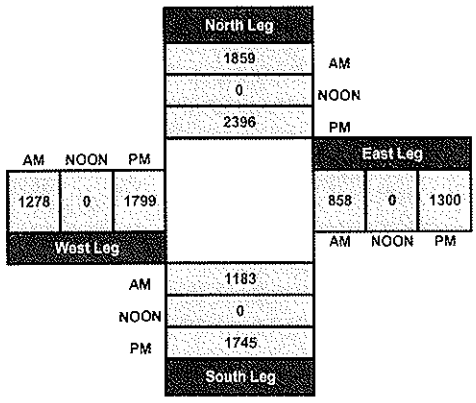
Midway Dr and Sport Arena Blvd/W Point Loma Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(5)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	18	23	3	9	3	3	57	13	9	56	10	224
7:15 AM	28	16	20	4	6	6	12	69	17	6	33	6	223
7:30 AM	26	20	28	5	9	5	18	86	16	11	56	9	289
7:45 AM	29	30	23	8	7	13	14	87	13	10	53	11	298
8:00 AM	19	22	14	6	11	12	16	91	21	21	68	7	308
8:15 AM	29	21	21	5	17	13	14	105	15	9	68	11	328
8:30 AM	24	30	34	8	10	11	18	103	20	18	84	6	366
8:45 AM	25	22	22	6	11	17	14	91	14	16	89	11	338
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	200	179	185	45	80	80	109	689	129	100	507	71	2374
APPROACH %'s :	35.46%	31.74%	32.80%	21.95%	39.02%	39.02%	11.76%	74.33%	13.92%	14.75%	74.78%	10.47%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	47	28	38	12	31	12	34	140	26	62	158	15	603
4:15 PM	26	38	35	9	34	19	32	118	24	70	140	16	561
4:30 PM	26	32	39	9	28	26	37	130	25	55	175	16	598
4:45 PM	41	29	47	15	42	10	23	91	53	49	138	11	549
5:00 PM	56	33	41	19	26	22	33	130	29	59	142	14	604
5:15 PM	47	31	31	9	35	28	34	151	27	59	174	17	643
5:30 PM	42	29	38	10	38	14	32	128	31	58	167	17	604
5:45 PM	49	15	28	9	39	18	29	122	29	47	146	9	540
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	334	235	297	92	273	149	254	1010	244	459	1240	115	4702
APPROACH %'s :	38.57%	27.14%	34.30%	17.90%	53.11%	28.99%	16.84%	66.98%	16.18%	25.30%	68.36%	6.34%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

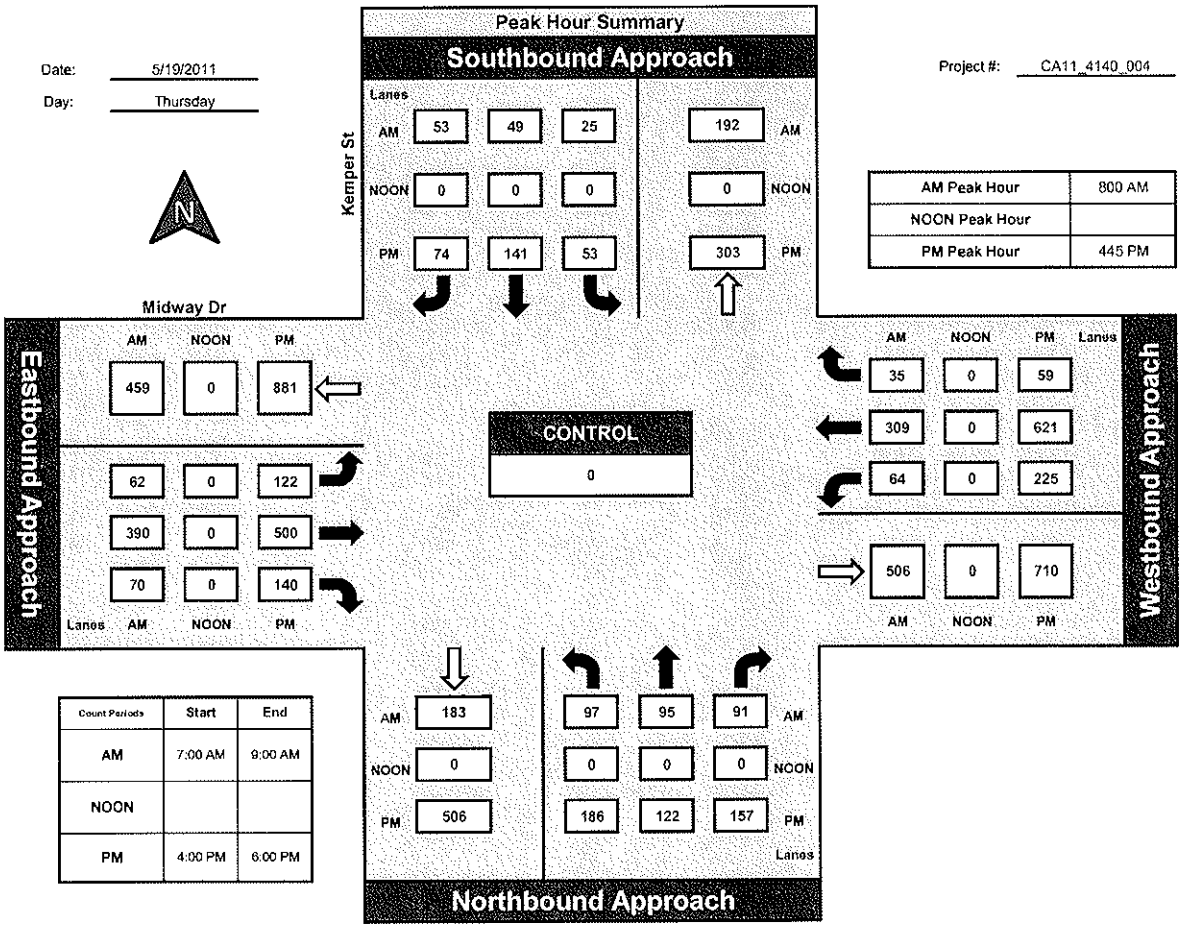
National Data & Surveying Services

Kemper St and Midway Dr , City of San Diego

Date: 5/19/2011

Day: Thursday

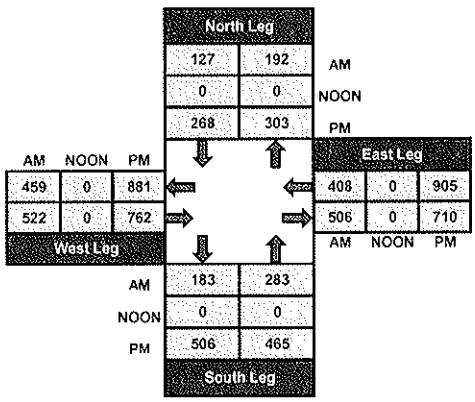
Project #: CA11_4140_004



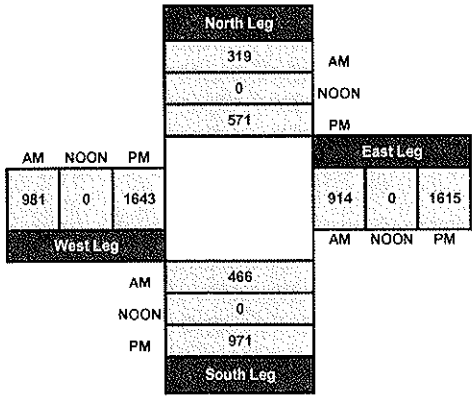
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(6)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	4	0	3	4	0	1	4	106	3	4	81	2	212
7:15 AM	1	2	1	1	0	2	3	102	2	2	90	4	210
7:30 AM	4	0	1	1	0	4	1	132	1	5	126	7	282
7:45 AM	3	0	1	1	1	4	1	114	2	7	132	11	277
8:00 AM	6	1	0	2	0	3	1	131	3	7	148	13	315
8:15 AM	7	1	3	4	1	3	4	139	5	6	158	12	343
8:30 AM	3	0	1	7	0	4	5	148	2	6	183	23	382
8:45 AM	3	1	1	3	1	5	6	119	0	6	140	20	305
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	5	11	23	3	26	25	991	18	43	1058	92	2326
APPROACH %'s :	65.96%	10.64%	23.40%	44.23%	5.77%	50.00%	2.42%	95.84%	1.74%	3.60%	88.68%	7.71%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	3	4	1	12	1	10	19	203	1	8	273	39	574
4:15 PM	4	2	1	12	4	13	11	205	4	6	242	34	538
4:30 PM	7	4	2	20	2	20	14	221	4	8	267	35	604
4:45 PM	3	1	3	16	2	16	11	170	5	6	240	34	507
5:00 PM	6	0	4	11	0	10	7	217	2	7	284	44	592
5:15 PM	8	1	5	22	0	6	14	197	5	6	246	51	561
5:30 PM	1	3	2	14	3	19	23	219	4	5	278	27	598
5:45 PM	4	0	5	14	1	7	9	186	9	1	242	27	505
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	36	15	23	121	13	101	108	1618	34	47	2072	291	4479
APPROACH %'s :	48.65%	20.27%	31.08%	51.49%	5.53%	42.98%	6.14%	91.93%	1.93%	1.95%	85.98%	12.07%	



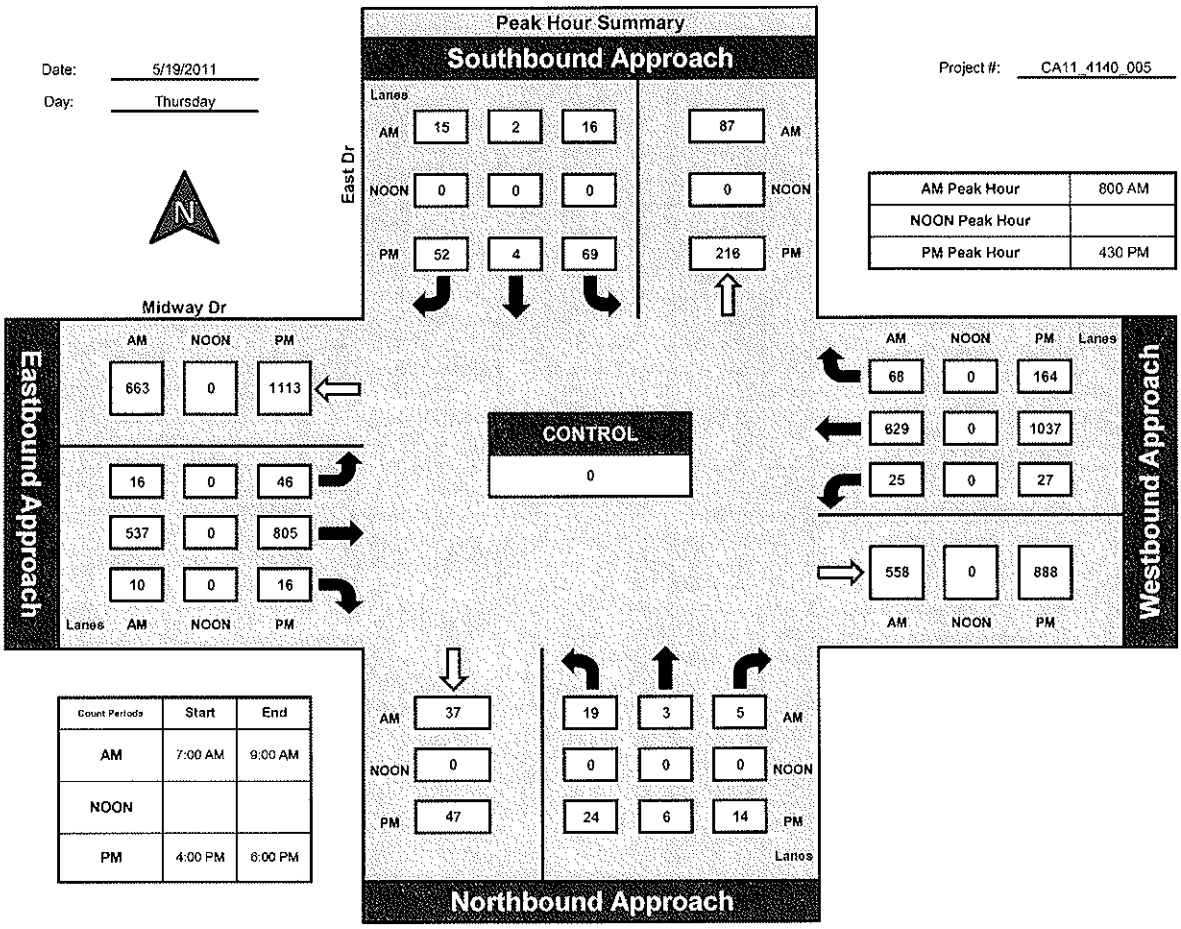
CONTROL :

ITM Peak Hour Summary

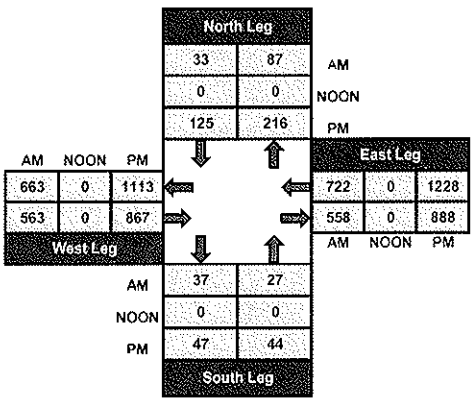
Prepared by:

National Data & Surveying Services

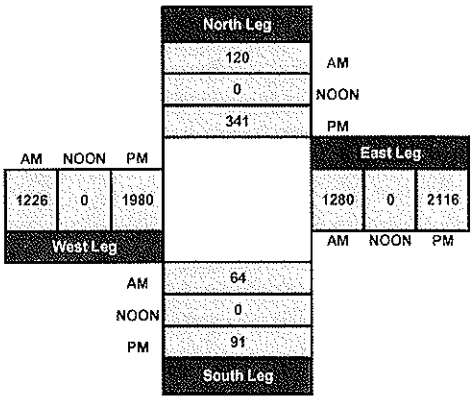
East Dr and Midway Dr , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(7)

8

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

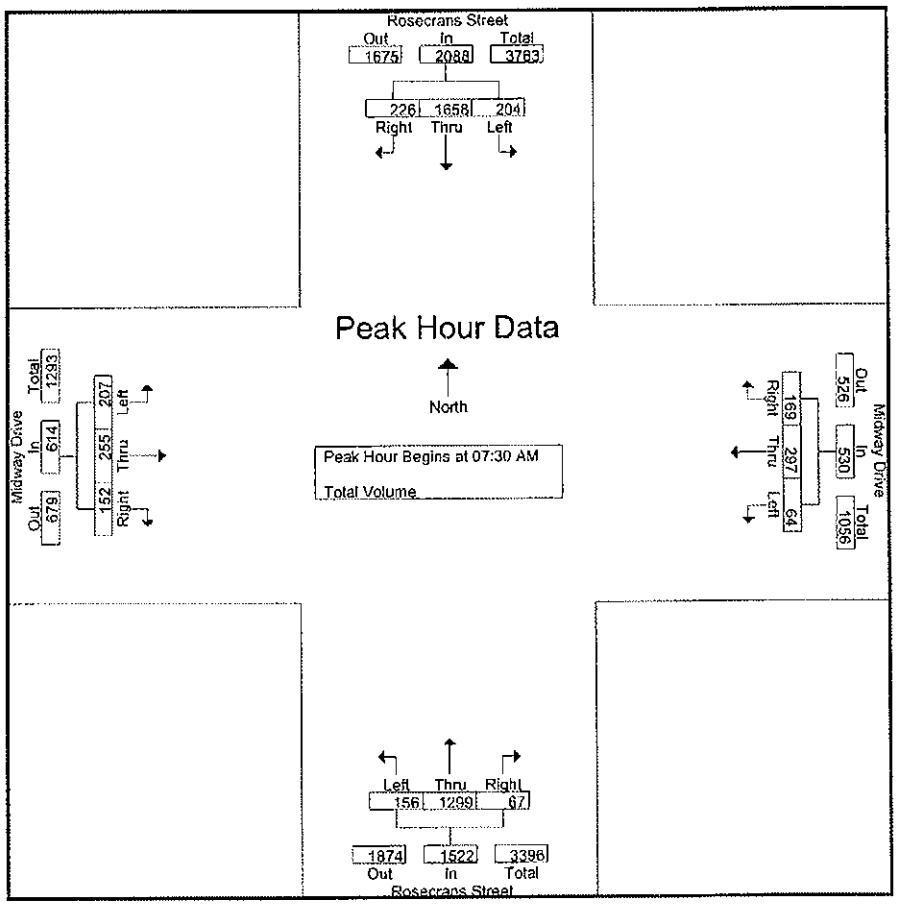
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
Total	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
07:00 AM	78	384	31	493	14	44	32	90	24	246	17	287	27	46	28	101	971
07:15 AM	67	472	45	584	18	54	25	97	17	283	13	313	45	59	16	120	1114
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
Total	259	1695	192	2146	62	240	127	429	104	1196	51	1351	165	238	115	518	4444
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
08:30 AM	58	310	55	423	15	88	45	148	33	332	20	385	55	77	35	167	1123
Grand Total	467	3165	378	4010	121	525	296	942	245	2328	131	2704	376	483	253	1112	8768
Apprch %	11.6	78.9	9.4		12.8	55.7	31.4		9.1	86.1	4.8		33.8	43.4	22.8		
Total %	5.3	36.1	4.3	45.7	1.4	6	3.4	10.7	2.8	26.6	1.5	30.8	4.3	5.5	2.9	12.7	

	Rosecrans Street Southbound				Midwny Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
Total Volume	204	1658	226	2088	64	297	169	530	156	1299	67	1522	207	255	152	614	4754
% App. Total	9.8	79.4	10.8		12.1	56	31.9		10.2	85.3	4.4		33.7	41.5	24.8		
PHF	.718	.856	.831	.877	.762	.773	.716	.844	.780	.931	.698	.926	.772	.951	.905	.914	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	67	472	45	584	20	72	36	128	34	**349**	11	394	44	67	33	144
+15 mins.	**71**	355	48	474	13	59	**59**	131	29	318	10	357	**67**	62	39	**168**
+30 mins.	43	**484**	**68**	**595**	**21**	**96**	40	**157**	**50**	286	**24**	360	47	60	**42**	149
+45 mins.	48	417	57	522	15	88	45	148	43	346	22	**411**	55	77	35	167
Total Volume	229	1728	218	2175	69	315	180	564	156	1299	67	1522	213	266	149	628
% App. Total	10.5	79.4	10		12.2	55.9	31.9		10.2	85.3	4.4		33.9	42.4	23.7	
PHF	.806	.893	.801	.914	.821	.820	.763	.898	.780	.931	.698	.926	.795	.864	.887	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

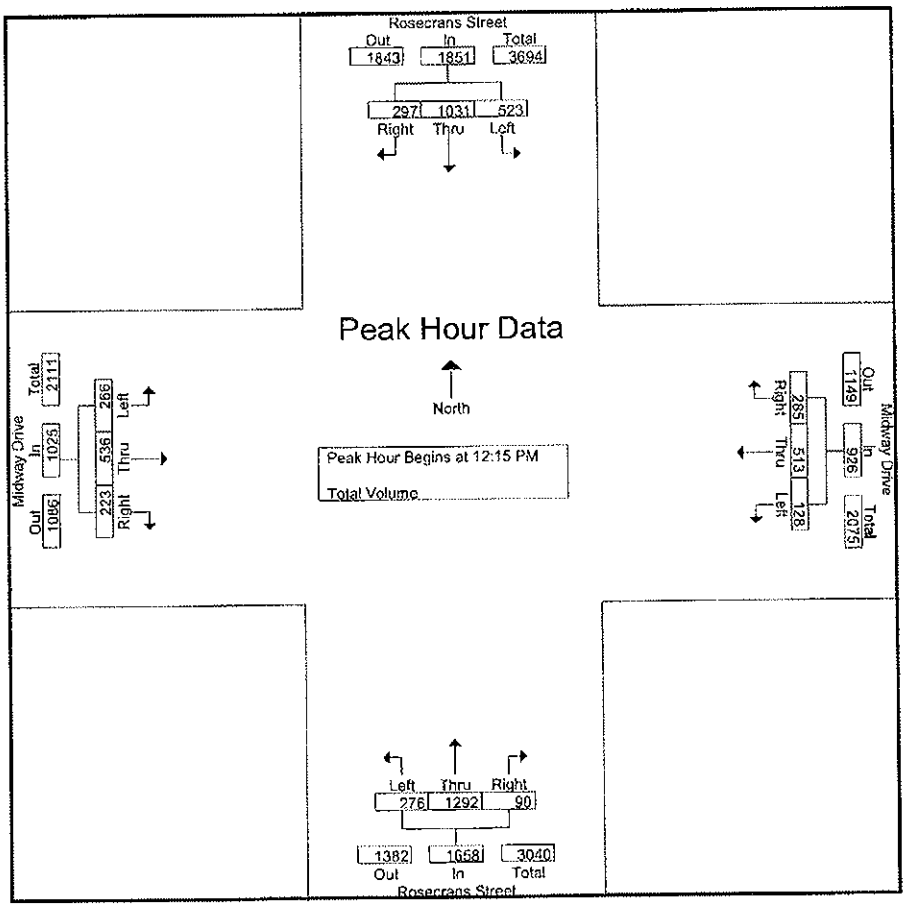
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	123	255	86	464	28	107	62	197	76	270	16	362	90	110	46	246	1269
11:45 AM	131	222	49	402	34	145	55	234	89	319	20	428	50	108	43	201	1265
Total	254	477	135	866	62	252	117	431	165	589	36	790	140	218	89	447	2534
12:00 PM	152	299	69	520	46	120	68	234	49	287	22	358	56	102	42	200	1312
12:15 PM	120	237	76	433	34	143	77	254	73	282	24	379	72	144	68	284	1350
12:30 PM	120	288	84	492	37	120	77	234	76	377	22	475	56	126	55	237	1438
12:45 PM	131	233	68	432	27	144	76	247	63	308	19	390	69	130	58	257	1326
Total	523	1057	297	1877	144	527	298	969	261	1254	87	1602	253	502	223	978	5426
01:00 PM	152	273	69	494	30	106	55	191	64	325	25	414	69	136	42	247	1346
01:15 PM	135	211	73	419	35	102	43	180	72	288	24	384	51	107	36	194	1177
Grand Total	1064	2018	574	3656	271	987	513	1771	562	2456	172	3190	513	963	390	1866	10483
Apprch %	29.1	55.2	15.7		15.3	55.7	29		17.6	77	5.4		27.5	51.6	20.9		
Total %	10.1	19.3	5.5	34.9	2.6	9.4	4.9	16.9	5.4	23.4	1.6	30.4	4.9	9.2	3.7	17.8	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	120	237	76	433	34	143	77	**254**	73	282	24	379	**72**	**144**	**68**	**284**	1350
12:30 PM	120	**288**	**84**	492	**37**	120	77	234	**76**	**377**	**22**	**475**	56	126	55	237	**1438**
12:45 PM	131	233	68	432	27	**144**	76	247	63	308	19	390	69	130	58	257	1326
01:00 PM	**152**	273	69	**494**	30	106	55	191	64	325	**25**	414	69	136	42	247	1346
Total Volume	523	1031	297	1851	128	513	285	926	276	1292	90	1658	266	536	223	1025	5460
% App. Total	28.3	55.7	16		13.8	55.4	30.8		16.6	77.9	5.4		26	52.3	21.8		
PHF	.860	.895	.884	.937	.865	.891	.925	.911	.908	.857	.900	.873	.924	.931	.820	.902	.949

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

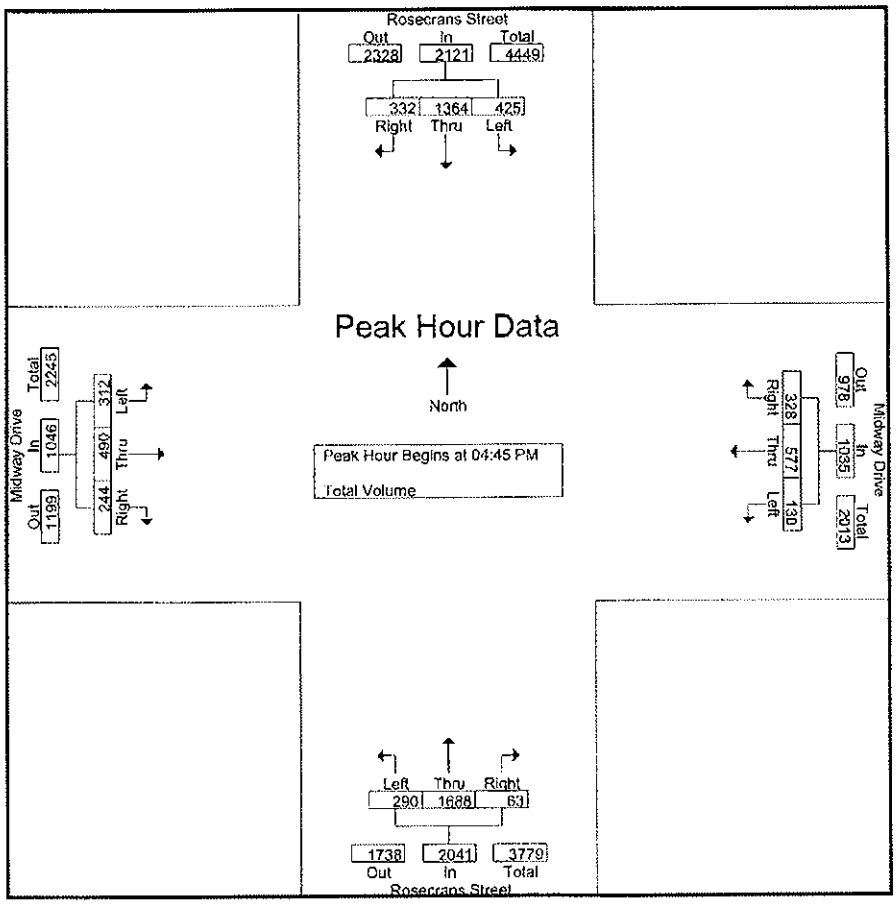
Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				12:30 PM				12:15 PM			
+0 mins.	**152**	**299**	69	**520**	**46**	120	68	234	**76**	**377**	22	**475**	**72**	**144**	**68**	**284**
+15 mins.	120	237	76	433	34	143	77	**254**	63	308	19	390	56	126	55	237
+30 mins.	120	288	**84**	492	37	120	77	234	64	325	**25**	414	69	130	58	257
+45 mins.	131	233	68	432	27	**144**	76	247	72	288	24	384	69	136	42	247
Total Volume	523	1057	297	1877	144	527	298	969	275	1298	90	1663	266	536	223	1025
% App. Total	27.9	56.3	15.8		14.9	54.4	30.8		16.5	78.1	5.4		26	52.3	21.8	
PHF	.860	.884	.884	.902	.783	.915	.968	.954	.905	.861	.900	.875	.924	.931	.820	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	116	330	90	536	40	133	95	268	62	427	17	506	60	109	80	249
+15 mins.	120	332	81	533	23	129	90	242	69	455	14	538	84	108	52	244
+30 mins.	99	344	89	532	38	154	84	276	67	424	13	504	86	129	46	261
+45 mins.	90	358	72	520	39	152	83	274	75	434	14	523	82	144	66	292
Total Volume	425	1364	332	2121	140	568	352	1060	273	1740	58	2071	312	490	244	1046
% App. Total	20	64.3	15.7		13.2	53.6	33.2		13.2	84	2.8		29.8	46.8	23.3	
PHF	.885	.953	.922	.989	.875	.922	.926	.960	.910	.956	.853	.962	.907	.851	.763	.896

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	106	301	72	479	34	138	80	252	62	427	17	506	75	117	42	234	1471
04:15 PM	107	324	78	509	33	128	96	257	69	455	14	538	77	111	52	240	1544
04:30 PM	103	285	80	468	40	133	95	268	67	424	13	504	72	131	56	259	1499
04:45 PM	116	330	90	536	23	129	90	242	75	434	14	523	60	109	80	249	1550
Total	432	1240	320	1992	130	528	361	1019	273	1740	58	2071	284	468	230	982	6064
05:00 PM	120	332	81	533	38	154	84	276	69	398	20	487	84	108	52	244	1540
05:15 PM	99	344	89	532	39	152	83	274	71	432	14	517	86	129	46	261	1584
05:30 PM	90	358	72	520	30	142	71	243	75	424	15	514	82	144	66	292	1569
05:45 PM	121	327	67	515	37	119	62	218	71	350	20	441	64	119	52	235	1409
Total	430	1361	309	2100	144	567	300	1011	286	1604	69	1959	316	500	216	1032	6102
Grand Total	862	2601	629	4092	274	1095	661	2030	559	3344	127	4030	600	968	446	2014	12166
Apprch %	21.1	63.6	15.4		13.5	53.9	32.6		13.9	83	3.2		29.8	48.1	22.1		
Total %	7.1	21.4	5.2	33.6	2.3	9	5.4	16.7	4.6	27.5	1	33.1	4.9	8	3.7	16.6	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	116	330	**90**	**536**	23	129	**90**	242	**75**	**434**	14	**523**	60	109	**80**	249	1550
05:00 PM	**120**	332	81	533	38	**154**	84	**276**	69	398	**20**	487	84	108	52	244	1540
05:15 PM	99	344	89	532	**39**	152	83	274	71	432	14	517	**86**	129	46	261	**1584**
05:30 PM	90	**358**	72	520	30	142	71	243	75	424	15	514	82	**144**	66	**292**	1569
Total Volume	425	1364	332	2121	130	577	328	1035	290	1688	63	2041	312	490	244	1046	6243
% App. Total	20	64.3	15.7		12.6	55.7	31.7		14.2	82.7	3.1		29.8	46.8	23.3		
PHF	.885	.953	.922	.989	.833	.937	.911	.938	.967	.972	.788	.976	.907	.851	.763	.896	.985

(9)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		85	4		87							17	193
7:15 AM		92	8		75							14	189
7:30 AM		118	2		117							10	247
7:45 AM		118	6		99							20	243
8:00 AM		114	8		112							21	255
8:15 AM		129	4		118							20	271
8:30 AM		149	7		150							24	330
8:45 AM		141	6		130							17	294

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	946	45	0	888	0	0	0	0	0	0	143	2022
APPROACH %'s :	0.00%	95.46%	4.54%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		172	4		203							63	442
4:15 PM		185	4		182							44	415
4:30 PM		169	1		228							71	469
4:45 PM		186	2		222							52	462
5:00 PM		220	1		232							53	506
5:15 PM		190	2		183							52	427
5:30 PM		164	1		206							43	414
5:45 PM		151	1		170							30	352
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1437	16	0	1626	0	0	0	0	0	0	408	3487
APPROACH %'s :	0.00%	98.90%	1.10%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
[illegible]													
[illegible]													

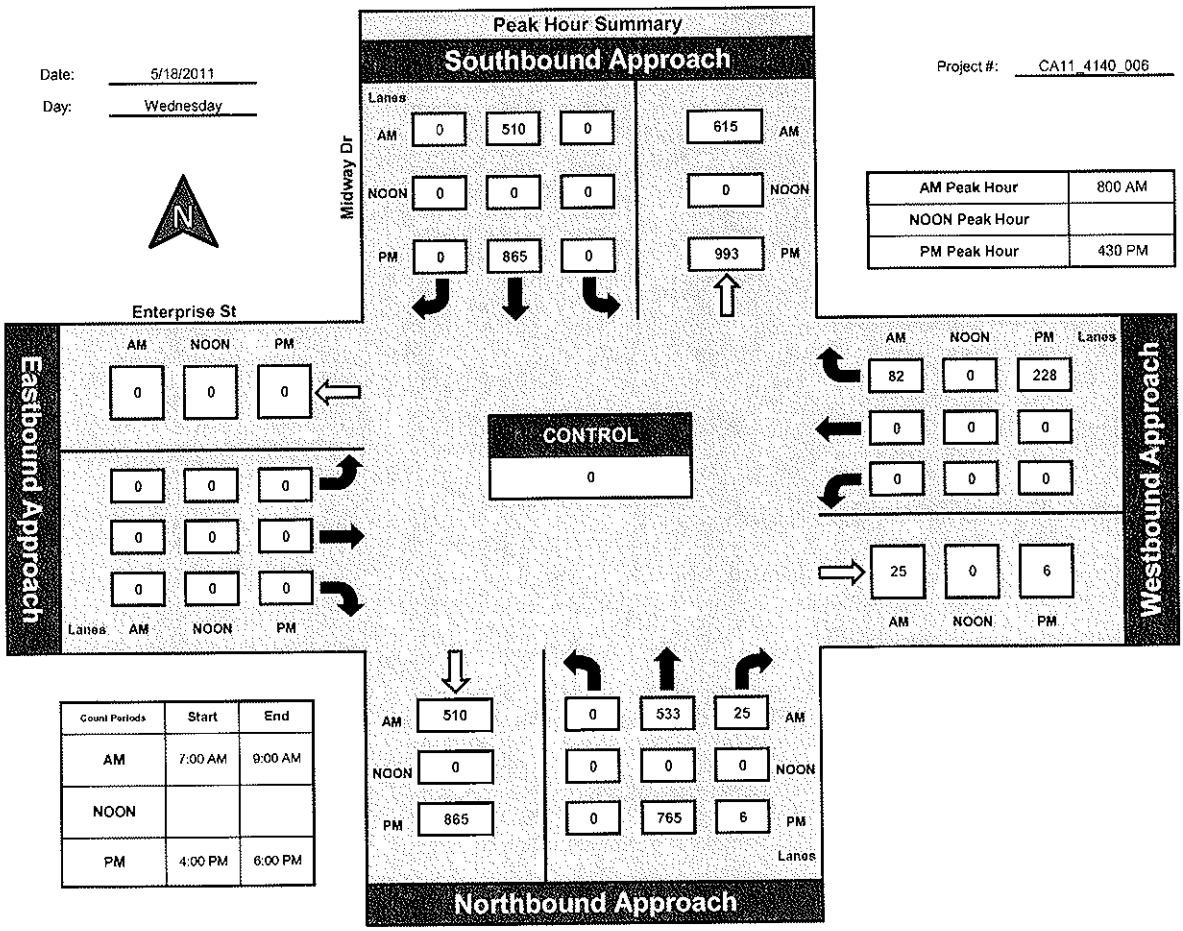
CONTROL :

ITM Peak Hour Summary

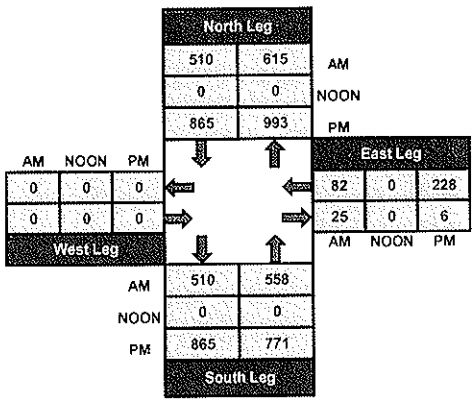
Prepared by:

National Data & Surveying Services

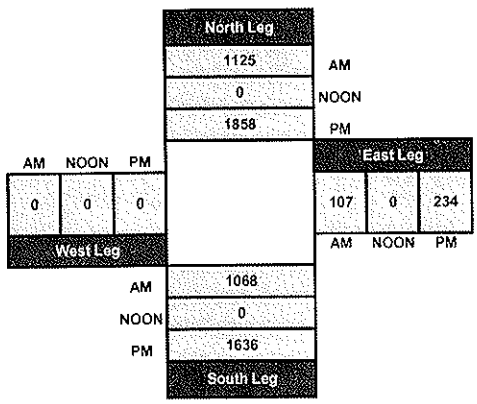
Midway Dr and Enterprise St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(10)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				65		21		160			380	84	710
7:15 AM				55		21		210			329	105	720
7:30 AM				95		21		186			248	115	665
7:45 AM				87		13		189			338	129	756
8:00 AM				89		19		210			314	119	751
8:15 AM				102		19		227			306	132	786
8:30 AM				119		28		210			253	152	762
8:45 AM				108		25		170			204	151	658

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	720	0	167	0	1562	0	0	2372	987	5808
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	81.17%	0.00%	18.83%	0.00%	100.00%	0.00%	0.00%	70.62%	29.38%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

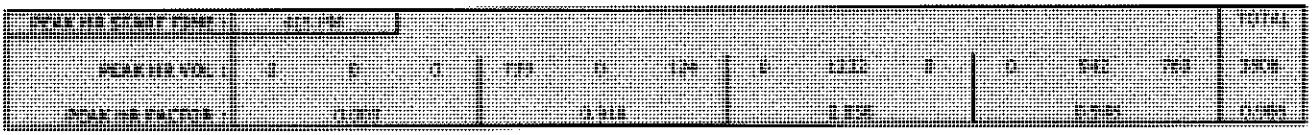
City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				172		27		333			223	175	930
4:15 PM				159		27		359			230	190	965
4:30 PM				192		32		310			227	170	931
4:45 PM				187		31		293			255	188	954
5:00 PM				201		34		270			230	221	956
5:15 PM				157		25		278			211	189	860
5:30 PM				175		31		216			206	169	797
5:45 PM				148		17		180			193	149	687

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	1391	0	224	0	2239	0	0	1775	1451	7080
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	86.13%	0.00%	13.87%	0.00%	100.00%	0.00%	0.00%	55.02%	44.98%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

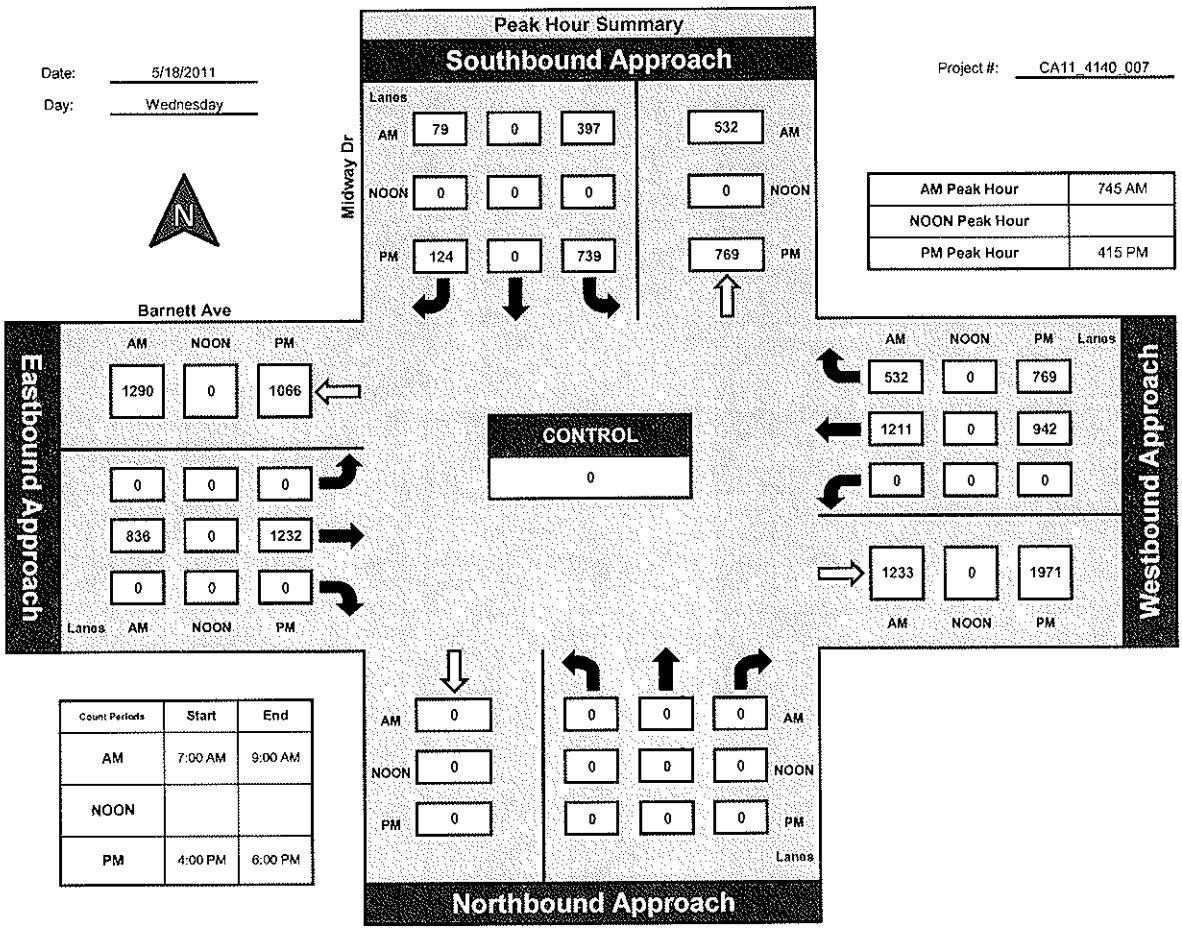
National Data & Surveying Services

Midway Dr and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

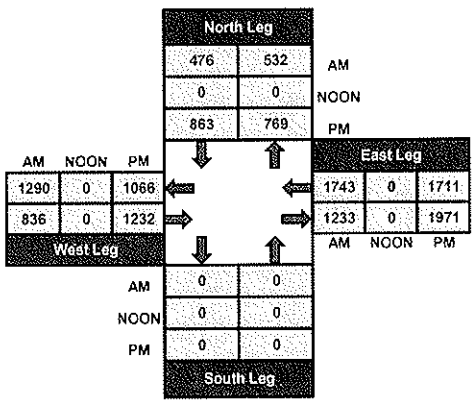
Project #: CA11_4140_007



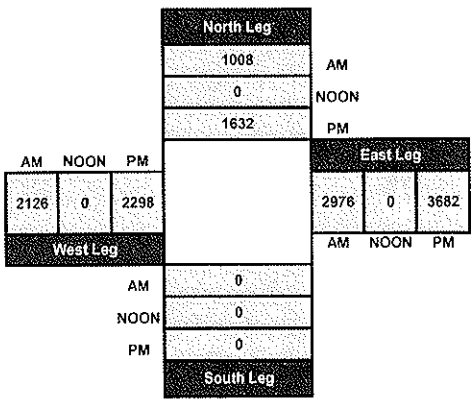
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

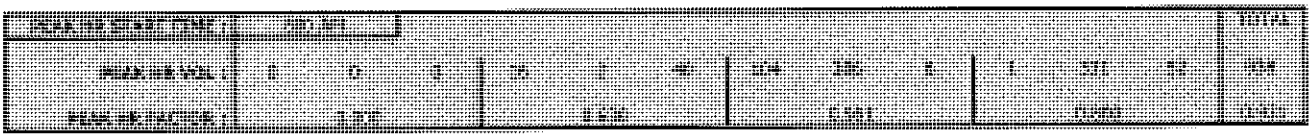
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				7	0	11	24	66	1	0	47	9	165
7:15 AM				7	1	18	30	83	0	0	36	6	181
7:30 AM				8	0	8	36	74	1	0	54	18	199
7:45 AM				3	0	16	32	99	2	0	68	15	235
8:00 AM				1	0	13	33	95	1	1	69	12	225
8:15 AM				8	1	14	25	99	0	0	78	14	239
8:30 AM				3	0	8	25	93	3	0	80	10	222
8:45 AM				4	1	5	21	99	2	0	104	16	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	41	3	93	226	708	10	1	536	100	1718
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	29.93%	2.19%	67.88%	23.94%	75.00%	1.06%	0.16%	84.14%	15.70%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

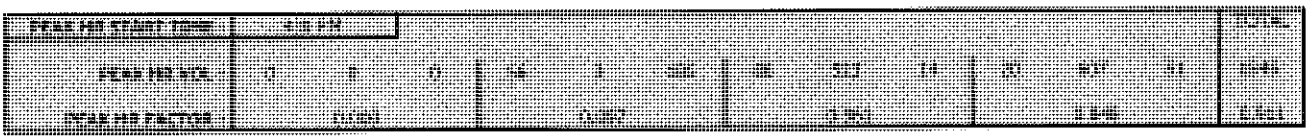
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				9	0	24	13	83	0	1	109	9	248
4:15 PM				12	0	36	13	105	2	4	121	11	304
4:30 PM				15	1	43	21	131	4	7	150	16	388
4:45 PM				14	0	48	25	130	7	5	177	18	424
5:00 PM				13	2	53	22	127	3	2	128	8	358
5:15 PM				14	0	41	18	135	0	6	152	9	375
5:30 PM				11	0	27	23	123	2	2	137	9	334
5:45 PM				12	2	35	28	136	5	3	149	8	378
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	100	5	307	163	970	23	30	1123	88	2809
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	24.27%	1.21%	74.51%	14.10%	83.91%	1.99%	2.42%	90.49%	7.09%	



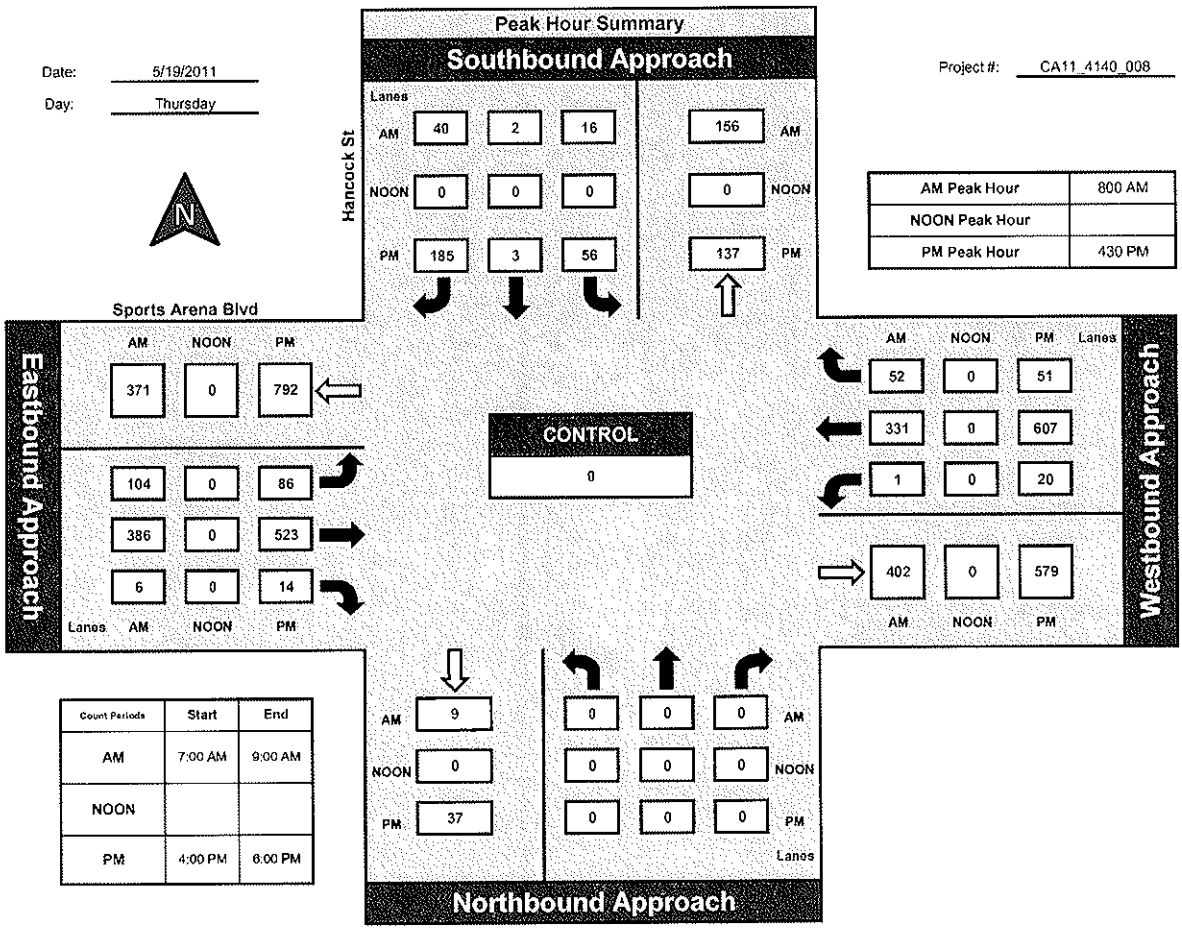
CONTROL :

ITM Peak Hour Summary

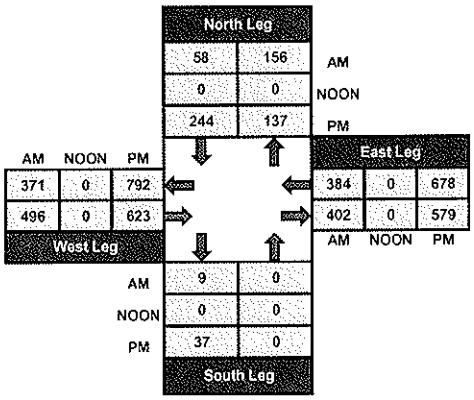
Prepared by:

National Data & Surveying Services

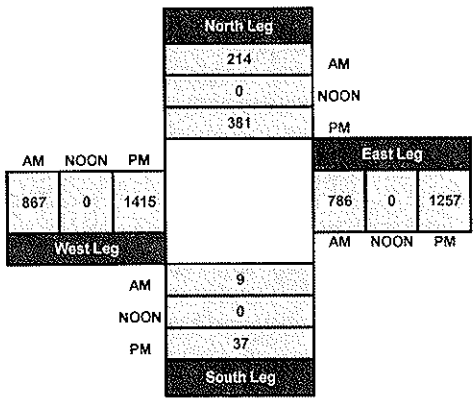
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		1		0				0	0			1
7:15 AM	0		1		0				0	0			1
7:30 AM	1		2		1				0	0			4
7:45 AM	0		1		0				0	0			1
8:00 AM	0		0		1				0	1			2
8:15 AM	0		2		1				1	0			4
8:30 AM	2		0		1				1	1			5
8:45 AM	0		0		0				0	0			

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	7	0	4	0	0	0	2	2	0	0	18
APPROACH %'s :	30.00%	0.00%	70.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

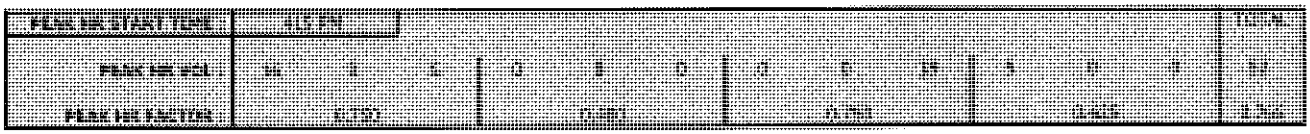
Project ID: CA11_4140_008 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		1		1				2	0			4
4:15 PM	5		2		0				2	2			11
4:30 PM	4		1		5				6	1			17
4:45 PM	4		2		0				5	2			13
5:00 PM	3		0		3				5	0			11
5:15 PM	2		0		0				1	1			4
5:30 PM	1		2		1				2	1			7
5:45 PM	3		2		2				3	2			12

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	0	10	0	12	0	0	0	26	9	0	0	79
APPROACH %'s :	68.75%	0.00%	31.25%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



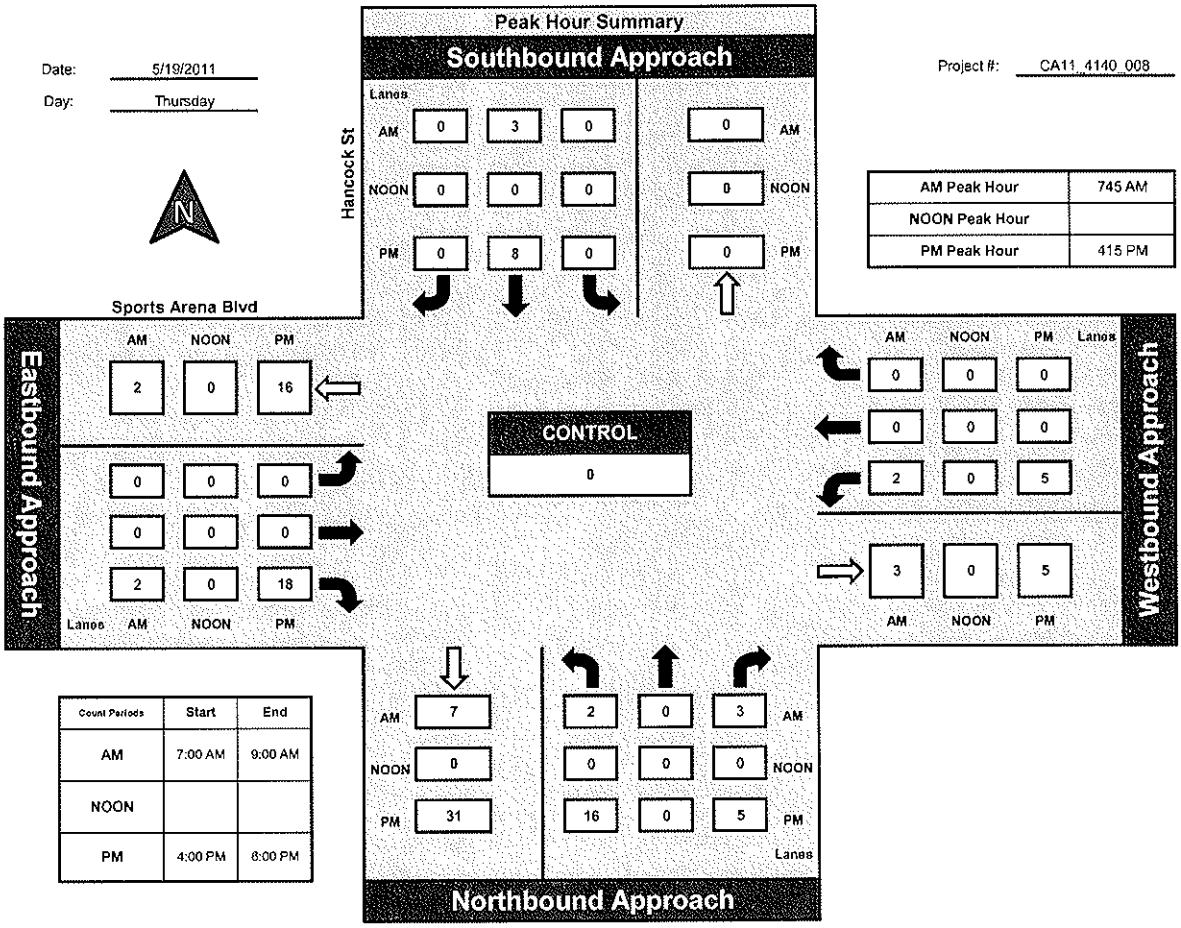
CONTROL :

ITM Peak Hour Summary

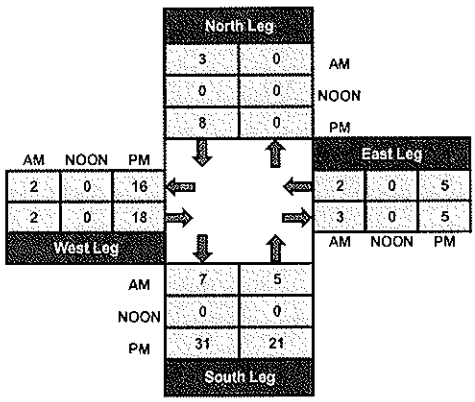
Prepared by:

National Data & Surveying Services

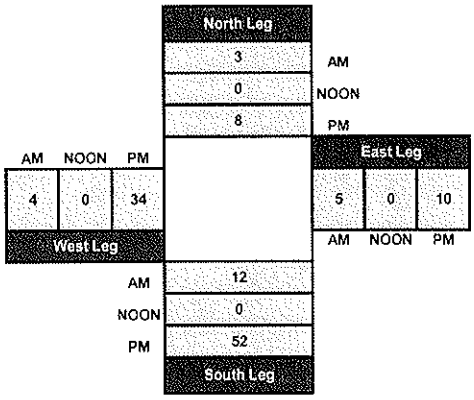
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(12)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	1	30	1	2	5	7	79	6	20	57	6	229
7:15 AM	13	2	20	3	5	3	4	90	15	14	49	9	227
7:30 AM	17	6	39	4	3	6	9	74	7	29	74	11	279
7:45 AM	12	10	22	7	4	13	9	68	16	27	57	10	255
8:00 AM	12	6	15	11	4	15	19	64	17	28	50	22	263
8:15 AM	23	8	19	10	6	23	20	71	11	24	44	20	279
8:30 AM	16	15	34	8	6	32	17	65	28	34	51	23	329
8:45 AM	23	11	27	17	7	30	12	81	20	30	82	15	355
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	131	59	206	61	37	127	97	592	120	206	464	116	2216
APPROACH %'s :	33.08%	14.90%	52.02%	27.11%	16.44%	56.44%	11.99%	73.18%	14.83%	26.21%	59.03%	14.76%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	74	40	110	36	20	83	65	290	72	116	279	76	1261
PEAK HR FACTOR :	0.803			0.782			0.906			0.906			0.907

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

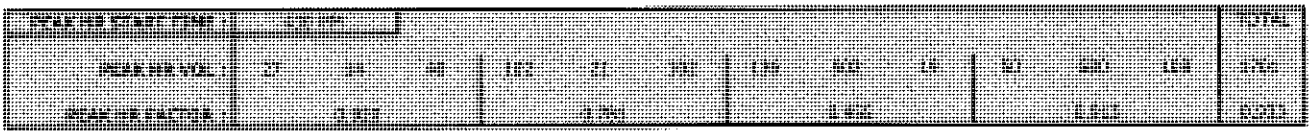
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	2	10	33	2	23	27	95	2	18	135	29	377
4:15 PM	6	3	8	28	5	23	35	106	10	8	139	29	400
4:30 PM	10	3	9	33	6	33	44	112	4	19	150	33	456
4:45 PM	6	5	10	22	5	19	25	125	6	9	158	18	408
5:00 PM	8	3	11	24	4	23	34	130	8	11	137	25	418
5:15 PM	3	3	10	23	6	27	33	135	1	11	135	32	419
5:30 PM	8	0	9	22	3	22	27	123	5	13	140	21	393
5:45 PM	5	5	8	28	6	21	21	136	5	10	119	35	399
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	47	24	75	213	37	191	246	962	41	99	1113	222	3270
APPROACH %'s :	32.19%	16.44%	51.37%	48.30%	8.39%	43.31%	19.70%	77.02%	3.28%	6.90%	77.62%	15.48%	



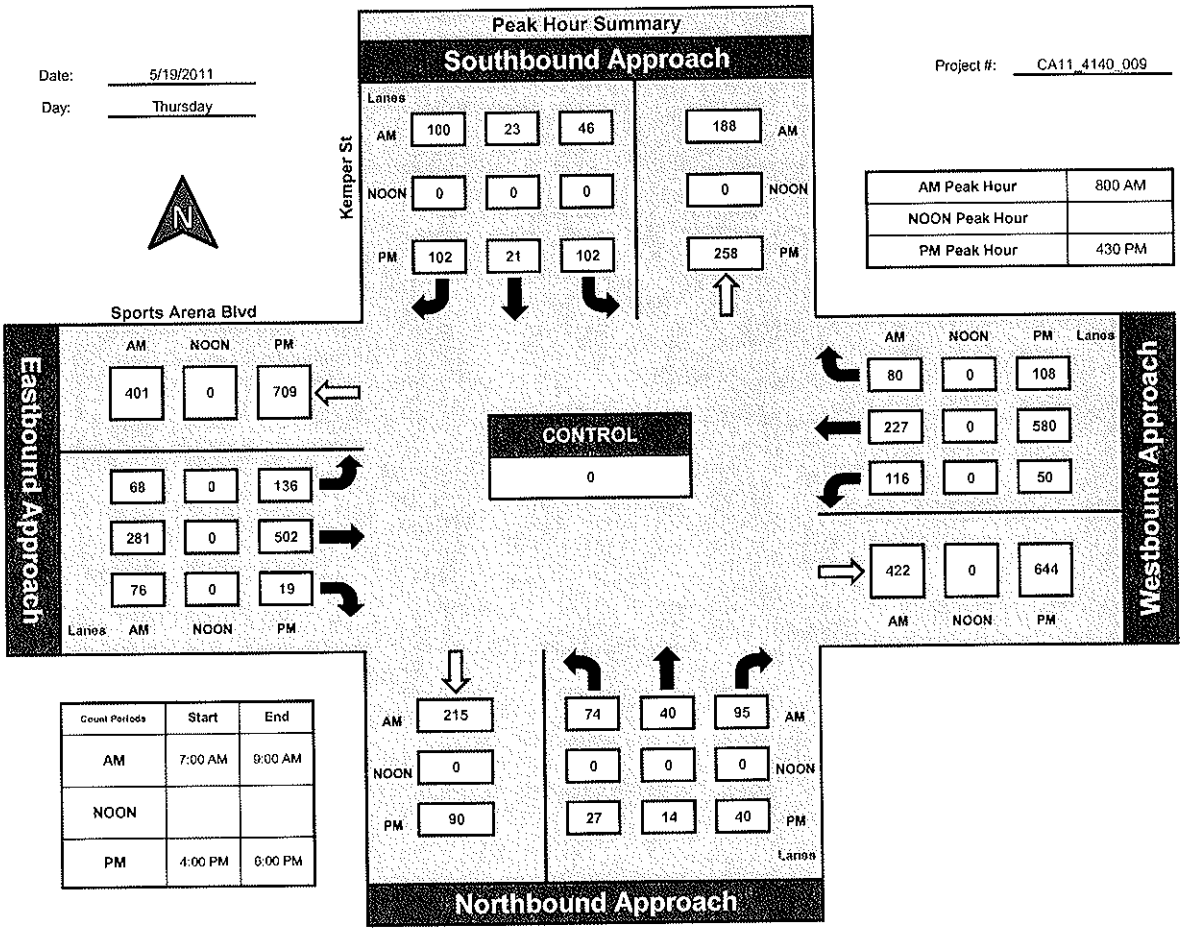
CONTROL :

ITM Peak Hour Summary

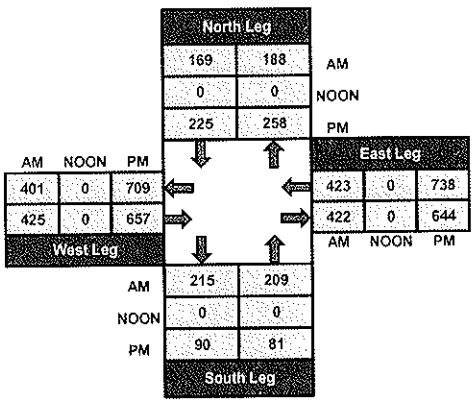
Prepared by:

National Data & Surveying Services

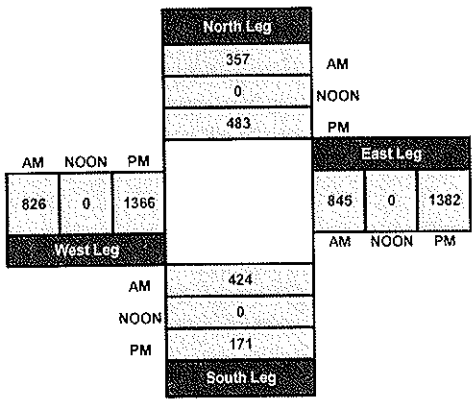
Kemper St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(13)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_010

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	0	1	2	0	4	11	69	12	1	63	1	171
7:15 AM	4	0	4	2	2	4	16	74	11	2	73	5	197
7:30 AM	5	0	1	7	0	5	14	87	15	1	96	2	233
7:45 AM	7	0	3	1	0	8	12	81	10	2	87	3	214
8:00 AM	7	1	0	5	0	7	20	65	11	4	78	2	200
8:15 AM	4	0	3	4	1	10	23	75	7	2	82	5	216
8:30 AM	6	3	2	5	1	11	16	66	9	2	92	11	224
8:45 AM	9	1	3	11	1	12	13	76	12	2	106	7	253
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	49	5	17	37	5	61	125	593	87	16	677	36	1708
APPROACH %'s :	69.01%	7.04%	23.94%	35.92%	4.85%	59.22%	15.53%	73.66%	10.81%	2.19%	92.87%	4.94%	
PEAK HR START TIME	[illegible]												
PEAK HR VOL	[illegible]												
PEAK HR FACTOR	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

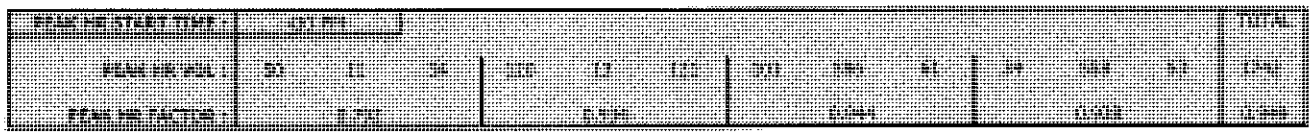
National Data & Surveying Services

Project ID: CA11_4140_010 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	12	3	7	18	3	37	35	146	10	4	136	13	424
4:15 PM	8	9	8	22	3	40	25	139	17	9	131	14	425
4:30 PM	17	4	9	25	2	36	25	152	17	8	146	18	459
4:45 PM	7	2	4	33	3	32	24	129	15	7	138	8	402
5:00 PM	15	3	9	33	5	24	24	162	12	6	143	11	447
5:15 PM	11	2	12	29	3	29	28	143	17	13	131	16	434
5:30 PM	11	2	9	20	0	24	13	149	19	10	130	13	400
5:45 PM	13	0	10	33	3	23	25	131	21	9	131	17	416
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	94	25	68	213	22	245	199	1151	128	66	1086	110	3407
APPROACH %'s :	50.27%	13.37%	36.36%	44.38%	4.58%	51.04%	13.46%	77.88%	8.66%	5.23%	86.05%	8.72%	



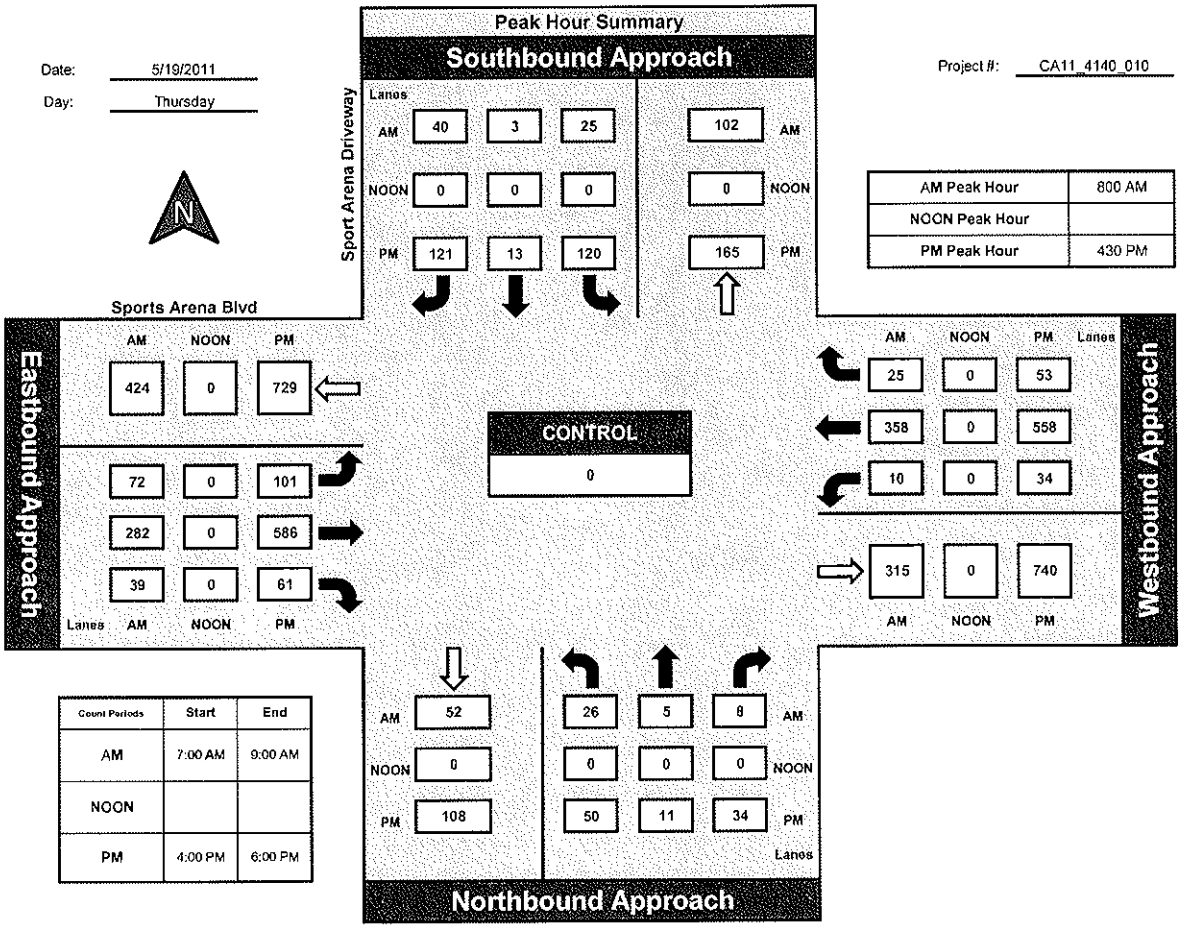
CONTROL :

ITM Peak Hour Summary

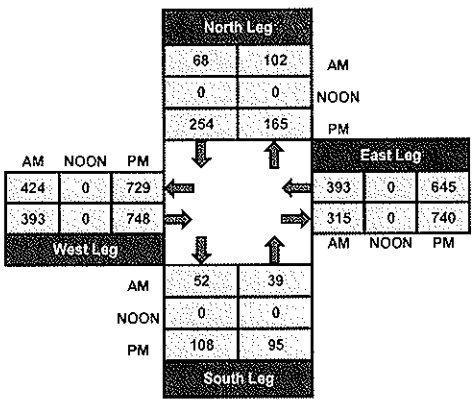
Prepared by:

National Data & Surveying Services

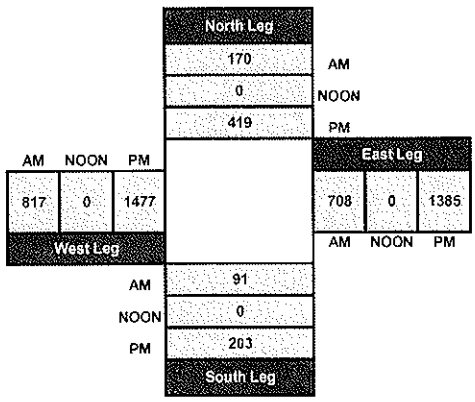
Sport Arena Driveway and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(14)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	0	5			0	3	77	1	7	98	10	203
7:15 AM	2	0	6			0	7	83	5	5	117	8	233
7:30 AM	1	0	2			0	7	122	9	8	121	9	279
7:45 AM	1	1	9			0	6	105	9	11	139	5	286
8:00 AM	3	0	10			1	5	108	6	6	135	10	284
8:15 AM	3	0	8			0	8	146	5	9	144	8	331
8:30 AM	3	0	5			0	11	131	6	8	161	9	334
8:45 AM	4	0	11			1	6	139	9	18	149	9	346
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	1	56	0	0	2	53	911	50	72	1064	68	2296
APPROACH %'s :	25.00%	1.32%	73.68%	0.00%	0.00%	100.00%	5.23%	89.84%	4.93%	5.98%	88.37%	5.65%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]			[illegible]			[illegible]			[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	5	1	21			1	11	196	23	26	179	5	468
4:15 PM	8	1	14			4	5	183	25	26	198	3	467
4:30 PM	3	1	11			0	5	202	33	30	217	2	504
4:45 PM	8	2	10			0	1	193	29	41	177	1	462
5:00 PM	6	1	20			1	0	189	24	18	190	0	449
5:15 PM	7	0	19			0	1	175	22	25	221	0	470
5:30 PM	8	1	24			1	3	181	20	30	194	0	462
5:45 PM	12	1	20			3	0	193	15	24	194	1	463
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	57	8	139	0	0	10	26	1512	191	220	1570	12	3745
APPROACH %'s :	27.94%	3.92%	68.14%	0.00%	0.00%	100.00%	1.50%	87.45%	11.05%	12.21%	87.13%	0.67%	
PEAK HR START TIME :	4:0 PM												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

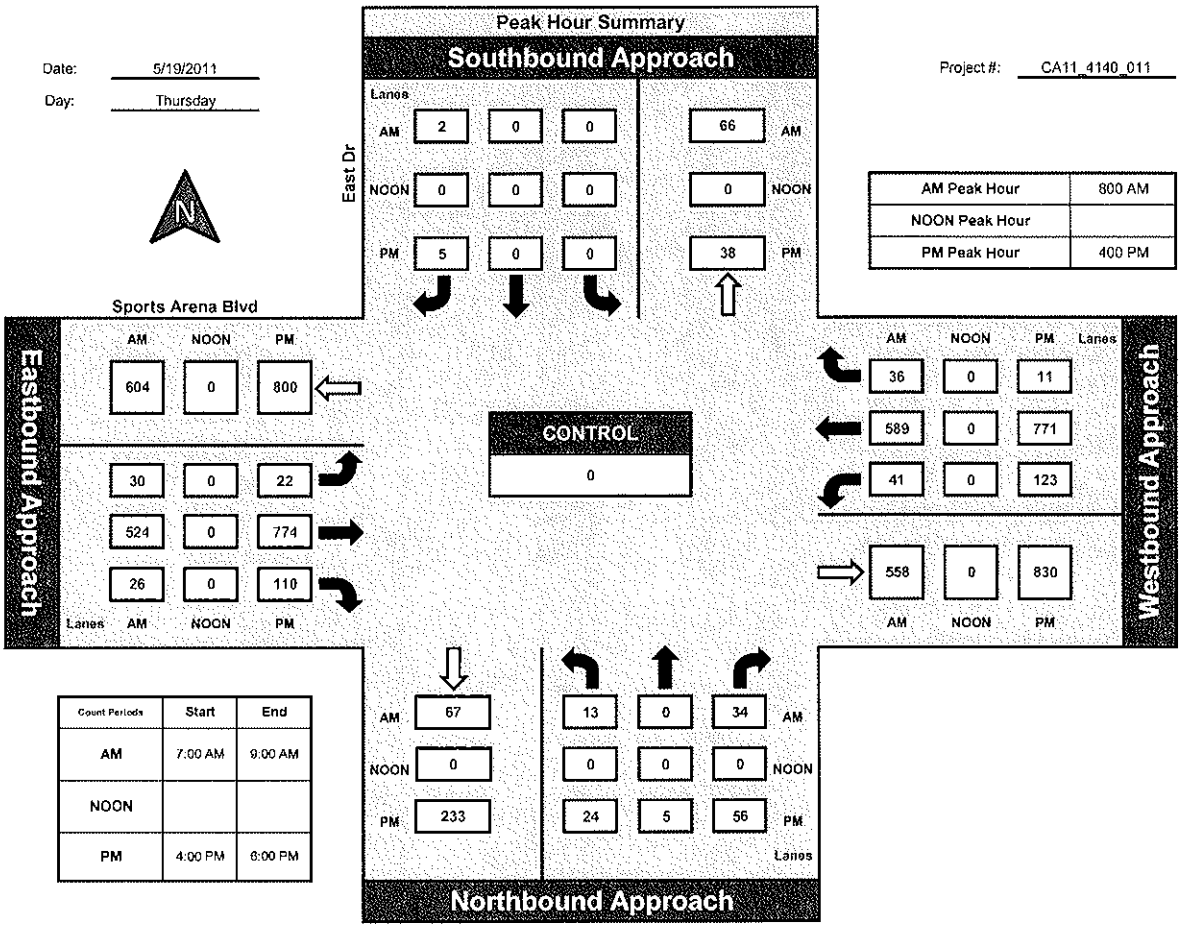
National Data & Surveying Services

East Dr and Sports Arena Blvd , City of San Diego

Date: 5/19/2011

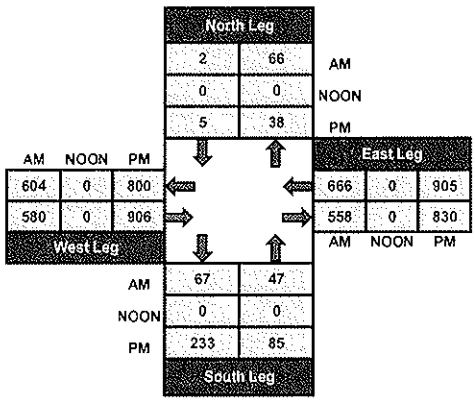
Day: Thursday

Project #: CA11_4140_011

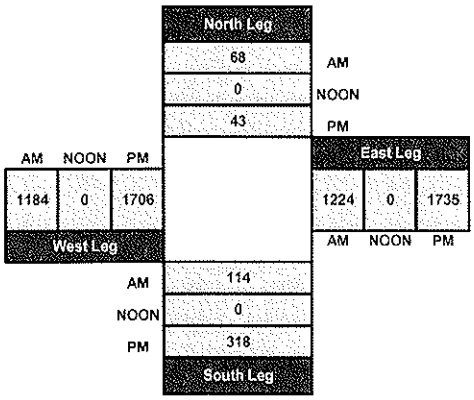


AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Total Ins & Outs



Total Volume Per Leg



(15)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

(15)

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

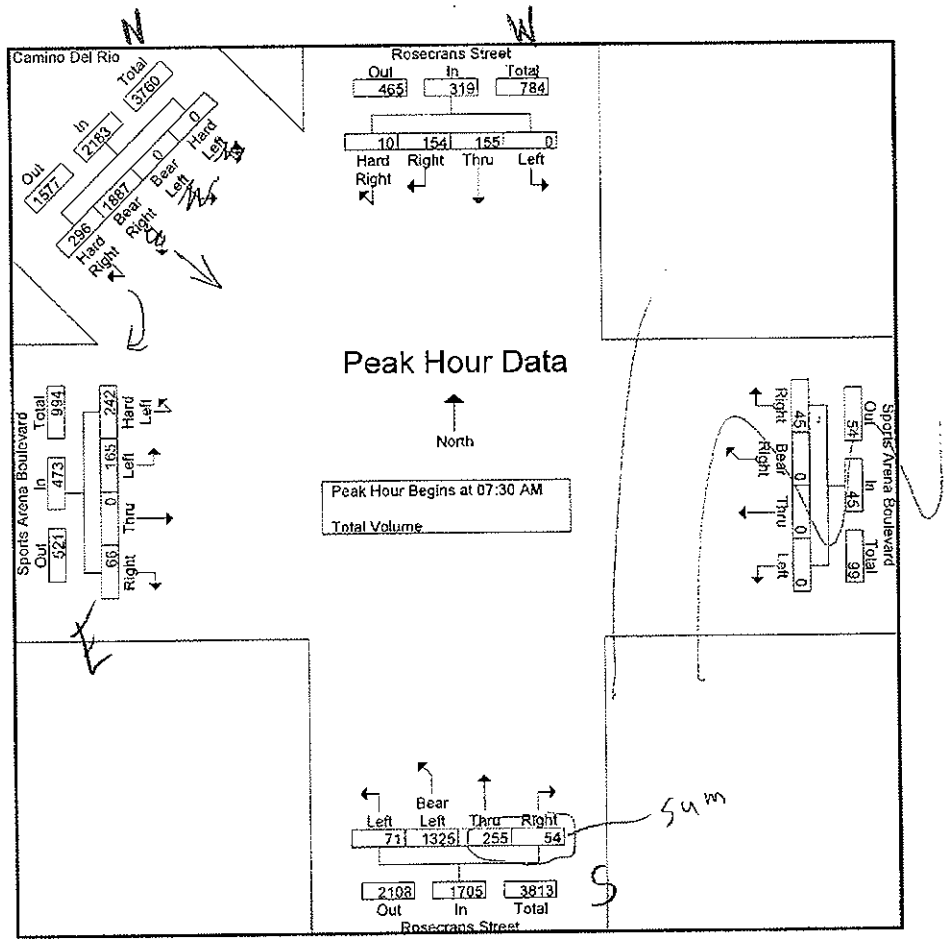
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
06:45 AM	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
Total	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
07:00 AM	0	25	23	1	49	0	0	0	8	8	20	227	39	4	290	42	30	0	15	87	0	0	504	54	558	992
07:15 AM	0	31	36	1	68	0	0	0	13	13	15	292	57	8	372	53	33	0	9	95	0	0	495	65	560	1108
07:30 AM	0	36	28	2	66	0	0	0	10	10	25	343	56	9	433	80	51	0	17	148	0	0	419	54	473	1130
07:45 AM	0	47	48	3	98	0	0	0	9	9	14	310	67	21	412	54	41	0	18	113	0	0	525	80	605	1237
Total	0	139	135	7	281	0	0	0	40	40	74	1172	219	42	1507	229	155	0	59	443	0	0	1943	253	2196	4467
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	74	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	15	15	23	351	58	13	445	50	43	0	18	111	0	0	454	88	542	1202
08:30 AM	0	45	44	4	93	0	0	0	18	18	27	322	64	9	422	62	37	0	16	115	0	0	352	67	419	1067
Grand Total	0	278	283	16	577	0	0	0	88	88	151	2378	457	85	3071	432	295	0	118	845	0	0	3653	542	4195	8776
Apprch %	0	48.2	49	2.8		0	0	0	100		4.9	77.4	14.9	2.8		51.1	34.9	0	14		0	0	87.1	12.9		
Total %	0	3.2	3.2	0.2	6.6	0	0	0	1	1	1.7	27.1	5.2	1	35	4.9	3.4	0	1.3	9.6	0	0	41.6	6.2	47.8	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:30 AM																										
07:30 AM	0	36	28	2	66	0	0	0	10	10	**25**	343	56	9	433	**80**	**51**	0	17	**148**	0	0	419	54	473	1130
07:45 AM	0	**47**	**48**	3	**98**	0	0	0	9	9	14	310	67	**21**	412	54	41	0	**18**	113	0	0	**525**	80	**605**	**1237**
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	**74**	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	**15**	**15**	23	**351**	58	13	445	50	43	0	18	111	0	0	454	**88**	542	1202
Total Volume	0	155	154	10	319	0	0	0	45	45	71	1325	255	54	1705	242	165	0	66	473	0	0	1887	296	2183	4725
% App. Total	0	48.6	48.3	3.1		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	86.4	13.6		
PHF	.000	.824	.802	.625	.814	.000	.000	.000	.750	.750	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.899	.841	.902	.955

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					07:45 AM					07:30 AM					07:30 AM					07:15 AM				
+0 mins.	0	47	48	3	98	0	0	0	9	9	25	343	56	9	433	80	51	0	17	148	0	0	495	65	560
+15 mins.	0	34	31	1	66	0	0	0	11	11	14	310	67	21	412	54	41	0	18	113	0	0	419	54	473
+30 mins.	0	38	47	4	89	0	0	0	15	15	9	321	74	11	415	58	30	0	13	101	0	0	525	80	605
+45 mins.	0	45	44	4	93	0	0	0	18	18	23	351	58	13	445	50	43	0	18	111	0	0	489	74	563
Total Volume	0	164	170	12	346	0	0	0	53	53	71	1325	255	54	1705	242	165	0	66	473	0	0	1928	273	2201
% App. Total	0	47.4	49.1	3.5		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	87.6	12.4	
PHF	.000	.872	.885	.750	.883	.000	.000	.000	.736	.736	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.918	.853	.910

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

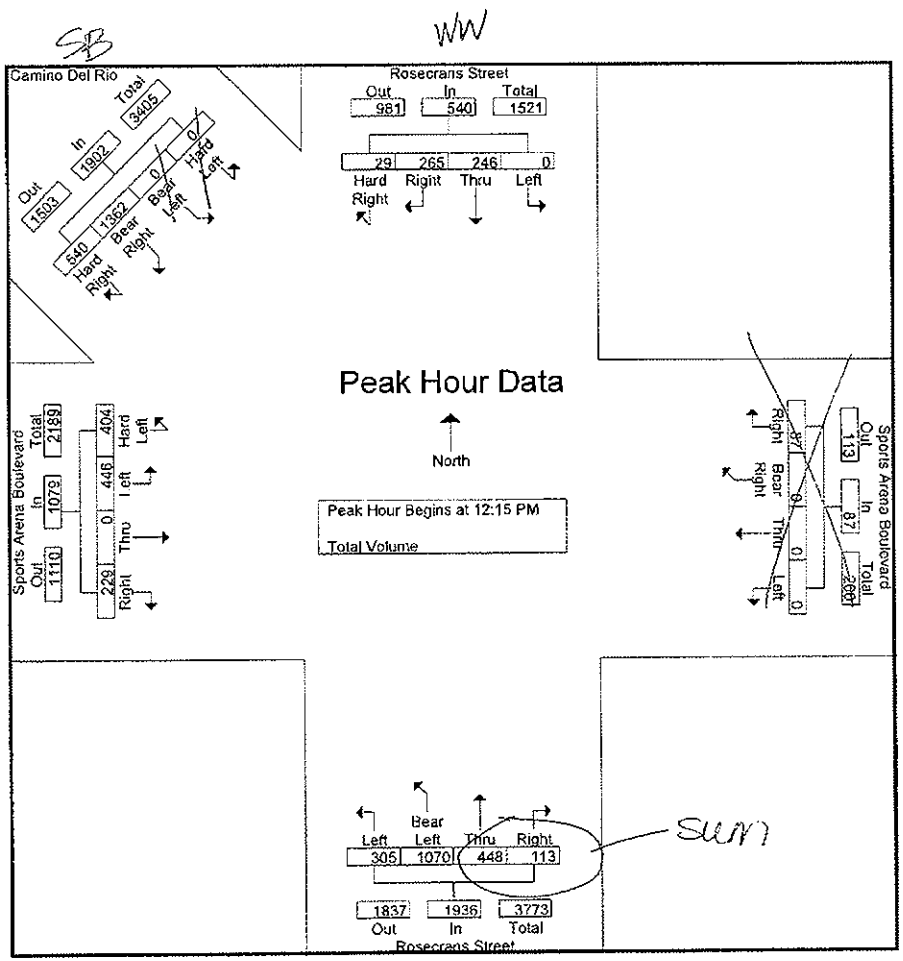
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
11:30 AM	0	55	87	6	148	0	0	0	25	25	81	228	100	26	435	86	79	0	48	213	0	0	328	132	460	1281
11:45 AM	0	47	93	7	147	0	0	0	23	23	79	246	104	18	447	84	86	0	53	223	0	0	377	161	538	1378
Total	0	102	180	13	295	0	0	0	48	48	160	474	204	44	882	170	165	0	101	436	0	0	705	293	998	2659
12:00 PM	0	73	90	2	165	0	0	0	19	19	71	252	99	9	431	93	105	0	59	257	0	0	328	146	474	1346
12:15 PM	0	66	70	7	143	0	0	0	17	17	93	231	105	23	452	78	93	0	68	239	0	0	353	159	512	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	299	122	27	525	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	10	118	0	0	0	23	23	75	241	116	38	470	95	105	0	43	243	0	0	339	119	458	1312
Total	0	245	284	21	550	0	0	0	81	81	316	1023	442	97	1878	376	418	0	224	1018	0	0	1364	556	1920	5447
01:00 PM	0	74	71	10	155	0	0	0	25	25	60	299	105	25	489	121	133	0	64	318	0	0	326	130	456	1443
01:15 PM	0	51	61	5	117	0	0	0	21	21	48	221	94	18	381	87	122	0	41	250	0	0	330	119	449	1218
Grand Total	0	472	596	49	1117	0	0	0	175	175	584	2017	845	184	3630	754	838	0	430	2022	0	0	2725	1098	3823	10767
Apprch %	0	42.3	53.4	4.4		0	0	0	100		16.1	55.6	23.3	5.1		37.3	41.4	0	21.3		0	0	71.3	28.7		
Total %	0	4.4	5.5	0.5	10.4	0	0	0	1.6	1.6	5.4	18.7	7.8	1.7	33.7	7	7.8	0	4	18.8	0	0	25.3	10.2	35.5	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 12:15 PM																										
12:15 PM	0	66	70	7	143	0	0	0	17	17	**93**	231	105	23	452	78	93	0	**68**	239	0	0	**353**	**159**	**512**	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	**299**	**122**	27	**525**	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	**10**	118	0	0	0	23	23	75	241	116	**38**	470	95	105	0	43	243	0	0	339	119	458	1312
01:00 PM	0	**74**	**71**	10	**155**	0	0	0	**25**	**25**	60	299	105	25	489	**121**	**133**	0	64	**318**	0	0	326	130	456	**1443**
Total Volume	0	246	265	29	540	0	0	0	87	87	305	1070	448	113	1936	404	446	0	229	1079	0	0	1362	540	1902	5544
% App. Total	0	45.6	49.1	5.4		0	0	0	100		15.8	55.3	23.1	5.8		37.4	41.3	0	21.2		0	0	71.6	28.4		
PHF	.000	.831	.933	.725	.871	.000	.000	.000	.870	.870	.820	.895	.918	.743	.922	.835	.838	.000	.842	.848	.000	.000	.965	.849	.929	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:30 AM					12:30 PM					12:15 PM					12:30 PM					11:45 AM				
+0 mins.	0	55	87	6	148	0	0	0	22	22	**93**	231	105	23	452	110	115	0	54	279	0	0	377	**161**	**538**
+15 mins.	0	47	**93**	7	147	0	0	0	23	23	77	**299**	**122**	27	**525**	95	105	0	43	243	0	0	328	146	474
+30 mins.	0	**73**	90	2	**165**	0	0	0	**25**	**25**	75	241	116	38	470	**121**	**133**	0	**64**	**318**	0	0	353	159	512
+45 mins.	0	66	70	7	143	0	0	0	21	21	60	299	105	25	489	87	122	0	41	250	0	0	344	132	476
Total Volume	0	241	340	22	603	0	0	0	91	91	305	1070	448	113	1936	413	475	0	202	1090	0	0	1402	598	2000
% App. Total	0	40	56.4	3.6		0	0	0	100		15.8	55.3	23.1	5.8		37.9	43.6	0	18.5		0	0	70.1	29.9	
PHF	.000	.825	.914	.786	.914	.000	.000	.000	.910	.910	.820	.895	.918	.743	.922	.853	.893	.000	.789	.857	.000	.000	.930	.929	.929

Counts Unlimited Inc.
25286 Jadyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

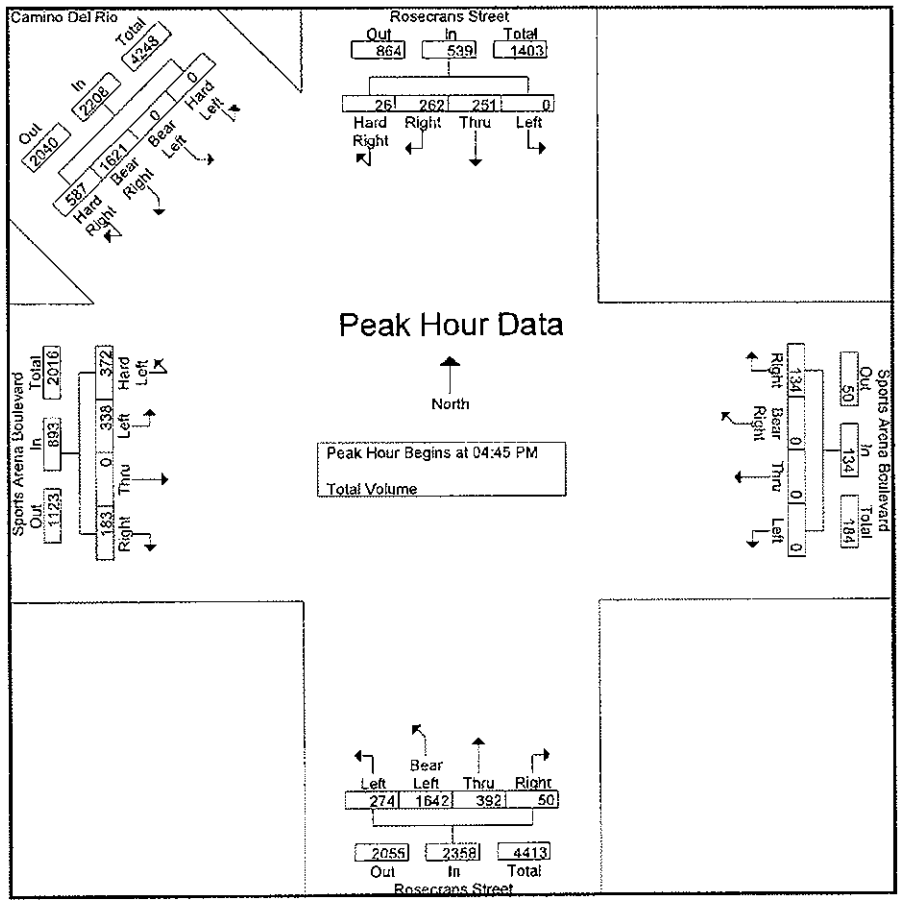
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
04:00 PM	0	47	67	9	123	0	0	0	29	29	50	417	101	17	585	117	81	0	46	244	0	0	384	134	518	1499
04:15 PM	0	60	83	5	148	0	0	0	45	45	60	488	90	21	659	82	84	0	34	200	0	0	403	104	507	1559
04:30 PM	0	51	87	7	145	0	0	0	47	47	54	407	106	18	585	85	78	0	30	193	0	0	368	129	497	1467
04:45 PM	0	55	53	8	116	0	0	0	35	35	58	430	98	19	605	100	90	0	48	238	0	0	425	136	561	1555
Total	0	213	290	29	532	0	0	0	156	156	222	1742	395	75	2434	384	333	0	158	875	0	0	1580	503	2083	6080
05:00 PM	0	61	62	7	130	0	0	0	38	38	62	387	109	12	570	92	78	0	49	219	0	0	397	165	562	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	74	433	92	12	611	87	81	0	40	208	0	0	407	148	555	1557
05:30 PM	0	61	80	6	147	0	0	0	24	24	80	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
05:45 PM	0	62	74	9	145	0	0	0	24	24	63	338	83	16	500	87	85	0	51	223	0	0	381	134	515	1407
Total	0	258	283	27	568	0	0	0	123	123	279	1550	377	47	2253	359	333	0	186	878	0	0	1577	585	2162	5984
Grand Total	0	471	573	56	1100	0	0	0	279	279	501	3292	772	122	4687	743	666	0	344	1753	0	0	3157	1088	4245	12064
Apprch %	0	42.8	52.1	5.1		0	0	0	100		10.7	70.2	16.5	2.6		42.4	38	0	19.6		0	0	74.4	25.6		
Total %	0	3.9	4.7	0.5	9.1	0	0	0	2.3	2.3	4.2	27.3	6.4	1	38.9	6.2	5.5	0	2.9	14.5	0	0	26.2	9	35.2	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 04:45 PM																										
04:45 PM	0	55	53	**8**	116	0	0	0	35	35	58	430	98	**19**	605	**100**	**90**	0	48	**238**	0	0	**425**	136	561	1555
05:00 PM	0	61	62	7	130	0	0	0	**38**	**38**	62	387	**109**	12	570	92	78	0	**49**	219	0	0	397	**165**	**562**	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	**74**	**433**	92	12	**611**	87	81	0	40	208	0	0	407	148	555	**1557**
05:30 PM	0	61	**80**	6	**147**	0	0	0	24	24	**80**	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
Total Volume	0	251	262	26	539	0	0	0	134	134	274	1642	392	50	2358	372	338	0	183	893	0	0	1621	587	2208	6132
% App. Total	0	46.6	48.6	4.8		0	0	0	100		11.6	69.6	16.6	2.1		41.7	37.8	0	20.5		0	0	73.4	26.6		
PHF	.000	.848	.819	.813	.917	.000	.000	.000	.882	.882	.856	.948	.899	.658	.965	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982	.985

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					04:15 PM					04:00 PM					04:45 PM					04:45 PM				
+0 mins.	0	61	62	7	130	0	0	0	45	45	50	417	101	17	585	**100**	**90**	0	48	**238**	0	0	425	136	561
+15 mins.	0	**74**	67	5	146	0	0	0	**47**	**47**	**60**	**488**	90	**21**	**659**	92	78	0	**49**	219	0	0	397	**165**	**562**
+30 mins.	0	61	**80**	6	**147**	0	0	0	35	35	54	407	**106**	18	585	87	81	0	40	208	0	0	407	148	555
+45 mins.	0	62	74	9	145	0	0	0	38	38	58	430	98	19	605	93	89	0	46	228	0	0	392	138	530
Total Volume	0	258	283	27	568	0	0	0	165	165	222	1742	395	75	2434	372	338	0	183	893	0	0	1621	587	2208
% App. Total	0	45.4	49.8	4.8		0	0	0	100		9.1	71.6	16.2	3.1		41.7	37.8	0	20.5		0	0	73.4	26.6	
PHF	.000	.872	.884	.750	.966	.000	.000	.000	.878	.878	.925	.892	.932	.893	.923	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982

(17)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		134			120	3			2				259
7:15 AM		137			103	5			7				252
7:30 AM		130			110	3			3				246
7:45 AM		182			135	5			10				332
8:00 AM		183			156	4			10				353
8:15 AM		175			134	6			7				322
8:30 AM		138			143	9			10				300
8:45 AM		147			130	6			14				297

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1226	0	0	1031	41	0	0	63	0	0	0	2361
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	96.18%	3.82%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		228			224	4			32				488
4:15 PM		210			202	6			26				444
4:30 PM		211			222	3			30				466
4:45 PM		203			196	6			29				434
5:00 PM		206			234	7			33				480
5:15 PM		190			181	1			32				404
5:30 PM		142			171	3			22				338
5:45 PM		125			180	2			13				320

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1515	0	0	1610	32	0	0	217	0	0	0	3374
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	98.05%	1.95%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[illegible]													
[illegible]	[illegible]												
[illegible]													

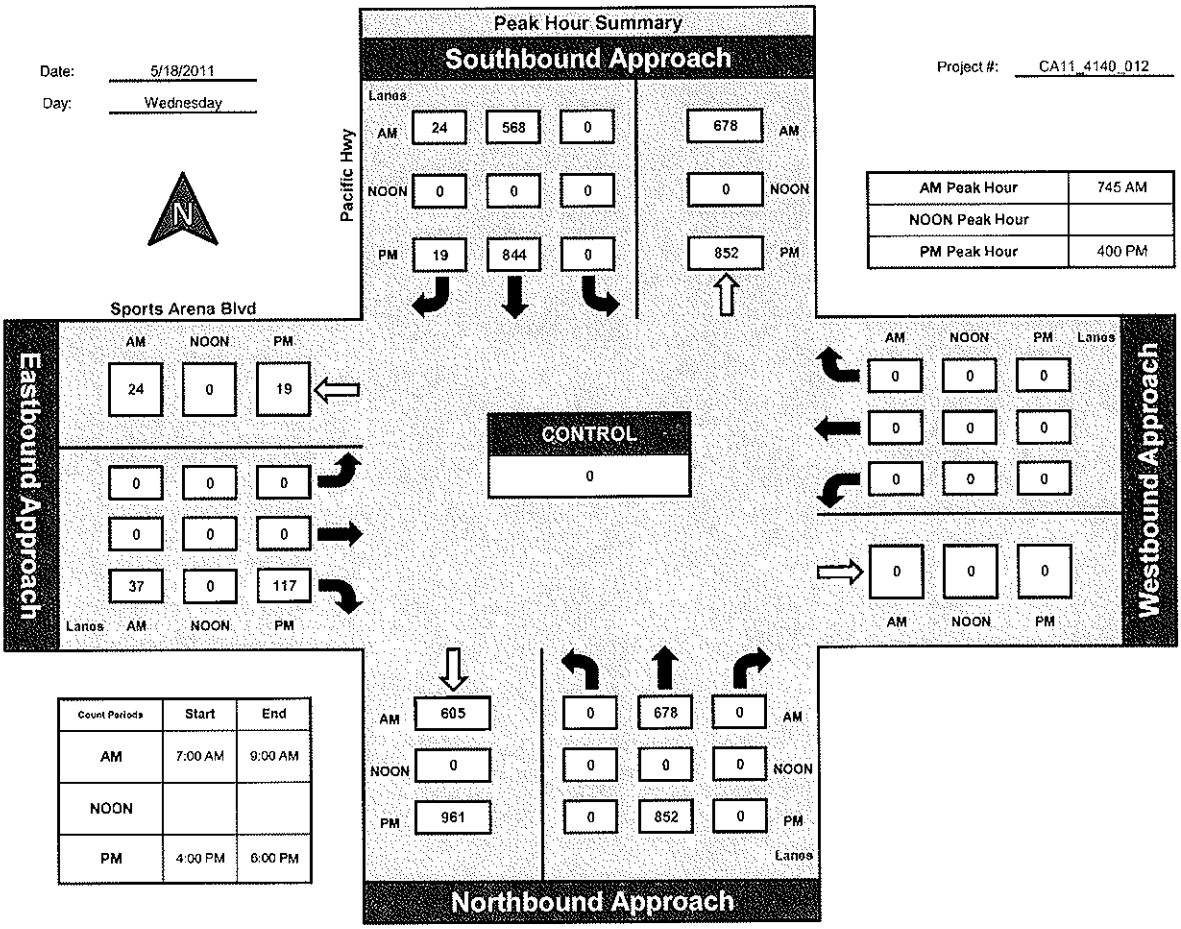
CONTROL :

ITM Peak Hour Summary

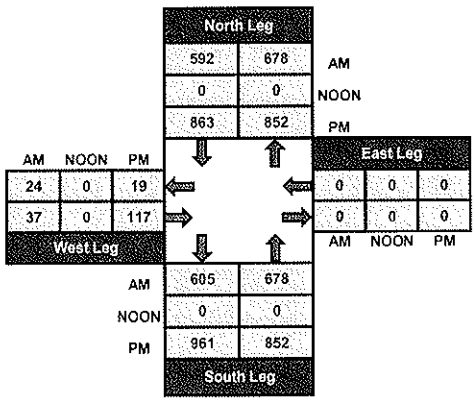
Prepared by:

National Data & Surveying Services

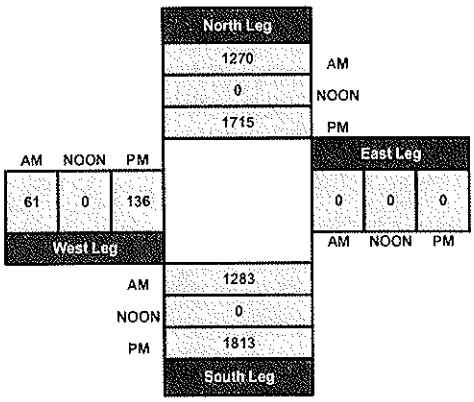
Pacific Hwy and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(18)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

Day: THURSDAY

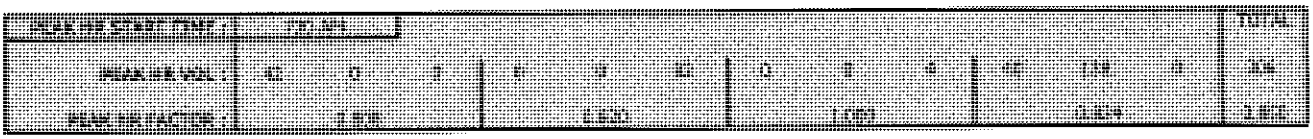
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0					5	0		0	0	6		11
7:15 AM	1					18	0		1	10	28		58
7:30 AM	13					18	0		1	13	32		77
7:45 AM	10					19	0		1	5	32		67
8:00 AM	10					25	0		1	16	38		90
8:15 AM	9					20	0		1	6	36		72
8:30 AM	17					14	1		2	12	30		76
8:45 AM	9					18	0		0	13	26		66

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	69	0	0	0	0	137	1	0	7	75	228	0	517
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	12.50%	0.00%	87.50%	24.75%	75.25%	0.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

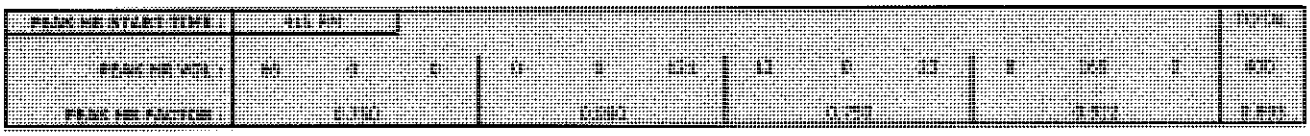
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	8					13	1		0	0	21		43
4:15 PM	22					32	5		7	3	42		111
4:30 PM	22					34	2		6	2	46		112
4:45 PM	9					23	3		3	3	41		82
5:00 PM	13					32	3		7	0	40		95
5:15 PM	11					22	1		10	0	43		87
5:30 PM	10					16	2		8	1	26		63
5:45 PM	11					13	2		12	0	32		70
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	106	0	0	0	0	185	19	0	53	9	291	0	663
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	26.39%	0.00%	73.61%	3.00%	97.00%	0.00%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

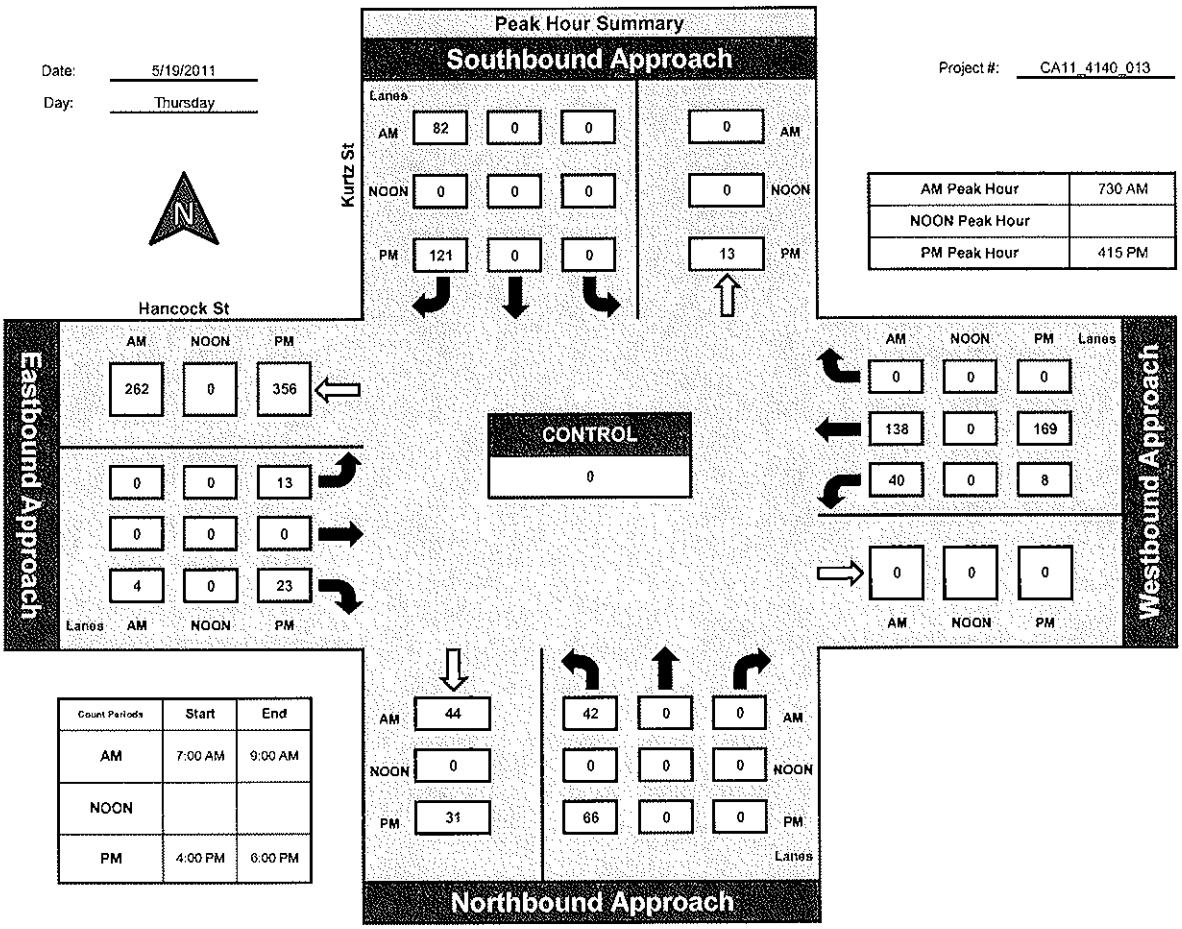
National Data & Surveying Services

Kurtz St and Hancock St , City of San Diego

Date: 5/19/2011

Day: Thursday

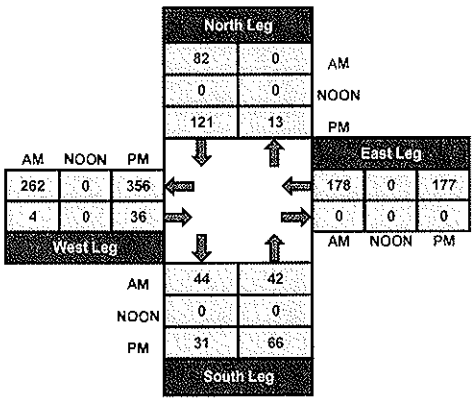
Project #: CA11_4140_013



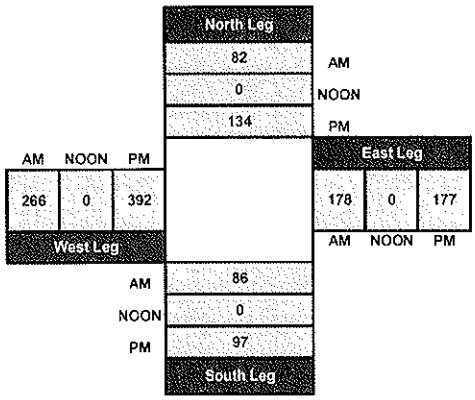
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

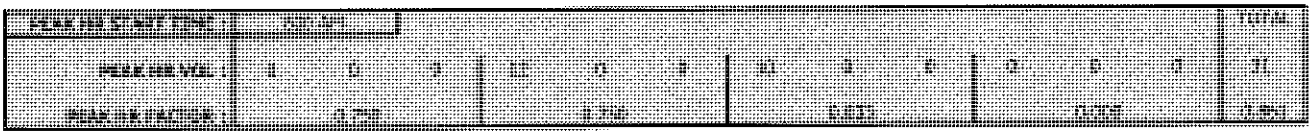
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM			3	0			1						4
7:15 AM			2	3			0						5
7:30 AM			1	1			3						5
7:45 AM			2	1			3						6
8:00 AM			1	4			1						6
8:15 AM			2	3			3						8
8:30 AM			3	3			3						9
8:45 AM			3	2			3						8

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	17	17	0	0	17	0	0	0	0	0	51
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM			4	2			3						9
4:15 PM			0	3			2						5
4:30 PM			2	1			1						4
4:45 PM			3	0			3						6
5:00 PM			2	1			2						5
5:15 PM			2	0			0						2
5:30 PM			2	1			0						3
5:45 PM			1	0			1						2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	16	8	0	0	12	0	0	0	0	0	36
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

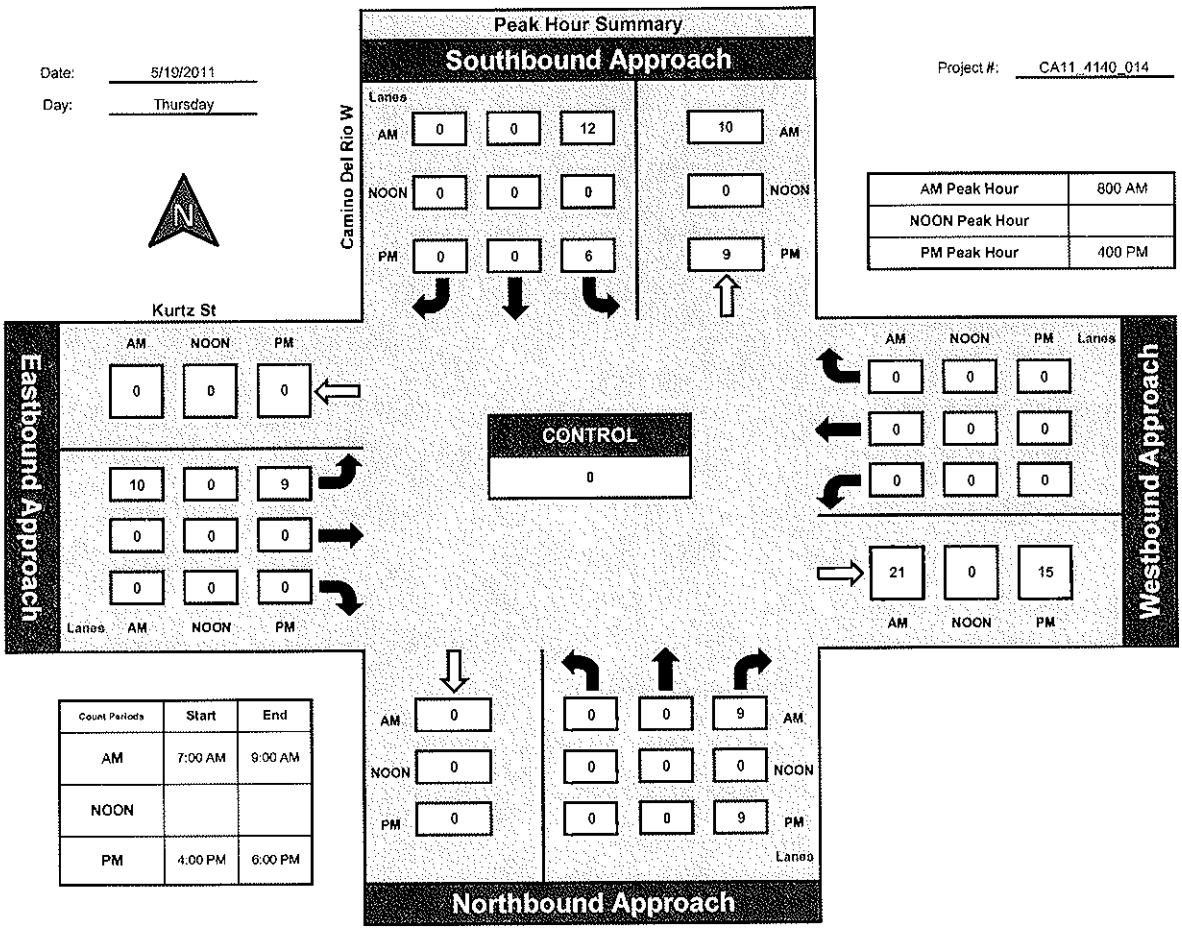
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

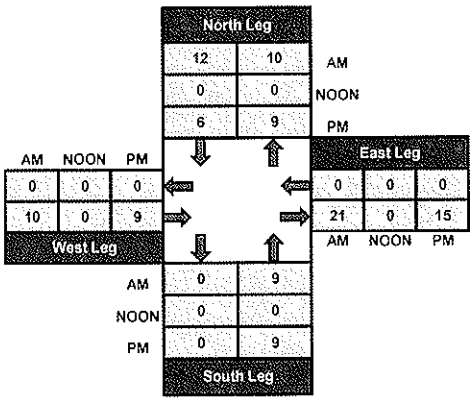
Project #: CA11_4140_014



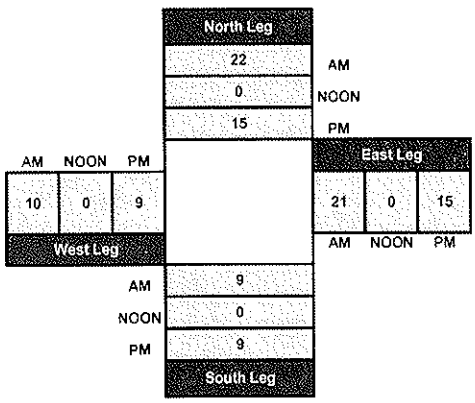
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				2									2
7:15 AM				1									1
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				2									2
8:15 AM				4									4
8:30 AM				2									2
8:45 AM				3									3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	17	0	0	0	0	0	0	0	0	17
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				5									5
4:15 PM				2									2
4:30 PM				3									3
4:45 PM				6									6
5:00 PM				0									
5:15 PM				3									3
5:30 PM				5									5
5:45 PM				4									4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	28	0	0	0	0	0	0	0	0	28
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

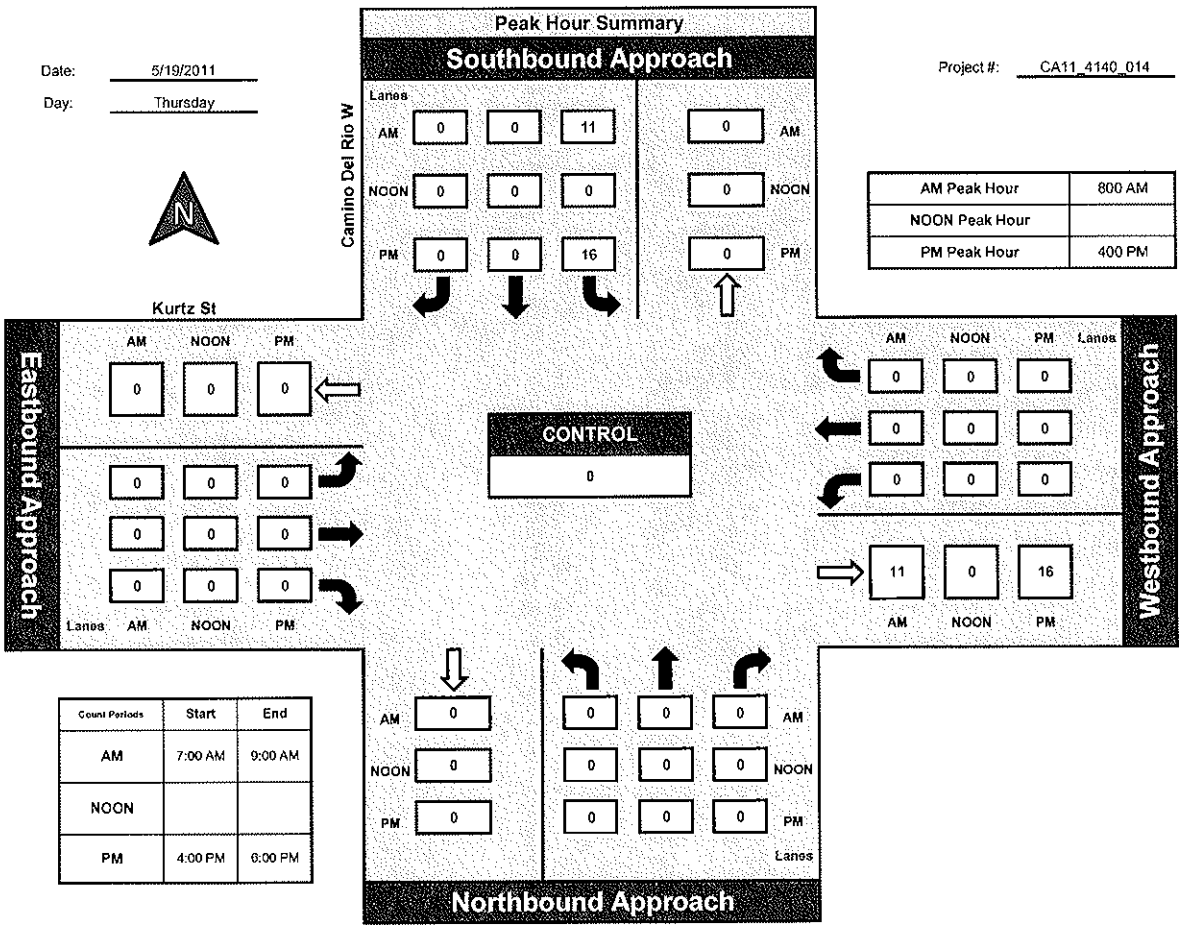
CONTROL :

ITM Peak Hour Summary

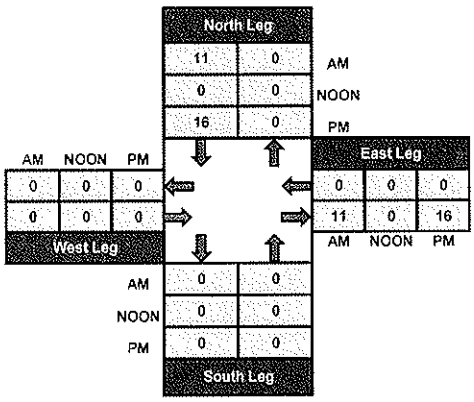
Prepared by:

National Data & Surveying Services

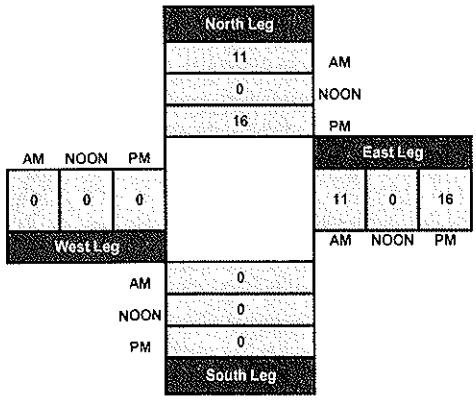
Camino Del Rio W and Kurtz St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

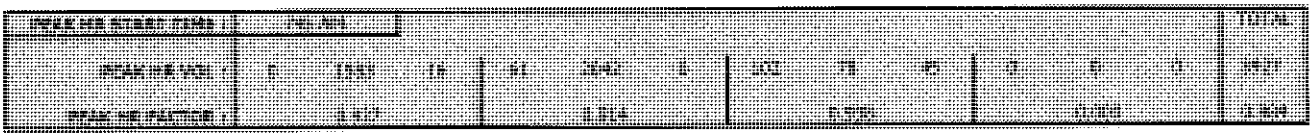
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		217	1	12	475		26	6	6				743
7:15 AM		330	2	8	521		18	13	9				901
7:30 AM		425	1	17	498		28	17	5				991
7:45 AM		386	5	5	524		22	15	17				974
8:00 AM		348	2	13	562		23	26	11				985
8:15 AM		427	4	18	468		25	20	8				970
8:30 AM		422	5	25	488		32	17	9				998
8:45 AM		368	4	23	479		38	23	18				953

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2923	24	121	4015	0	212	137	83	0	0	0	7515
APPROACH %'s :	0.00%	99.19%	0.81%	2.93%	97.07%	0.00%	49.07%	31.71%	19.21%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

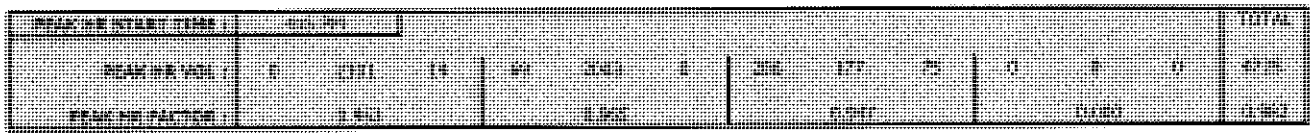
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		500	3	22	447		68	36	14				1090
4:15 PM		547	2	22	510		67	34	21				1203
4:30 PM		553	2	19	466		82	41	16				1179
4:45 PM		495	8	20	498		63	51	21				1156
5:00 PM		506	2	8	529		74	51	17				1187
5:15 PM		489	2	9	531		67	36	20				1154
5:30 PM		417	11	9	507		62	23	12				1041
5:45 PM		438	2	13	563		42	31	12				1101

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3945	32	122	4051	0	525	303	133	0	0	0	9111
APPROACH %'s :	0.00%	99.20%	0.80%	2.92%	97.08%	0.00%	54.63%	31.53%	13.84%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

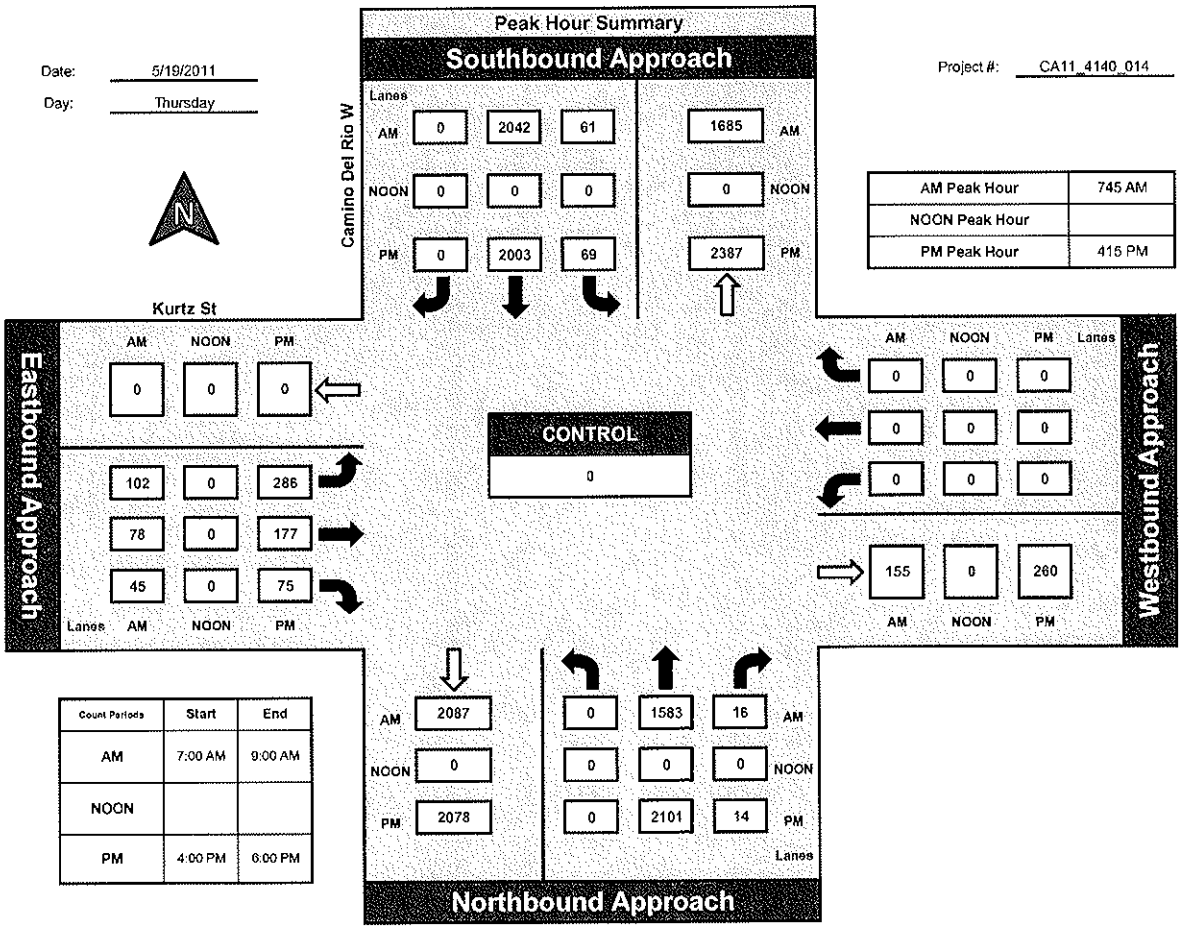
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

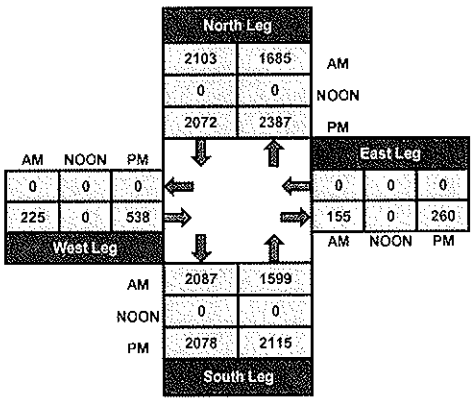
Project #: CA11_4140_014



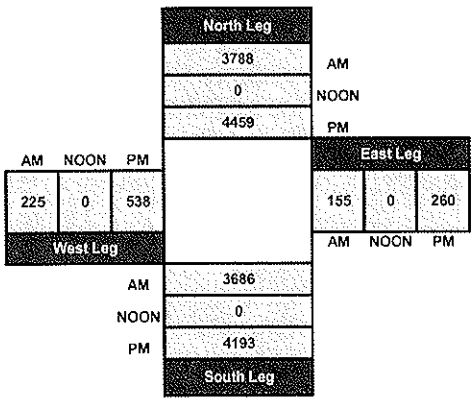
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(20)

6

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

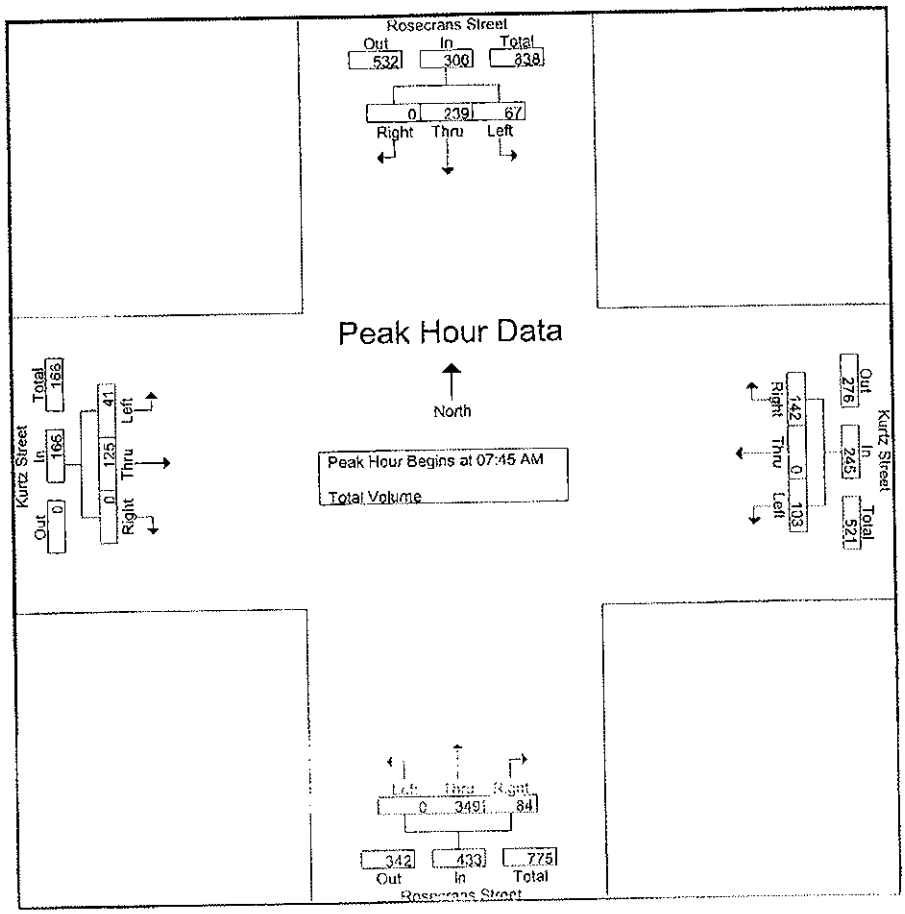
	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
Total	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
07:00 AM	18	36	0	54	17	0	28	45	0	50	23	73	6	26	0	32	204
07:15 AM	28	42	0	70	19	0	33	52	0	68	22	90	4	31	0	35	247
07:30 AM	19	58	0	77	16	0	35	51	0	77	29	106	10	35	0	45	279
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
Total	85	206	0	291	73	0	131	204	0	287	93	380	30	118	0	148	1023
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Grand Total	153	399	0	552	178	0	276	454	0	601	178	779	69	244	0	313	2098
Apprch %	27.7	72.3	0		39.2	0	60.8		0	77.2	22.8		22	78	0		
Total %	7.3	19	0	26.3	8.5	0	13.2	21.6	0	28.6	8.5	37.1	3.3	11.6	0	14.9	

	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	41	125	0	166	1150
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		24.7	75.3	0		
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.946	.913	.975	.854	.744	.000	.767	.913

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	20	70	0	90	21	0	35	56	0	92	19	111	10	35	0	45
+15 mins.	18	44	0	62	18	0	38	56	0	80	23	103	10	26	0	36
+30 mins.	15	61	0	76	36	0	38	74	0	91	20	111	11	26	0	37
+45 mins.	14	64	0	78	28	0	31	59	0	86	22	108	12	42	0	54
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	43	129	0	172
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		25	75	0	
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.948	.913	.975	.896	.768	.000	.796

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

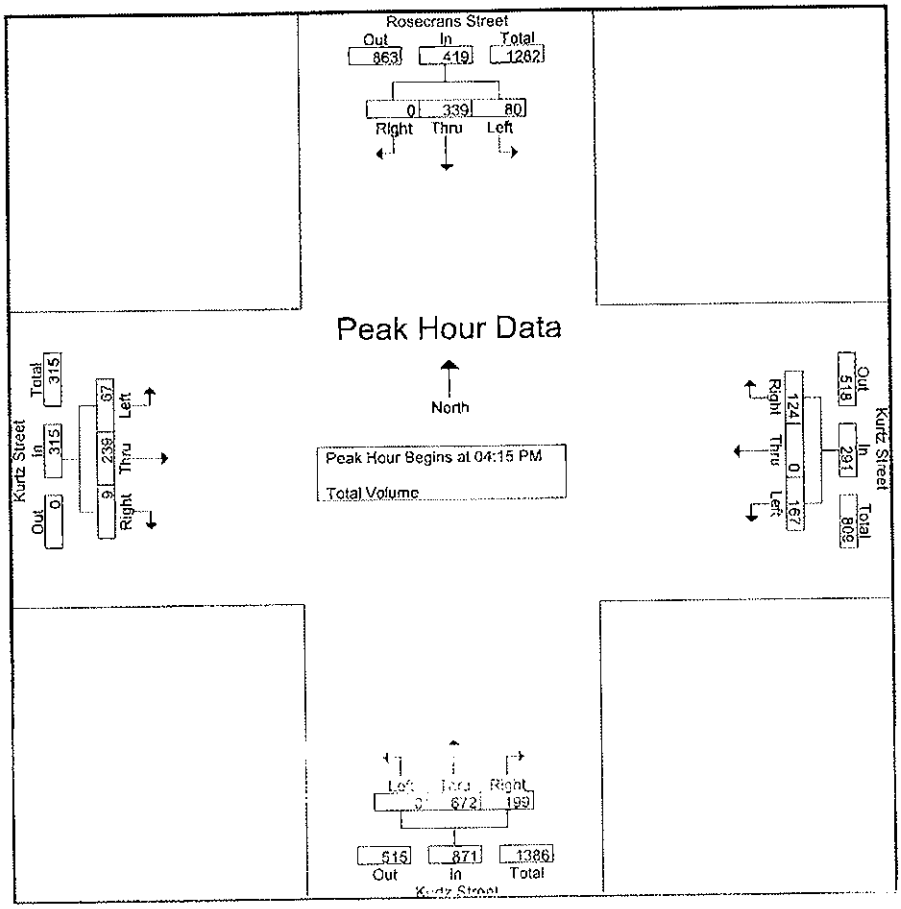
	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	19	88	0	107	34	0	32	66	0	167	48	215	12	60	3	75	463
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
Total	85	342	0	427	170	0	132	302	0	660	205	865	60	228	8	296	1890
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
05:15 PM	10	93	0	103	40	0	35	75	0	150	47	197	15	44	4	63	438
05:30 PM	17	100	0	117	36	0	27	63	0	151	49	200	23	40	2	65	445
05:45 PM	11	105	0	116	45	0	20	65	0	133	45	178	12	35	3	50	409
Total	52	383	0	435	152	0	106	258	0	613	183	796	69	190	13	272	1761
Grand Total	137	725	0	862	322	0	238	560	0	1273	388	1661	129	418	21	568	3651
Apprch %	15.9	84.1	0		57.5	0	42.5		0	76.6	23.4		22.7	73.6	3.7		
Total %	3.8	19.9	0	23.6	8.8	0	6.5	15.3	0	34.9	10.6	45.5	3.5	11.4	0.6	15.6	

	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
Total Volume	80	339	0	419	167	0	124	291	0	672	199	871	67	239	9	315	1896
% App. Total	19.1	80.9	0		57.4	0	42.6		0	77.2	22.8		21.3	75.9	2.9		
PHF	.714	.808	.000	.927	.819	.000	.800	.856	.000	.938	.843	.976	.698	.841	.563	.838	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM								04:15 PM							
+0 mins.	14	85	0	99	34	0	32	66	0	165	51	216	12	60	2	74
+15 mins.	10	93	0	103	49	0	36	85	0	152	59	211	13	53	2	68
+30 mins.	17	100	0	117	51	2	25	76	0	174	47	221	21	55	1	77
+45 mins.	11	105	0	116	36	0	39	75	0	179	42	221	19	71	4	94
Total Volume	52	383	0	435	170	0	132	302	0	672	199	871	67	239	9	315
% App. Total	12	88	0		56.3	0	43.7		0	77.2	22.8		21.3	75.9	2.9	
PHF	.765	.912	.000	.929	.833	.000	.846	.888	.000	.939	.843	.976	.698	.842	.563	.838

(21)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	54	78			77	3			43				255
7:15 AM	57	76			71	2			42				248
7:30 AM	55	84			69	1			44				253
7:45 AM	78	101			91	1			58				329
8:00 AM	68	107			95	1			67				338
8:15 AM	89	99			80	4			65				337
8:30 AM	59	84			87	3			57				290
8:45 AM	56	80			66	2			73				277

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	516	709	0	0	636	17	0	0	449	0	0	0	2327
APPROACH %'s :	42.12%	57.88%	0.00%	0.00%	97.40%	2.60%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

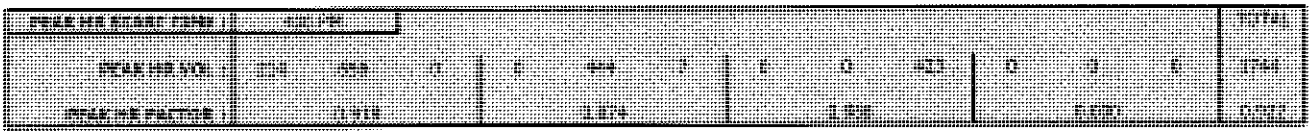
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	59	178			127	2			107				473
4:15 PM	38	185			100	3			106				432
4:30 PM	67	146			123	1			104				441
4:45 PM	50	147			94	1			106				398
5:00 PM	36	176			120	2			125				459
5:15 PM	47	137			69	3			110				366
5:30 PM	44	96			83	5			91				319
5:45 PM	39	90			86	1			103				319
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	380	1155	0	0	802	18	0	0	852	0	0	0	3207
APPROACH %'s :	24.76%	75.24%	0.00%	0.00%	97.80%	2.20%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

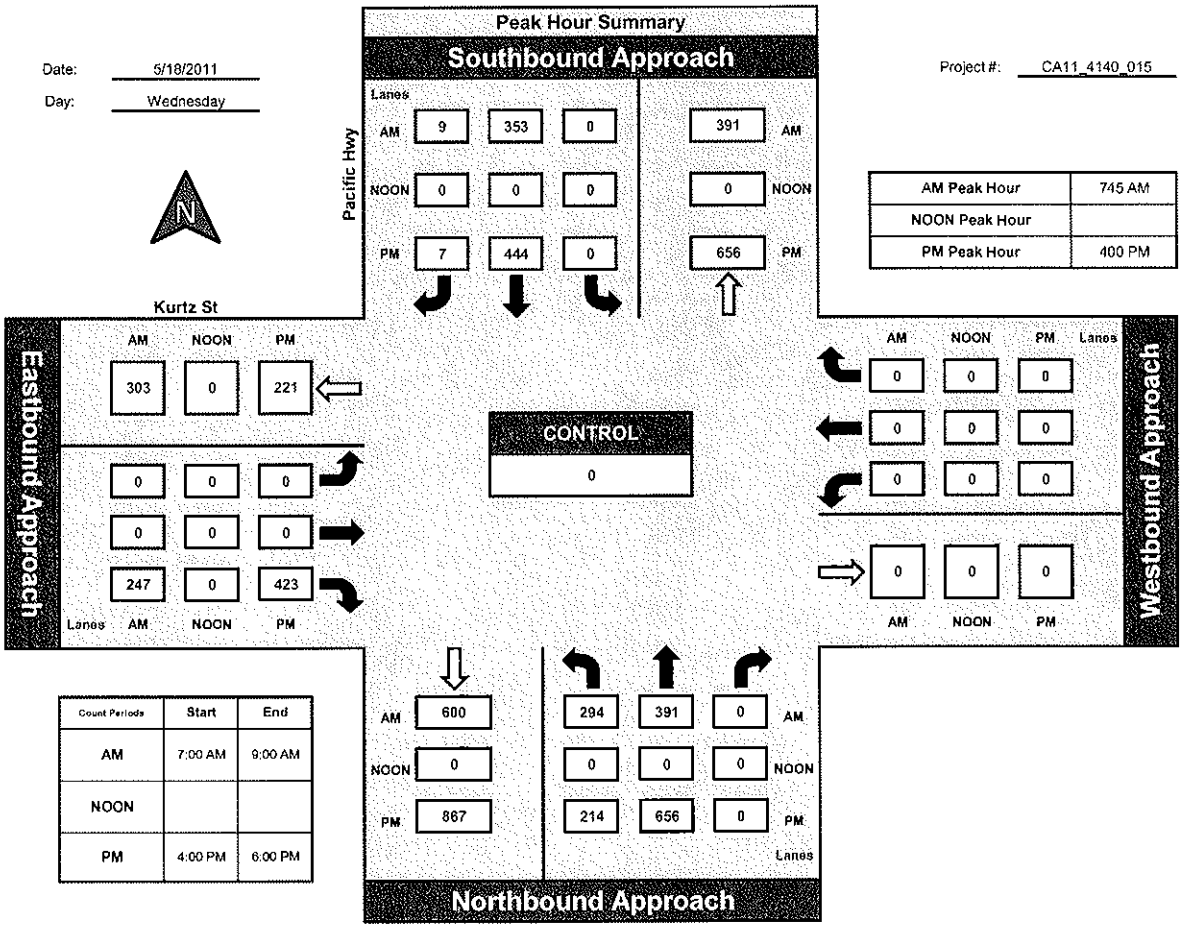
National Data & Surveying Services

Pacific Hwy and Kurtz St , City of San Diego

Date: 5/18/2011

Day: Wednesday

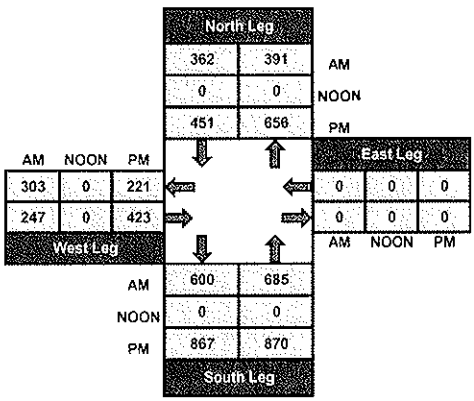
Project #: CA11_4140_015



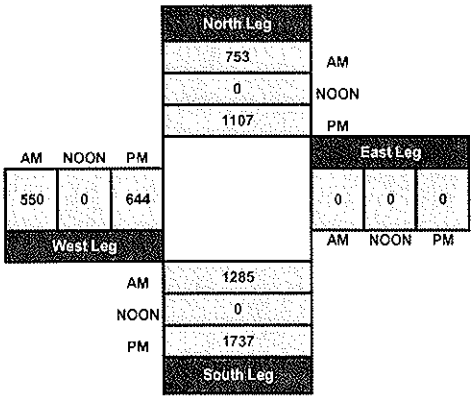
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(23)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

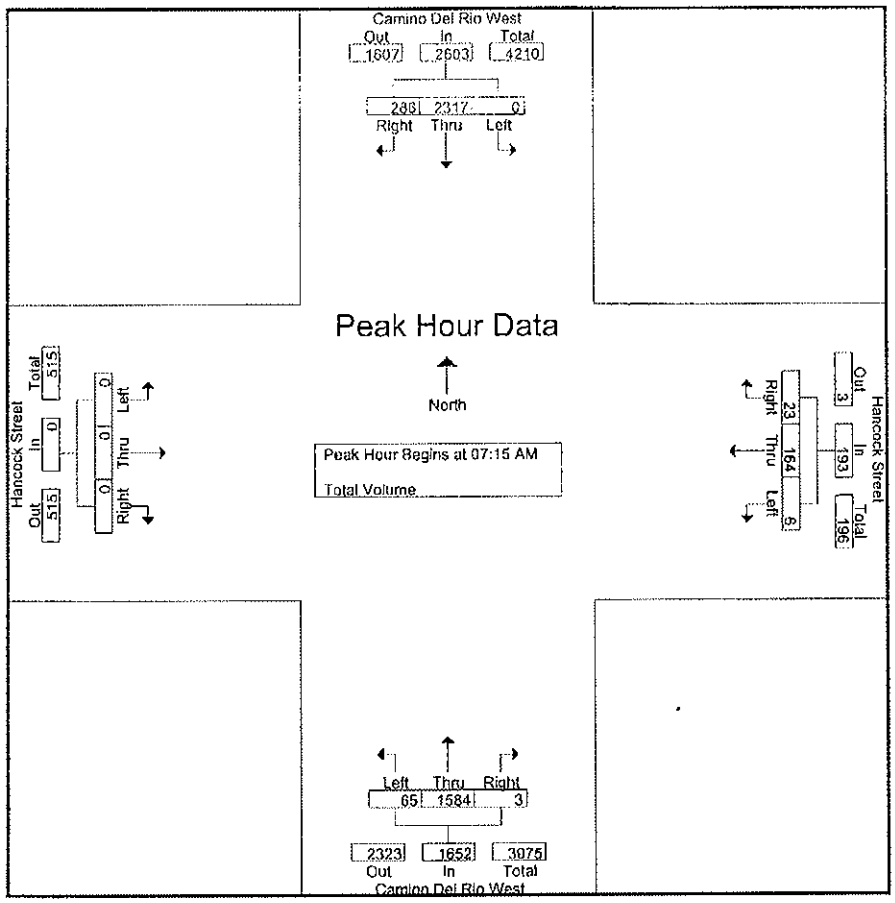
	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
Total	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
07:00 AM	0	589	35	624	9	12	8	29	15	279	9	303	0	0	0	0	956
07:15 AM	0	618	39	657	0	30	11	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	3	41	3	47	10	455	0	465	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	3	443	0	0	0	0	1146
Total	0	2311	214	2525	14	122	25	161	56	1498	12	1566	0	0	0	0	4252
08:00 AM	0	595	107	702	1	54	6	61	24	365	0	389	0	0	0	0	1152
08:15 AM	0	515	70	585	2	47	7	56	14	389	1	404	0	0	0	0	1045
08:30 AM	0	425	94	519	6	54	17	77	16	411	0	427	0	0	0	0	1023
Grand Total	0	4371	517	4888	32	289	63	384	124	2888	22	3034	0	0	0	0	8306
Apprch %	0	89.4	10.6		8.3	75.3	16.4		4.1	95.2	0.7		0	0	0		
Total %	0	52.6	6.2	58.8	0.4	3.5	0.8	4.6	1.5	34.8	0.3	36.5	0	0	0	0	

	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**618**	39	657	0	30	**11**	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	**3**	41	3	47	10	**455**	0	**465**	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	**3**	443	0	0	0	0	1146
08:00 AM	0	595	**107**	**702**	1	**54**	6	**61**	**24**	365	0	389	0	0	0	0	**1152**
Total Volume	0	2317	286	2603	6	164	23	193	65	1584	3	1652	0	0	0	0	4448
% App. Total	0	89	11		3.1	85	11.9		3.9	95.9	0.2		0	0	0		
PHF	.000	.937	.668	.927	.500	.759	.523	.791	.677	.870	.250	.888	.000	.000	.000	.000	.965

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				06:45 AM			
+0 mins.	0	618	39	657	2	39	3	44	10	455	0	465	0	0	0	0
+15 mins.	0	525	60	585	1	54	6	61	15	425	3	443	0	0	0	0
+30 mins.	0	579	80	659	2	47	7	56	24	365	0	389	0	0	0	0
+45 mins.	0	595	107	702	6	54	17	77	14	389	1	404	0	0	0	0
Total Volume	0	2317	286	2603	11	194	33	238	63	1634	4	1701	0	0	0	0
% App. Total	0	89	11		4.6	81.5	13.9		3.7	96.1	0.2		0	0	0	
PHF	.000	.937	.668	.927	.458	.898	.485	.773	.656	.898	.333	.915	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

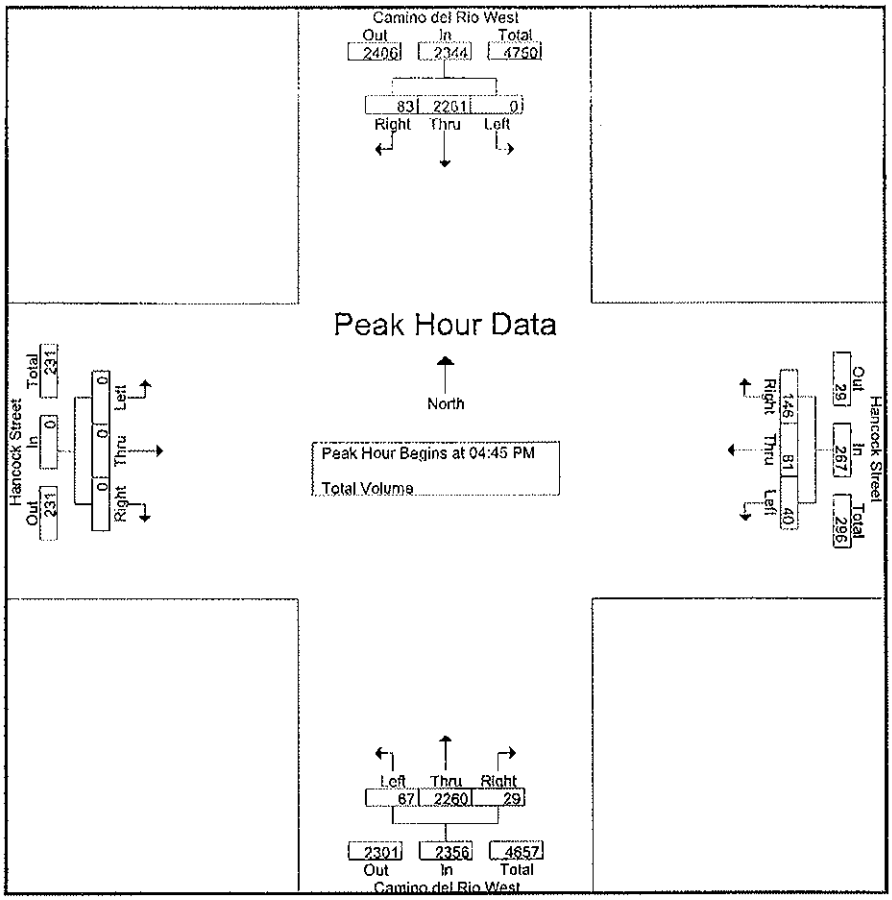
	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	476	31	507	1	34	14	49	17	585	5	607	0	0	0	0	1163
04:15 PM	0	523	30	553	5	23	34	62	11	525	5	541	0	0	0	0	1156
04:30 PM	0	532	25	557	9	21	33	63	11	569	2	582	0	0	0	0	1202
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
Total	0	2061	112	2173	29	97	118	244	68	2264	21	2353	0	0	0	0	4770
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
05:45 PM	0	538	23	561	8	21	27	56	15	489	7	511	0	0	0	0	1128
Total	0	2269	80	2349	34	83	136	253	53	2164	27	2244	0	0	0	0	4846
Grand Total	0	4330	192	4522	63	180	254	497	121	4428	48	4597	0	0	0	0	9616
Apprch %	0	95.8	4.2		12.7	36.2	51.1		2.6	96.3	1		0	0	0		
Total %	0	45	2	47	0.7	1.9	2.6	5.2	1.3	46	0.5	47.8	0	0	0	0	

	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
Total Volume	0	2261	83	2344	40	81	146	267	67	2260	29	2356	0	0	0	0	4967
% App. Total	0	96.5	3.5		15	30.3	54.7		2.8	95.9	1.2		0	0	0		
PHF	.000	.971	.798	.975	.714	.653	.869	.845	.578	.959	.518	.945	.000	.000	.000	.000	.983

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	0	570	20	590	5	23	34	62	11	569	2	582	0	0	0	0
+15 mins.	0	579	18	597	9	21	33	63	29	585	9	623	0	0	0	0
+30 mins.	0	582	19	601	14	19	37	70	11	525	14	550	0	0	0	0
+45 mins.	0	538	23	561	6	31	42	79	19	589	4	612	0	0	0	0
Total Volume	0	2269	80	2349	34	94	146	274	70	2268	29	2367	0	0	0	0
% App. Total	0	96.6	3.4		12.4	34.3	53.3		3	95.8	1.2		0	0	0	
PHF	.000	.975	.870	.977	.607	.758	.869	.867	.603	.963	.518	.950	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

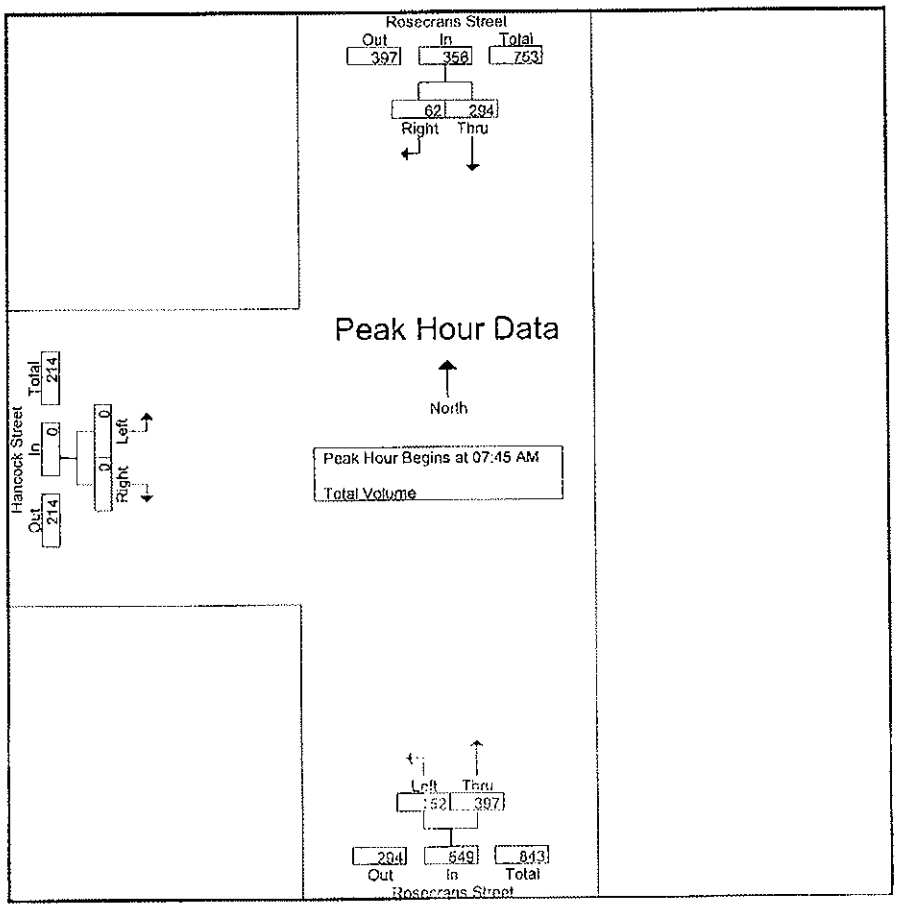
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:45 AM	46	6	52	40	70	110	0	0	0	162
Total	46	6	52	40	70	110	0	0	0	162
07:00 AM	50	5	55	23	59	82	0	0	0	137
07:15 AM	66	13	79	25	93	118	0	0	0	197
07:30 AM	72	19	91	27	101	128	0	0	0	219
07:45 AM	87	14	101	27	116	143	0	0	0	244
Total	275	51	326	102	369	471	0	0	0	797
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Grand Total	528	105	633	267	720	987	0	0	0	1620
Apprch %	83.4	16.6		27.1	72.9		0	0		
Total %	32.6	6.5	39.1	16.5	44.4	60.9	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	87	14	101	27	116	143	0	0	0	244
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Total Volume	294	62	356	152	397	549	0	0	0	905
% App. Total	82.6	17.4		27.7	72.3		0	0		
PHF	.845	.861	.881	.844	.856	.960	.000	.000	.000	.927

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:45 AM			06:45 AM		
+0 mins.	72	19	91	27	116	143	0	0	0
+15 mins.	87	14	101	45	85	130	0	0	0
+30 mins.	60	18	78	44	99	143	0	0	0
+45 mins.	70	16	86	36	97	133	0	0	0
Total Volume	289	67	356	152	397	549	0	0	0
% App. Total	81.2	18.8		27.7	72.3		0	0	
PHF	.830	.882	.881	.844	.856	.960	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

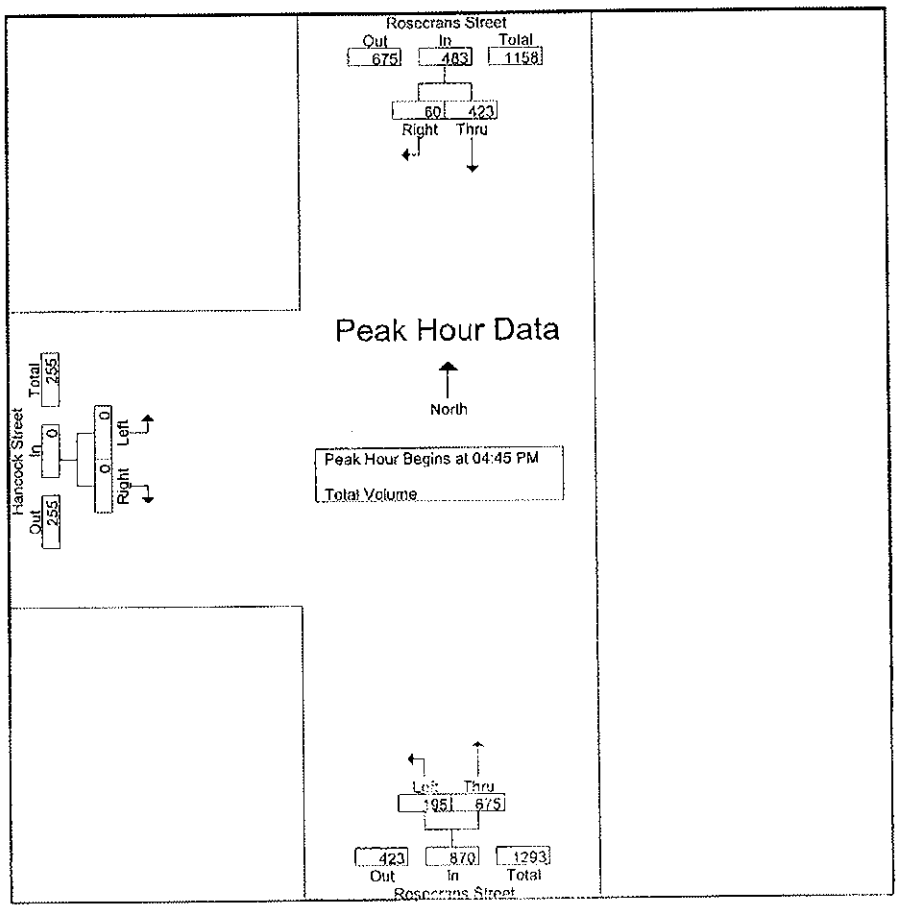
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	104	18	122	48	157	205	0	0	0	327
04:15 PM	109	17	126	53	153	206	0	0	0	332
04:30 PM	106	20	126	44	158	202	0	0	0	328
04:45 PM	89	14	103	51	187	238	0	0	0	341
Total	408	69	477	196	655	851	0	0	0	1328
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
05:45 PM	117	12	129	31	138	169	0	0	0	298
Total	451	58	509	175	626	801	0	0	0	1310
Grand Total	859	127	986	371	1281	1652	0	0	0	2638
Apprch %	87.1	12.9		22.5	77.5		0	0		
Total %	32.6	4.8	37.4	14.1	48.6	62.6	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	89	14	103	51	187	238	0	0	0	341
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
Total Volume	423	60	483	195	675	870	0	0	0	1353
% App. Total	87.6	12.4		22.4	77.6		0	0		
PHF	.896	.882	.901	.956	.902	.914	.000	.000	.00	.990

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			04:00 PM		
+0 mins.	107	17	124	44	158	202	0	0	0
+15 mins.	109	13	122	51	187	238	0	0	0
+30 mins.	118	16	134	51	167	218	0	0	0
+45 mins.	117	12	129	48	168	216	0	0	0
Total Volume	451	58	509	194	680	874	0	0	0
% App. Total	88.6	11.4		22.2	77.8		0	0	
PHF	.956	.853	.950	.951	.909	.918	.000	.000	.000

(25)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				12			37	101				14	164
7:15 AM				16			46	158				24	244
7:30 AM				15			58	111				31	215
7:45 AM				17			60	103				32	212
8:00 AM				12			86	117				23	238
8:15 AM				10			66	76				18	170
8:30 AM				14			43	62				37	156
8:45 AM				22			58	66				27	173
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	118	0	0	454	794	0	0	0	206	1572
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	36.38%	63.62%	0.00%	0.00%	0.00%	100.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021

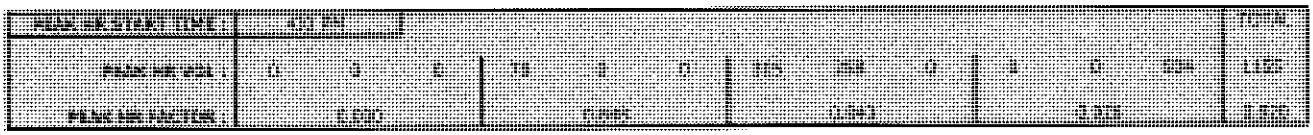
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				11			54	46				124	235
4:15 PM				18			66	63				107	254
4:30 PM				15			66	68				136	285
4:45 PM				17			78	58				116	269
5:00 PM				23			83	50				131	287
5:15 PM				23			88	82				121	314
5:30 PM				14			79	45				54	192
5:45 PM				23			124	38				75	260
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	144	0	0	638	450	0	0	0	864	2096
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	58.64%	41.36%	0.00%	0.00%	0.00%	100.00%	



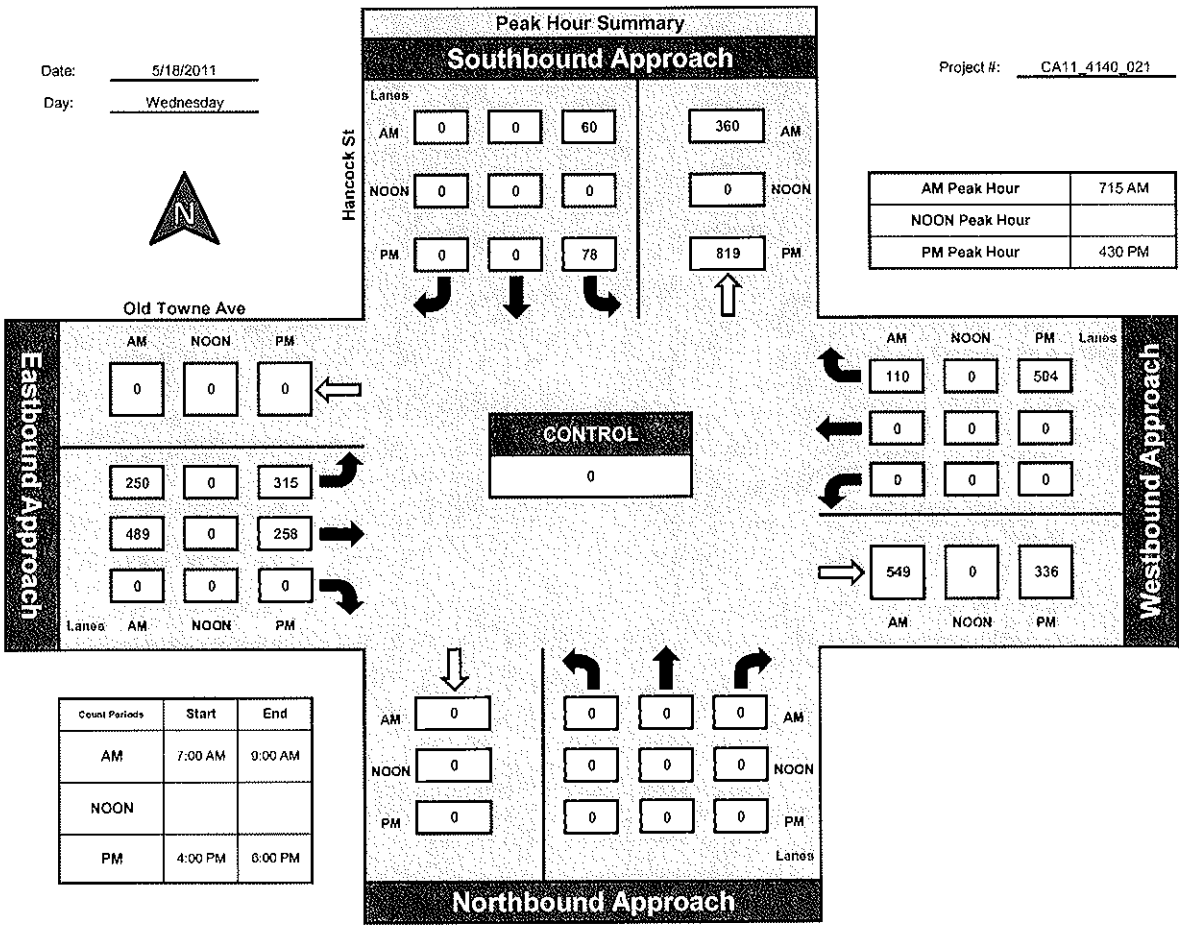
CONTROL :

ITM Peak Hour Summary

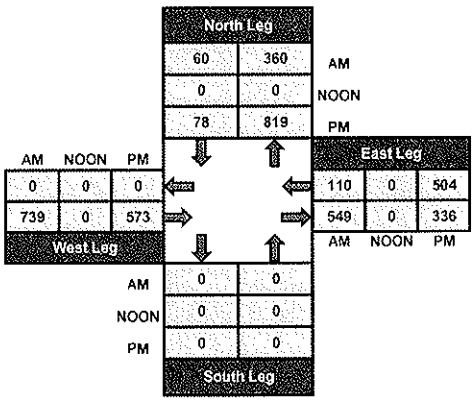
Prepared by:

National Data & Surveying Services

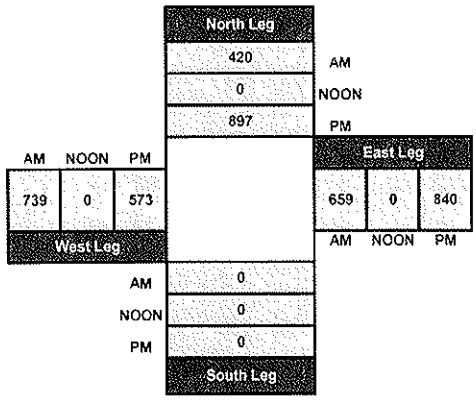
Hancock St and Old Towne Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(26)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	13	2	7	1	0	1	5	21	91	2	2	0	145
7:15 AM	19	1	9	0	1	0	1	21	141	2	3	2	200
7:30 AM	35	0	5	0	0	0	1	24	110	0	1	0	176
7:45 AM	23	1	8	0	0	1	2	33	81	0	3	1	153
8:00 AM	16	0	13	0	0	0	3	45	79	5	12	0	173
8:15 AM	9	0	10	0	1	0	0	21	67	4	4	0	116
8:30 AM	28	1	7	0	1	1	0	27	55	0	12	0	132
8:45 AM	14	1	7	0	2	2	1	33	47	1	7	0	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	6	66	1	5	5	13	225	671	14	44	3	1210
APPROACH %'s :	68.56%	2.62%	28.82%	9.09%	45.45%	45.45%	1.43%	24.75%	73.82%	22.95%	72.13%	4.92%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	120	0	18	0	0	0	2	27	31	1	8	0	207
4:15 PM	79	0	19	0	1	5	2	43	32	2	19	1	203
4:30 PM	116	1	14	0	1	5	1	42	39	4	19	0	242
4:45 PM	97	2	12	1	2	5	1	32	44	2	12	0	210
5:00 PM	100	2	7	1	1	3	1	33	41	2	26	0	217
5:15 PM	109	2	17	2	2	0	5	47	48	2	18	0	252
5:30 PM	42	0	11	0	1	1	1	30	28	2	5	0	121
5:45 PM	60	1	11	1	0	1	0	36	27	1	20	0	158
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	723	8	109	5	8	20	13	290	290	16	127	1	1610
APPROACH %'s :	86.07%	0.95%	12.98%	15.15%	24.24%	60.61%	2.19%	48.90%	48.90%	11.11%	88.19%	0.69%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

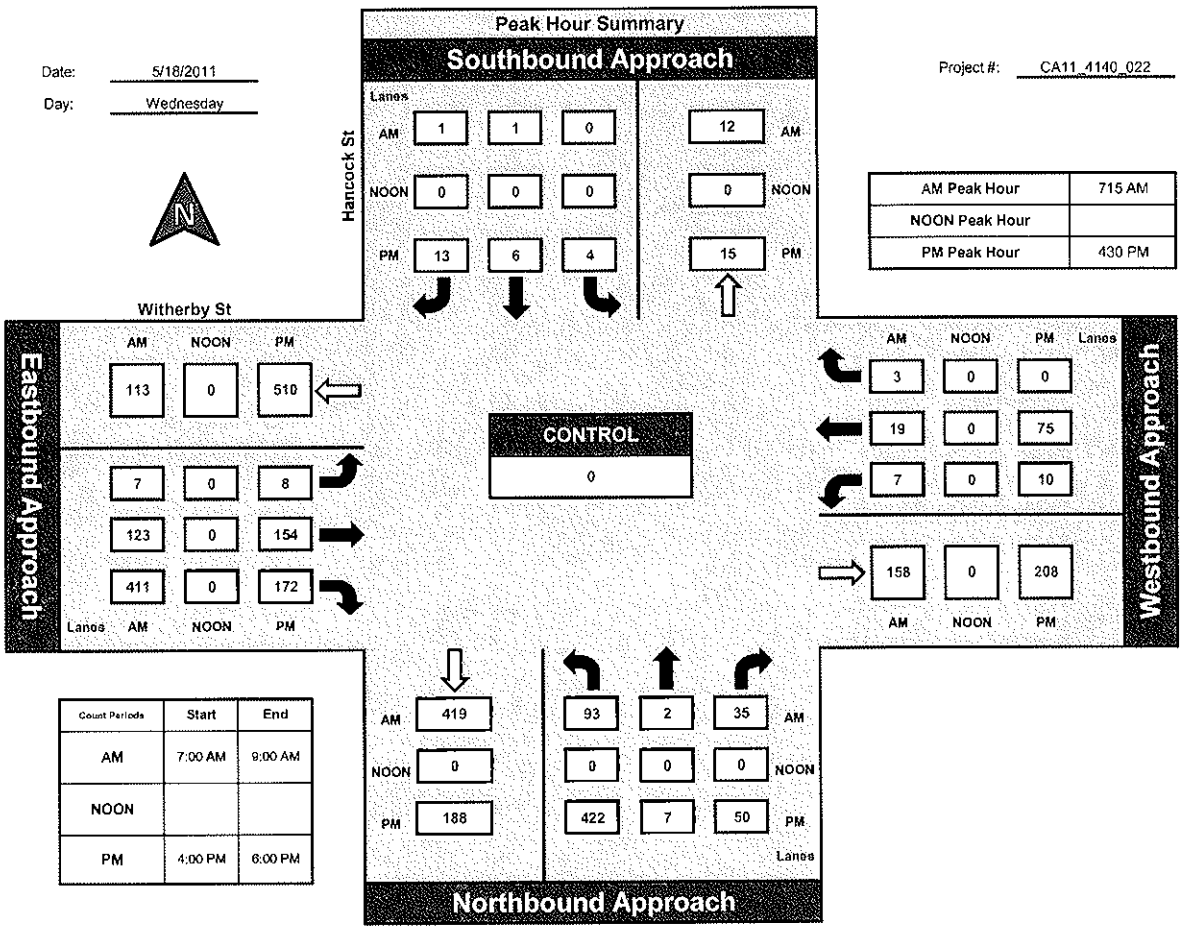
National Data & Surveying Services

Hancock St and Witherby St , City of San Diego

Date: 5/18/2011

Day: Wednesday

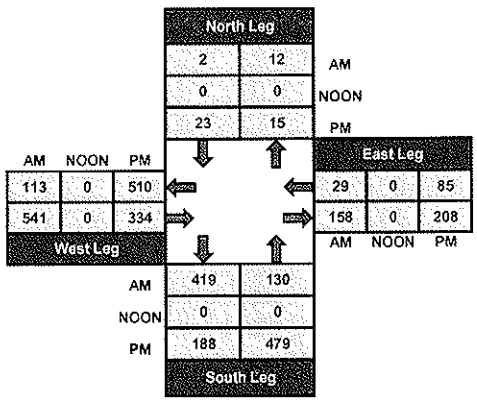
Project #: CA11_4140_022



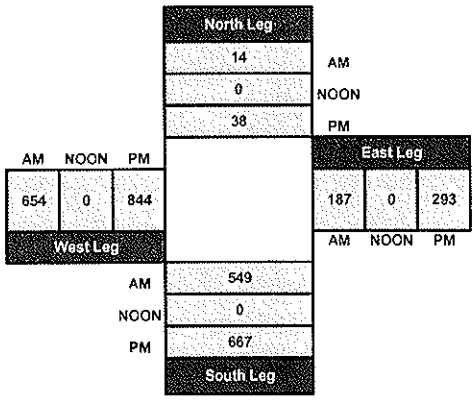
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(28)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					235	2			1	6			244
7:15 AM					216	4			1	3			224
7:30 AM					268	1			4	5			278
7:45 AM					355	7			2	6			370
8:00 AM					323	1			2	5			331
8:15 AM					367	5			5	7			384
8:30 AM					359	1			1	10			371
8:45 AM					346	1			2	12			361

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	2469	22	0	0	18	54	0	0	2563
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.12%	0.88%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

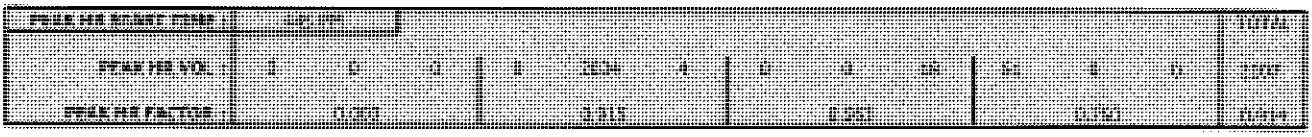
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					291	1			1	9			302
4:15 PM					344	4			7	6			361
4:30 PM					388	2			7	10			407
4:45 PM					477	0			7	17			501
5:00 PM					556	1			8	11			576
5:15 PM					536	1			3	7			547
5:30 PM					465	2			0	16			483
5:45 PM					381	2			0	13			396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3438	13	0	0	33	89	0	0	3573
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.62%	0.38%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



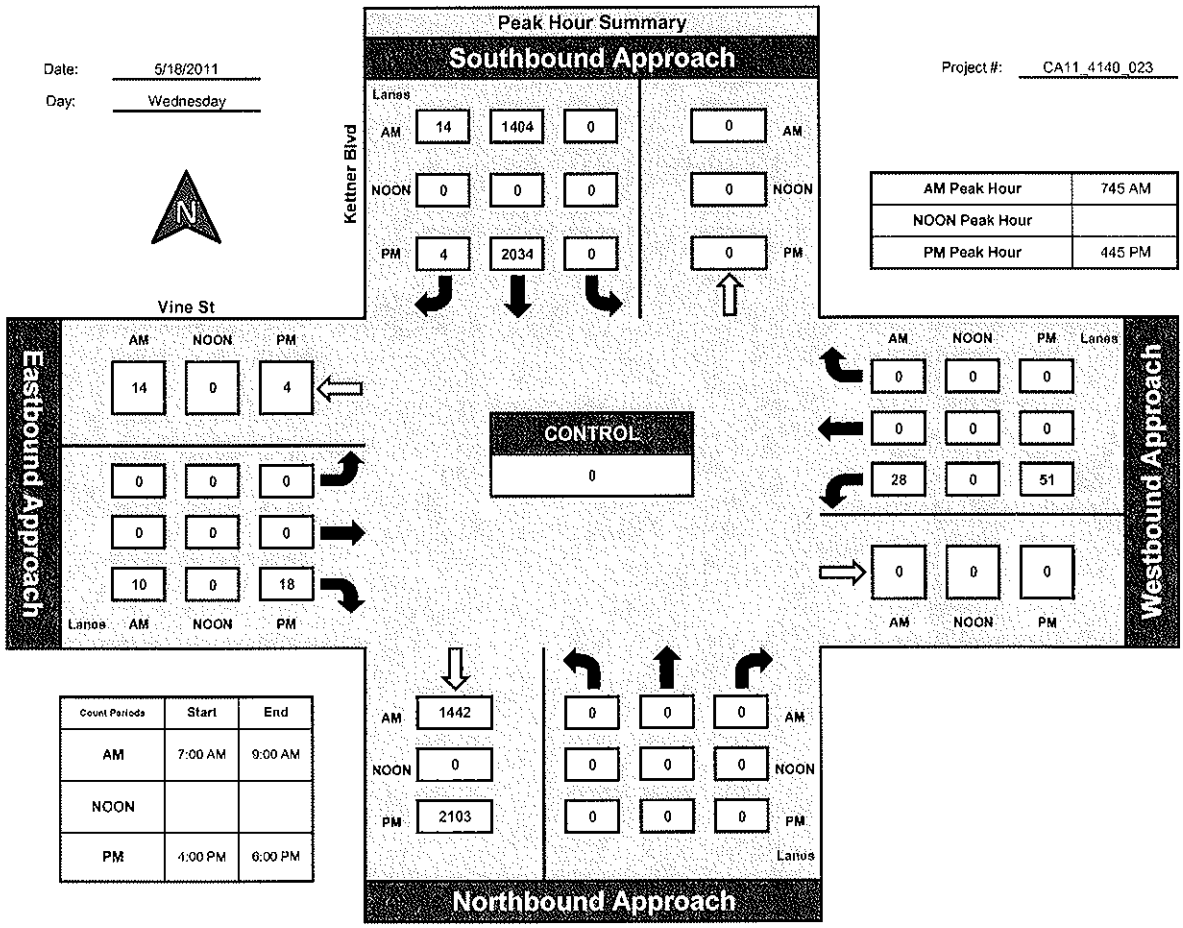
CONTROL :

ITM Peak Hour Summary

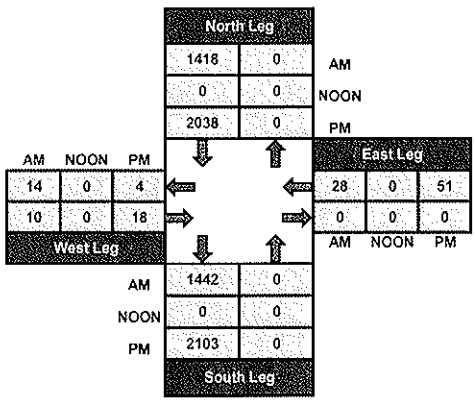
Prepared by:

National Data & Surveying Services

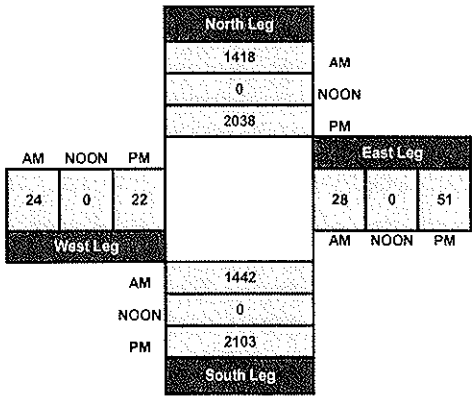
Kettner Blvd and Vine St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(31)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_018

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	450					19			222				691
7:15 AM	410					7			265				682
7:30 AM	358					15			272				645
7:45 AM	444					22			274				740
8:00 AM	413					18			286				717
8:15 AM	418					17			312				747
8:30 AM	390					16			309				715
8:45 AM	341					15			274				630

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3224	0	0	0	0	129	0	0	2214	0	0	0	5567
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]													
[redacted]													
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

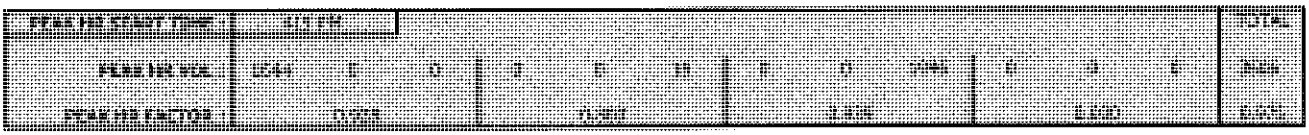
Project ID: CA11_4140_018 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	376					1			501				878
4:15 PM	404					3			518				925
4:30 PM	371					4			498				873
4:45 PM	426					5			470				901
5:00 PM	443					4			460				907
5:15 PM	405					2			436				843
5:30 PM	351					2			384				737
5:45 PM	333					2			309				644

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3109	0	0	0	0	23	0	0	3576	0	0	0	6708
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_018

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
	73	0	AM
	0	0	NOON
	16	0	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
1738	0	1660		0	0	0
1181	0	1946		0	0	0

	South Leg	
AM	1181	1665
NOON	0	0
PM	1946	1644

Total Volume Per Leg

	North Leg	
	73	AM
	0	NOON
	16	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
2919	0	3606		0	0	0

	South Leg
AM	2846
NOON	0
PM	3590

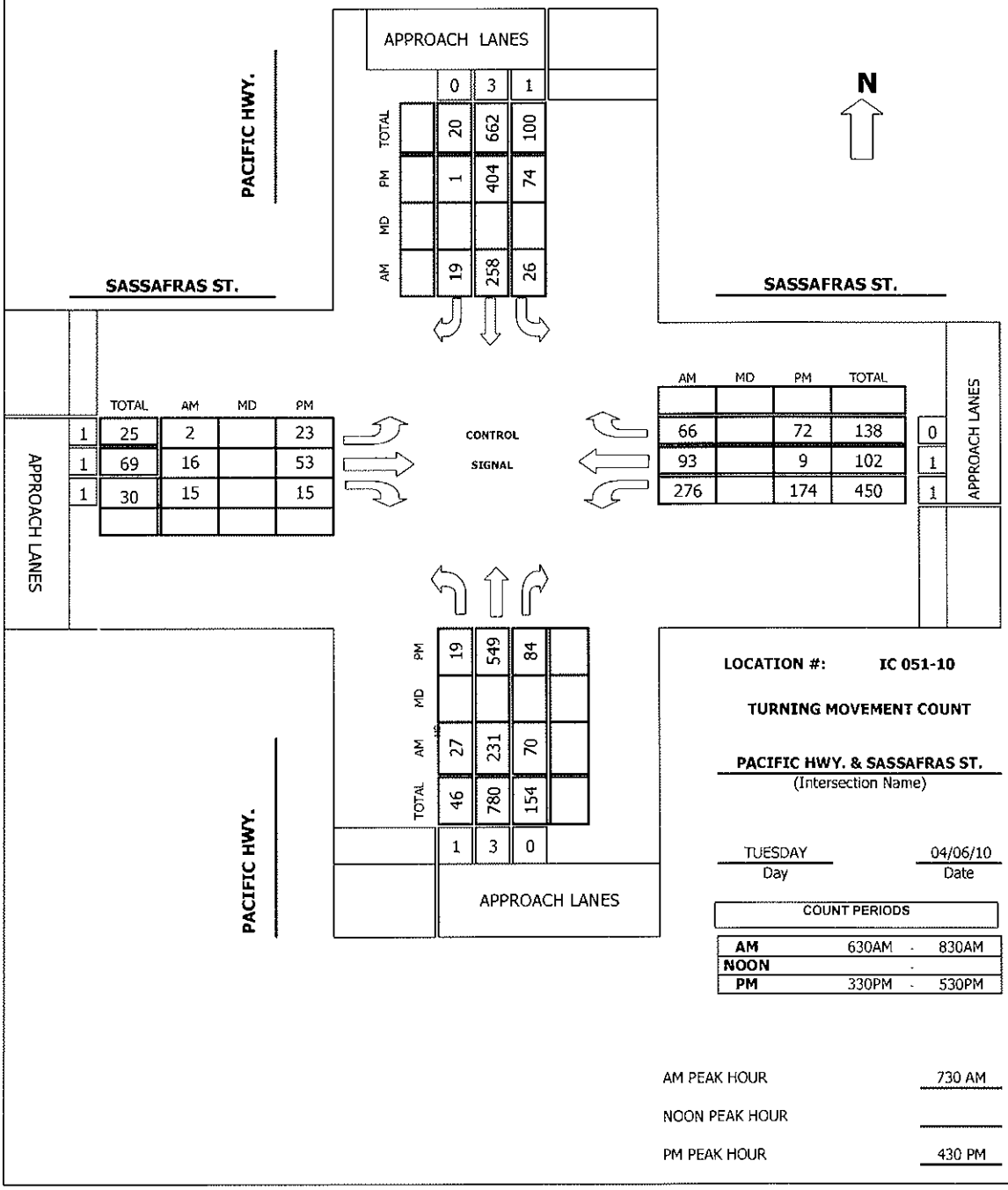
(34)

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: IC 051-10

TMC SUMMARY OF PACIFIC HWY. & SASSAFRAS ST.



LOCATION #: IC 051-10

TURNING MOVEMENT COUNT

PACIFIC HWY. & SASSAFRAS ST.
(Intersection Name)

TUESDAY (Day) 04/06/10 (Date)

COUNT PERIODS			
AM	630AM	-	830AM
NOON		-	
PM	330PM	-	530PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM	5	39	19	3	38	2	1	0	2	75	32	5	221
6:45 AM	6	47	9	4	63	1	1	1	1	104	15	7	259
7:00 AM	7	45	15	5	45	2	0	0	4	73	18	13	227
7:15 AM	8	55	16	4	67	3	0	0	1	50	21	8	233
7:30 AM	6	35	13	4	65	6	0	1	2	68	30	13	243
7:45 AM	7	72	12	7	69	4	0	3	2	77	20	19	292
8:00 AM	5	71	16	6	68	6	1	3	6	64	19	17	282
8:15 AM	9	53	29	9	56	3	1	9	5	67	24	17	282
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	53	417	129	42	471	27	4	17	23	578	179	99	2039
Approach %	8.85	69.62	21.54	7.78	87.22	5.00	9.09	38.64	52.27	67.52	20.91	11.57	
App/Depart	599	/	520	540	/	1072	44	/	188	856	/	259	

AM Peak Hr Begins at: 730 AM

PEAK													
Volumes	27	231	70	26	258	19	2	16	15	276	93	66	1099
Approach %	8.23	70.43	21.34	8.58	85.15	6.27	6.06	48.48	45.45	63.45	21.38	15.17	
PEAK HR. FACTOR:		0.891			0.947			0.550			0.938		0.941

CONTROL: SIGNAL
COMMENT 1:
COMMENT 2:

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	5	115	37	20	89	1	1	8	4	50	2	15	347
3:45 PM	6	127	26	16	90	1	2	2	3	42	1	19	335
4:00 PM	7	126	23	13	105	1	1	12	7	46	5	16	362
4:15 PM	5	98	23	18	105	1	2	11	4	59	4	17	347
4:30 PM	3	117	23	20	105	1	5	16	2	44	4	18	358
4:45 PM	6	130	19	17	99	0	3	7	3	42	1	17	344
5:00 PM	8	138	25	19	104	0	8	23	6	44	1	21	397
5:15 PM	2	164	17	18	96	0	7	7	4	44	3	16	378
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	42	1015	193	141	793	5	29	86	33	371	21	139	2868
Approach %	3.36	81.20	15.44	15.02	84.45	0.53	19.59	58.11	22.30	69.87	3.95	26.18	
App/Depart	1250	/	1183	939	/	1197	148	/	420	531	/	68	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	19	549	84	74	404	1	23	53	15	174	9	72	1477
Approach %	2.91	84.20	12.88	15.45	84.34	0.21	25.27	58.24	16.48	68.24	3.53	28.24	
PEAK HR. FACTOR:		0.891			0.950			0.615			0.966		0.930

CONTROL: SIGNAL
COMMENT 1: 0
COMMENT 2: 0

FIELD DATA SERVICES OF ARIZONA, INC.

520.316.6745

Pedestrian & Bicycle Study

Location: PACIFIC HWY. & SASSAFRAS ST.

Date: 04/06/10
Day: TUESDAY

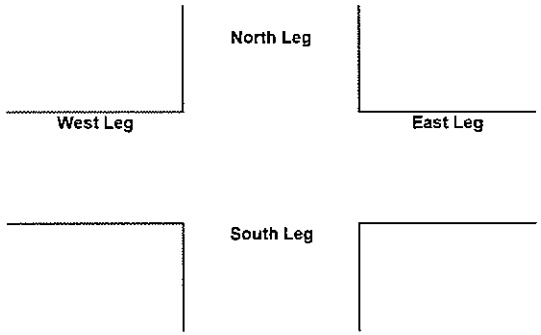
City: SAN DIEGO
Project #: IC 051-10

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	2	2	0
6:45 AM	0	1	0	0
7:00 AM	0	1	1	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	0
7:45 AM	0	1	0	0
8:00 AM	0	1	0	1
8:15 AM	0	1	0	0
TOTAL	0	8	3	1

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	0	1	2
6:45 AM	0	0	0	4
7:00 AM	0	0	0	2
7:15 AM	0	0	1	0
7:30 AM	0	0	1	0
7:45 AM	0	0	0	1
8:00 AM	0	0	0	2
8:15 AM	0	0	1	2
TOTAL	0	0	4	13

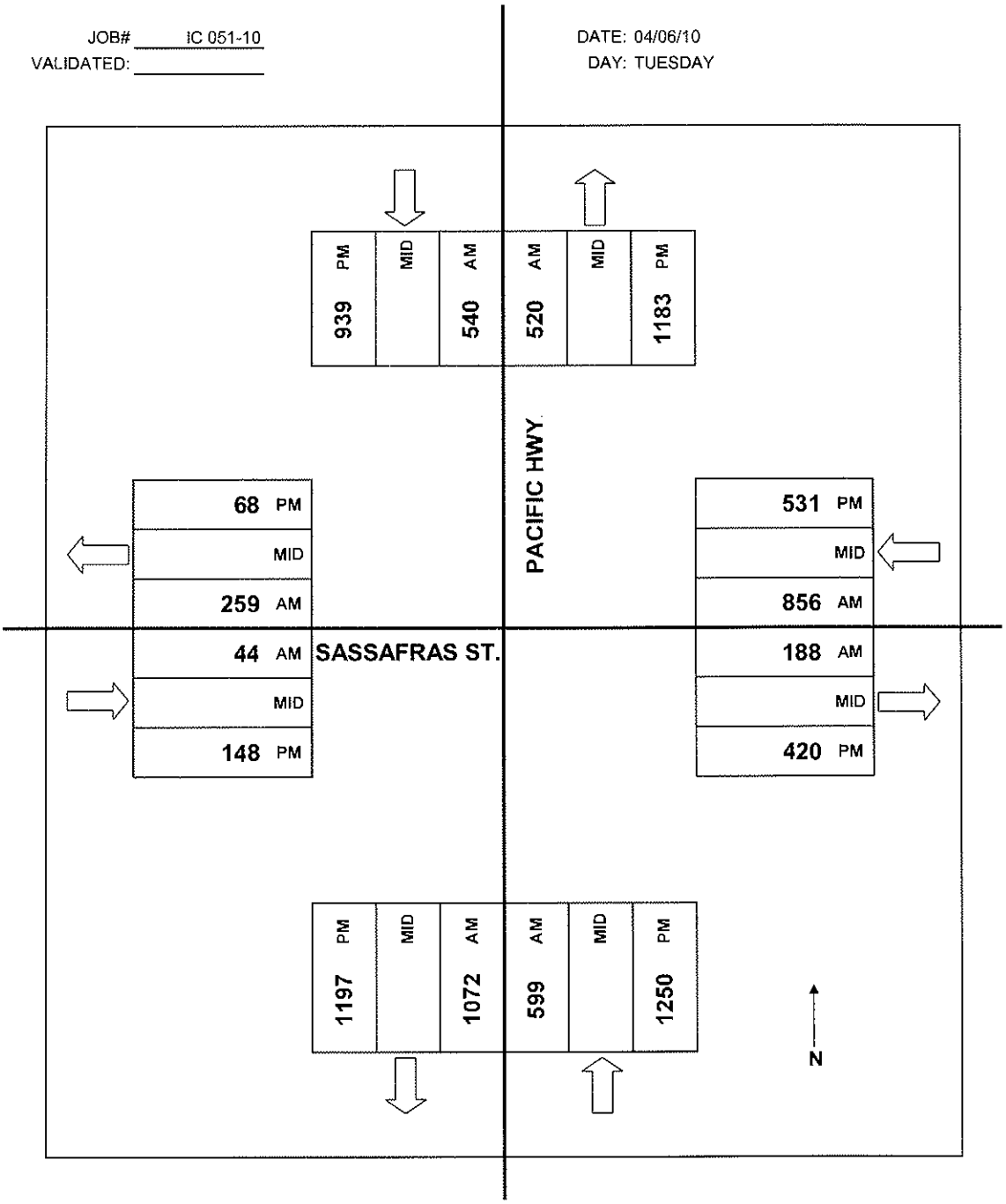
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	0	1
3:45 PM	0	0	0	0
4:00 PM	0	3	0	0
4:15 PM	0	1	0	2
4:30 PM	0	6	0	0
4:45 PM	0	1	0	2
5:00 PM	0	2	0	0
5:15 PM	0	0	0	0
TOTAL	0	13	0	5

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	2	0
3:45 PM	0	0	4	1
4:00 PM	0	0	2	2
4:15 PM	0	0	3	1
4:30 PM	0	0	1	2
4:45 PM	0	0	0	1
5:00 PM	0	0	2	1
5:15 PM	0	0	0	1
TOTAL	0	0	14	9



JOB# IC 051-10
VALIDATED: _____

DATE: 04/06/10
DAY: TUESDAY



(36)

2

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

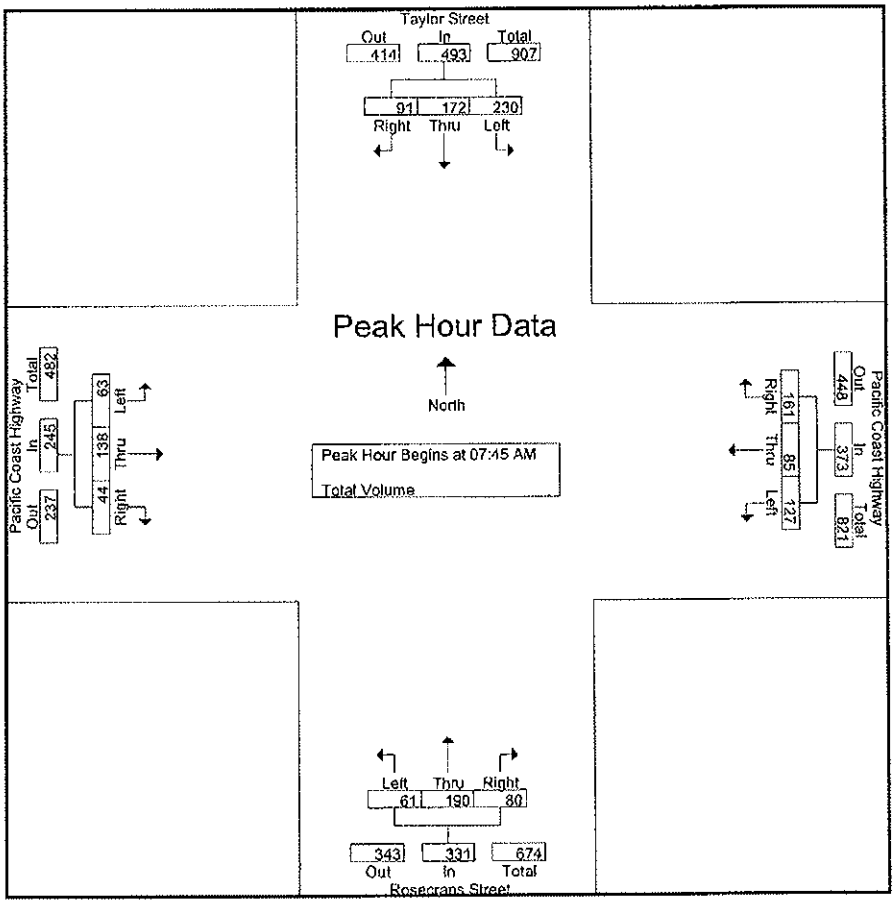
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
Total	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
07:00 AM	76	19	16	111	23	11	18	52	10	23	27	60	15	26	12	53	276
07:15 AM	92	21	11	124	43	18	21	82	13	29	21	63	12	21	6	39	308
07:30 AM	65	44	24	133	37	19	31	87	10	41	30	81	8	30	14	52	353
07:45 AM	66	53	20	139	37	20	41	98	11	51	18	80	22	50	15	87	404
Total	299	137	71	507	140	68	111	319	44	144	96	284	57	127	47	231	1341
08:00 AM	58	31	19	108	36	21	45	102	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	29	118	24	20	33	77	19	68	19	106	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Grand Total	533	268	162	963	250	146	261	657	101	304	186	591	114	236	82	432	2643
Apprch %	55.3	27.8	16.8		38.1	22.2	39.7		17.1	51.4	31.5		26.4	54.6	19		
Total %	20.2	10.1	6.1	36.4	9.5	5.5	9.9	24.9	3.8	11.5	7	22.4	4.3	8.9	3.1	16.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**66**	**53**	20	**139**	37	20	41	98	11	51	18	80	**22**	**50**	**15**	**87**	**404**
08:00 AM	58	31	19	108	36	21	**45**	**102**	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	**29**	118	24	20	33	77	**19**	**68**	19	**106**	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Total Volume	230	172	91	493	127	85	161	373	61	190	80	331	63	138	44	245	1442
% App. Total	46.7	34.9	18.5		34	22.8	43.2		18.4	57.4	24.2		25.7	56.3	18		
PHF	.871	.811	.784	.887	.858	.885	.894	.914	.803	.699	.870	.781	.716	.690	.733	.704	.892

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	76	19	16	111	37	20	41	98	10	41	**30**	81	**22**	**50**	**15**	**87**
+15 mins.	**92**	21	11	124	36	21	**45**	**102**	11	51	18	80	9	27	12	48
+30 mins.	65	44	**24**	133	24	20	33	77	13	31	23	67	13	31	7	51
+45 mins.	66	**53**	20	**139**	30	**24**	42	96	**19**	**68**	19	**106**	19	30	10	59
Total Volume	299	137	71	507	127	85	161	373	53	191	90	334	63	138	44	245
% App. Total	59	27	14		34	22.8	43.2		15.9	57.2	26.9		25.7	56.3	18	
PHF	.813	.646	.740	.912	.858	.885	.894	.914	.697	.702	.750	.788	.716	.690	.733	.704

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009

Groups Printed- Total Volume

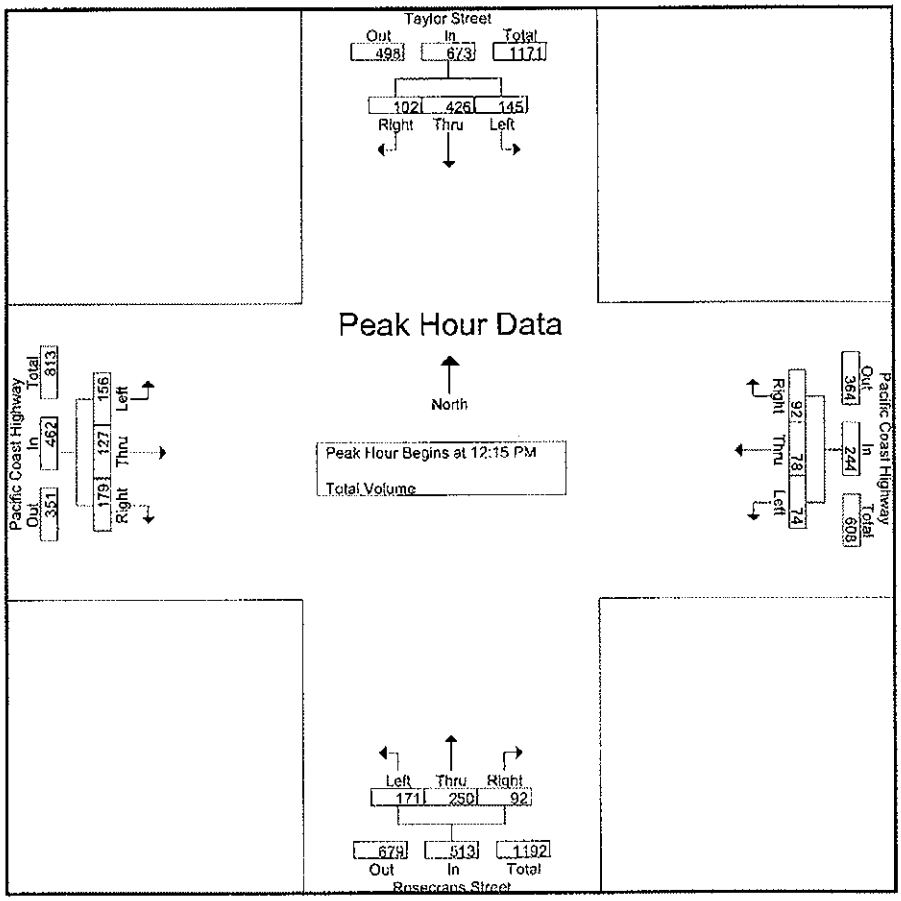
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	23	86	27	136	16	17	27	60	42	60	13	115	46	24	48	118	429
11:45 AM	21	94	29	144	16	23	13	52	27	77	21	125	45	28	54	127	448
Total	44	180	56	280	32	40	40	112	69	137	34	240	91	52	102	245	877
12:00 PM	30	70	19	119	13	28	32	73	33	62	12	107	41	32	41	114	413
12:15 PM	34	116	22	172	29	13	26	68	33	66	31	130	47	36	39	122	492
12:30 PM	34	110	33	177	14	20	18	52	45	58	25	128	38	26	54	118	475
12:45 PM	31	118	32	181	13	17	20	50	45	63	15	123	47	39	43	129	483
Total	129	414	106	649	69	78	96	243	156	249	83	488	173	133	177	483	1863
01:00 PM	46	82	15	143	18	28	28	74	48	63	21	132	24	26	43	93	442
01:15 PM	28	85	10	123	24	24	15	63	19	50	15	84	61	40	65	166	436
Grand Total	247	761	187	1195	143	170	179	492	292	499	153	944	349	251	387	987	3618
Apprch %	20.7	63.7	15.6		29.1	34.6	36.4		30.9	52.9	16.2		35.4	25.4	39.2		
Total %	6.8	21	5.2	33	4	4.7	4.9	13.6	8.1	13.8	4.2	26.1	9.6	6.9	10.7	27.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	34	116	22	172	**29**	13	26	68	33	**66**	**31**	130	**47**	36	39	122	**492**
12:30 PM	34	110	**33**	177	14	20	18	52	45	58	25	128	38	26	**54**	118	475
12:45 PM	31	**118**	32	**181**	13	17	20	50	45	63	15	123	47	**39**	43	**129**	483
01:00 PM	**46**	82	15	143	18	**28**	**28**	**74**	**48**	63	21	**132**	24	26	43	93	442
Total Volume	145	426	102	673	74	78	92	244	171	250	92	513	156	127	179	462	1892
% App. Total	21.5	63.3	15.2		30.3	32	37.7		33.3	48.7	17.9		33.8	27.5	38.7		
PHF	.788	.903	.773	.930	.638	.696	.821	.824	.891	.947	.742	.972	.830	.814	.829	.895	.961

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				12:15 PM				12:30 PM			
+0 mins.	34	116	22	172	16	17	27	60	33	**66**	31	130	38	26	54	118
+15 mins.	34	110	**33**	177	16	23	13	52	45	58	25	128	47	39	43	129
+30 mins.	31	**118**	32	**181**	13	**28**	**32**	**73**	45	63	15	123	24	26	43	93
+45 mins.	**46**	82	15	143	**29**	13	26	68	**48**	63	21	**132**	**61**	**40**	**65**	**166**
Total Volume	145	426	102	673	74	81	98	253	171	250	92	513	170	131	205	506
% App. Total	21.5	63.3	15.2		29.2	32	38.7		33.3	48.7	17.9		33.6	25.9	40.5	
PHF	.788	.903	.773	.930	.638	.723	.766	.866	.891	.947	.742	.972	.697	.819	.788	.762

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

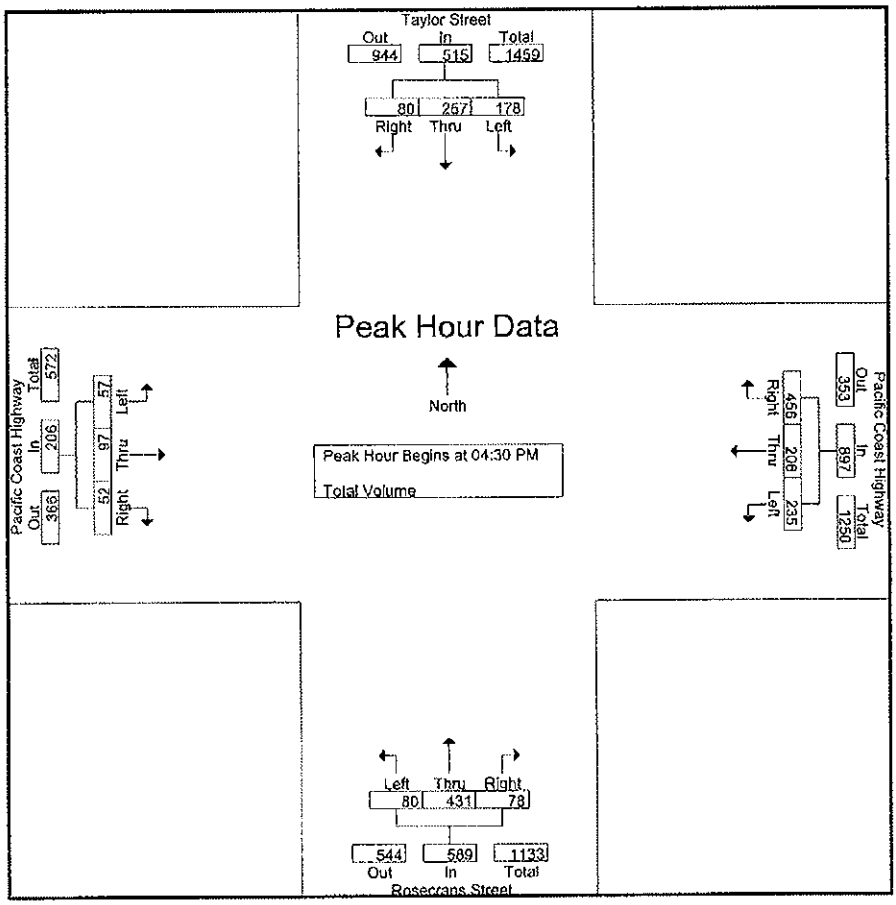
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	57	49	27	133	70	65	123	258	19	87	19	125	22	23	17	62	578
04:15 PM	32	54	20	106	83	46	103	232	22	64	32	118	11	27	12	50	506
04:30 PM	51	56	15	122	60	48	127	235	25	113	30	168	19	27	13	59	584
04:45 PM	40	57	16	113	62	38	107	207	18	90	10	118	14	13	7	34	472
Total	180	216	78	474	275	197	460	932	84	354	91	529	66	90	49	205	2140
05:00 PM	46	79	21	146	57	61	115	233	20	133	16	169	16	27	14	57	605
05:15 PM	41	65	28	134	56	59	107	222	17	95	22	134	8	30	18	56	546
05:30 PM	42	78	17	137	70	32	103	205	19	102	24	145	14	15	12	41	528
05:45 PM	42	80	20	142	42	36	92	170	18	90	22	130	12	24	15	51	493
Total	171	302	86	559	225	188	417	830	74	420	84	578	50	96	59	205	2172
Grand Total	351	518	164	1033	500	385	877	1762	158	774	175	1107	116	186	108	410	4312
Apprch %	34	50.1	15.9		28.4	21.9	49.8		14.3	69.9	15.8		28.3	45.4	26.3		
Total %	8.1	12	3.8	24	11.6	8.9	20.3	40.9	3.7	17.9	4.1	25.7	2.7	4.3	2.5	9.5	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**51**	56	15	122	60	48	**127**	**235**	**25**	113	**30**	168	**19**	27	13	**59**	584
04:45 PM	40	57	16	113	**62**	38	107	207	18	90	10	118	14	13	7	34	472
05:00 PM	46	**79**	21	**146**	57	**61**	115	233	20	**133**	16	**169**	16	27	14	57	**605**
05:15 PM	41	65	**28**	134	56	59	107	222	17	95	22	134	8	**30**	**18**	56	546
Total Volume	178	257	80	515	235	206	456	897	80	431	78	589	57	97	52	206	2207
% App. Total	34.6	49.9	15.5		26.2	23	50.8		13.6	73.2	13.2		27.7	47.1	25.2		
PHF	.873	.813	.714	.882	.948	.844	.898	.954	.800	.810	.650	.871	.750	.808	.722	.873	.912

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	**46**	79	21	**146**	70	**65**	123	**258**	**25**	113	**30**	168	**19**	27	13	**59**
+15 mins.	41	65	**28**	134	**83**	46	103	232	18	90	10	118	14	13	7	34
+30 mins.	42	78	17	137	60	48	**127**	235	20	**133**	16	**169**	16	27	14	57
+45 mins.	42	**80**	20	142	62	38	107	207	17	95	22	134	8	**30**	**18**	56
Total Volume	171	302	86	559	275	197	460	932	80	431	78	589	57	97	52	206
% App. Total	30.6	54	15.4		29.5	21.1	49.4		13.6	73.2	13.2		27.7	47.1	25.2	
PHF	.929	.944	.768	.957	.828	.758	.906	.903	.800	.810	.650	.871	.750	.808	.722	.873

(37)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	29	8	0	29	27	0	0	2	9	7	27	158
7:15 AM	27	35	2	0	32	33	1	0	0	7	11	31	179
7:30 AM	33	36	8	1	39	39	1	0	4	7	19	25	212
7:45 AM	37	43	9	1	31	38	1	0	6	9	35	45	255
8:00 AM	24	56	12	1	26	37	0	1	5	9	46	55	272
8:15 AM	27	37	7	0	21	69	1	0	3	7	51	42	265
8:30 AM	31	33	7	0	27	52	0	0	2	11	29	43	235
8:45 AM	24	43	5	5	28	61	1	0	5	11	28	41	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	223	312	58	8	233	356	5	1	27	70	226	309	1828
APPROACH %'s :	37.61%	52.61%	9.78%	1.34%	39.03%	59.63%	15.15%	3.03%	81.82%	11.57%	37.36%	51.07%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	91	46	3	1	42	31	0	0	1	15	16	34	280
4:15 PM	97	66	2	1	41	28	0	1	6	21	22	45	330
4:30 PM	96	70	4	0	52	39	0	1	6	17	26	38	349
4:45 PM	104	67	2	0	45	29	0	0	5	21	20	50	343
5:00 PM	107	54	1	0	53	46	0	0	9	24	26	50	370
5:15 PM	99	69	2	0	52	23	1	1	1	9	16	57	330
5:30 PM	76	52	3	0	47	36	1	0	4	16	25	53	313
5:45 PM	42	39	1	0	33	27	0	0	2	10	17	38	209
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	712	463	18	2	365	259	2	3	34	133	168	365	2524
APPROACH %'s :	59.68%	38.81%	1.51%	0.32%	58.31%	41.37%	5.13%	7.69%	87.18%	19.97%	25.23%	54.80%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

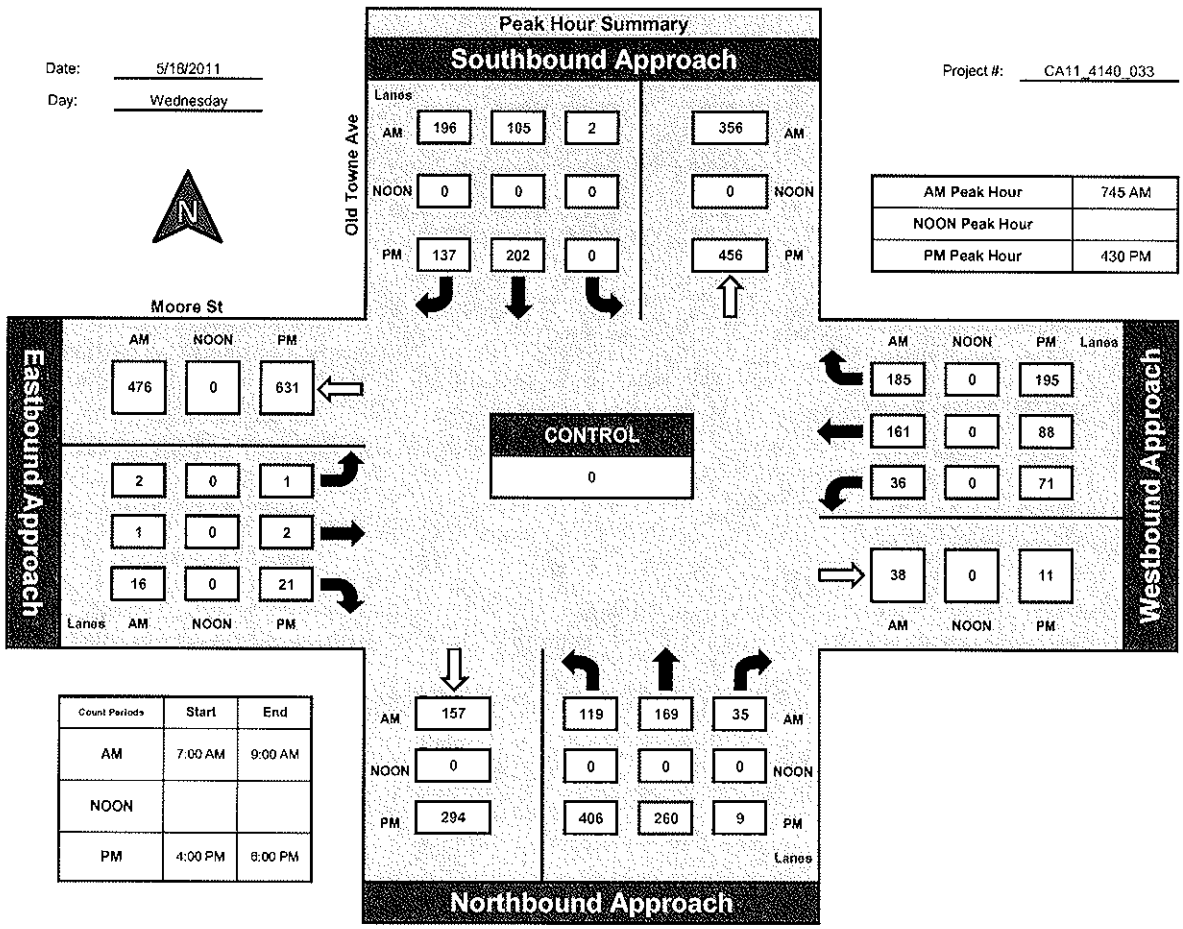
National Data & Surveying Services

Old Towne Ave and Moore St , City of San Diego

Date: 5/18/2011

Day: Wednesday

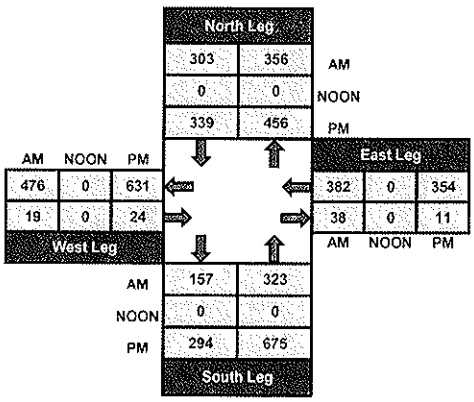
Project #: CA11_4140_033



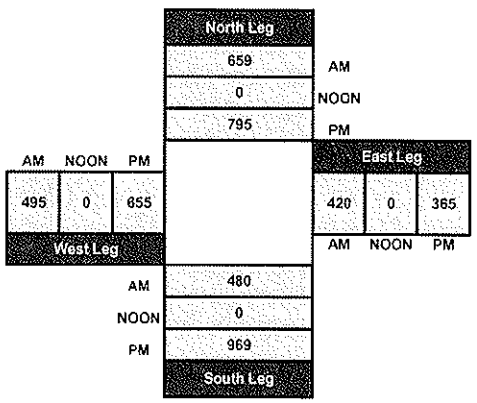
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(38)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

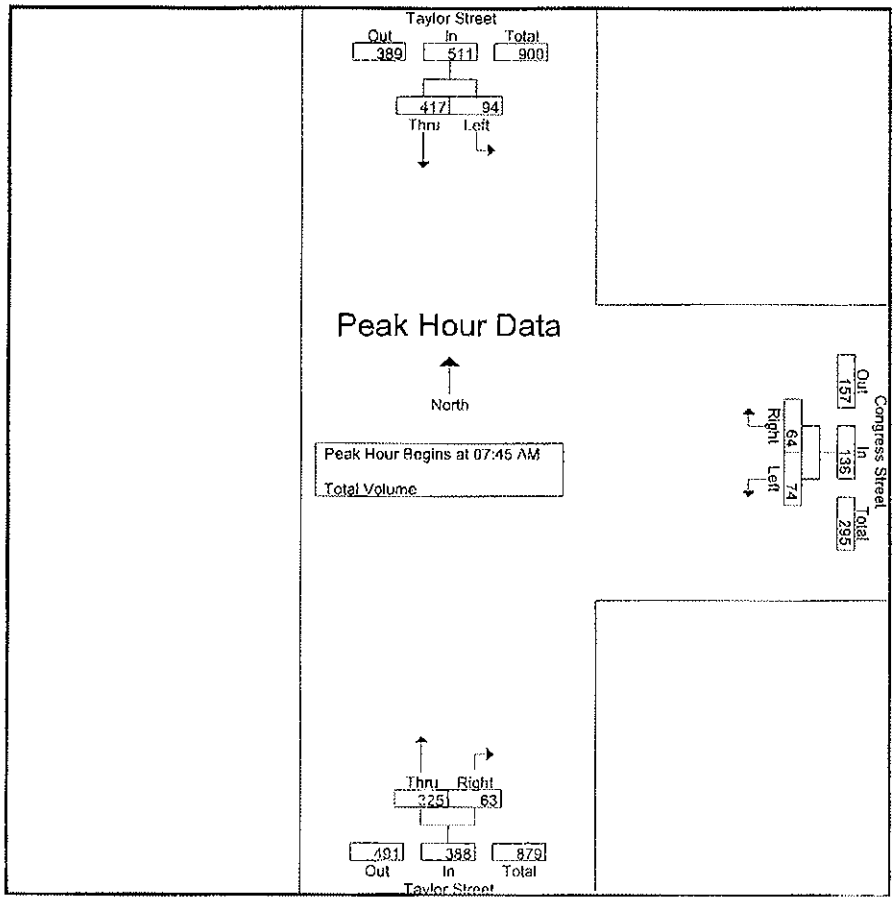
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:45 AM	10	92	102	13	4	17	42	11	53	172
Total	10	92	102	13	4	17	42	11	53	172
07:00 AM	14	108	122	7	11	18	58	6	64	204
07:15 AM	13	124	137	10	12	22	55	8	63	222
07:30 AM	21	121	142	9	17	26	63	8	71	239
07:45 AM	23	122	145	19	18	37	93	13	106	288
Total	71	475	546	45	58	103	269	35	304	953
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	19	32	80	18	98	252
08:30 AM	27	99	126	29	11	40	80	19	99	265
Grand Total	152	862	1014	113	108	221	543	96	639	1874
Apprch %	15	85		51.1	48.9		85	15		
Total %	8.1	46	54.1	6	5.8	11.8	29	5.1	34.1	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	23	**122**	**145**	19	18	37	**93**	13	**106**	**288**
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	**19**	32	80	18	98	252
08:30 AM	**27**	99	126	**29**	11	**40**	80	19	99	265
Total Volume	94	417	511	74	64	138	325	63	388	1037
% App. Total	18.4	81.6		53.6	46.4		83.8	16.2		
PHF	.870	.855	.881	.638	.842	.863	.874	.829	.915	.901

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:45 AM		
+0 mins.	14	108	122	19	18	37	93	13	106
+15 mins.	13	124	137	13	16	29	72	13	85
+30 mins.	21	121	142	13	19	32	80	18	98
+45 mins.	23	122	145	29	11	40	80	19	99
Total Volume	71	475	546	74	64	138	325	63	388
% App. Total	13	87		53.6	46.4		83.8	16.2	
PHF	.772	.958	.941	.638	.842	.863	.874	.82[illegible]	.915

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

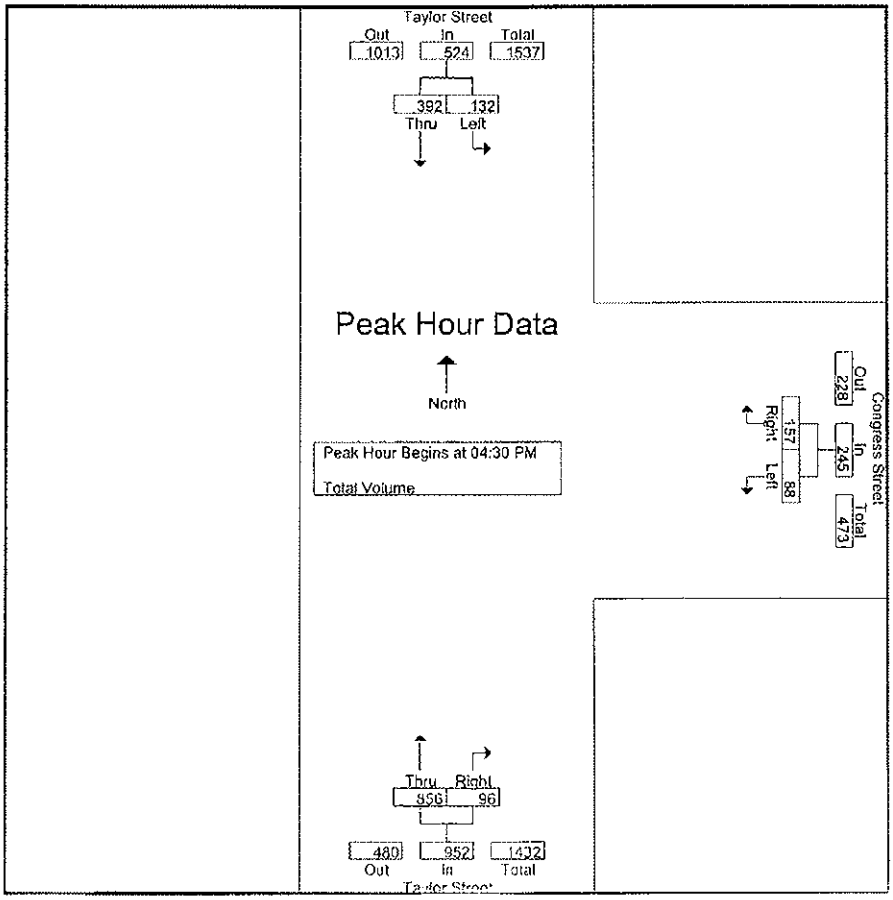
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	33	104	137	21	37	58	197	16	213	408
04:15 PM	29	85	114	12	25	37	182	12	194	345
04:30 PM	52	93	145	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
Total	135	368	503	71	133	204	795	72	867	1574
05:00 PM	26	111	137	24	36	60	240	20	260	457
05:15 PM	33	102	135	26	50	76	200	32	232	443
05:30 PM	28	101	129	24	33	57	194	26	220	406
05:45 PM	31	95	126	16	35	51	173	22	195	372
Total	118	409	527	90	154	244	807	100	907	1678
Grand Total	253	777	1030	161	287	448	1602	172	1774	3252
Apprch %	24.6	75.4		35.9	64.1		90.3	9.7		
Total %	7.8	23.9	31.7	5	8.8	13.8	49.3	5.3	54.6	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**52**	93	**145**	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
05:00 PM	26	111	137	24	36	60	**240**	20	**260**	**457**
05:15 PM	33	102	135	26	50	76	200	32	232	443
Total Volume	132	392	524	88	157	245	856	96	952	1721
% App. Total	25.2	74.8		35.9	64.1		89.9	10.1		
PHF	.635	.883	.903	.846	.785	.806	.892	.750	.915	.941

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	26	111	137	20	38	58	224	25	249
+15 mins.	33	102	135	24	36	60	192	24	216
+30 mins.	28	101	129	26	50	76	240	20	260
+45 mins.	31	95	126	24	33	57	200	32	232
Total Volume	118	409	527	94	157	251	856	96	952
% App. Total	22.4	77.6		37.5	62.5		89.9	10.1	
PHF	.894	.921	.962	.904	.785	.826	.893	.75	.915

(39)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

Day: WEDNESDAY

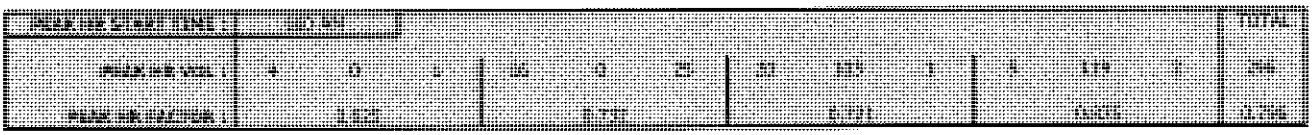
City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	2		2	2	12	1	0	12	1	32
7:15 AM	0	0	0	3		4	4	15	2	0	25	0	53
7:30 AM	2	0	1	4		4	2	25	0	0	21	0	59
7:45 AM	0	1	0	3		3	6	25	0	0	23	1	62
8:00 AM	1	0	0	3		3	2	24	0	2	23	1	59
8:15 AM	0	0	1	4		4	4	18	0	1	28	0	60
8:30 AM	1	0	0	3		11	5	28	0	1	35	0	84
8:45 AM	2	0	0	6		7	9	33	1	1	33	1	93

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	1	2	28	0	38	34	180	4	5	200	4	502
APPROACH %'s :	66.67%	11.11%	22.22%	42.42%	0.00%	57.58%	15.60%	82.57%	1.83%	2.39%	95.69%	1.91%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

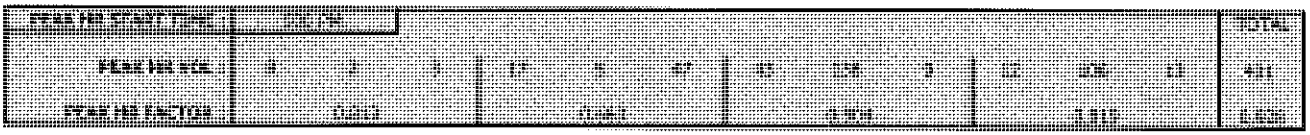
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	1	5	1	11	6	28	2	0	32	1	87
4:15 PM	0	2	1	7	0	5	6	28	2	0	34	4	89
4:30 PM	0	2	1	4	1	9	10	35	1	2	35	3	103
4:45 PM	1	0	2	3	0	6	10	26	0	1	27	4	80
5:00 PM	2	0	1	3	0	9	7	37	2	3	25	5	94
5:15 PM	2	0	0	2	0	11	10	32	2	4	31	5	99
5:30 PM	1	2	1	3	1	14	11	34	1	3	35	2	108
5:45 PM	3	0	1	9	4	13	15	33	4	2	15	1	100
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	6	8	36	7	78	75	253	14	15	234	25	760
APPROACH %'s :	39.13%	26.09%	34.78%	29.75%	5.79%	64.46%	21.93%	73.98%	4.09%	5.47%	85.40%	9.12%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

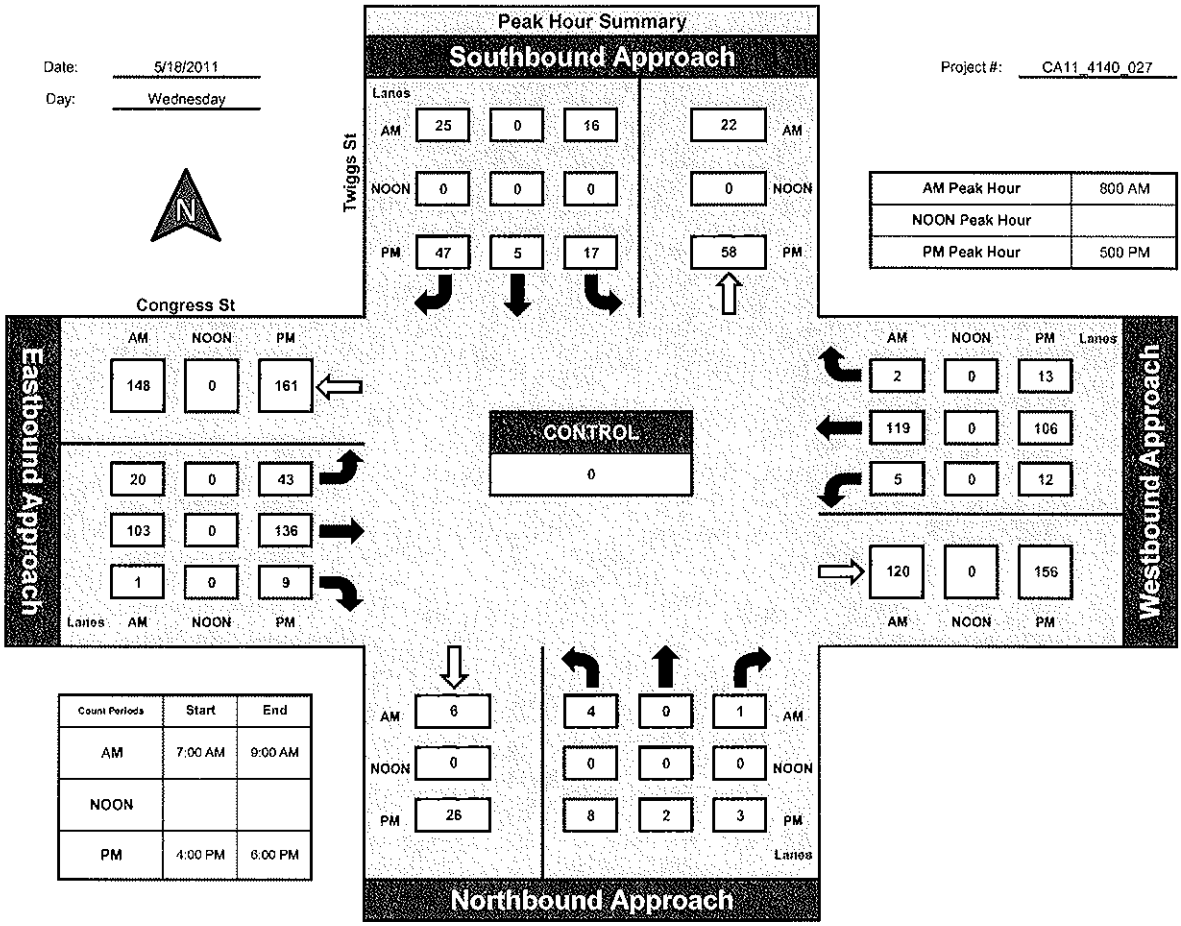
National Data & Surveying Services

Twiggs St and Congress St , City of San Diego

Date: 5/18/2011

Day: Wednesday

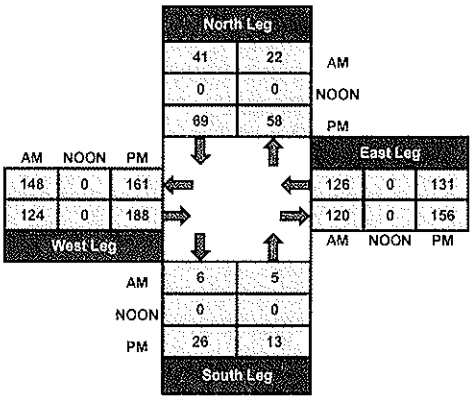
Project #: CA11_4140_027



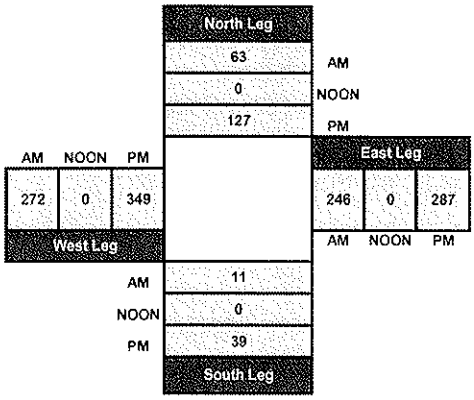
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(40)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	3	2	0	1	3	3	1	10	3	0	7	1	34
7:15 AM	7	1	0	3	3	1	0	12	6	1	17	0	51
7:30 AM	1	0	1	3	3	1	0	24	2	0	19	1	55
7:45 AM	2	2	1	2	3	0	2	27	1	0	19	0	59
8:00 AM	3	1	2	3	3	2	1	23	2	1	24	1	66
8:15 AM	0	0	0	2	3	1	1	19	1	0	27	4	58
8:30 AM	2	0	1	2	4	0	2	22	3	2	35	1	74
8:45 AM	3	1	0	3	4	2	1	27	12	2	30	2	87
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	7	5	19	26	10	8	164	30	6	178	10	484
APPROACH %'s :	63.64%	21.21%	15.15%	34.55%	47.27%	18.18%	3.96%	81.19%	14.85%	3.09%	91.75%	5.15%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

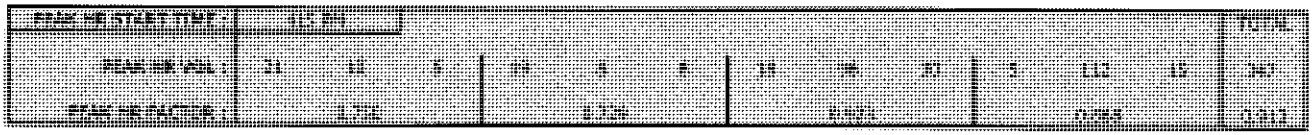
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	2	1	2	6	0	2	4	28	2	2	30	3	82
4:15 PM	5	2	1	7	2	3	5	26	6	1	33	4	95
4:30 PM	4	2	3	5	2	1	5	29	5	0	28	4	88
4:45 PM	6	5	1	5	0	1	2	20	7	3	26	5	81
5:00 PM	6	1	0	2	4	3	6	21	12	1	25	2	83
5:15 PM	4	1	2	4	3	7	2	24	7	2	30	1	87
5:30 PM	9	0	0	5	2	0	5	34	2	0	28	2	87
5:45 PM	6	3	3	9	1	2	3	27	10	0	16	6	86
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	42	15	12	43	14	19	32	209	51	9	216	27	689
APPROACH %'s :	60.87%	21.74%	17.39%	56.58%	18.42%	25.00%	10.96%	71.58%	17.47%	3.57%	85.71%	10.71%	



CONTROL :

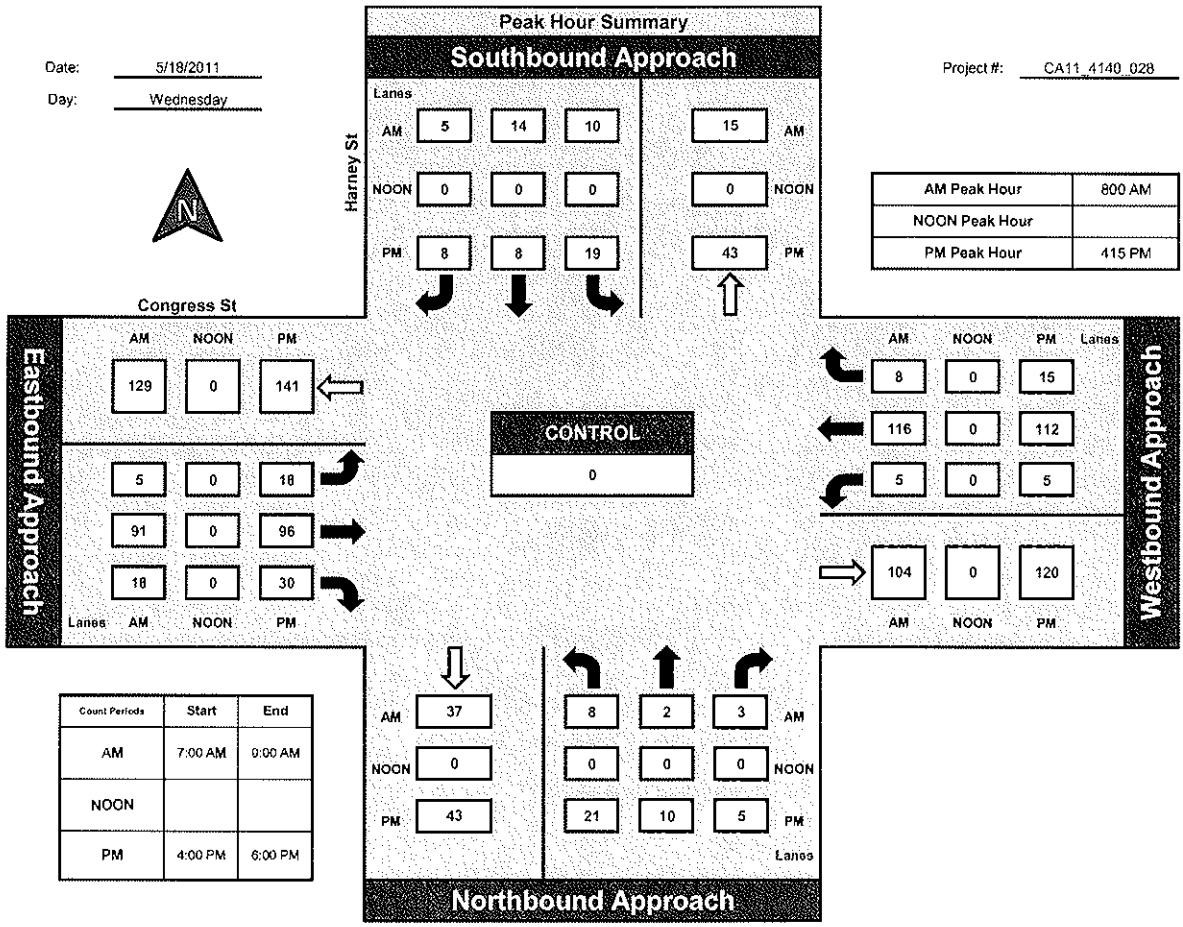
ITM Peak Hour Summary

Prepared by:

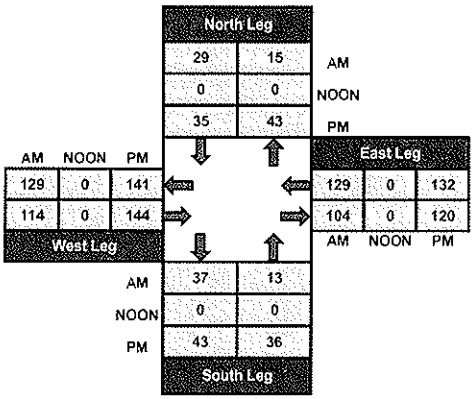
NDS

National Data & Surveying Services

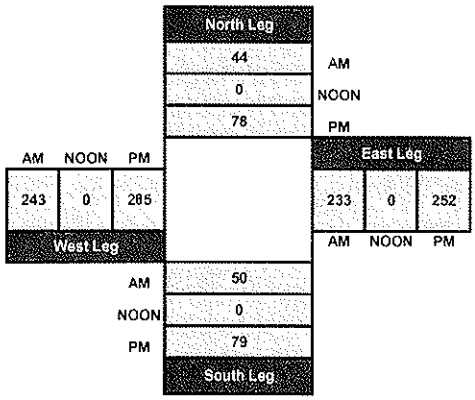
Harney St and Congress St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0			0			2	0			2
7:15 AM	1	0	1			0			2	1			5
7:30 AM	0	0	1			2			3	2			8
7:45 AM	0	0	1			4			1	1			7
8:00 AM	0	2	2			0			2	2			8
8:15 AM	2	3	3			2			3	6			19
8:30 AM	0	0	2			0			2	3			7
8:45 AM	0	3	2			5			1	4			15
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	8	12	0	0	13	0	0	16	19	0	0	71
APPROACH %'s :	13.04%	34.78%	52.17%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	
[illegible]	[illegible]												

CONTROL :

Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below **PM**

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	1	3			0			2	2			9
4:15 PM	2	2	1			3			4	1			13
4:30 PM	1	2	0			0			0	2			5
4:45 PM	1	1	0			2			5	0			9
5:00 PM	1	1	1			2			2	1			8
5:15 PM	0	1	1			3			1	3			9
5:30 PM	1	1	4			3			1	3			13
5:45 PM	2	2	0			2			3	2			11

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	11	10	0	0	15	0	0	18	14	0	0	77
APPROACH %'s :	30.00%	36.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

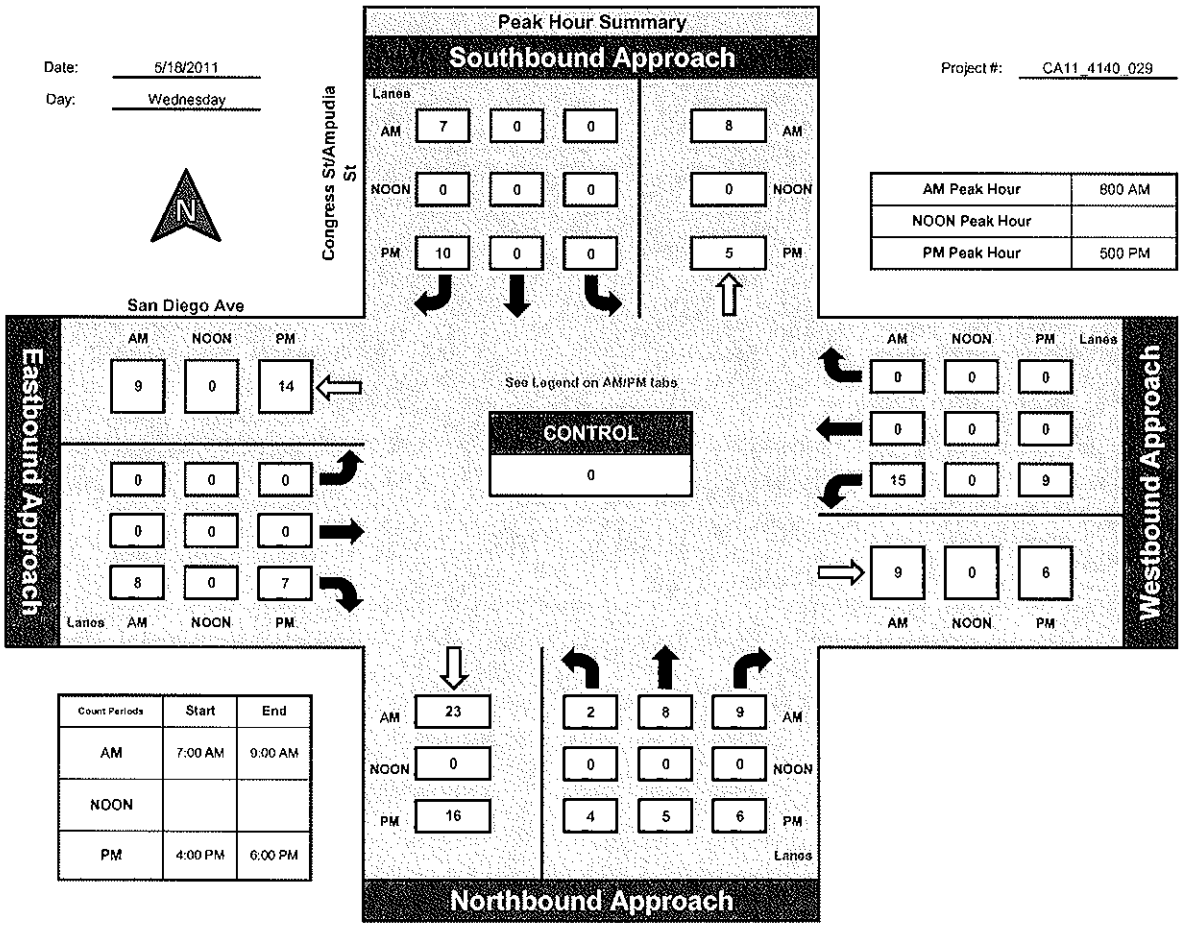
Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

ITM Peak Hour Summary

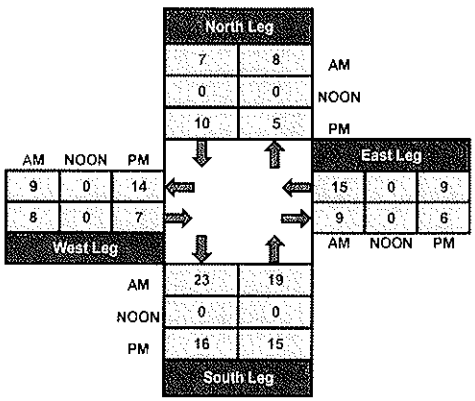
Prepared by:

National Data & Surveying Services

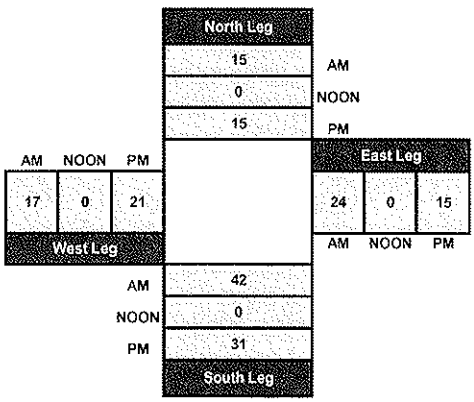
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		5	2	0			13	0	8	21	0	49
7:15 AM	0		6	0	0			8	3	17	22	1	57
7:30 AM	0		20	0	0			17	3	20	27	0	87
7:45 AM	0		18	0	1			16	0	30	33	2	100
8:00 AM	1		16	1	1			8	1	34	41	1	104
8:15 AM	1		14	1	0			14	0	27	63	0	120
8:30 AM	0		18	0	0			14	0	37	57	0	126
8:45 AM	0		19	0	0			13	0	30	61	0	123
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	116	4	2	0	0	103	7	203	325	4	766
APPROACH %'s :	1.69%	0.00%	98.31%	66.67%	33.33%	0.00%	0.00%	93.64%	6.36%	38.16%	61.09%	0.75%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029

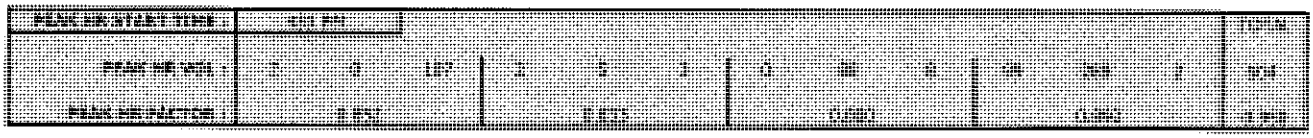
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		28	0	3	1		44	1	19	52	0	148
4:15 PM	1		24	0	1	0		22	1	20	49	1	119
4:30 PM	1		31	1	0	2		23	2	24	73	1	158
4:45 PM	0		24	0	2	0		19	2	22	69	0	138
5:00 PM	1		25	0	2	0		26	4	29	61	1	149
5:15 PM	0		27	1	1	1		20	0	24	85	0	159
5:30 PM	0		21	0	2	0		22	0	24	72	1	142
5:45 PM	0		31	0	0	0		25	2	16	76	0	150
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	211	2	11	4	0	201	12	178	537	4	1163
APPROACH %'s :	1.40%	0.00%	98.60%	11.76%	64.71%	23.53%	0.00%	94.37%	5.63%	24.76%	74.69%	0.56%	



CONTROL :

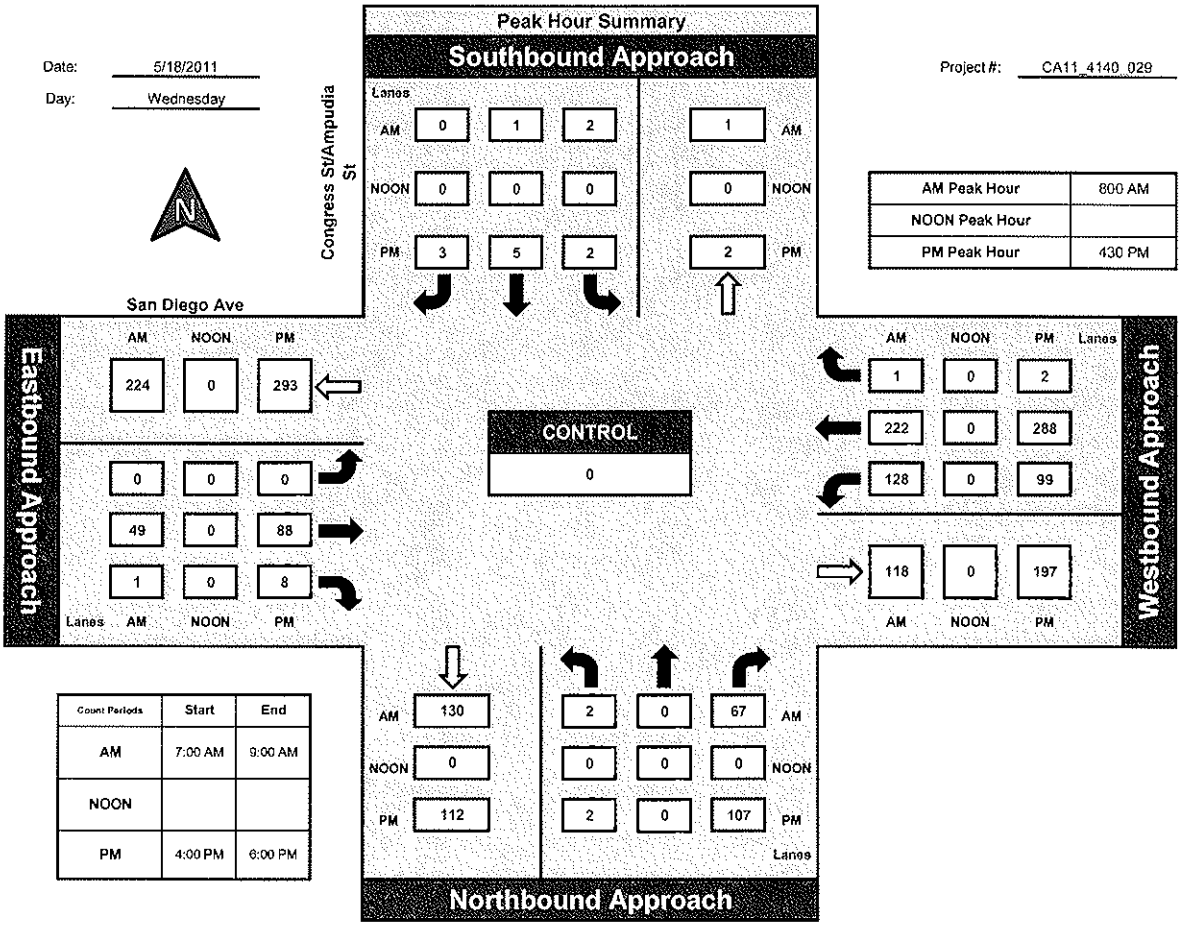
ITM Peak Hour Summary

Prepared by:

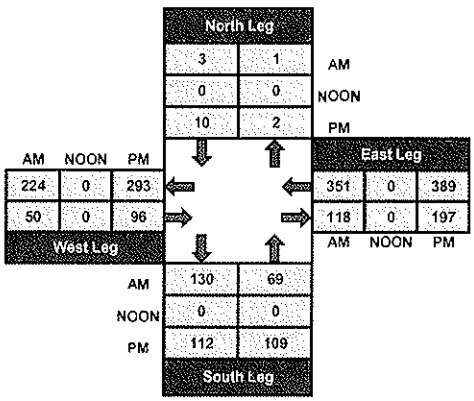
NDS

National Data & Surveying Services

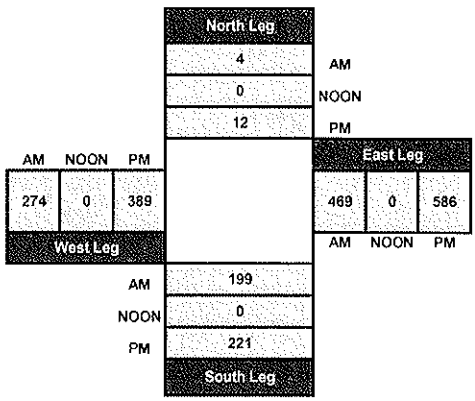
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(42)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		2	0	5	3					3		6	19
7:15 AM		3	2	4	6					2		8	25
7:30 AM		3	3	7	5					1		11	30
7:45 AM		3	3	10	4					3		19	42
8:00 AM		1	1	5	4					2		21	34
8:15 AM		4	0	3	8					2		35	52
8:30 AM		8	2	8	7					6		35	66
8:45 AM		6	1	9	10					8		37	71

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	30	12	51	47	0	0	0	0	27	0	172	339
APPROACH %'s :	0.00%	71.43%	28.57%	52.04%	47.96%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	13.57%	0.00%	86.43%	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		6	3	10	5					9		15	48
4:15 PM		9	5	12	7					8		16	57
4:30 PM		6	8	5	4					13		29	65
4:45 PM		7	6	10	2					9		21	55
5:00 PM		8	2	10	5					5		23	53
5:15 PM		9	4	14	4					8		31	70
5:30 PM		6	8	7	4					12		30	67
5:45 PM		7	6	10	2					9		20	54

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	58	42	78	33	0	0	0	0	73	0	185	469
APPROACH %'s :	0.00%	58.00%	42.00%	70.27%	29.73%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	28.29%	0.00%	71.71%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

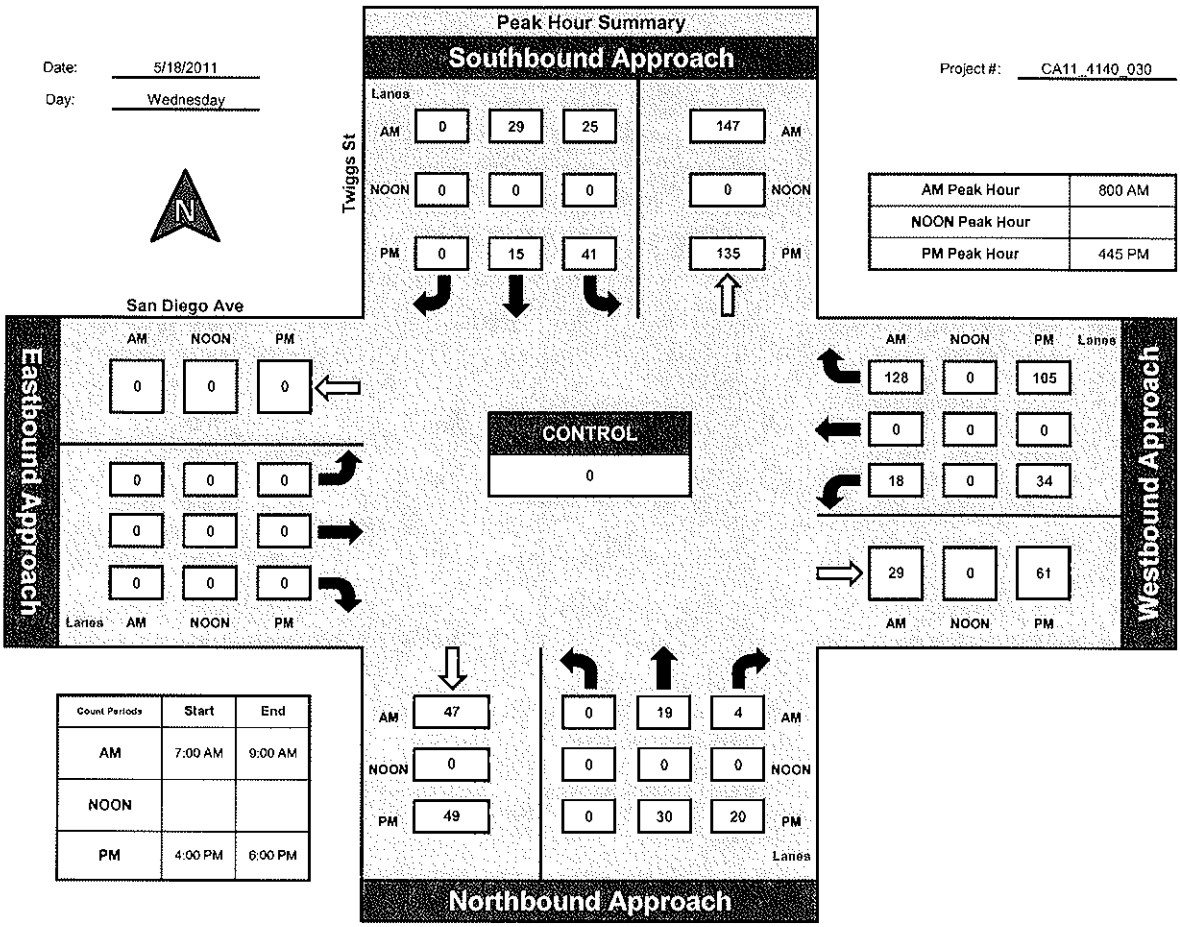
National Data & Surveying Services

Twiggs St and San Diego Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

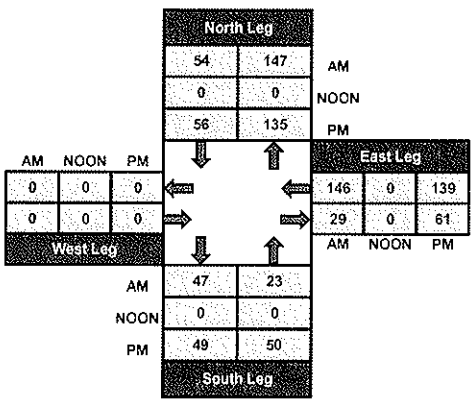
Project #: CA11_4140_030



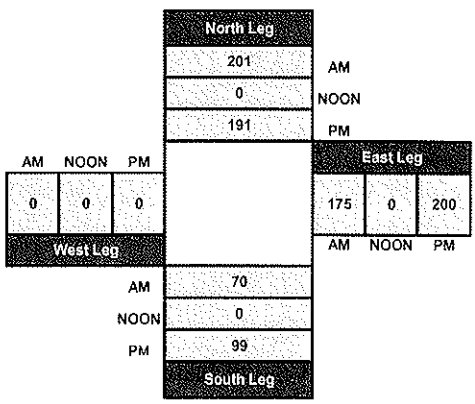
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(43)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	2	0	11	8	1	0	4	0	0	8	8	43
7:15 AM	1	0	0	8	5	1	0	6	1	1	6	9	38
7:30 AM	0	0	0	13	6	0	1	8	0	0	7	15	50
7:45 AM	1	3	0	15	6	2	1	7	1	0	26	13	75
8:00 AM	1	0	1	7	6	2	1	6	2	0	20	17	63
8:15 AM	1	3	0	14	5	2	0	1	0	2	31	26	85
8:30 AM	2	0	2	9	5	1	0	9	1	1	39	19	88
8:45 AM	1	0	0	7	2	7	0	8	1	0	35	21	82
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	8	3	84	43	16	3	49	6	4	172	128	524
APPROACH %'s :	42.11%	42.11%	15.79%	58.74%	30.07%	11.19%	5.17%	84.48%	10.34%	1.32%	56.58%	42.11%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	1	3	17	9	2	1	11	3	1	22	23	93
4:15 PM	0	4	1	15	6	1	0	15	3	3	29	22	99
4:30 PM	1	4	3	16	5	2	2	16	2	5	31	19	106
4:45 PM	0	4	2	14	1	1	1	14	0	5	29	27	98
5:00 PM	0	7	4	24	7	0	0	16	1	8	34	23	124
5:15 PM	3	3	5	21	7	1	0	19	5	6	39	25	134
5:30 PM	1	6	3	16	9	3	1	17	0	9	36	27	128
5:45 PM	1	2	1	29	5	2	2	15	2	7	28	21	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	31	22	152	49	12	7	123	16	44	248	187	897
APPROACH %'s :	10.17%	52.54%	37.29%	71.36%	23.00%	5.63%	4.79%	84.25%	10.96%	9.19%	51.77%	39.04%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

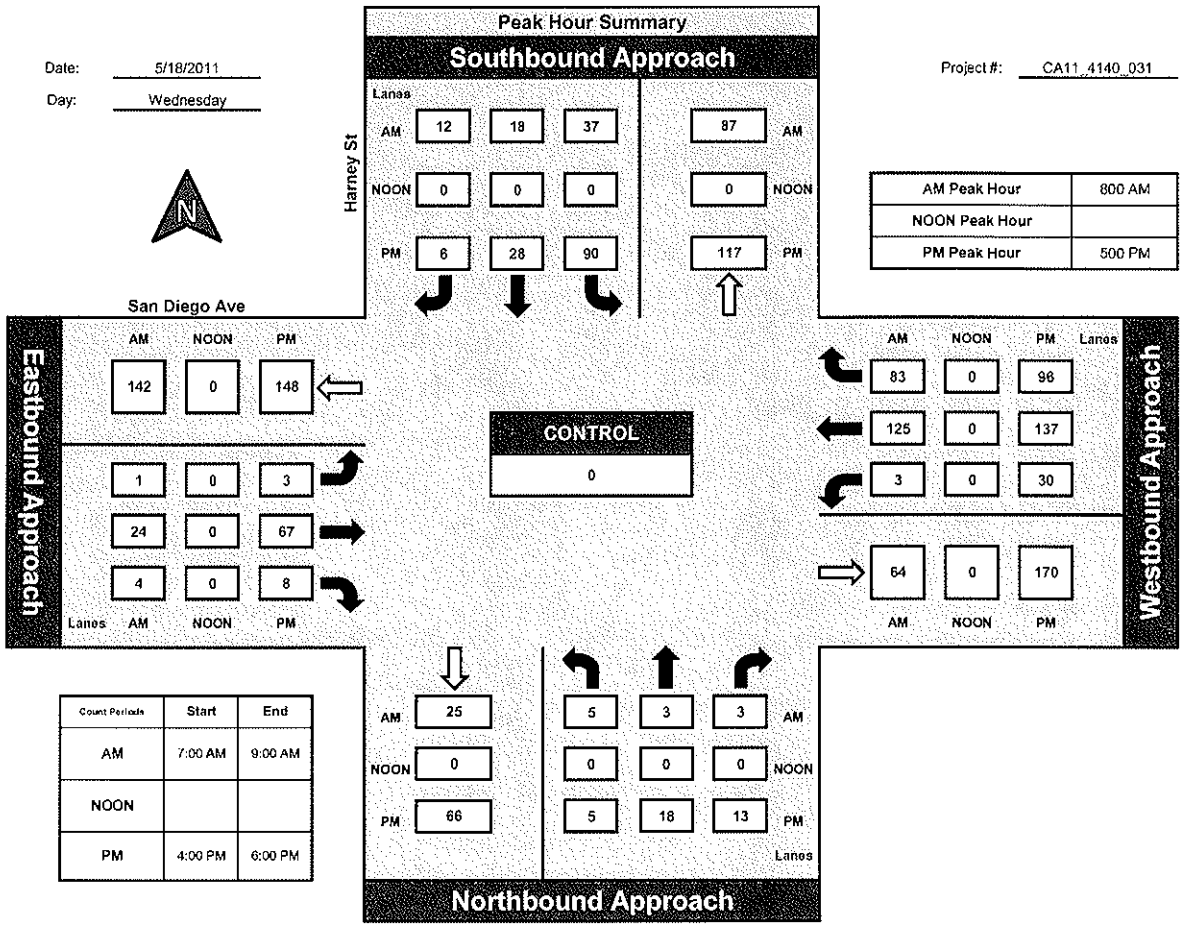
CONTROL :

ITM Peak Hour Summary

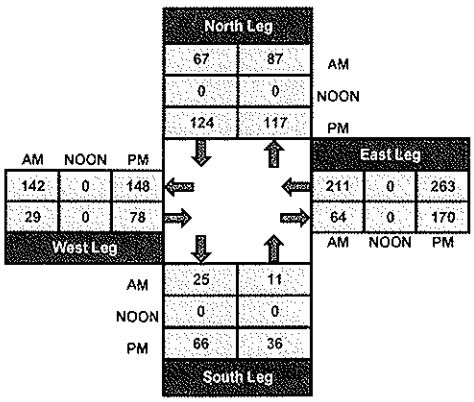
Prepared by:

National Data & Surveying Services

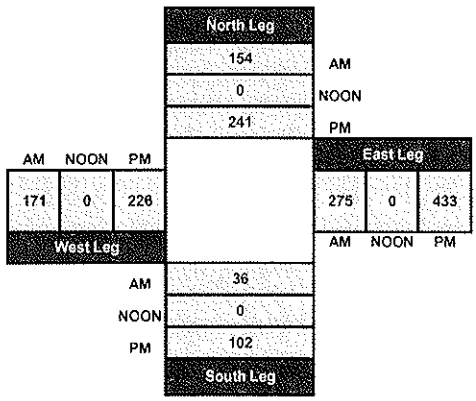
Harney St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(44)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	24	8	10	0	3	0	0	1	18	27	5	0	96
7:15 AM	31	7	11	0	8	2	0	6	14	30	9	0	118
7:30 AM	33	14	8	1	12	0	1	4	30	40	17	3	163
7:45 AM	51	4	10	1	4	1	4	5	24	38	12	0	154
8:00 AM	63	12	12	0	5	1	0	10	14	38	15	1	171
8:15 AM	53	8	7	0	5	1	2	7	22	55	42	1	203
8:30 AM	39	5	13	0	7	1	4	7	21	65	55	2	219
8:45 AM	43	2	13	0	5	1	3	16	16	63	47	2	211
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	337	60	84	2	49	7	14	56	159	356	202	9	1335
APPROACH %'s :	70.06%	12.47%	17.46%	3.45%	84.48%	12.07%	6.11%	24.45%	69.43%	62.79%	35.63%	1.59%	
[illegible]	[illegible]												TOTAL
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	46	3	15	1	18	1	2	7	63	32	28	1	217
4:15 PM	50	7	18	0	11	2	2	12	30	14	18	0	164
4:30 PM	55	7	22	1	10	3	0	15	40	24	38	4	219
4:45 PM	66	6	25	2	15	3	2	14	29	18	20	2	202
5:00 PM	62	11	18	0	12	2	0	11	44	28	30	3	221
5:15 PM	73	6	24	2	8	7	2	8	41	18	31	1	221
5:30 PM	64	2	30	3	16	5	2	13	27	21	32	0	215
5:45 PM	60	9	19	2	9	3	4	16	36	33	28	0	219
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	476	51	171	11	99	26	14	96	310	188	225	11	1678
APPROACH %'s :	68.19%	7.31%	24.50%	8.09%	72.79%	19.12%	3.33%	22.86%	73.81%	44.34%	53.07%	2.59%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

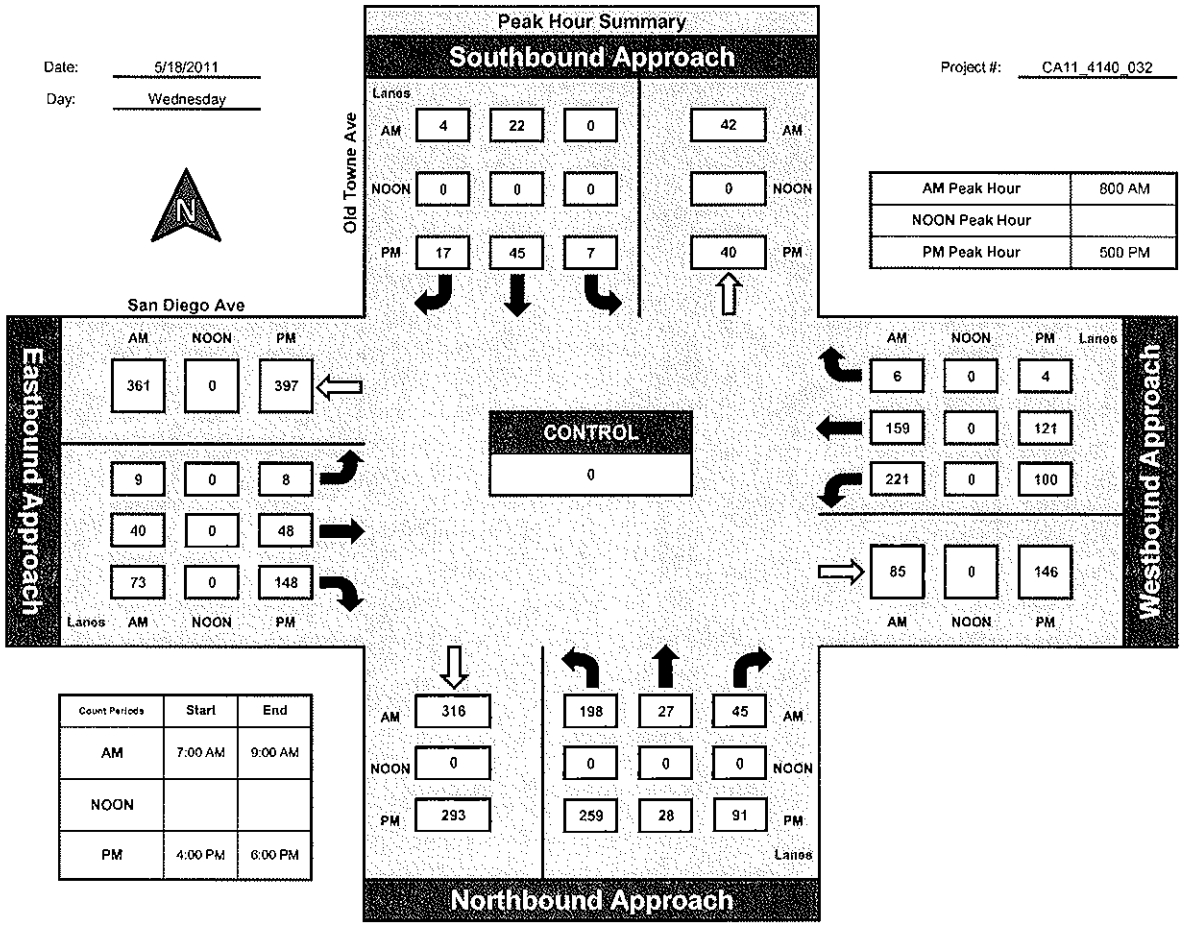
CONTROL :

ITM Peak Hour Summary

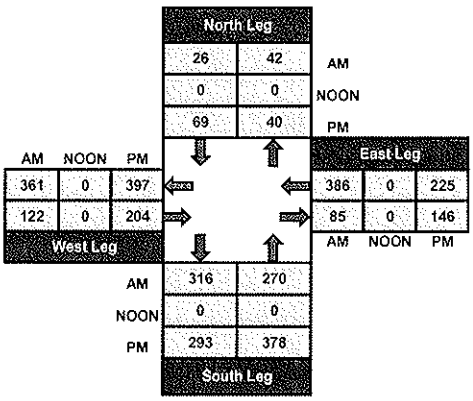
Prepared by:

National Data & Surveying Services

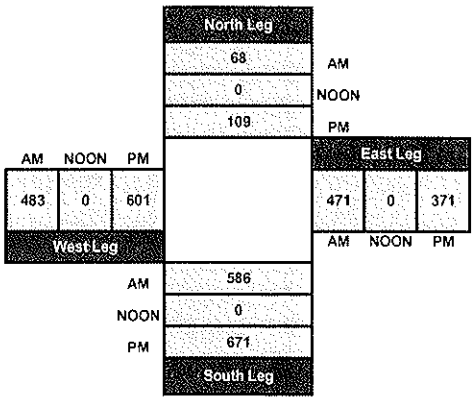
Old Towne Ave and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(45)

Intersection Turning Movement

Prepared by:

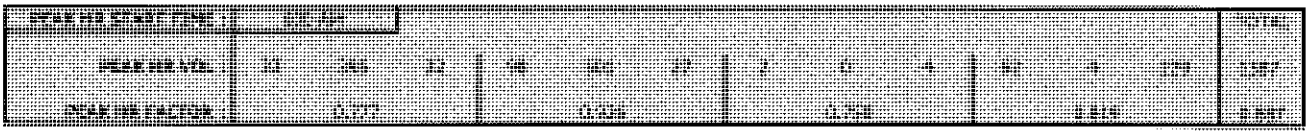
National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	5	44	6	16	108	3	1	1	2	10	2	14	212
7:15 AM	8	73	8	21	105	3	0	0	0	12	0	18	248
7:30 AM	12	81	6	18	131	3	0	0	1	14	0	38	304
7:45 AM	14	74	9	37	155	4	1	0	1	22	2	45	364
8:00 AM	15	63	11	25	134	9	0	0	2	16	2	38	315
8:15 AM	3	84	5	17	113	7	1	0	0	16	1	57	304
8:30 AM	9	128	11	23	125	4	0	0	2	11	1	63	377
8:45 AM	6	120	5	33	129	7	1	0	0	19	0	71	391
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	72	667	61	190	1000	40	4	1	8	120	8	344	2515
APPROACH %'s :	9.00%	83.38%	7.63%	15.45%	81.30%	3.25%	30.77%	7.69%	61.54%	25.42%	1.69%	72.88%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	206	24	32	66	3	5	0	3	23	0	31	394
4:15 PM	0	190	16	42	90	0	5	0	2	19	2	41	407
4:30 PM	4	211	27	49	98	2	5	0	1	20	0	38	455
4:45 PM	3	195	15	45	69	2	1	1	2	16	2	47	398
5:00 PM	5	214	22	42	84	1	3	1	1	15	0	43	431
5:15 PM	3	189	14	52	86	1	6	0	1	14	0	51	417
5:30 PM	1	175	24	39	81	2	3	0	3	17	1	31	377
5:45 PM	1	121	30	44	89	0	0	1	0	19	0	37	342
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	1501	172	345	663	11	28	3	13	143	5	319	3221
APPROACH %'s :	1.06%	88.76%	10.17%	33.86%	65.06%	1.08%	63.64%	6.82%	29.55%	30.62%	1.07%	68.31%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Taylor St and Juan St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_017

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	626	626	AM
NOON	0	0	NOON
PM	531	1003	PM

West Leg				East Leg			
AM	NOON	PM		AM	NOON	PM	
64	0	23		295	0	246	AM
6	0	22		130	0	268	NOON
							PM

	South Leg	
AM	567	460
NOON	0	0
PM	407	902

Total Volume Per Leg

	North Leg
AM	1252
NOON	0
PM	1534

West Leg			East Leg		
AM	NOON	PM			
70	0	45	425	0	514
			AM	NOON	PM

	South Leg
AM	1027
NOON	0
PM	1309

(46)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	1	1	0	0	0	0	14	5	0	19	0	47
7:15 AM	7	0	3	0	0	1	1	21	7	0	27	1	68
7:30 AM	8	0	1	0	0	0	0	20	9	1	34	1	74
7:45 AM	9	0	5	0	0	2	0	23	9	0	42	0	90
8:00 AM	6	1	0	1	1	0	0	29	18	0	24	0	80
8:15 AM	14	1	2	0	1	0	0	18	15	1	29	0	81
8:30 AM	11	1	2	1	0	1	0	20	7	0	26	0	69
8:45 AM	23	2	2	0	1	0	0	25	14	0	38	1	106
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	85	6	16	2	3	4	1	170	84	2	239	3	615
APPROACH %'s :	79.44%	5.61%	14.95%	22.22%	33.33%	44.44%	0.39%	66.67%	32.94%	0.82%	97.95%	1.23%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

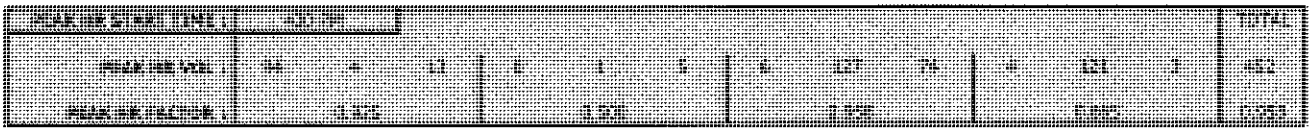
Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	23	0	3	0	0	0	1	36	15	2	23	0	103
4:15 PM	18	0	6	0	0	0	1	32	15	6	17	1	96
4:30 PM	23	3	4	0	1	2	1	37	13	1	26	1	112
4:45 PM	28	0	2	0	0	1	2	30	20	1	34	0	118
5:00 PM	22	1	3	0	0	1	0	31	23	0	26	2	109
5:15 PM	21	0	4	0	0	1	3	29	18	2	35	0	113
5:30 PM	20	1	2	1	1	1	0	33	15	1	32	0	107
5:45 PM	21	0	4	0	0	0	0	26	26	2	23	1	103

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	176	5	28	1	2	6	8	254	145	15	216	5	861
APPROACH %'s :	84.21%	2.39%	13.40%	11.11%	22.22%	66.67%	1.97%	62.41%	35.63%	6.36%	91.53%	2.12%	



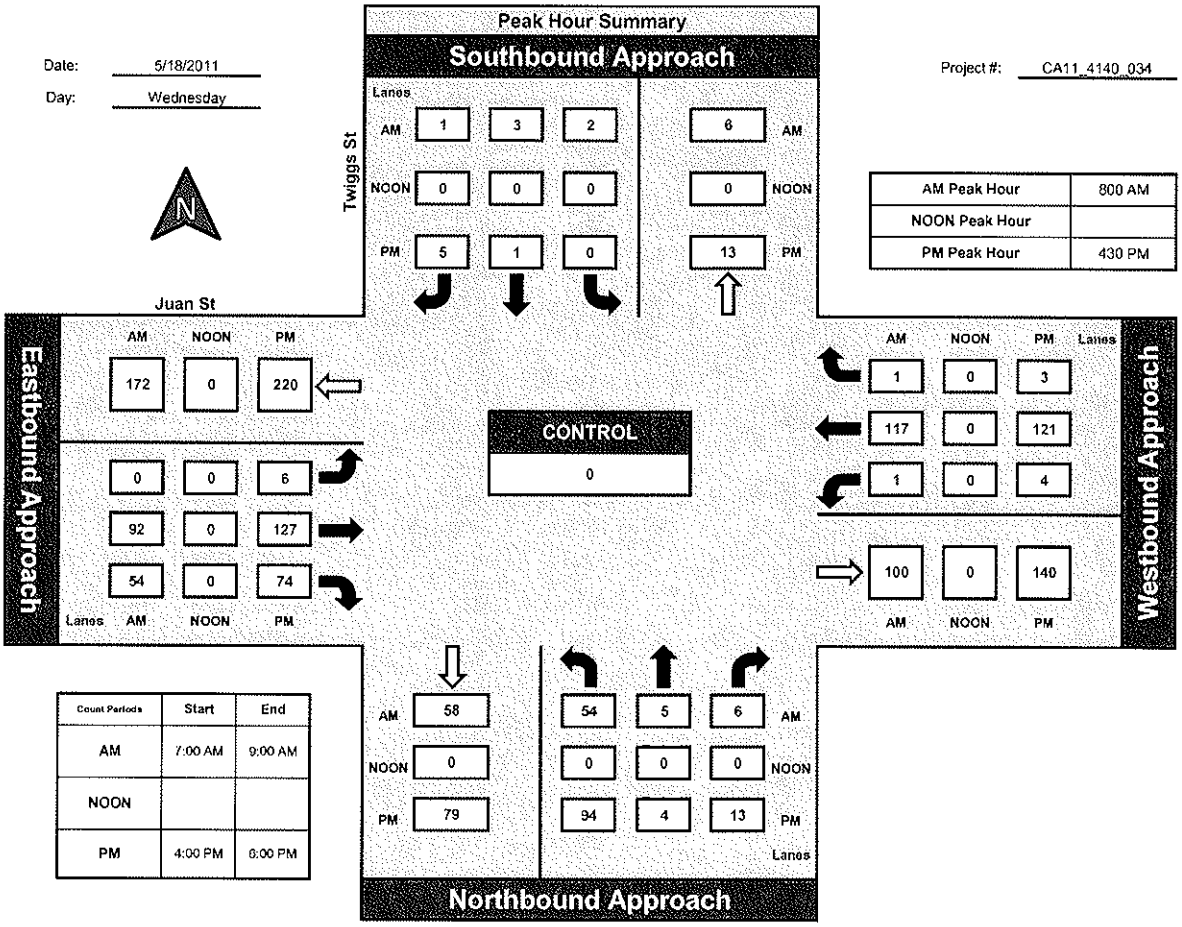
CONTROL :

ITM Peak Hour Summary

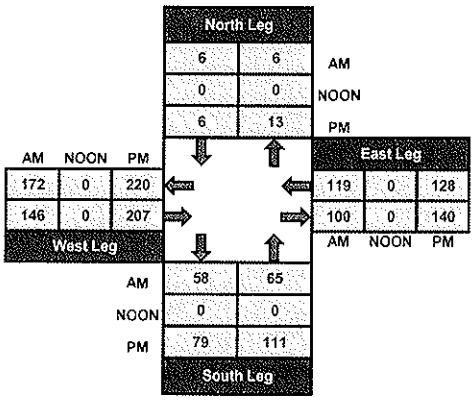
Prepared by:

National Data & Surveying Services

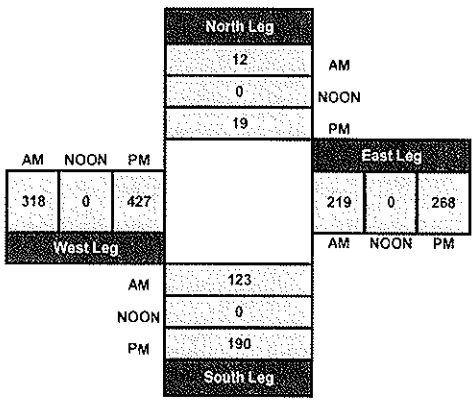
Twiggs St and Juan St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(47)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	6	1	6	0	1	1	1	10	0	9	15	0	50
7:15 AM	5	1	6	0	0	1	1	14	3	8	19	0	58
7:30 AM	8	1	6	0	0	3	1	9	6	15	38	0	87
7:45 AM	9	1	5	0	0	0	2	16	13	12	28	0	86
8:00 AM	4	1	9	0	0	1	4	15	11	6	24	0	75
8:15 AM	0	1	5	2	1	0	1	0	0	5	1	1	17
8:30 AM	13	0	4	0	0	1	0	17	8	8	23	0	74
8:45 AM	19	1	2	0	0	0	1	18	7	9	22	2	81

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	7	43	2	2	7	11	99	48	72	170	3	528
APPROACH %'s :	56.14%	6.14%	37.72%	18.18%	18.18%	63.64%	6.96%	62.66%	30.38%	29.39%	69.39%	1.22%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	11	0	3	0	0	0	0	26	10	10	23	0	83
4:15 PM	11	2	3	2	0	1	1	28	11	9	10	0	78
4:30 PM	11	1	11	0	0	2	1	30	9	4	16	1	86
4:45 PM	15	2	7	0	0	2	2	25	9	2	18	0	82
5:00 PM	14	0	13	0	0	2	1	22	13	3	16	2	86
5:15 PM	17	0	5	0	3	3	0	19	10	5	17	1	80
5:30 PM	24	2	8	0	1	0	3	18	12	4	11	0	83
5:45 PM	13	0	6	0	0	1	2	29	6	6	16	2	81
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	116	7	56	2	4	11	10	197	80	43	127	6	659
APPROACH %'s :	64.80%	3.91%	31.28%	11.76%	23.53%	64.71%	3.48%	68.64%	27.87%	24.43%	72.16%	3.41%	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harney St and Juan St , City of San Diego

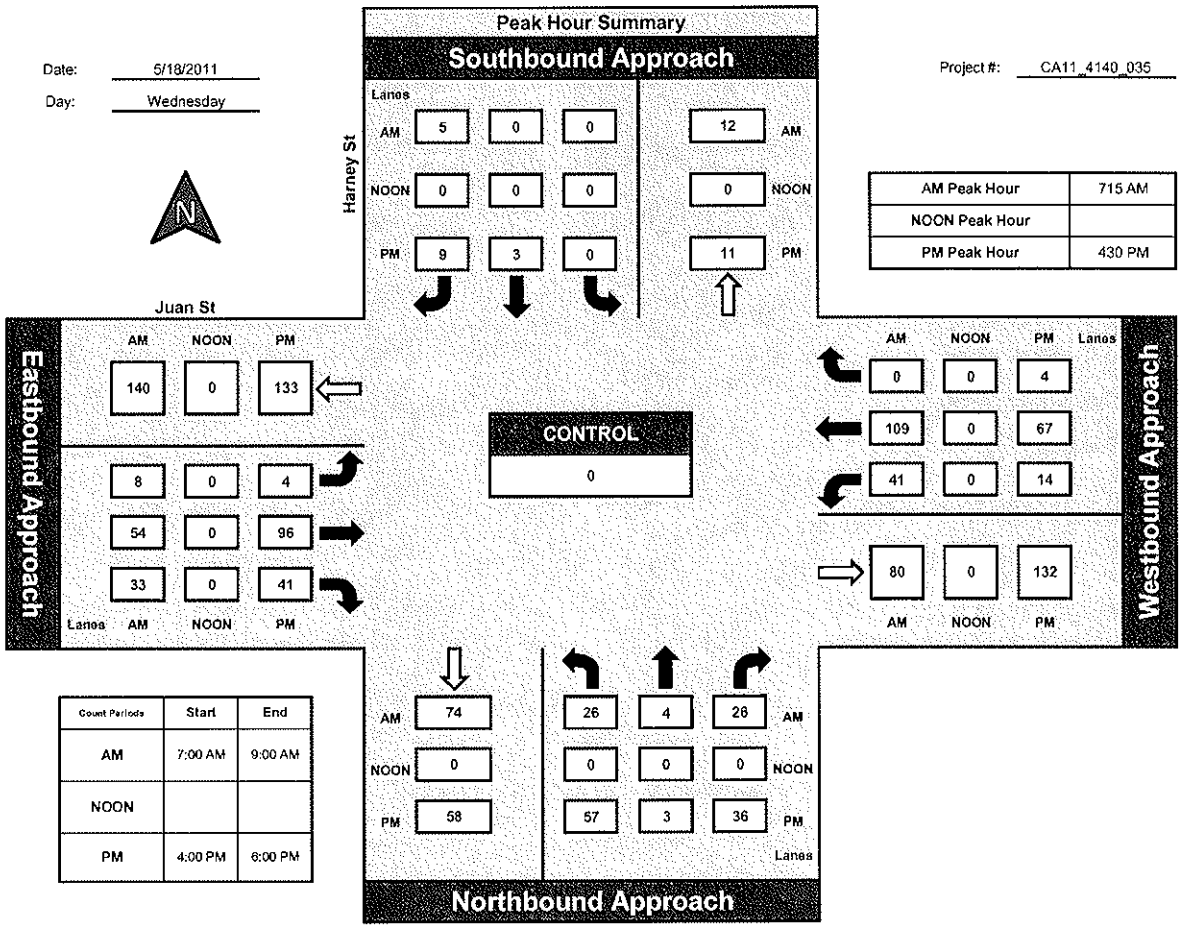
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

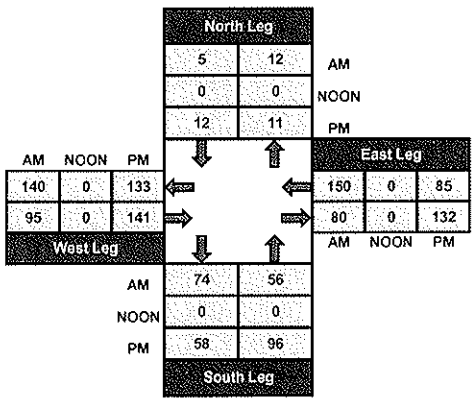
Project #: CA11_4140_035

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

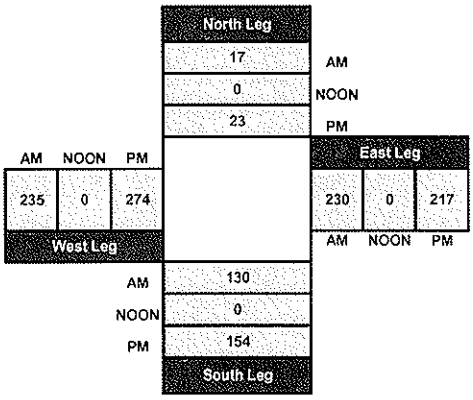


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(48)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	30	30	0	0	118	13	7	0	44			2	244
7:15 AM	49	34	0	0	100	18	9	0	46			0	256
7:30 AM	66	48	1	1	135	39	13	0	51			1	355
7:45 AM	73	38	1	0	152	64	18	0	74			2	422
8:00 AM	57	38	0	0	137	36	27	0	67			0	362
8:15 AM	77	56	0	0	119	50	17	0	36			0	355
8:30 AM	119	63	0	0	125	49	8	3	58			2	427
8:45 AM	111	76	0	0	141	57	7	2	53			2	449
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	582	383	2	1	1027	326	106	5	429	0	0	9	2870
APPROACH %'s :	60.19%	39.61%	0.21%	0.07%	75.85%	24.08%	19.63%	0.93%	79.44%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	364	233	1	1	533	199	65	3	274	0	0	5	1676
PEAK HR FACTOR :	0.788			0.250			0.778			0.000			0.945

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	104	167	2	0	57	37	16	0	36			3	422
4:15 PM	95	152	4	0	68	18	14	0	58			3	412
4:30 PM	120	164	1	2	70	32	20	4	56			4	473
4:45 PM	115	131	1	0	73	34	19	1	40			3	417
5:00 PM	120	165	4	1	68	23	23	2	48			3	457
5:15 PM	113	146	4	0	83	18	16	0	56			4	440
5:30 PM	103	114	1	0	74	16	18	0	57			1	384
5:45 PM	81	87	2	1	72	24	14	1	48			3	333
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	851	1126	19	4	565	202	140	8	399	0	0	24	3338
APPROACH %'s :	42.64%	56.41%	0.95%	0.52%	73.28%	26.20%	25.59%	1.46%	72.94%	0.00%	0.00%	100.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

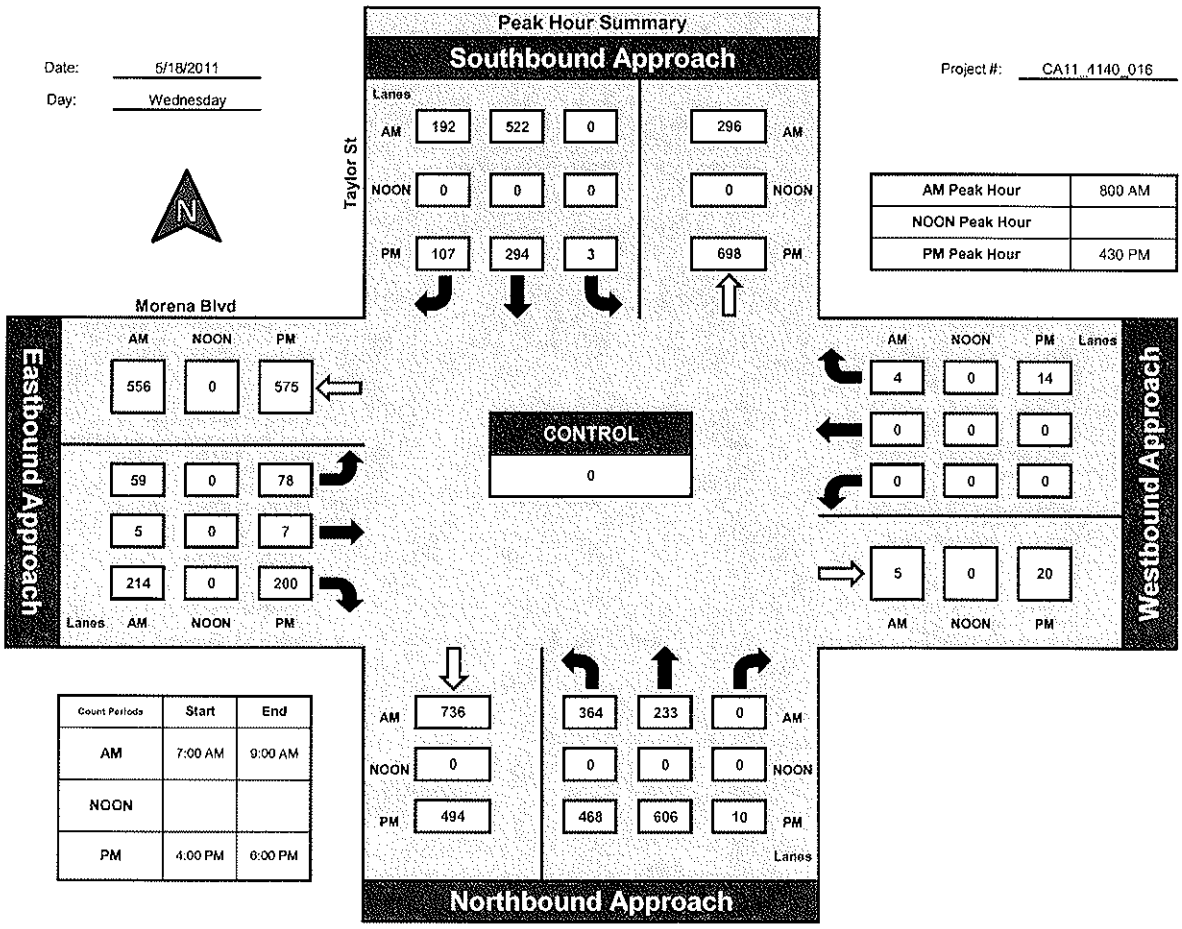
National Data & Surveying Services

Taylor St and Morena Blvd , City of San Diego

Date: 5/18/2011

Day: Wednesday

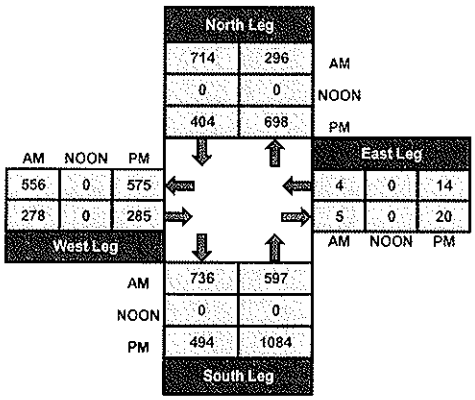
Project #: CA11_4140_016



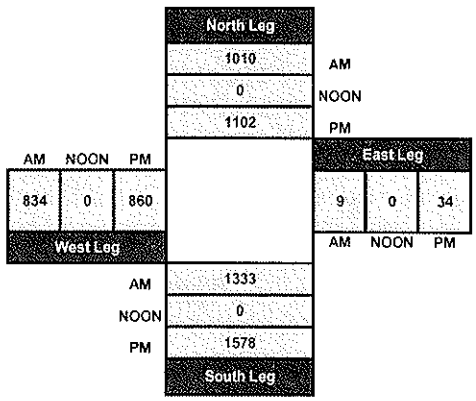
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

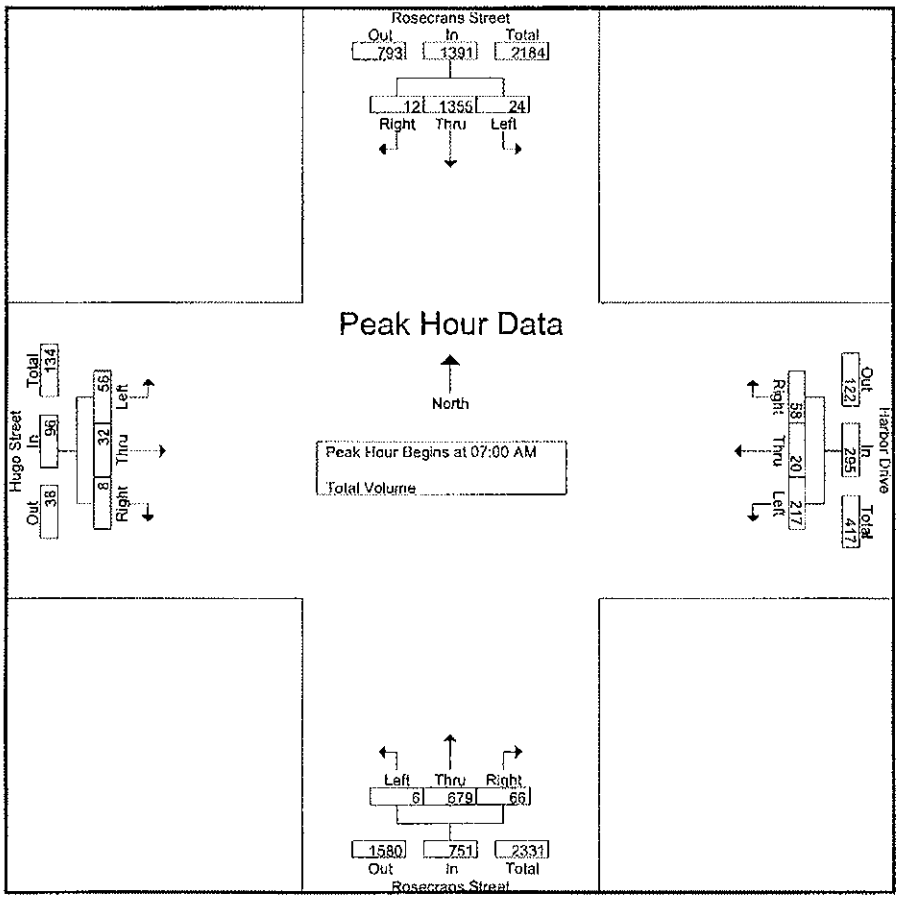
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	4	315	1	320	57	9	9	75	0	86	17	103	6	3	1	10	508
06:45 AM	3	387	5	395	43	7	9	59	0	101	9	110	10	5	3	18	582
Total	7	702	6	715	100	16	18	134	0	187	26	213	16	8	4	28	1090
07:00 AM	4	366	4	374	40	2	18	60	3	138	17	158	13	7	2	22	614
07:15 AM	4	340	1	345	74	12	15	101	1	181	21	203	14	11	2	27	676
07:30 AM	7	330	5	342	46	5	9	60	0	179	16	195	18	9	3	30	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
08:00 AM	5	277	1	283	40	16	11	67	0	183	18	201	15	14	1	30	581
08:15 AM	5	283	2	290	56	7	10	73	0	160	19	179	22	4	0	26	568
Grand Total	41	2617	21	2679	413	59	97	569	6	1209	129	1344	109	58	13	180	4772
Apprch %	1.5	97.7	0.8		72.6	10.4	17		0.4	90	9.6		60.6	32.2	7.2		
Total %	0.9	54.8	0.4	56.1	8.7	1.2	2	11.9	0.1	25.3	2.7	28.2	2.3	1.2	0.3	3.8	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	**366**	4	**374**	40	2	**18**	60	**3**	138	17	158	**13**	7	2	22	614
07:15 AM	4	340	1	345	74	**12**	15	**101**	1	**181**	**21**	**203**	14	**11**	2	27	**676**
07:30 AM	7	330	**5**	342	46	5	9	60	0	179	16	195	**18**	9	**3**	**30**	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total Volume	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
% App. Total	1.7	97.4	0.9		73.6	6.8	19.7		0.8	90.4	8.8		58.3	33.3	8.3		
PHF	.667	.926	.600	.930	.733	.417	.806	.730	.500	.938	.786	.925	.778	.727	.667	.800	.937

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	3	387	5	395	74	12	15	101	1	181	21	203	14	11	2	27
+15 mins.	4	366	4	374	46	5	9	60	0	179	16	195	18	9	3	30
+30 mins.	4	340	1	345	57	1	16	74	2	181	12	195	11	5	1	17
+45 mins.	7	330	5	342	40	16	11	67	0	183	18	201	15	14	1	30
Total Volume	18	1423	15	1456	217	34	51	302	3	724	67	794	58	39	7	104
% App. Total	1.2	97.7	1		71.9	11.3	16.9		0.4	91.2	8.4		55.8	37.5	6.7	
PHF	.643	.919	.750	.922	.733	.531	.797	.748	.375	.989	.798	.978	.806	.696	.583	.867

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

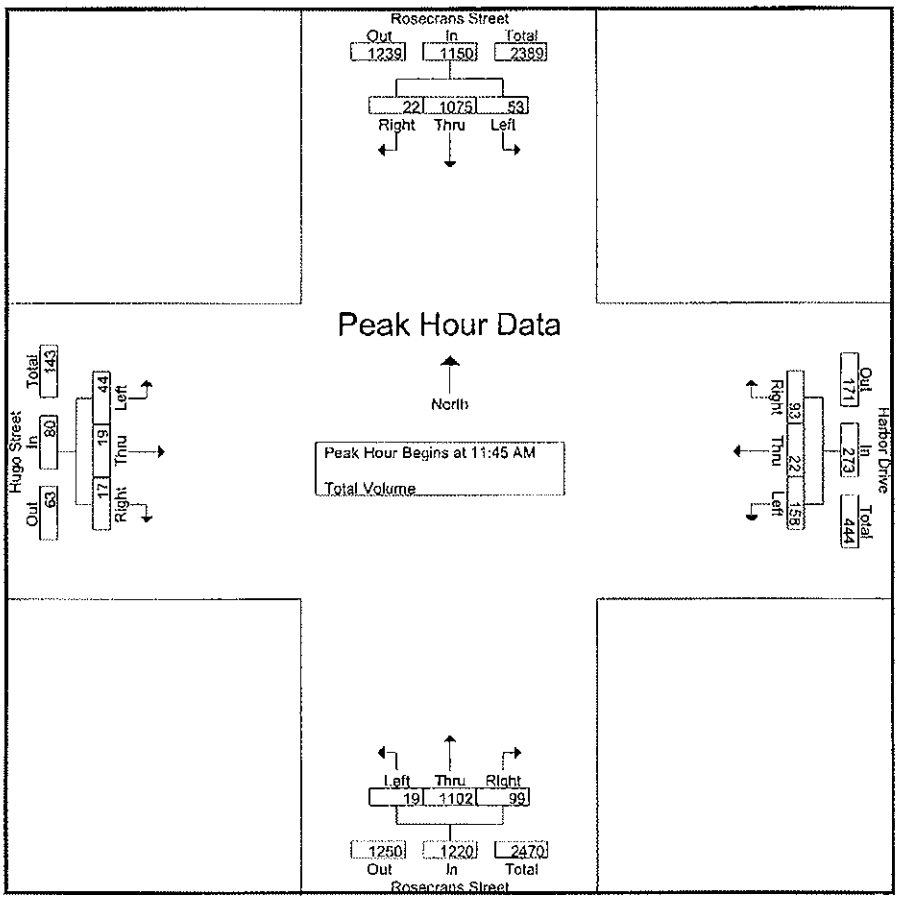
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	10	242	4	256	43	8	24	75	5	287	27	319	15	10	2	27	677
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
Total	21	521	10	552	71	12	43	126	10	597	54	661	29	14	7	50	1389
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
12:45 PM	12	280	8	300	37	7	27	71	4	264	24	292	13	9	6	28	691
Total	54	1076	24	1154	167	25	101	293	18	1056	96	1170	43	24	18	85	2702
01:00 PM	12	244	4	260	41	7	26	74	3	270	32	305	11	6	4	21	660
01:15 PM	10	214	5	229	36	5	19	60	2	280	29	311	13	6	0	19	619
Grand Total	97	2055	43	2195	315	49	189	553	33	2203	211	2447	96	50	29	175	5370
Apprch %	4.4	93.6	2		57	8.9	34.2		1.3	90	8.6		54.9	28.6	16.6		
Total %	1.8	38.3	0.8	40.9	5.9	0.9	3.5	10.3	0.6	41	3.9	45.6	1.8	0.9	0.5	3.3	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
Total Volume	53	1075	22	1150	158	22	93	273	19	1102	99	1220	44	19	17	80	2723
% App. Total	4.6	93.5	1.9		57.9	8.1	34.1		1.6	90.3	8.1		55	23.8	21.2		
PHF	.576	.873	.917	.893	.898	.786	.750	.875	.950	.889	.917	.892	.786	.679	.850	.870	.934

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				11:30 AM				12:15 PM			
+0 mins.	10	255	6	271	**44**	6	25	75	**5**	287	**27**	319	9	7	5	21
+15 mins.	**23**	233	5	261	44	**7**	18	69	5	**310**	27	**342**	11	4	4	19
+30 mins.	9	**308**	5	**322**	42	5	**31**	**78**	5	245	26	276	**13**	**9**	**6**	**28**
+45 mins.	12	280	**8**	300	37	7	27	71	5	262	25	292	11	6	4	21
Total Volume	54	1076	24	1154	167	25	101	293	20	1104	105	1229	44	26	19	89
% App. Total	4.7	93.2	2.1		57	8.5	34.5		1.6	89.8	8.5		49.4	29.2	21.3	
PHF	.587	.873	.750	.896	.949	.893	.815	.939	1.000	.890	.972	.898	.846	.722	.792	.795

Counts Unlimited Inc.
26286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

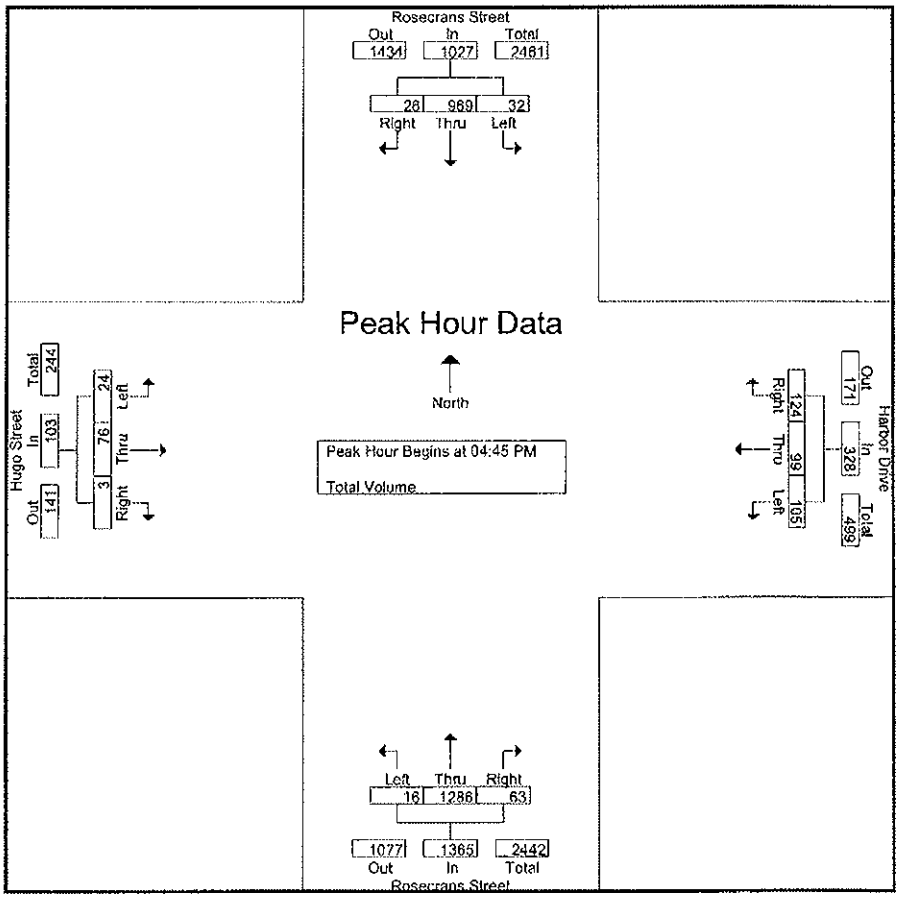
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	198	5	211	33	10	22	65	5	351	17	373	12	8	3	23	672
04:15 PM	3	200	11	214	37	12	27	76	8	319	9	336	13	9	2	24	650
04:30 PM	7	221	8	236	45	23	39	107	8	228	6	242	10	12	7	29	614
04:45 PM	9	241	4	254	28	21	37	86	7	251	12	270	9	13	0	22	632
Total	27	860	28	915	143	66	125	334	28	1149	44	1221	44	42	12	98	2568
05:00 PM	10	247	16	273	21	22	31	74	5	401	13	419	5	15	0	20	786
05:15 PM	5	251	5	261	29	27	29	85	2	322	28	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	29	27	83	2	312	10	324	2	27	2	31	677
05:45 PM	5	229	1	235	29	28	24	81	1	245	6	252	2	7	4	13	581
Total	28	957	23	1008	106	106	111	323	10	1280	57	1347	17	70	7	94	2772
Grand Total	55	1817	51	1923	249	172	236	657	38	2429	101	2568	61	112	19	192	5340
Apprch %	2.9	94.5	2.7		37.9	26.2	35.9		1.5	94.6	3.9		31.8	58.3	9.9		
Total %	1	34	1	36	4.7	3.2	4.4	12.3	0.7	45.5	1.9	48.1	1.1	2.1	0.4	3.6	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	9	241	4	254	28	21	**37**	**86**	**7**	251	12	270	9	13	0	22	632
05:00 PM	**10**	247	**16**	**273**	21	22	31	74	5	**401**	13	**419**	5	15	0	20	**786**
05:15 PM	5	**251**	5	261	**29**	27	29	85	2	322	**28**	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	**29**	27	83	2	312	10	324	2	**27**	2	**31**	677
Total Volume	32	969	26	1027	105	99	124	328	16	1286	63	1365	24	76	3	103	2823
% App. Total	3.1	94.4	2.5		32	30.2	37.8		1.2	94.2	4.6		23.3	73.8	2.9		
PHF	.800	.965	.406	.940	.905	.853	.838	.953	.571	.802	.563	.814	.667	.704	.375	.831	.898

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Diego
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Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:45 PM				04:45 PM			
+0 mins.	9	241	4	254	**45**	23	**39**	**107**	7	251	12	270	9	13	0	22
+15 mins.	**10**	247	**16**	**273**	28	21	37	86	5	**401**	13	**419**	5	15	0	20
+30 mins.	5	**251**	5	261	21	22	31	74	2	322	28	352	8	21	1	30
+45 mins.	8	230	1	239	29	**27**	29	85	2	312	10	324	2	**27**	**2**	**31**
Total Volume	32	969	26	1027	123	93	136	352	16	1286	63	1365	24	76	3	103
% App. Total	3.1	94.4	2.5		34.9	26.4	38.6		1.2	94.2	4.6		23.3	73.8	2.9	
PHF	.800	.965	.406	.940	.683	.861	.872	.822	.571	.802	.563	.814	.667	.704	.375	.831

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

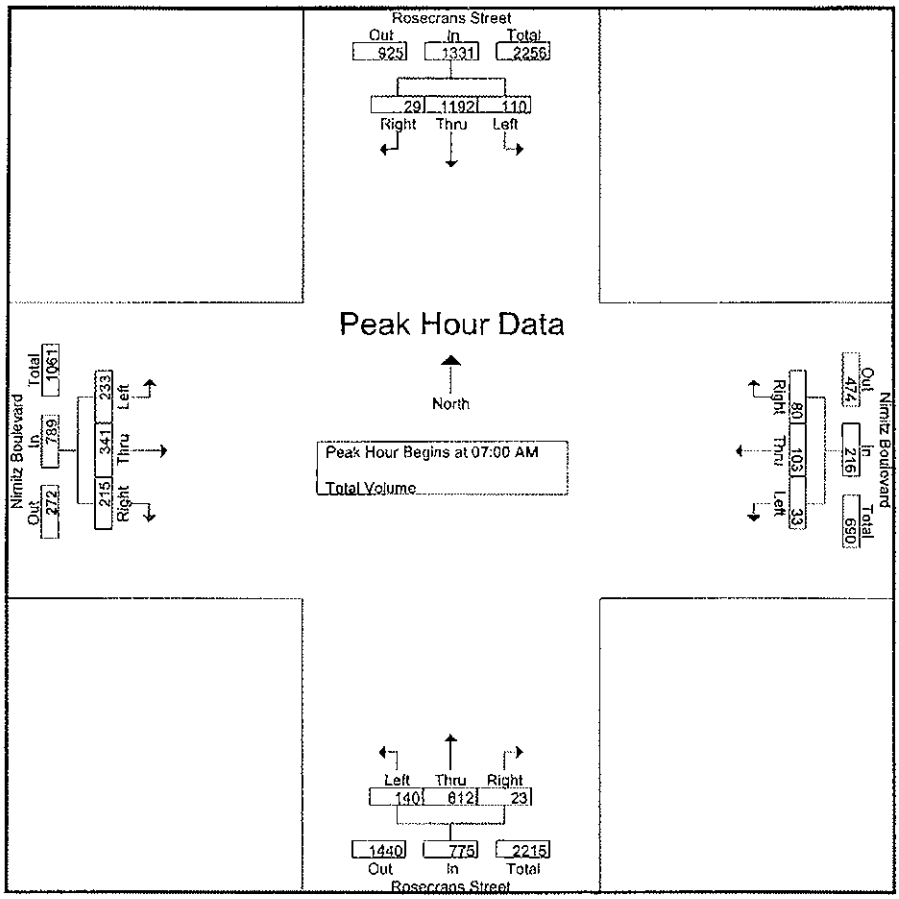
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	38	254	22	314	6	38	22	66	30	69	10	109	62	66	47	175	664
06:45 AM	28	322	19	369	5	33	24	62	45	89	3	137	62	71	60	193	761
Total	66	576	41	683	11	71	46	128	75	158	13	246	124	137	107	368	1425
07:00 AM	25	324	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	8	359	9	26	20	55	34	151	7	192	74	74	58	206	812
07:30 AM	28	272	8	308	13	29	23	65	37	158	6	201	49	103	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	39	166	8	213	66	100	49	215	782
Total	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
08:00 AM	34	230	8	272	4	27	12	43	38	161	8	207	85	54	43	182	704
08:15 AM	28	250	22	300	6	24	20	50	49	149	10	208	61	65	56	182	740
Grand Total	238	2248	100	2586	54	225	158	437	302	1080	54	1436	503	597	421	1521	5980
Apprch %	9.2	86.9	3.9		12.4	51.5	36.2		21	75.2	3.8		33.1	39.3	27.7		
Total %	4	37.6	1.7	43.2	0.9	3.8	2.6	7.3	5.1	18.1	0.9	24	8.4	10	7	25.4	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	25	**324**	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	**8**	**359**	9	26	20	55	34	151	7	192	**74**	74	**58**	206	**812**
07:30 AM	28	272	8	308	**13**	**29**	**23**	**65**	37	158	6	201	49	**103**	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	**39**	**166**	**8**	**213**	66	100	49	**215**	782
Total Volume	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
% App. Total	8.3	89.6	2.2		15.3	47.7	37		18.1	79	3		29.5	43.2	27.2		
PHF	.743	.920	.906	.927	.635	.888	.870	.831	.897	.922	.719	.910	.787	.828	.927	.917	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
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File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
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Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				07:30 AM				07:15 AM			
+0 mins.	**38**	254	**22**	314	6	**38**	22	**66**	37	158	6	201	74	74	**58**	206
+15 mins.	28	322	19	**369**	5	33	**24**	62	39	**166**	8	**213**	49	**103**	53	205
+30 mins.	25	**324**	6	355	7	23	21	51	38	161	8	207	66	100	49	**215**
+45 mins.	37	314	8	359	9	26	20	55	**49**	149	**10**	208	**85**	54	43	182
Total Volume	128	1214	55	1397	27	120	87	234	163	634	32	829	274	331	203	808
% App. Total	9.2	86.9	3.9		11.5	51.3	37.2		19.7	76.5	3.9		33.9	41	25.1	
PHF	.842	.937	.625	.946	.750	.789	.906	.886	.832	.955	.800	.973	.806	.803	.875	.940

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25286 Jaclyn Avenue
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City of San Diego
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File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
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Groups Printed- Total Volume

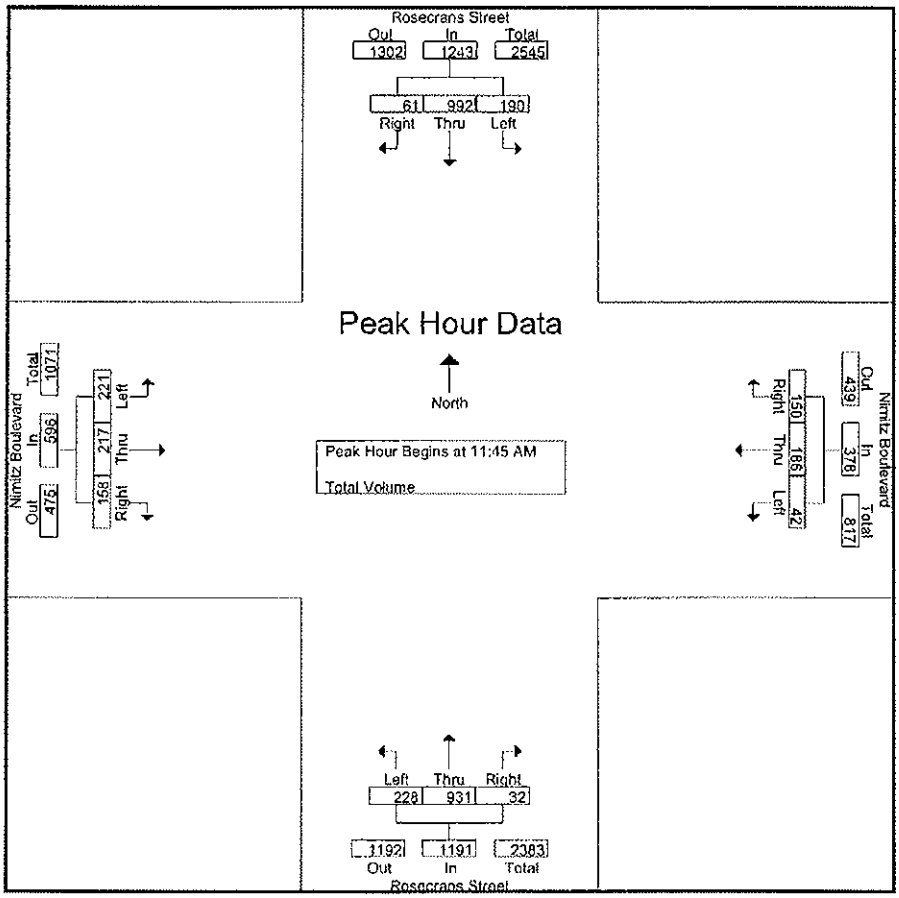
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	43	201	17	261	16	36	49	101	53	229	9	291	52	56	33	141	794
11:45 AM	43	272	15	330	13	51	43	107	62	266	11	339	64	45	37	146	922
Total	86	473	32	591	29	87	92	208	115	495	20	630	116	101	70	287	1716
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	63	46	163	766
12:15 PM	56	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	17	323	16	48	36	100	55	239	9	303	50	59	40	149	875
12:45 PM	42	249	22	313	11	41	35	87	62	258	10	330	37	45	62	144	874
Total	189	969	68	1226	40	176	142	358	228	923	31	1182	194	217	183	594	3360
01:00 PM	44	184	34	262	6	56	43	105	56	208	10	274	29	36	38	103	744
01:15 PM	35	195	25	255	6	59	36	101	69	230	11	310	36	45	34	115	781
Grand Total	354	1821	159	2334	81	378	313	772	468	1856	72	2396	375	399	325	1099	6601
Apprch %	15.2	78	6.8		10.5	49	40.5		19.5	77.5	3		34.1	36.3	29.6		
Total %	5.4	27.6	2.4	35.4	1.2	5.7	4.7	11.7	7.1	28.1	1.1	36.3	5.7	6	4.9	16.6	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	43	**272**	15	**330**	13	**51**	**43**	**107**	**62**	**266**	**11**	**339**	**64**	45	37	146	**922**
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	**63**	**46**	**163**	766
12:15 PM	**56**	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	**17**	323	**16**	48	36	100	55	239	9	303	50	59	40	149	875
Total Volume	190	992	61	1243	42	186	150	378	228	931	32	1191	221	217	158	596	3408
% App. Total	15.3	79.8	4.9		11.1	49.2	39.7		19.1	78.2	2.7		37.1	36.4	26.5		
PHF	.848	.912	.897	.942	.656	.912	.872	.883	.919	.875	.727	.878	.863	.861	.859	.914	.924

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:45 AM				12:30 PM				12:30 PM				11:45 AM			
+0 mins.	43	**272**	15	**330**	**16**	48	36	100	55	239	9	303	**64**	45	37	146
+15 mins.	45	214	13	272	11	41	35	87	62	**258**	10	**330**	54	**63**	**46**	**163**
+30 mins.	**56**	246	16	318	6	56	**43**	**105**	56	208	10	274	53	50	35	138
+45 mins.	46	260	**17**	323	6	59	36	101	69	230	**11**	310	50	59	40	149
Total Volume	190	992	61	1243	39	204	150	393	242	935	40	1217	221	217	158	596
% App. Total	15.3	79.8	4.9		9.9	51.9	38.2		19.9	76.8	3.3		37.1	36.4	26.5	
PHF	.848	.912	.897	.942	.609	.864	.872	.936	.877	.906	.909	.922	.863	.861	.859	.914

Counts Unlimited Inc.
25286 Jaclyn Avenue
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951-485-7934

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File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
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Groups Printed- Total Volume

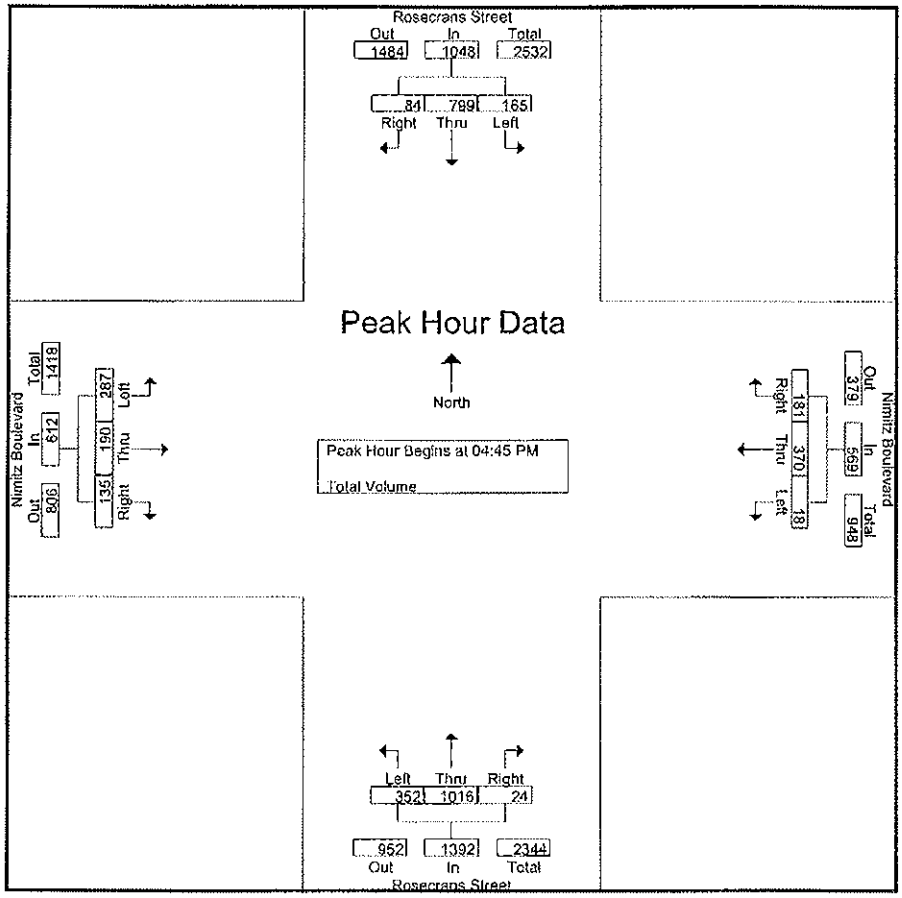
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	35	181	30	246	2	83	42	127	82	278	11	371	75	48	34	157	901
04:15 PM	45	199	25	269	3	92	42	137	67	259	7	333	61	67	37	165	904
04:30 PM	37	191	20	248	4	110	50	164	58	211	7	276	72	50	37	159	847
04:45 PM	47	216	22	285	6	92	56	154	79	205	6	290	81	51	37	169	898
Total	164	787	97	1048	15	377	190	582	286	953	31	1270	289	216	145	650	3550
05:00 PM	48	168	18	234	3	114	43	160	110	283	11	404	77	40	35	152	950
05:15 PM	38	208	23	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
05:45 PM	48	196	26	270	4	59	37	100	72	208	6	286	50	42	34	126	782
Total	166	779	88	1033	16	337	162	515	345	1019	24	1388	256	181	132	569	3505
Grand Total	330	1566	185	2081	31	714	352	1097	631	1972	55	2658	545	397	277	1219	7055
Apprch %	15.9	75.3	8.9		2.8	65.1	32.1		23.7	74.2	2.1		44.7	32.6	22.7		
Total %	4.7	22.2	2.6	29.5	0.4	10.1	5	15.5	8.9	28	0.8	37.7	7.7	5.6	3.9	17.3	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	47	**216**	22	**285**	**6**	92	**56**	154	79	205	6	290	**81**	**51**	37	**169**	898
05:00 PM	**48**	168	18	234	**3**	**114**	43	**160**	**110**	**283**	**11**	**404**	77	40	35	152	**950**
05:15 PM	38	208	**23**	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
Total Volume	165	799	84	1048	18	370	181	569	352	1016	24	1392	287	190	135	612	3621
% App. Total	15.7	76.2	8		3.2	65	31.8		25.3	73	1.7		46.9	31	22.1		
PHF	.859	.925	.913	.919	.750	.811	.808	.889	.800	.898	.545	.861	.886	.931	.912	.905	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	35	181	**30**	246	3	92	42	137	79	205	6	290	75	48	34	157
+15 mins.	45	199	25	269	4	110	50	**164**	**110**	**283**	11	**404**	61	**67**	**37**	165
+30 mins.	37	191	20	248	**6**	92	**56**	154	96	269	6	371	72	50	37	159
+45 mins.	**47**	**216**	22	**285**	3	**114**	43	160	67	259	1	327	**81**	51	37	**169**
Total Volume	164	787	97	1048	16	408	191	615	352	1016	24	1392	289	216	145	650
% App. Total	15.6	75.1	9.3		2.6	66.3	31.1		25.3	73	1.7		44.5	33.2	22.3	
PHF	.872	.911	.808	.919	.667	.895	.853	.938	.800	.898	.545	.861	.892	.806	.980	.962

(51)

16

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

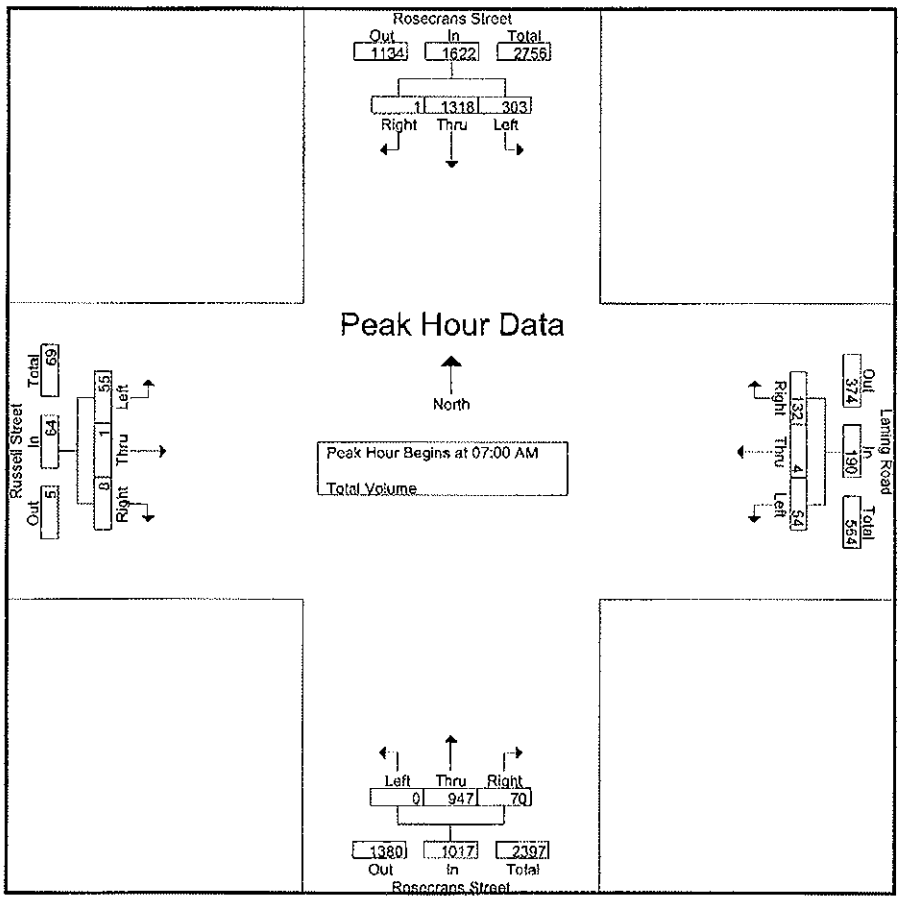
	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	46	248	0	294	15	0	34	49	0	127	1	128	14	2	0	16	487
06:45 AM	68	350	0	418	11	0	29	40	0	155	12	167	7	0	0	7	632
Total	114	598	0	712	26	0	63	89	0	282	13	295	21	2	0	23	1119
07:00 AM	58	411	1	470	13	1	42	56	0	227	10	237	16	0	7	23	786
07:15 AM	109	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	21	2	35	58	0	221	12	233	18	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	251	36	287	6	0	0	6	645
Total	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
08:00 AM	65	270	0	335	32	1	30	63	0	252	46	298	11	0	0	11	707
08:15 AM	53	371	0	424	32	0	32	64	0	243	20	263	10	2	0	12	763
Grand Total	535	2557	1	3093	144	5	257	406	0	1724	149	1873	97	5	8	110	5482
Apprch %	17.3	82.7	0		35.5	1.2	63.3		0	92	8		88.2	4.5	7.3		
Total %	9.8	46.6	0	56.4	2.6	0.1	4.7	7.4	0	31.4	2.7	34.2	1.8	0.1	0.1	2	

	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	58	**411**	**1**	**470**	13	1	**42**	56	**0**	227	10	237	16	0	**7**	**23**	**786**
07:15 AM	**109**	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	**21**	**2**	35	**58**	0	221	12	233	**18**	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	**251**	**36**	**287**	6	0	0	6	645
Total Volume	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
% App. Total	18.7	81.3	0.1		28.4	2.1	69.5		0	93.1	6.9		85.9	1.6	12.5		
PHF	.695	.802	.250	.863	.643	.500	.786	.819	.000	.943	.486	.886	.764	.250	.286	.696	.920

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:30 AM				07:30 AM				06:45 AM			
+0 mins.	68	350	0	418	21	2	35	58	0	221	12	233	7	0	0	7
+15 mins.	58	411	1	470	12	0	24	36	0	251	36	287	16	0	7	23
+30 mins.	109	356	0	465	32	1	30	63	0	252	46	298	15	1	0	16
+45 mins.	82	289	0	371	32	0	32	64	0	243	20	263	18	0	1	19
Total Volume	317	1406	1	1724	97	3	121	221	0	967	114	1081	56	1	8	65
% App. Total	18.4	81.6	0.1		43.9	1.4	54.8		0	89.5	10.5		86.2	1.5	12.3	
PHF	.727	.855	.250	.917	.758	.375	.864	.863	.000	.959	.620	.907	.778	.250	.286	.707

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Street
Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

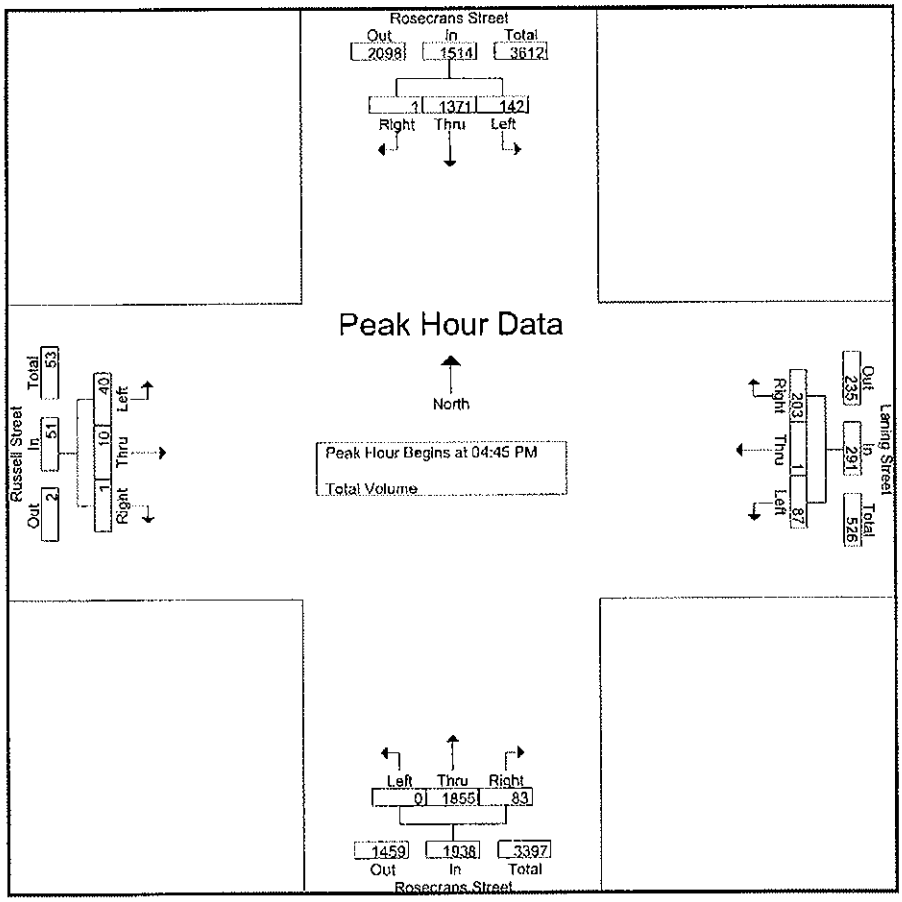
	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	280	0	308	21	4	56	81	1	374	26	401	11	0	0	11	801
04:15 PM	41	268	2	311	29	0	54	83	1	394	30	425	8	1	1	10	829
04:30 PM	38	266	1	305	22	0	63	85	0	404	14	418	8	1	1	10	818
04:45 PM	45	348	0	393	21	0	67	88	0	430	21	451	5	1	1	7	939
Total	152	1162	3	1317	93	4	240	337	2	1602	91	1695	32	3	3	38	3387
05:00 PM	39	310	1	350	15	0	71	86	0	528	22	550	8	1	0	9	995
05:15 PM	31	342	0	373	27	1	41	69	0	457	22	479	12	4	0	16	937
05:30 PM	27	371	0	398	24	0	24	48	0	440	18	458	15	4	0	19	923
05:45 PM	27	327	4	358	18	0	27	45	0	356	30	386	4	1	0	5	794
Total	124	1350	5	1479	84	1	163	248	0	1781	92	1873	39	10	0	49	3649
Grand Total	276	2512	8	2796	177	5	403	585	2	3383	183	3568	71	13	3	87	7036
Apprch %	9.9	89.8	0.3		30.3	0.9	68.9		0.1	94.8	5.1		81.6	14.9	3.4		
Total %	3.9	35.7	0.1	39.7	2.5	0.1	5.7	8.3	0	48.1	2.6	50.7	1	0.2	0	1.2	

	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**45**	348	0	393	21	0	67	**88**	0	430	21	451	5	1	**1**	7	939
05:00 PM	39	310	1	350	15	0	71	86	0	**528**	**22**	**550**	8	1	0	9	**995**
05:15 PM	31	342	0	373	**27**	1	41	69	0	457	22	479	12	**4**	0	16	937
05:30 PM	27	371	0	**398**	24	0	24	48	0	440	18	458	**15**	4	0	**19**	923
Total Volume	142	1371	1	1514	87	1	203	291	0	1855	83	1938	40	10	1	51	3794
% App. Total	9.4	90.6	0.1		29.9	0.3	69.8		0	95.7	4.3		78.4	19.6	2		
PHF	.789	.924	.250	.951	.806	.250	.715	.827	.000	.878	.943	.881	.667	.625	.250	.671	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Street
Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	**45**	348	0	393	29	0	54	83	0	430	21	451	5	1	1	7
+15 mins.	39	310	1	350	22	0	63	85	0	**528**	**22**	**550**	8	1	0	9
+30 mins.	31	342	0	373	21	0	67	**88**	0	457	22	479	12	4	0	16
+45 mins.	27	**371**	0	**398**	15	0	**71**	86	0	440	18	458	15	4	0	19
Total Volume	142	1371	1	1514	87	0	255	342	0	1855	83	1938	40	10	1	51
% App. Total	9.4	90.6	0.1		25.4	0	74.6		0	95.7	4.3		78.4	19.6	2	
PHF	.789	.924	.250	.951	.750	.000	.898	.972	.000	.878	.943	.881	.667	.625	.250	.671

(S2)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					28	20				26	447		521
7:15 AM					20	12				38	434		504
7:30 AM					30	11				42	382		465
7:45 AM					45	19				62	433		559
8:00 AM					33	20				51	378		482
8:15 AM					46	22				48	373		489
8:30 AM					42	17				66	351		476
8:45 AM					57	15				47	346		465
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	301	136	0	0	0	380	3144	0	3961
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	68.88%	31.12%	#DIV/0!	#DIV/0!	#DIV/0!	10.78%	89.22%	0.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					80	11				36	222		349
4:15 PM					82	12				39	221		354
4:30 PM					74	20				51	219		364
4:45 PM					95	17				43	256		411
5:00 PM					101	20				52	211		384
5:15 PM					97	14				50	223		384
5:30 PM					100	16				52	227		395
5:45 PM					89	20				45	250		404

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	718	130	0	0	0	368	1829	0	3045
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	84.67%	15.33%	#DIV/0!	#DIV/0!	#DIV/0!	16.75%	83.25%	0.00%	



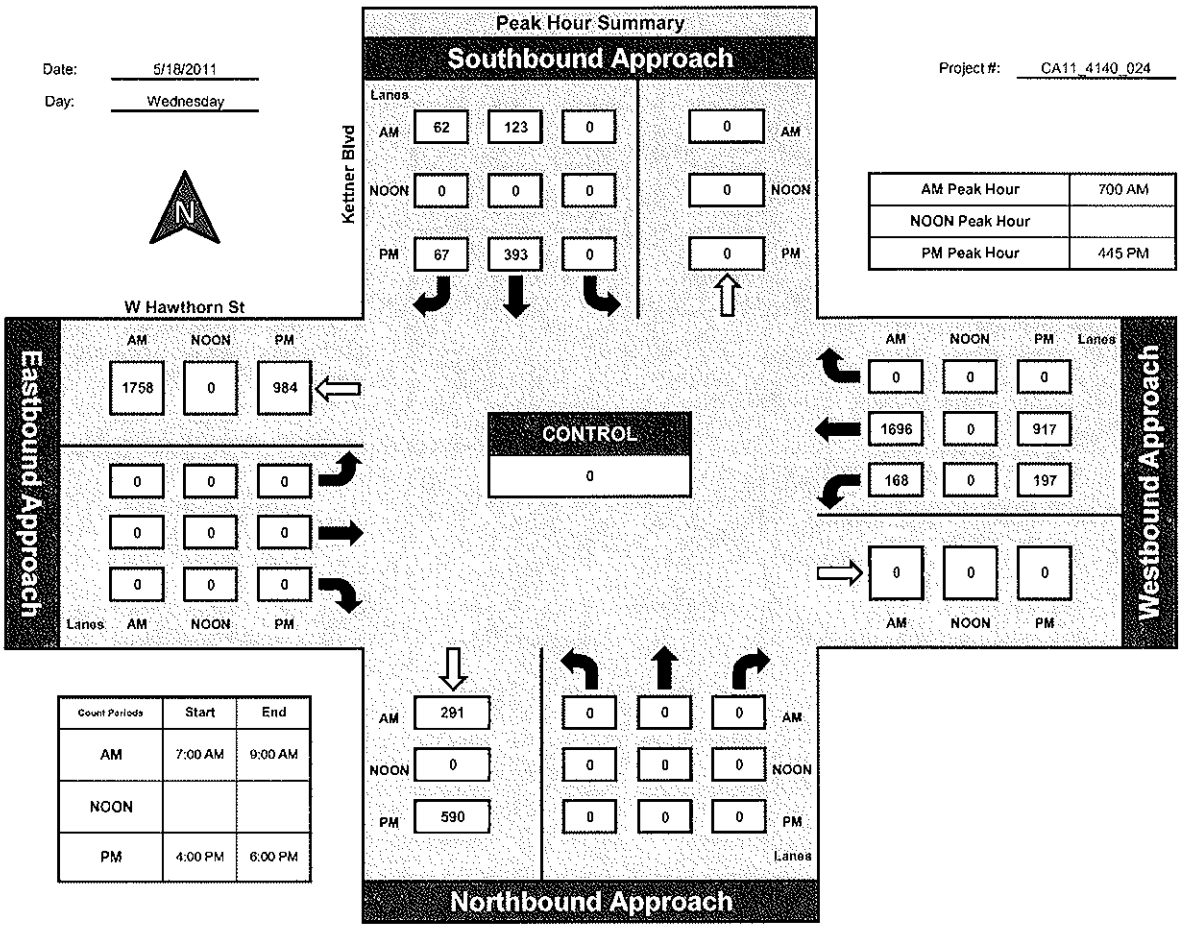
CONTROL :

ITM Peak Hour Summary

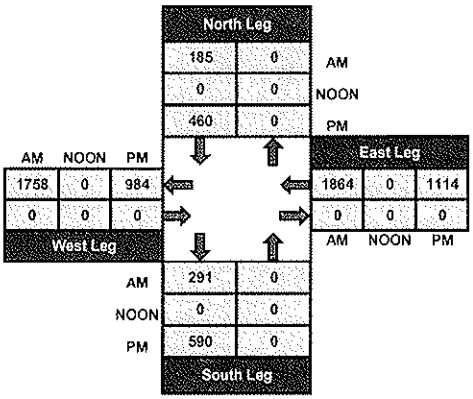
Prepared by:

National Data & Surveying Services

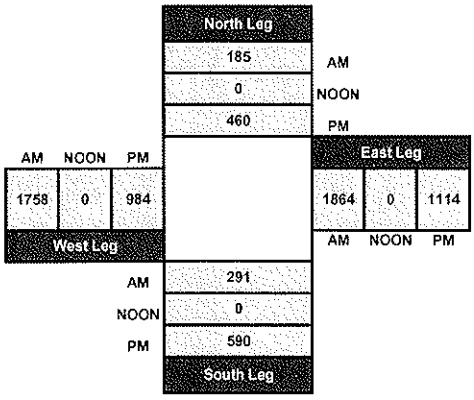
Kettner Blvd and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(53)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				20	31			201	5				257
7:15 AM				18	47			179	6				250
7:30 AM				24	47			200	5				276
7:45 AM				34	76			209	5				324
8:00 AM				24	61			199	5				289
8:15 AM				19	72			213	7				311
8:30 AM				31	77			220	8				336
8:45 AM				36	66			229	10				341
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	206	477	0	0	1650	51	0	0	0	2384
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	30.16%	69.84%	0.00%	0.00%	97.00%	3.00%	#DIV/0!	#DIV/0!	#DIV/0!	
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				54	63			362	4				483
4:15 PM				53	66			366	14				499
4:30 PM				53	74			428	4				559
4:45 PM				65	76			353	13				507
5:00 PM				70	79			385	7				541
5:15 PM				52	89			367	15				523
5:30 PM				69	85			326	14				494
5:45 PM				42	91			312	9				454
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	458	623	0	0	2899	80	0	0	0	4060
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	42.37%	57.63%	0.00%	0.00%	97.31%	2.69%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

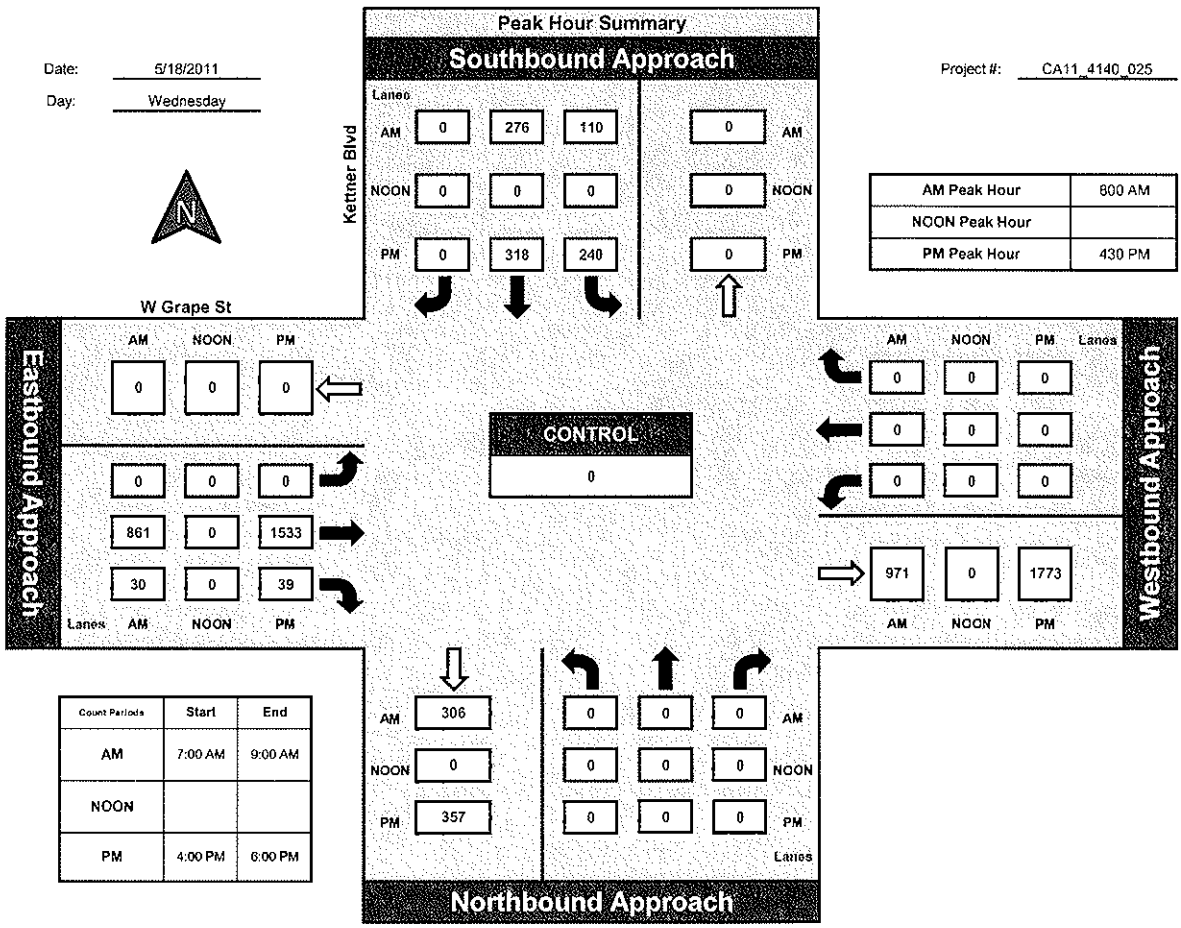
ITM Peak Hour Summary

Prepared by:

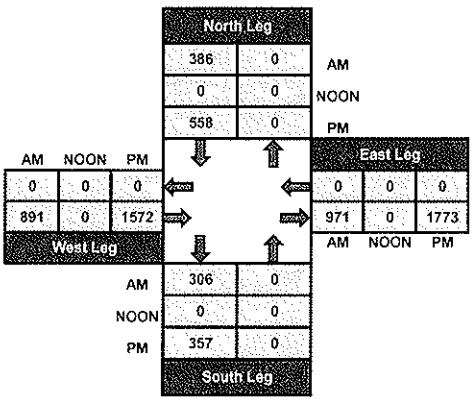
NDS

National Data & Surveying Services

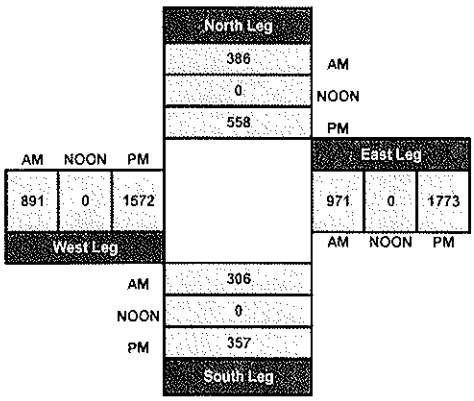
Kettner Blvd and W Grape St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(54)

Intersection Turning Movement

Prepared by:

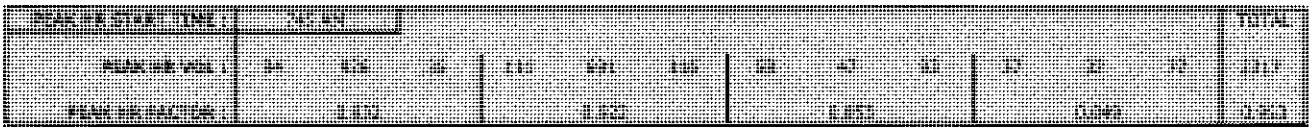
National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	189	8	29	120	16	7	8	15	4	5	8	424
7:15 AM	27	220	11	30	141	25	18	3	10	4	10	6	505
7:30 AM	21	228	15	34	167	29	12	9	15	8	5	20	563
7:45 AM	19	240	10	32	185	32	13	14	20	4	4	15	588
8:00 AM	32	209	12	28	160	31	11	11	22	11	10	19	556
8:15 AM	22	218	10	27	174	25	12	7	30	9	12	19	565
8:30 AM	21	259	3	24	172	28	22	15	21	13	6	24	608
8:45 AM	11	226	11	25	176	19	17	12	18	12	10	22	559
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	168	1789	80	229	1295	205	112	79	151	65	62	133	4368
APPRDACH %'s :	8.25%	87.83%	3.93%	13.24%	74.90%	11.86%	32.75%	23.10%	44.15%	25.00%	23.85%	51.15%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	19	291	21	28	313	3	13	13	32	19	5	21	778
4:15 PM	21	294	24	36	309	5	10	17	35	24	8	22	805
4:30 PM	28	261	36	38	327	1	10	11	38	17	8	19	794
4:45 PM	17	265	28	41	330	1	11	16	42	23	7	20	801
5:00 PM	19	267	25	26	313	2	17	25	51	34	11	43	833
5:15 PM	6	284	27	37	306	6	21	18	58	28	15	34	840
5:30 PM	17	245	36	37	301	9	11	11	39	31	14	26	777
5:45 PM	14	203	37	57	306	9	9	14	37	34	10	20	750
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	141	2110	234	300	2505	36	102	125	332	210	78	205	6378
APPROACH %'s :	5.67%	84.91%	9.42%	10.56%	88.17%	1.27%	18.25%	22.36%	59.39%	42.60%	15.82%	41.58%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]												

CONTROL :

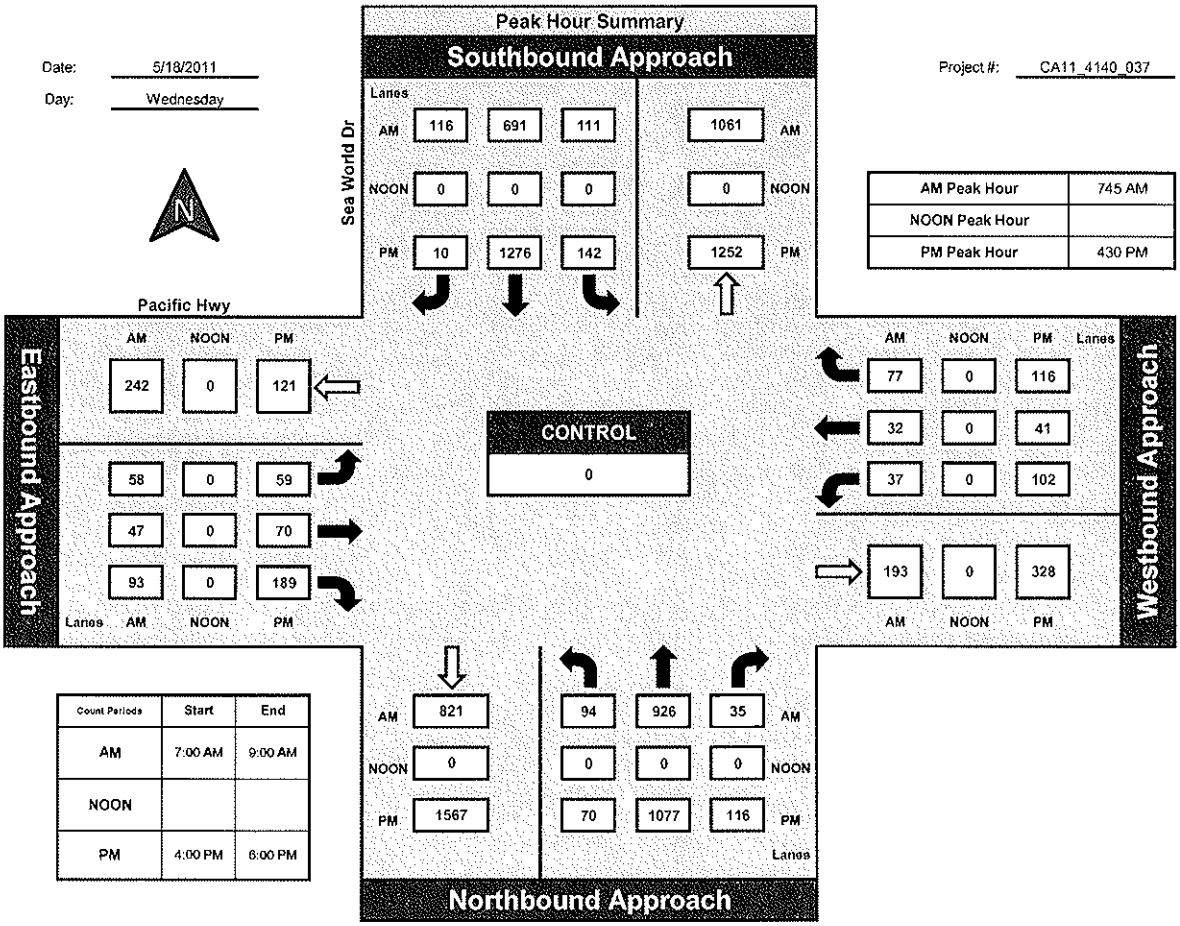
ITM Peak Hour Summary

Prepared by:

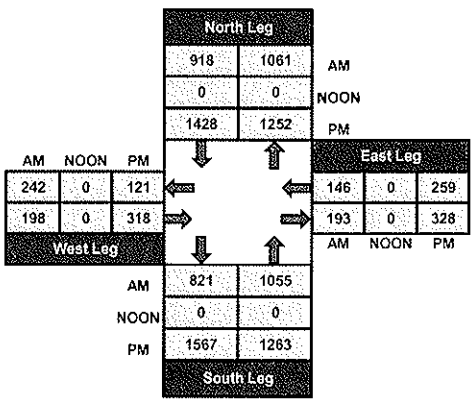
NDS

National Data & Surveying Services

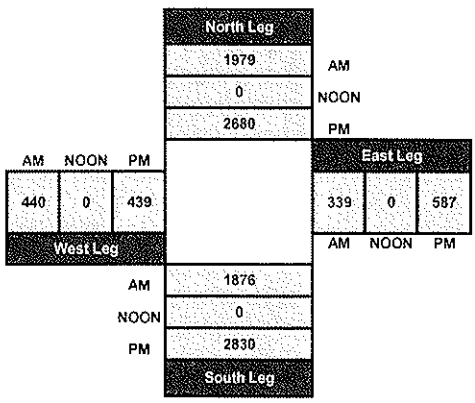
Sea World Dr and Pacific Hwy , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7												7
7:15 AM	12												12
7:30 AM	10												10
7:45 AM	15												15
8:00 AM	4												4
8:15 AM	7												7
8:30 AM	8												8
8:45 AM	13												13
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	76	0	0	0	0	0	0	0	0	0	0	0	76
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

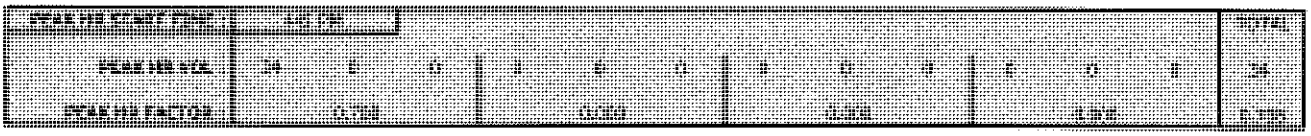
National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	9												9
4:15 PM	9												9
4:30 PM	7												7
4:45 PM	8												8
5:00 PM	7												7
5:15 PM	7												7
5:30 PM	12												12
5:45 PM	5												5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	0	0	0	0	0	0	0	0	0	0	0	64
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	



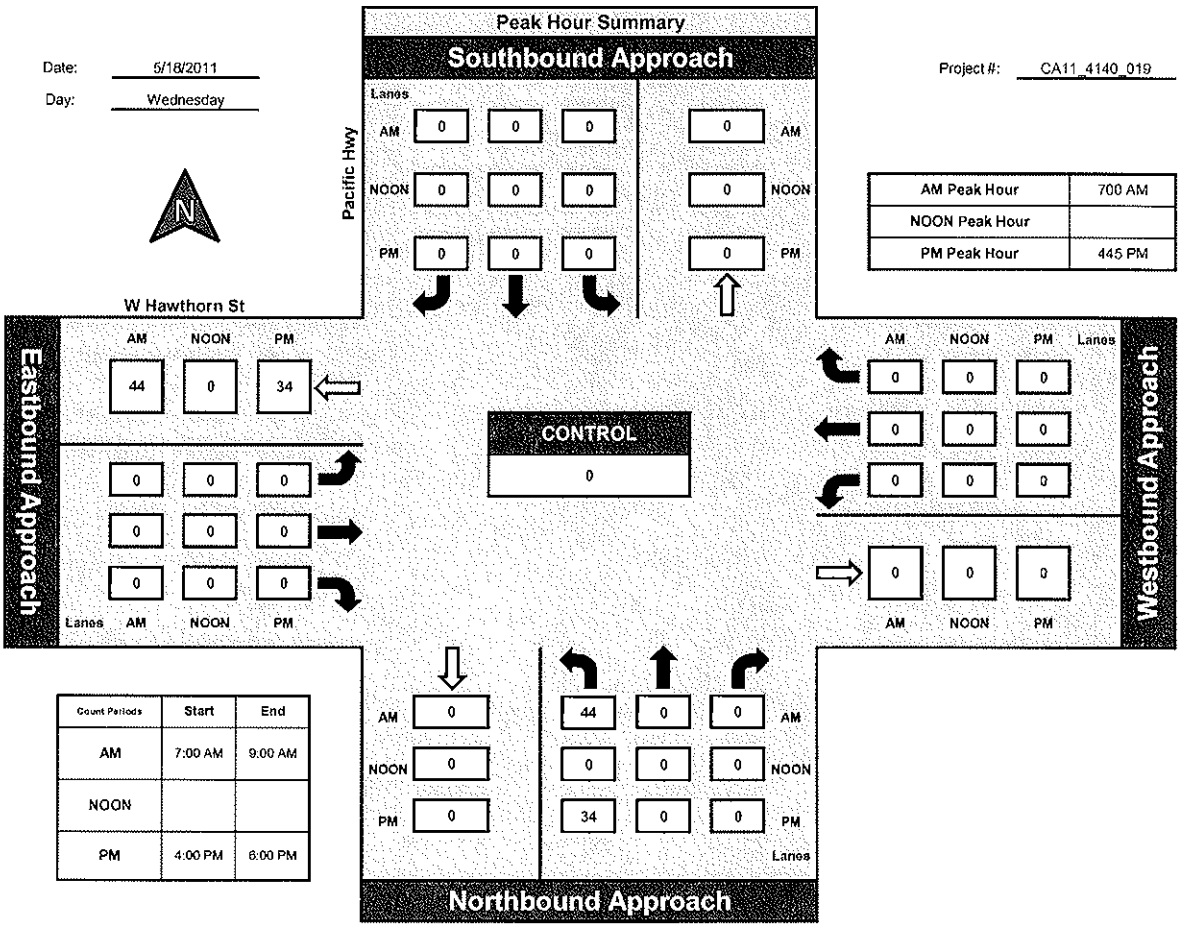
CONTROL :

ITM Peak Hour Summary

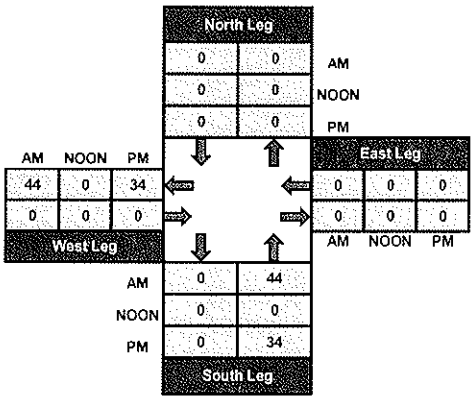
Prepared by:

National Data & Surveying Services

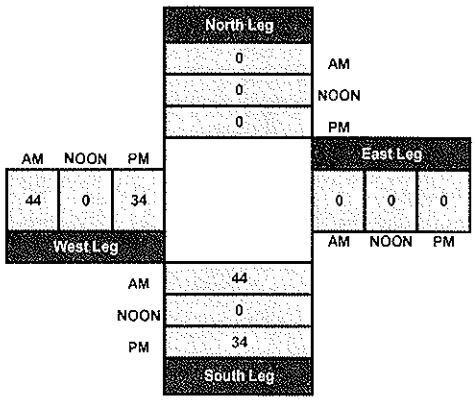
Pacific Hwy and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	36			24	7				86	360	12	545
7:15 AM	19	41			37	4				72	341	20	534
7:30 AM	13	45			35	5				90	284	18	490
7:45 AM	12	36			43	3				114	327	20	555
8:00 AM	12	41			35	7				83	294	15	487
8:15 AM	17	42			43	3				54	316	19	494
8:30 AM	13	47			52	9				70	269	16	476
8:45 AM	11	55			43	4				59	279	27	478
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	117	343	0	0	312	42	0	0	0	628	2470	147	4059
APPROACH %'s :	25.43%	74.57%	0.00%	0.00%	88.14%	11.86%	#DIV/0!	#DIV/0!	#DIV/0!	19.35%	76.12%	4.53%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	16	63			61	1				36	170	16	363
4:15 PM	23	70			61	5				34	173	22	388
4:30 PM	15	69			65	5				24	188	17	383
4:45 PM	21	70			54	5				30	222	17	419
5:00 PM	14	101			65	5				21	191	18	415
5:15 PM	13	108			51	3				26	190	20	411
5:30 PM	12	86			48	7				30	178	22	383
5:45 PM	13	80			53	3				33	216	22	420
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	127	647	0	0	458	34	0	0	0	234	1528	154	3182
APPROACH %'s :	16.41%	83.59%	0.00%	0.00%	93.09%	6.91%	#DIV/0!	#DIV/0!	#DIV/0!	12.21%	79.75%	8.04%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Hawthorn St , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_019

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Southbound Approach (Pacific Hwy)

Lanes				
AM	19	139	0	228 AM
NOON	0	0	0	0 NOON
PM	18	217	0	457 PM

Eastbound Approach (W Hawthorn St)

	AM	NOON	PM
	1395	0	845
	0	0	0
	0	0	0
	0	0	0
Lanes	AM	NOON	PM

CONTROL: 0

Westbound Approach

Lanes	AM	NOON	PM
	70	0	82
	1312	0	775
	362	0	110
	0	0	0
	AM	NOON	PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

AM	501	64	158	0 AM
NOON	0	0	0	0 NOON
PM	327	52	375	0 PM
				Lanes

Total Ins & Outs

	North Leg		
	158	228	AM
	0	0	NOON
	235	457	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
1395	0	845		1744	0	967
0	0	0		0	0	0

	South Leg	
AM	501	222
NOON	0	0
PM	327	427

Total Volume Per Leg

North Leg	
386	AM
0	NOON
692	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1395	0	845	1744	0	967

South Leg	
AM	723
NOON	0
PM	754

(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				0									
7:15 AM				4									4
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				0									
8:15 AM				1									1
8:30 AM				1									1
8:45 AM				5									5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	14	0	0	0	0	0	0	0	0	14
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				1									1
4:15 PM				3									3
4:30 PM				2									2
4:45 PM				0									
5:00 PM				3									3
5:15 PM				1									1
5:30 PM				4									4
5:45 PM				2									2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	16	0	0	0	0	0	0	0	0	16
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

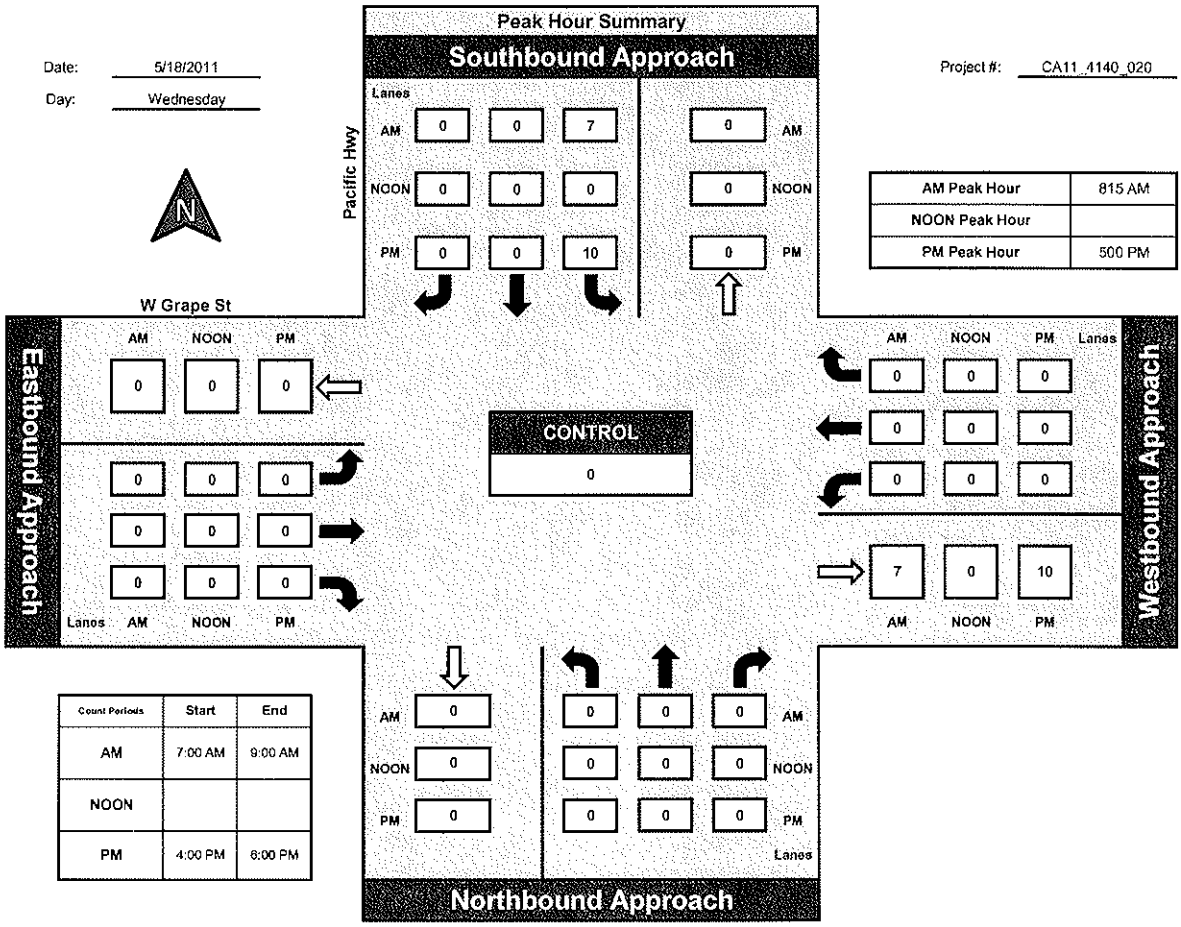
National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

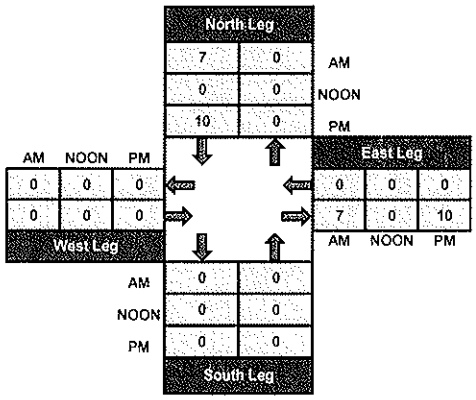
Project #: CA11_4140_020



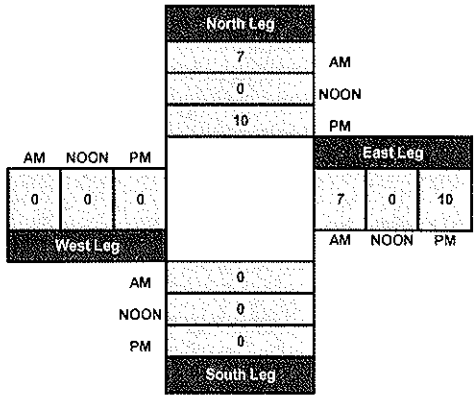
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

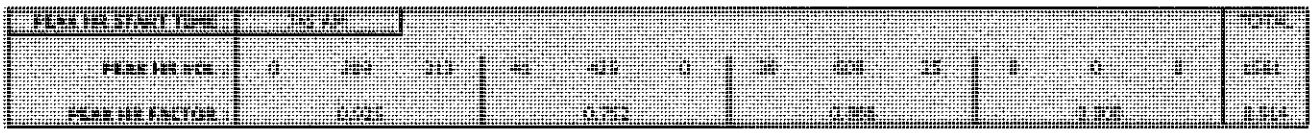
Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		51	41	6	79		15	166	7				365
7:15 AM		50	47	5	92		12	122	3				331
7:30 AM		56	51	11	112		8	137	5				380
7:45 AM		48	66	9	146		14	138	6				427
8:00 AM		55	42	8	107		8	148	8				376
8:15 AM		52	52	11	84		4	155	2				360
8:30 AM		54	53	13	88		13	168	9				398
8:45 AM		65	41	17	100		13	177	9				422

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	431	393	80	808	0	87	1211	49	0	0	0	3059
APPROACH %'s :	0.00%	52.31%	47.69%	9.01%	90.99%	0.00%	6.46%	89.90%	3.64%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		87	95	21	77		7	260	6				553
4:15 PM		95	87	29	76		5	243	9				544
4:30 PM		76	96	23	71		8	297	7				578
4:45 PM		86	79	23	69		6	257	6				526
5:00 PM		112	84	19	73		17	276	5				586
5:15 PM		113	73	17	63		12	311	6				595
5:30 PM		91	70	21	69		6	232	11				500
5:45 PM		85	57	19	69		10	242	10				492
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	745	641	172	567	0	71	2118	60	0	0	0	4374
APPROACH %'s :	0.00%	53.75%	46.25%	23.27%	76.73%	0.00%	3.16%	94.18%	2.67%	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_020

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach

Lanes					
AM	0	425	41	248	AM
NOON	0	0	0	0	NOON
PM	0	276	82	430	PM

Pacific Hwy

W Grape St

Eastbound Approach

Lanes	AM	NOON	PM
	0	0	0
	39	0	43
	609	0	1141
	25	0	24

Westbound Approach

Lanes	AM	NOON	PM
	0	0	0
	0	0	0
	0	0	0
	863	0	1555

CONTROL

0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	450	0	209	213	AM
NOON	0	0	0	0	NOON
PM	300	0	387	332	PM

Total Ins & Outs

	North Leg	
AM	466	248
NOON	0	0
PM	358	430

West Leg	AM	NOON	PM
AM	0	0	0
NOON	673	0	1208
PM			

East Leg	AM	NOON	PM
AM	0	0	0
NOON	863	0	1555
PM			

	South Leg	
AM	450	422
NOON	0	0
PM	300	719

Total Volume Per Leg

	North Leg
AM	714
NOON	0
PM	788

West Leg	AM	NOON	PM
AM	673	0	1208
NOON			
PM			

East Leg	AM	NOON	PM
AM	863	0	1555
NOON			
PM			

	South Leg
AM	872
NOON	0
PM	1019

(57)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		204	28	21	125					34		14	426
7:15 AM		234	55	33	116					38		19	495
7:30 AM		238	57	43	156					42		29	565
7:45 AM		240	74	56	145					40		25	580
8:00 AM		246	49	22	173					38		19	547
8:15 AM		211	59	29	183					59		28	569
8:30 AM		266	62	31	184					60		26	629
8:45 AM		214	67	26	171					51		25	554
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1853	451	261	1253	0	0	0	0	362	0	185	4365
APPROACH %'s :	0.00%	80.43%	19.57%	17.24%	82.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	66.18%	0.00%	33.82%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		296	82	64	304					74		36	856
4:15 PM		304	82	63	301					61		34	845
4:30 PM		295	82	67	319					72		31	866
4:45 PM		285	82	69	328					78		35	877
5:00 PM		275	122	80	316					72		25	890
5:15 PM		298	105	64	334					79		27	907
5:30 PM		256	78	63	302					74		34	807
5:45 PM		238	99	56	328					75		26	822
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2247	732	526	2532	0	0	0	0	585	0	248	6870
APPROACH %'s :	0.00%	75.43%	24.57%	17.20%	82.80%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	70.23%	0.00%	29.77%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and Friars Rd , City of San Diego

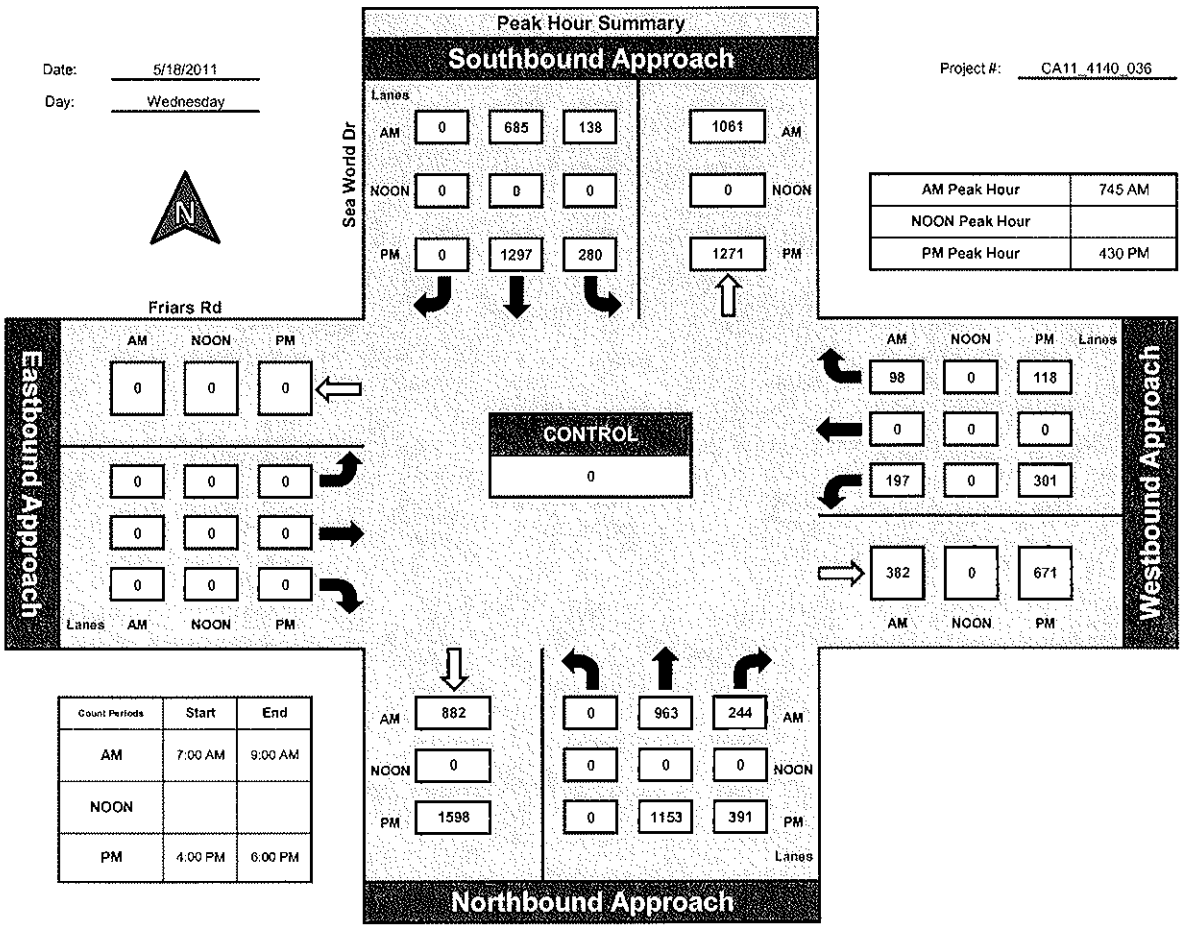
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

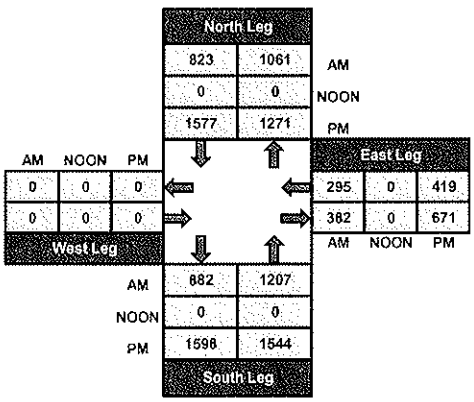
Project #: CA11_4140_036

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

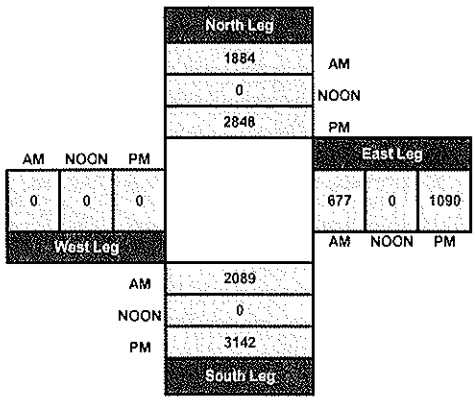


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(58)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		0	32	0	113		198	5	55	45		448
7:15 AM	0		0	48	0	153		226	19	57	50		553
7:30 AM	0		1	67	0	167		238	19	73	55		620
7:45 AM	0		0	75	1	183		258	13	78	57		665
8:00 AM	0		0	78	0	126		226	9	88	85		612
8:15 AM	0		0	68	1	178		235	18	79	57		636
8:30 AM	0		0	77	0	123		282	20	70	92		664
8:45 AM	1		0	68	0	162		249	19	61	67		627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	0	1	513	2	1205	0	1912	122	561	508	0	4825
APPROACH %'s :	50.00%	0.00%	50.00%	29.83%	0.12%	70.06%	0.00%	94.00%	6.00%	52.48%	47.52%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				65	1	257		270	51	76	76	1	797
4:15 PM				86	2	279		268	53	60	81	1	830
4:30 PM				85	0	272		239	47	90	83	1	817
4:45 PM				83	0	295		234	51	77	71	1	812
5:00 PM				76	1	279		275	63	65	69	0	828
5:15 PM				66	0	282		272	57	75	65	0	817
5:30 PM				74	0	282		239	53	53	68	0	769
5:45 PM				62	1	303		168	61	51	63	0	709
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	597	5	2249	0	1965	436	547	576	4	6379
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	20.94%	0.18%	78.88%	0.00%	81.84%	18.16%	48.54%	51.11%	0.35%	

[redacted]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 SB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_038

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach

Sea World Dr

Lanes					
AM	610	2	298	0	AM
NOON	0	0	0	0	NOON
PM	1125	3	330	3	PM

Eastbound Approach

I-5 SB Ramps

Lanes	AM	NOON	PM
	901	0	1429
	0	0	0
	1001	0	1016
	60	0	214

Westbound Approach

Lanes	AM	NOON	PM
	0	0	3
	291	0	304
	315	0	292
	1299	0	1346

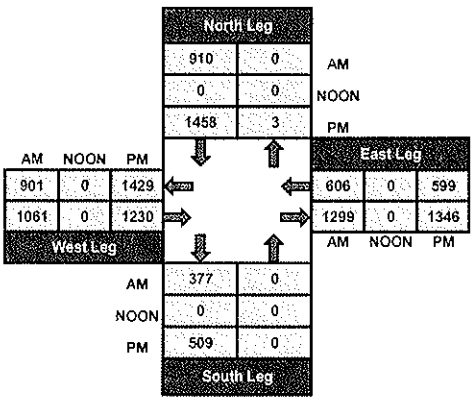
CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

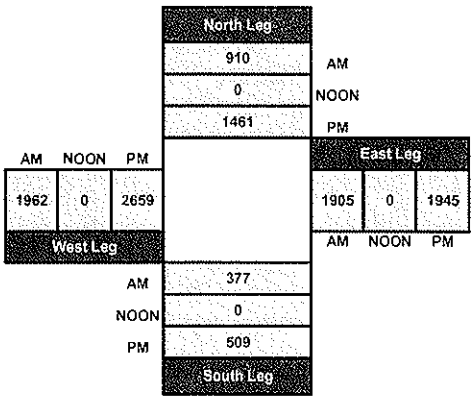
Northbound Approach

Lanes					
AM	377	0	0	0	AM
NOON	0	0	0	0	NOON
PM	509	0	0	0	PM

Total Ins & Outs



Total Volume Per Leg



(59)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

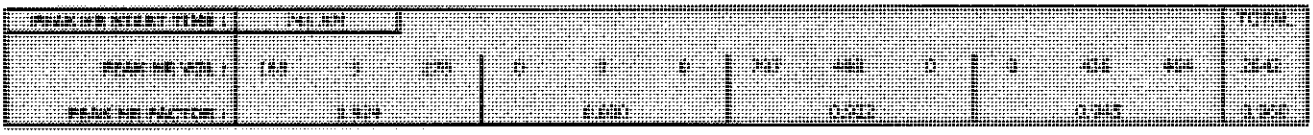
Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	21	0	45				174	50	0		72	77	439
7:15 AM	33	0	49				205	74	0		81	93	535
7:30 AM	31	0	65				193	108	0		92	117	606
7:45 AM	33	0	88				180	157	0		107	120	685
8:00 AM	44	0	67				186	113	0		122	116	648
8:15 AM	35	3	61				202	106	0		108	106	621
8:30 AM	56	0	60				229	122	0		99	122	688
8:45 AM	54	0	71				193	131	1		82	105	637

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	307	3	506	0	0	0	1562	861	1	0	763	856	4859
APPROACH %'s :	37.62%	0.37%	62.01%	#DIV/0!	#DIV/0!	#DIV/0!	64.44%	35.52%	0.04%	0.00%	47.13%	52.87%	



CONTROL :

Intersection Turning Movement

Prepared by:

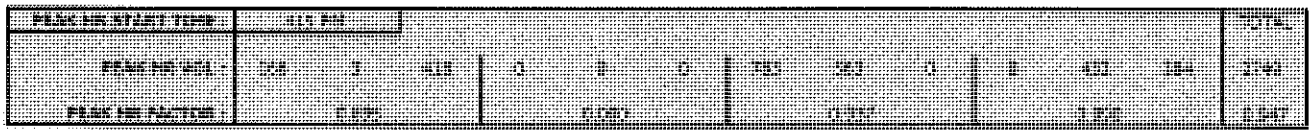
National Data & Surveying Services

Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	43	1	69				195	137			111	102	658
4:15 PM	44	0	120				208	149			100	105	726
4:30 PM	57	0	98				196	125			114	92	682
4:45 PM	31	0	96				183	126			110	96	642
5:00 PM	34	3	104				196	163			108	91	699
5:15 PM	36	0	109				210	127			99	90	671
5:30 PM	38	0	98				197	117			88	67	605
5:45 PM	37	1	69				144	79			70	61	461
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	320	5	763	0	0	0	1529	1023	0	0	800	704	5144
APPROACH %'s :	29.41%	0.46%	70.13%	#DIV/0!	#DIV/0!	#DIV/0!	59.91%	40.09%	0.00%	0.00%	53.19%	46.81%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 NB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_039

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach (Sea World Dr)

Lanes					
AM	0	0	0	1264	AM
NOON	0	0	0	0	NOON
PM	0	0	0	1170	PM

Eastbound Approach (I-5 NB Ramps)

Lanes	AM	NOON	PM
	604	0	598
	797	0	783
	498	0	563
	0	0	0

Westbound Approach

Lanes	AM	NOON	PM
	464	0	384
	436	0	432
	0	0	0
	774	0	981

CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	0	168	3	276	AM
NOON	0	0	0	0	NOON
PM	0	166	3	418	PM

Total Ins & Outs

North Leg		
0	1264	AM
0	0	NOON
0	1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
604	0	598	900	0	816
1295	0	1346	774	0	981

South Leg		
0	447	AM
0	0	NOON
0	587	PM

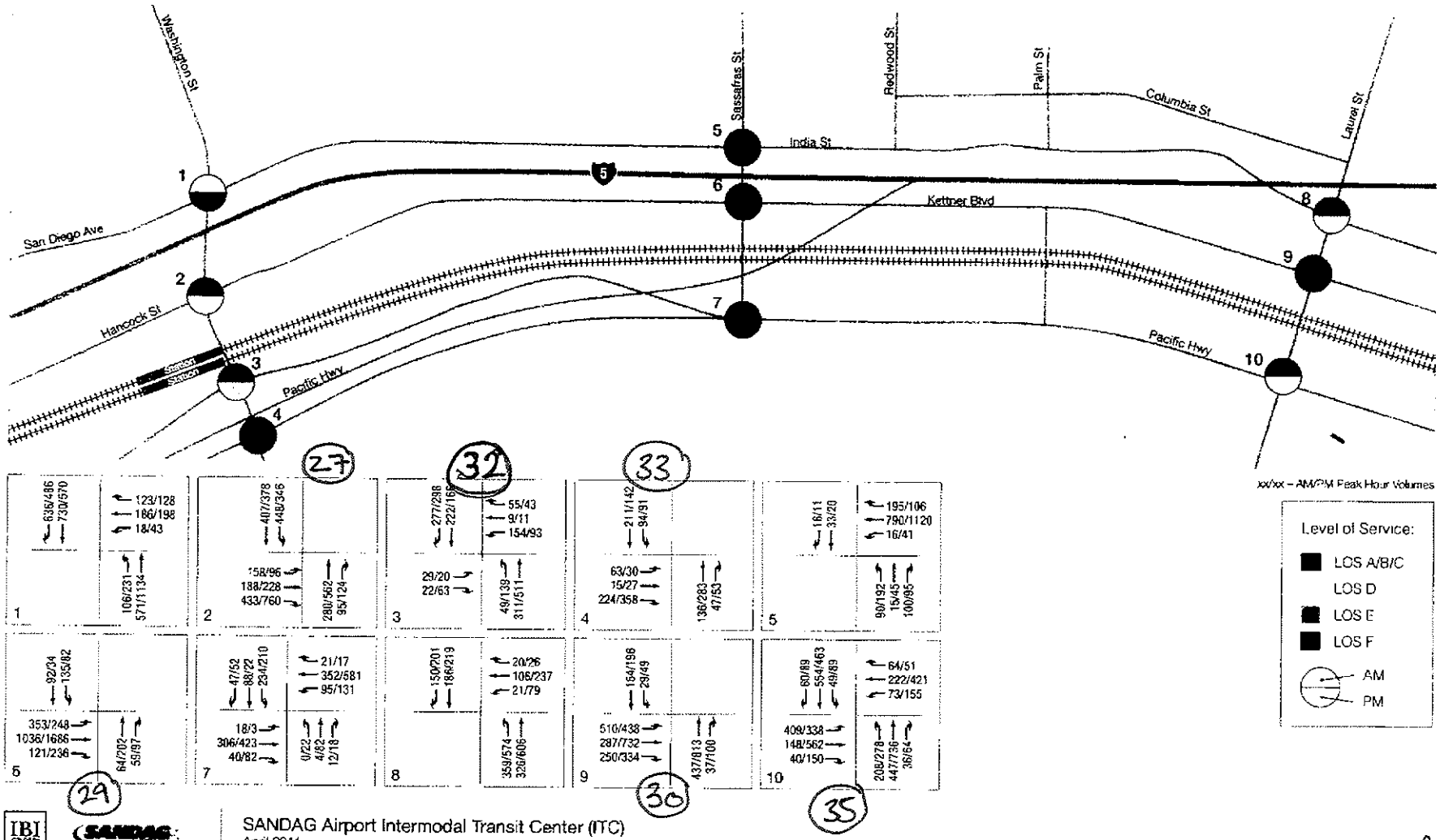
Total Volume Per Leg

North Leg	
1264	AM
0	NOON
1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1899	0	1944	1674	0	1797

South Leg	
447	AM
0	NOON
587	PM

Existing AM/PM Peak Hour Traffic Volumes and Level of Service



Cyclists and Pedestrian Counts

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

2

PROJECT#: 11-4140-001
N/S Street: W Mission Bay Dr
E/W Street: I-8 WB Off-Ramp
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	0	2	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0
7:45 AM	0	0	0	0	1	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	2	2	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	2	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4167-001
N/S Street: West Mission Bay Dr
E/W Street: Channel Way
DATE: 6/9/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0
TOTALS	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

4

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-003
N/S Street: Midway Dr
E/W Street: Sport Arena Blvd/W Point Loma Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	1	2	0	0	0
7:15 AM	4	3	0	1	0	1	1	0
7:30 AM	0	0	0	0	1	0	0	0
7:45 AM	0	0	1	1	2	0	0	1
8:00 AM	1	0	0	0	0	0	0	1
8:15 AM	2	2	3	0	0	1	1	0
8:30 AM	1	1	2	0	1	0	1	1
8:45 AM	0	1	0	0	1	0	0	0
TOTALS	**9**	**7**	**8**	**3**	**7**	**2**	**3**	**3**
	4	4	5	0	2	1	2	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	3
7:30 AM	0	0	0	1	3	0	0	2
7:45 AM	0	0	0	0	1	0	0	3
8:00 AM	0	0	2	2	0	0	0	5
8:15 AM	0	0	2	2	0	0	0	2
8:30 AM	0	0	1	2	0	0	0	6
8:45 AM	0	0	0	0	1	0	0	2
TOTALS	**0**	**1**	**5**	**7**	**5**	**0**	**0**	**23**
	0	0	5	6	1	0	0	15

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	3	0	0	0	0	2
4:15 PM	3	2	1	0	0	2	1	0
4:30 PM	0	2	2	0	0	0	1	0
4:45 PM	0	0	4	0	0	0	3	1
5:00 PM	1	2	2	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	1	2	0	0	0	0	1	1
5:45 PM	0	0	1	0	0	0	2	1
TOTALS	**5**	**9**	**13**	**0**	**0**	**2**	**9**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	3
4:15 PM	1	1	0	0	1	0	1	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	3	1	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	2	0	0	0	0	0
TOTALS	**1**	**5**	**5**	**1**	**1**	**0**	**2**	**4**

5

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-004
N/S Street: Kemper St
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	1
7:15 AM	0	0	1	0	0	1	1	2
7:30 AM	0	0	0	2	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	2	0	0	0	2
8:15 AM	0	0	0	1	0	2	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	0	1	1	5	5	3
TOTALS	**0**	**0**	**2**	**6**	**2**	**8**	**8**	**10**
	0	0	1	4	1	7	6	6

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	1	0	0	0	0
8:45 AM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**4**	**2**	**2**	**0**	**0**	**0**
	0	0	4	2	1	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	5	2	2	2	0	1	2
4:15 PM	0	5	5	5	1	1	1	1
4:30 PM	2	1	7	0	0	0	1	4
4:45 PM	0	4	2	4	3	6	0	1
5:00 PM	2	0	1	2	0	1	2	2
5:15 PM	3	2	2	3	0	2	2	0
5:30 PM	1	0	1	0	0	0	1	2
5:45 PM	0	0	2	2	0	0	1	1
TOTALS	**8**	**17**	**22**	**18**	**6**	**10**	**9**	**13**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**

6

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-005
N/S Street: East Dr
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	1	0	0	0	0
7:15 AM	0	0	1	0	0	0	2	1
7:30 AM	1	0	0	0	0	0	2	3
7:45 AM	0	0	1	0	0	0	0	1
8:00 AM	0	0	2	0	0	1	3	1
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	3	0
8:45 AM	0	0	1	0	0	0	2	1
TOTALS	**1**	**0**	**7**	**1**	**0**	**1**	**12**	**7**
	0	0	3	0	0	1	8	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**1**
	0	0	1	0	0	0	1	0

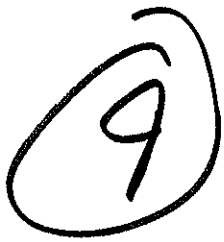
P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	9	3
4:15 PM	1	0	0	0	0	0	2	5
4:30 PM	1	0	0	0	0	0	5	3
4:45 PM	0	0	0	0	0	0	3	4
5:00 PM	1	0	0	0	0	0	7	2
5:15 PM	0	1	0	0	0	0	5	4
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	8	0	0	0	0	0	5	5
TOTALS	**11**	**1**	**0**	**0**	**0**	**1**	**38**	**28**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0
5:45 PM	0	0	1	1	0	0	0	0
TOTALS	**1**	**2**	**4**	**2**	**1**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-006
N/S Street: Midway Dr
E/W Street: Enterprise St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	3	0	0	0	0	0	0	0
TOTALS	**3**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
	3	0	0	0	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	1	1	0	0	0	0	0	0
8:15 AM	1	3	0	0	0	0	0	0
8:30 AM	0	4	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**12**	**0**	**0**	**0**	**0**	**0**	**0**
	2	8	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**3**	**1**	**0**	**0**

10

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-007
N/S Street: Midway Dr
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	2	0	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	0	0	0	0
8:30 AM	1	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**5**	**0**	**0**	**1**	**0**	**0**	**0**
	3	5	0	0	1	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	6	0	0	3	1	0	0
7:15 AM	4	2	0	0	2	2	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	2	3	0	0	0	2	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	3	5	0	0	1	3	0	0
8:30 AM	0	1	0	0	2	0	0	0
8:45 AM	1	2	0	0	1	1	0	0
TOTALS	**12**	**19**	**0**	**0**	**9**	**10**	**0**	**0**
	5	9	0	0	3	5	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	1	0	0	0	0	0	0
4:15 PM	1	2	0	0	1	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	1	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTALS	**7**	**4**	**0**	**0**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	1	0	0
4:15 PM	0	1	0	0	0	1	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	1	3	0	0	1	0	0	0
5:00 PM	2	1	0	0	1	0	0	0
5:15 PM	0	2	0	0	1	0	0	0
5:30 PM	0	1	0	0	1	1	0	0
5:45 PM	1	1	0	0	0	1	0	0
TOTALS	**5**	**10**	**0**	**0**	**4**	**4**	**0**	**0**

11

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-008
N/S Street: Hancock St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	2	0	0
7:15 AM	0	1	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	1	2
7:45 AM	2	2	1	1	0	2	1	2
8:00 AM	0	2	1	1	0	0	1	2
8:15 AM	2	2	2	5	0	1	0	3
8:30 AM	0	2	1	0	0	0	0	3
8:45 AM	0	1	1	3	0	3	2	0
TOTALS	**4**	**11**	**7**	**11**	**1**	**9**	**5**	**13**
	2	7	5	9	0	4	3	8

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0
8:00 AM	0	1	2	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**
	0	1	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	1	1	3	1	0	1
4:15 PM	1	1	1	3	1	2	2	4
4:30 PM	1	4	0	2	1	0	2	2
4:45 PM	3	1	2	1	2	2	2	3
5:00 PM	5	2	0	1	0	1	1	1
5:15 PM	0	2	0	4	1	4	0	5
5:30 PM	1	1	0	2	2	2	2	3
5:45 PM	0	4	1	3	0	1	1	1
TOTALS	**11**	**18**	**5**	**17**	**10**	**13**	**10**	**20**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**3**	**1**	**0**	**0**	**0**	**0**

12

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-009
N/S Street: Kemper St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	2	2	3	0	0	0
7:15 AM	1	0	0	0	1	2	0	0
7:30 AM	0	0	0	1	0	1	0	0
7:45 AM	3	0	1	1	3	2	0	1
8:00 AM	0	0	0	0	1	2	1	0
8:15 AM	2	0	2	1	4	2	0	1
8:30 AM	1	0	2	2	2	0	0	0
8:45 AM	1	1	2	1	2	1	0	1
TOTALS	**8**	**2**	**9**	**8**	**16**	**10**	**1**	**3**
	4	1	6	4	9	S	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	1	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0
7:30 AM	0	2	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	1	0	0
8:15 AM	0	0	2	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	3	0	1	1	0	0
TOTALS	**1**	**5**	**9**	**0**	**2**	**3**	**1**	**1**
	0	0	8	0	1	2	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	4	3	1	0	0	0	0
4:45 PM	1	2	2	2	3	0	1	0
5:00 PM	3	1	1	2	5	1	0	1
5:15 PM	2	0	3	0	0	0	1	0
5:30 PM	2	1	1	2	2	0	0	0
5:45 PM	1	0	0	1	0	0	0	0
TOTALS	**10**	**8**	**11**	**8**	**10**	**2**	**2**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	1	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**3**	**6**	**1**	**0**	**0**	**0**	**0**

13

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-010
N/S Street: Sport Arena Driveway
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	1	1	1	0	0	0
7:45 AM	1	0	0	0	1	0	0	0
8:00 AM	0	0	0	1	0	0	0	0
8:15 AM	1	0	0	2	3	0	0	0
8:30 AM	2	0	0	2	1	0	0	0
8:45 AM	1	0	2	2	1	2	0	0
TOTALS	**5**	**0**	**4**	**8**	**9**	**2**	**0**	**0**
	4	0	2	7	5	2	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	1	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**1**	**4**	**3**	**3**	**0**	**0**	**0**	**0**
	0	3	3	2	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	1	1	0	0	0
4:15 PM	3	1	1	0	0	1	0	0
4:30 PM	4	0	1	1	1	1	0	0
4:45 PM	4	1	0	0	0	2	0	0
5:00 PM	2	5	0	1	0	1	0	0
5:15 PM	1	2	3	1	0	1	0	0
5:30 PM	1	0	2	2	0	0	0	0
5:45 PM	1	0	2	1	1	0	0	0
TOTALS	**17**	**9**	**10**	**7**	**3**	**6**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	2	0	0	0	0	0
4:45 PM	0	0	3	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	3	0	0	0	0	0
5:45 PM	1	1	0	0	0	0	0	0
TOTALS	**1**	**3**	**10**	**0**	**0**	**0**	**0**	**0**

14

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-011
N/S Street: East Dr
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	3	3	0	1	1	2	0	0
7:15 AM	3	2	0	2	0	1	0	0
7:30 AM	2	1	2	0	0	1	0	0
7:45 AM	1	0	2	2	0	0	0	0
8:00 AM	0	2	1	0	1	1	0	0
8:15 AM	4	2	0	1	1	4	0	0
8:30 AM	5	3	3	4	1	4	0	0
8:45 AM	4	1	3	3	4	5	0	0
TOTALS	**22**	**14**	**11**	**13**	**8**	**18**	**0**	**0**
	13	8	7	8	7	14	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	1	0	0	0	0	0
7:15 AM	0	0	1	2	1	1	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	2	2	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	1	1	0	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**3**	**10**	**5**	**2**	**1**	**1**	**0**	**0**
	3	4	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	2	0	0	0	0	0	0
4:15 PM	3	1	3	1	0	0	0	0
4:30 PM	2	2	4	6	1	0	0	0
4:45 PM	1	2	3	2	0	0	0	0
5:00 PM	3	3	1	4	1	0	0	0
5:15 PM	2	5	0	3	0	2	0	0
5:30 PM	4	6	1	2	0	0	0	0
5:45 PM	3	2	0	5	0	0	0	0
TOTALS	**24**	**23**	**12**	**23**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	2	0	0	1	0	0	0	0
4:45 PM	3	1	0	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0
TOTALS	**7**	**1**	**1**	**6**	**0**	**0**	**0**	**0**

17

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-012
N/S Street: Pacific Hwy
E/W Street: Sports Arena Blvd
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	2	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**5**
	0	0	0	0	0	0	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	7
7:15 AM	0	0	0	0	0	0	0	8
7:30 AM	0	0	0	0	0	0	1	3
7:45 AM	0	0	0	0	0	0	1	8
8:00 AM	0	0	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	1	5
8:30 AM	0	0	0	0	0	0	1	9
8:45 AM	0	0	0	0	0	0	0	5
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**51**
	0	0	0	0	0	0	3	28

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**

18

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-013
N/S Street: Kurtz St
E/W Street: Hancock St
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**
	0	0	3	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
	0	0	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

19

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-014
N/S Street: Camino Del Rio W
E/W Street: Kurtz St
DATE: 5/19/2011
CITY: San Diego

DAY: Thursday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	2	0	0	0	0
7:15 AM	0	0	2	2	1	0	0	0	0	0
7:30 AM	0	0	2	3	2	1	1	0	1	1
7:45 AM	0	0	0	3	0	0	1	0	0	1
8:00 AM	0	0	1	3	0	0	0	0	0	0
8:15 AM	0	0	2	3	1	1	0	1	1	0
8:30 AM	0	0	0	1	1	1	1	0	1	0
8:45 AM	0	0	2	1	4	2	0	1	1	1
TOTALS	**0**	**0**	**9**	**21**	**9**	**7**	**3**	**2**	**4**	**3**
	0	0	5	8	6	4	1	2	3	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	2	1	0	0	0	0
8:15 AM	0	0	2	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	1	2	0	0	0	1
TOTALS	**0**	**0**	**8**	**3**	**1**	**0**	**0**	**2**
	0	0	6	3	0	0	0	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	1	5	0	1	0	0	0	0
4:15 PM	0	0	4	6	0	2	0	0	0	0
4:30 PM	0	0	2	2	2	0	1	5	0	0
4:45 PM	0	0	1	3	2	2	0	0	1	1
5:00 PM	0	0	3	3	7	3	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	7	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0
4:45 PM	0	0	2	2	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	2	1	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

21

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-015
N/S Street: Pacific Hwy
E/W Street: Kurtz St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
	0	0	0	0	0	0	0	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	8
7:15 AM	0	0	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	11
8:15 AM	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**51**
	0	0	0	0	0	0	1	27

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

22

PROJECT#: 11-4167-002
N/S Street: Hancock St
E/W Street: Channel Way
DATE: 6/9/2011
DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	1	0
TOTALS	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

25

PROJECT#: 11-4140-021
N/S Street: Hancock St
E/W Street: Old Towne Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
	2	1	0	0	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	2	0	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-022
N/S Street: Hancock St
E/W Street: Witherby St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	0	0	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	0	0	1	0	1	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	1	1	0	0
TOTALS	**0**	**0**	**6**	**1**	**2**	**2**	**0**	**1**
	0	0	6	0	1	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**
	0	0	0	1	0	2	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	2	0
4:30 PM	0	0	1	1	0	0	2	1
4:45 PM	0	0	0	1	0	0	2	0
5:00 PM	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	2	1	1	0	1	4
TOTALS	**0**	**0**	**4**	**3**	**2**	**0**	**9**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	2	0	2	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	2	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

28

PROJECT#: 11-4140-023
N/S Street: Kettner Blvd
E/W Street: Vine St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
	0	0	0	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
	0	0	0	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**

31

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-018
N/S Street: Pacific Hwy
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**
	0	0	0	0	0	0	2	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
	0	0	0	0	0	0	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-016
N/S Street: Taylor St
E/W Street: Morena Blvd
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	1	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	1	0	0
8:30 AM	0	0	0	0	3	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**4**	**2**	**1**	**0**
	0	0	1	0	3	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	1	5
7:30 AM	0	0	1	1	2	0	1	0
7:45 AM	0	0	2	1	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	1	1	0	1	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**5**	**3**	**3**	**0**	**5**	**11**
	0	0	1	1	1	0	1	4

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	1	0	0	1	0
4:45 PM	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	2	0	0	0
5:15 PM	0	0	0	1	1	0	2	2
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**1**	**2**	**4**	**2**	**5**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	1	2	0	1	1
4:30 PM	0	0	1	0	2	0	1	1
4:45 PM	0	0	1	0	2	0	1	0
5:00 PM	0	0	1	1	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	2	3	0	0	1
5:45 PM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**3**	**5**	**12**	**0**	**4**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

37

PROJECT#: 11-4140-033
N/S Street: Old Towne Ave
E/W Street: Moore St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	2	0	0	0	0	2	0	0
8:00 AM	2	1	0	0	0	0	0	0
8:15 AM	2	1	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**6**	**5**	**0**	**0**	**1**	**3**	**0**	**0**
	6	2	0	0	0	3	0	0

0 1.3541667

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
	0	0	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	2	0	0	0
4:15 PM	1	1	0	0	1	1	0	0
4:30 PM	0	1	0	0	2	0	0	0
4:45 PM	0	1	0	0	1	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	1	0	1	0	0	1	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**4**	**5**	**2**	**0**	**6**	**2**	**1**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-027
N/S Street: Twiggs St
E/W Street: Congress St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	2	7	0	0	0	0
7:15 AM	0	1	2	1	0	1	0	0
7:30 AM	1	1	3	1	0	0	0	0
7:45 AM	1	0	2	0	0	0	0	0
8:00 AM	0	0	5	0	0	0	0	0
8:15 AM	0	2	1	1	0	0	0	0
8:30 AM	2	1	9	3	0	0	0	0
8:45 AM	1	2	10	1	0	0	0	0
TOTALS	**6**	**8**	**34**	**14**	**0**	**1**	**0**	**0**
	3	5	25	5	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	2	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0
8:30 AM	0	3	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**3**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	3	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	8	9	7	0	0	1	8
4:15 PM	0	4	15	7	0	2	0	7
4:30 PM	1	2	6	9	5	5	0	2
4:45 PM	4	10	4	9	0	4	0	2
5:00 PM	5	3	16	5	1	1	2	0
5:15 PM	8	9	13	8	2	5	6	4
5:30 PM	7	5	12	4	4	0	2	8
5:45 PM	3	3	10	9	3	6	0	5
TOTALS	**34**	**44**	**85**	**58**	**15**	**23**	**11**	**36**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	2	1	0	0	0	0	0
4:45 PM	0	2	4	0	0	4	0	0
5:00 PM	1	2	0	0	0	0	0	0
5:15 PM	1	1	1	0	0	2	0	0
5:30 PM	1	0	1	0	0	0	0	0
5:45 PM	0	5	0	0	0	0	0	0
TOTALS	**4**	**14**	**8**	**0**	**0**	**6**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

40

PROJECT#: 11-4140-028
N/S Street: Harney St
E/W Street: Congress St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	0	0	0
7:15 AM	0	1	2	2	0	0	1	0
7:30 AM	1	0	2	2	1	1	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	4	0	0	0	0	0
8:15 AM	0	2	2	1	2	0	0	1
8:30 AM	2	1	5	2	0	0	0	0
8:45 AM	3	0	3	1	0	0	1	0
TOTALS	**6**	**4**	**20**	**13**	**3**	**1**	**2**	**1**
	5	3	14	4	2	0	1	1 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0
7:45 AM	0	3	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	2	0	0	0	0	0
8:30 AM	1	3	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	2	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	4	0	2	0	0	6	1
4:15 PM	0	0	6	4	4	3	2	1
4:30 PM	0	2	2	1	0	0	4	2
4:45 PM	2	4	5	3	1	3	4	0
5:00 PM	0	4	3	4	0	0	4	0
5:15 PM	0	0	6	2	0	0	3	2
5:30 PM	3	5	3	5	1	1	2	1
5:45 PM	2	1	3	2	0	0	3	0
TOTALS	**8**	**20**	**28**	**23**	**6**	**7**	**28**	**7**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	0	2	1	0	0	0	0	0
4:45 PM	0	1	3	0	0	0	0	0
5:00 PM	0	2	1	0	0	0	0	0
5:15 PM	0	1	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	3	0	0	0	0	0	0
TOTALS	**0**	**11**	**8**	**0**	**0**	**0**	**0**	**0**

41

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-029
N/S Street: Congress St/Ampudia St
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	2	0	0	1	0	1	0	0	0
7:45 AM	0	0	1	0	2	0	0	1	0	0
8:00 AM	2	0	0	0	3	2	0	0	0	0
8:15 AM	2	1	0	0	1	2	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0
TOTALS	**4**	**3**	**1**	**0**	**8**	**4**	**1**	**3**	**1**	**0**
	4	1	0	0	5	4	0	1	1	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	1	0
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	3	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**2**	**0**	**0**	**2**	**0**
	0	0	3	0	0	0	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	1	2	0	2
4:15 PM	0	0	0	0	3	0	1	4	0	3
4:30 PM	0	1	0	0	4	1	3	5	1	4
4:45 PM	0	0	0	0	3	2	2	3	2	2
5:00 PM	2	4	0	0	3	1	1	0	4	0
5:15 PM	1	0	0	0	2	2	2	0	2	0
5:30 PM	2	1	1	0	3	0	2	3	2	3
5:45 PM	0	2	0	0	0	1	1	2	0	1
TOTALS	**5**	**8**	**1**	**0**	**19**	**7**	**13**	**19**	**11**	**15**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	1	0
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	1	0	1	0	1	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0
TOTALS	**0**	**0**	**7**	**1**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

42

PROJECT#: 11-4140-030
N/S Street: Twiggs St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	3	0	1	0	0	0
7:15 AM	3	6	5	3	1	1	0	0
7:30 AM	4	8	9	5	0	4	0	0
7:45 AM	10	15	13	13	2	0	0	0
8:00 AM	12	22	12	8	5	9	0	0
8:15 AM	15	10	11	7	6	6	0	0
8:30 AM	18	11	9	15	3	11	0	0
8:45 AM	25	21	15	11	8	14	0	0
TOTALS	**88**	**94**	**77**	**62**	**26**	**45**	**0**	**0**
	70	64	47	41	22	40	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	22	26	25	8	5	8	0	0
4:15 PM	12	12	25	29	5	11	0	0
4:30 PM	33	16	22	8	4	11	0	0
4:45 PM	15	26	37	19	11	21	0	0
5:00 PM	25	29	21	16	3	10	0	0
5:15 PM	15	12	29	27	3	11	0	0
5:30 PM	34	13	17	10	4	10	0	0
5:45 PM	19	23	41	29	8	19	0	0
TOTALS	**175**	**157**	**217**	**146**	**43**	**101**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-031
N/S Street: Harney St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

43

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	5	1	2	3	0	1	0
7:15 AM	7	12	9	2	2	2	1	2
7:30 AM	14	8	12	10	10	13	11	6
7:45 AM	14	21	15	17	7	9	10	10
8:00 AM	13	29	14	11	12	10	8	7
8:15 AM	21	18	14	10	10	7	12	4
8:30 AM	18	15	12	19	2	11	2	9
8:45 AM	31	25	13	11	14	16	12	11
TOTALS	**118**	**133**	**90**	**82**	**60**	**68**	**57**	**49**
	83	87	53	51	38	44	34	31

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0
8:30 AM	2	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**4**	**0**	**2**	**2**	**0**	**0**	**0**	**0**
	3	0	2	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	52	28	36	28	17	9	0	9
4:15 PM	48	32	24	17	7	3	5	12
4:30 PM	48	28	24	16	7	10	14	5
4:45 PM	40	25	30	23	13	5	7	2
5:00 PM	30	26	37	25	5	7	15	4
5:15 PM	31	26	26	16	14	6	6	23
5:30 PM	36	39	17	35	7	12	1	16
5:45 PM	46	58	16	33	11	9	7	12
TOTALS	**331**	**262**	**210**	**193**	**81**	**61**	**55**	**83**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	3	1	0	1	0	0	0	0
4:30 PM	3	3	0	3	1	0	0	0
4:45 PM	0	1	2	0	0	0	0	0
5:00 PM	3	0	2	0	2	0	0	0
5:15 PM	0	1	0	2	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0
5:45 PM	0	3	1	0	0	1	0	0
TOTALS	**9**	**10**	**6**	**6**	**3**	**1**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

44

PROJECT#: 11-4140-032
N/S Street: Old Towne Ave
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	2	1	0	0	0	1	0
8:00 AM	0	4	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	1	0	0	1	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**4**	**7**	**4**	**1**	**0**	**0**	**4**	**2**
	0	4	2	1	0	0	3	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**
	0	1	2	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	1	0	0
4:15 PM	0	2	3	2	2	0	0	1
4:30 PM	2	2	2	3	0	1	2	0
4:45 PM	1	0	2	1	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	1	2	1	0	0	0	0	0
5:30 PM	1	4	1	1	0	2	2	3
5:45 PM	2	0	1	1	0	1	0	0
TOTALS	**10**	**10**	**10**	**9**	**2**	**5**	**4**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0
TOTALS	**1**	**10**	**2**	**0**	**0**	**0**	**0**	**1**

45

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-017
N/S Street: Taylor St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	1	1	2	0
7:30 AM	1	0	0	0	1	1	0	0
7:45 AM	1	1	0	0	3	1	0	0
8:00 AM	0	1	0	0	1	2	0	0
8:15 AM	1	0	0	0	2	1	0	0
8:30 AM	0	0	0	0	5	2	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**14**	**8**	**2**	**0**
	1	1	0	0	8	5	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	1
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	1
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**0**	**3**	**0**	**1**	**0**	**2**	**5**
	0	0	2	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	1	2	1	0	0
4:15 PM	1	1	0	1	1	4	0	0
4:30 PM	0	0	0	0	0	3	1	0
4:45 PM	0	0	1	4	2	0	0	1
5:00 PM	0	0	0	1	1	2	2	0
5:15 PM	0	2	0	0	0	4	9	0
5:30 PM	0	0	0	1	0	3	0	0
5:45 PM	1	0	0	2	1	0	4	0
TOTALS	**2**	**4**	**1**	**10**	**7**	**17**	**16**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	1	0
4:30 PM	2	0	0	0	0	0	1	2
4:45 PM	0	0	1	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**2**	**0**	**1**	**0**	**4**	**6**

46

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-034
N/S Street: Twiggs St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	4	2	0	0	2	0	0
7:30 AM	0	1	0	1	0	0	0	0
7:45 AM	1	0	1	1	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0
8:45 AM	0	5	2	2	1	1	0	0
TOTALS	**1**	**12**	**5**	**6**	**1**	**3**	**0**	**0**
	0	7	2	3	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1
7:45 AM	2	0	0	0	1	0	0	0
8:00 AM	1	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**6**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
	3	0	0	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	0
4:45 PM	0	0	2	6	0	18	2	0
5:00 PM	0	0	1	0	1	11	0	0
5:15 PM	0	0	2	0	2	4	0	0
5:30 PM	0	0	1	0	0	0	1	1
5:45 PM	0	0	6	0	6	1	8	0
TOTALS	**0**	**0**	**14**	**6**	**9**	**37**	**11**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

47

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-035
N/S Street: Harney St
E/W Street: Juan St
DATE: 5/18/2011
DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	7	0	0	0	0	1	3
7:15 AM	0	1	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	4
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0
TOTALS	**3**	**8**	**2**	**1**	**0**	**2**	**1**	**7**
	1	1	1	1	0	2	0	4

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**
	0	2	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	3	0	2	2	2
4:15 PM	0	0	2	1	2	0	2	1
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	1	2	0	0	1	0	5	0
5:00 PM	2	4	2	1	3	4	3	0
5:15 PM	3	1	2	4	0	2	2	2
5:30 PM	0	0	0	2	0	1	0	0
5:45 PM	0	2	1	0	2	0	3	4
TOTALS	**7**	**10**	**7**	**11**	**8**	**9**	**19**	**9**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0
TOTALS	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**1**

Table 3.1
Rosecrans Corridor 2-Hour AM Peak Period Pedestrian Counts

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Taylor Street / Congress Street	61	82 (Taylor St.)	29 (Congress St.)	15 (Taylor St.)	187
Rosecrans Street-Taylor Street / Pacific Highway	34 (PCH)	129 (Taylor St.)	21 (PCH)	61 (Rosecrans St.)	245
Rosecrans Street / Jefferson Street	69 (Jefferson St.)	1 (Rosecrans St.)	0 (Jefferson St.)	0 (Rosecrans St.)	70
Rosecrans Street / Moore Street	37 (Moore St.)	4 (Rosecrans St.)	0 (Moore St.)	4 (Rosecrans St.)	45
Rosecrans Street / Hancock Street	30 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	30
Rosecrans Street / Kurtz Street	47 (Kurtz St.)	4 (Rosecrans St.)	21 (Kurtz St.)	2 (Rosecrans St.)	74
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	9 (Sports Arena Blvd.)	9 (Rosecrans St.)	45 (Sports Arena Blvd.)	18 (Rosecrans St.)	100
Rosecrans Street / Midway Drive	18 (Midway Dr.)	14 (Rosecrans St.)	27 (Midway Dr.)	25 (Rosecrans St.)	84
Rosecrans Street / N. Evergreen Street	8 (Evergreen St.)	6 (Rosecrans St.)	5 (Evergreen St.)	0 (Rosecrans St.)	19
Rosecrans Street / Lytton Street	8 (Lytton St.)	0 (Rosecrans St.)	0 (Lytton St.)	3 (Rosecrans St.)	11
Rosecrans Street / Roosevelt Road	0	15 (Rosecrans St.)	11 (Roosevelt Rd.)	2 (Rosecrans St.)	28
Rosecrans Street / Curtis Street	9 (Curtis St.)	0 (Rosecrans St.)	0	0 (Rosecrans St.)	9
Rosecrans Street / Womble Road		82 (Rosecrans St.)	12 (Womble Rd.)	0 (Rosecrans St.)	94
Rosecrans Street / Xenophon Street	17 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	17
Rosecrans Street / Farragut Road-Voltaire Street	4 (Voltaire St.)	5 (Rosecrans St.)	17 (Farragut Rd.)	12 (Rosecrans St.)	38
Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	1 (Laning Rd.)	1 (Rosecrans St.)	2
Rosecrans Street / Oliphant Street	8 (Oliphant St.)	0 (Rosecrans St.)	8	0 (Rosecrans St.)	16
Rosecrans Street / Macualay Street	18 (Macualay St.)	1 (Rosecrans St.)	5 (DW)	3 (Rosecrans St.)	27
Rosecrans Street / Nimitz Boulevard	23 (Nimitz Blvd.)	14 (Rosecrans St.)	24 (Nimitz Blvd.)	19 (Rosecrans St.)	80
Rosecrans Street / Jarvis Street	23 (Jarvis St.)	8 (Rosecrans St.)	9 (Jarvis St.)	11 (Rosecrans St.)	51
Rosecrans Street / N. Harbor Drive-Hugo Street	14 (Hugo St.)	13 (Rosecrans St.)	16 (Harbor Dr.)	13 (Rosecrans St.)	56
Rosecrans Street / Garrison Street	11 (Garrison St.)	0 (Rosecrans St.)	0 (Garrison St.)	0 (Rosecrans St.)	11
Rosecrans Street / Carleton Street	25 (Carleton St.)	16 (Rosecrans St.)	11 (Carleton St.)	13 (Rosecrans St.)	65
Rosecrans Street / Shelter Island Drive-Byron Street	10 (Byron St.)	11 (Rosecrans St.)	14 (Shelter Island Dr.)	13 (Rosecrans St.)	48

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	15 (Canon St.)	23 (Rosecrans St.)	24 (Canon St.)	10 (Rosecrans St.)	72
Rosecrans Street / Talbot Street	10 (Talbot St.)	14 (Rosecrans St.)	5 (Talbot St.)	13 (Rosecrans St.)	42
Camino del Rio W. / Moore Street	1 (Moore St.)	0 (Camino del Rio)	0 (Moore St.)	3 (Camino del Rio)	4
#23 Camino del Rio W. / Hancock Street	0 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	0
#19 Camino del Rio W. / Kurtz Street	0 (Kurtz St.)	0 (Rosecrans St.)	0 (Kurtz St.)	0 (Rosecrans St.)	0
TOTAL	509	451	305	241	1,525

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 4 pedestrians along the northwest leg of the intersection (Camino del Rio) and 15 pedestrians along the south leg (Rosecrans St.).

Table 3.2
Rosecrans Corridor 2-Hour PM Peak Period Pedestrian Counts

	Intersection	West Leg	North Leg	East Leg	South Leg	Total
#38	Taylor Street / Congress Street	46	26 (Taylor St.)	81 (Congress St.)	53 (Taylor St.)	206
#36	Rosecrans Street-Taylor Street / Pacific Highway	23 (PCH)	170 (Taylor St.)	15 (PCH)	27 (Rosecrans St.)	235
	Rosecrans Street / Jefferson Street	86 (Jefferson St.)	0 (Rosecrans St.)	0 (Jefferson St.)	2 (Rosecrans St.)	88
	Rosecrans Street / Moore Street	57 (Moore St.)	7 (Rosecrans St.)	2 (Moore St.)	0 (Rosecrans St.)	66
#24	Rosecrans Street / Hancock Street	66 (Hancock St.)	0 (Rosecrans St.)	145 (Hancock St.)	0 (Rosecrans St.)	211
#20	Rosecrans Street / Kurtz Street	51 (Kurtz St.)	17 (Rosecrans St.)	43 (Kurtz St.)	3 (Rosecrans St.)	114
#15	Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	31 (Sports Arena Blvd.)	10 (Rosecrans St.)	29 (Sports Arena Blvd.)	63 (Rosecrans St.)	156
#7	Rosecrans Street / Midway Drive	48 (Midway Dr.)	40 (Rosecrans St.)	65 (Midway Dr.)	42 (Rosecrans St.)	195
	Rosecrans Street / N. Evergreen Street	11 (Evergreen St.)	11 (Rosecrans St.)	8 (Evergreen St.)	1 (Rosecrans St.)	31
#1	Rosecrans Street / Lytton Street	6 (Lytton St.)	6 (Rosecrans St.)	1 (Lytton St.)	0 (Rosecrans St.)	13
	Rosecrans Street / Roosevelt Road	0	7 (Rosecrans St.)	4 (Roosevelt Rd.)	0 (Rosecrans St.)	11
	Rosecrans Street / Curtis Street	5 (Curtis St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	5
	Rosecrans Street / Womble Road		32 (Rosecrans St.)	7 (Womble Rd.)	0 (Rosecrans St.)	39
	Rosecrans Street / Xenophon Street	6 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	6
	Rosecrans Street / Farragut Road-Voltaire Street	1 (Voltaire St.)	5 (Rosecrans St.)	13 (Farragut Rd.)	20 (Rosecrans St.)	39
#51	Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	3 (Laning Rd.)	0 (Rosecrans St.)	3
	Rosecrans Street / Oliphant Street	34 (Oliphant St.)	0 (Rosecrans St.)	47	0 (Rosecrans St.)	81
	Rosecrans Street / Macualay Street	8 (Macualay St.)	0 (Rosecrans St.)	12 (DW)	1 (Rosecrans St.)	21
#50	Rosecrans Street / Nimitz Boulevard	26 (Nimitz Blvd.)	25 (Rosecrans St.)	26 (Nimitz Blvd.)	41 (Rosecrans St.)	118
	Rosecrans Street / Jarvis Street	19 (Jarvis St.)	2 (Rosecrans St.)	20 (Jarvis St.)	5 (Rosecrans St.)	46
#49	Rosecrans Street / N. Harbor Drive-Hugo Street	4 (Hugo St.)	5 (Rosecrans St.)	3 (Harbor Dr.)	6 (Rosecrans St.)	18
	Rosecrans Street / Garrison Street	34 (Garrison St.)	0 (Rosecrans St.)	47 (Garrison St.)	0 (Rosecrans St.)	81
	Rosecrans Street / Carleton Street	15 (Carleton St.)	22 (Rosecrans St.)	10 (Carleton St.)	11 (Rosecrans St.)	58
	Rosecrans Street / Shelter Island Drive-Byron Street	9 (Byron St.)	8 (Rosecrans St.)	15 (Shelter Island Dr.)	19 (Rosecrans St.)	51

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	11 (Canon St.)	25 (Rosecrans St.)	28 (Canon St.)	11 (Rosecrans St.)	75
Rosecrans Street / Talbot Street	9 (Talbot St.)	20 (Rosecrans St.)	13 (Talbot St.)	19 (Rosecrans St.)	61
Camino del Rio W. / Moore Street	0 (Moore St.)	0 (Camino del Rio)	1 (Moore St.)	0 (Camino del Rio)	1
#23 Camino del Rio W. / Hancock Street	15 (Hancock St.)	20 (Rosecrans St.)	2 (Hancock St.)	1 (Rosecrans St.)	38
#19 Camino del Rio W. / Kurtz Street	15 (Kurtz St.)	20 (Rosecrans St.)	2 (Kurtz St.)	1 (Rosecrans St.)	38
TOTAL	636	478	642	326	2,105

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 9 pedestrians along the northwest leg of the intersection (Camino del Rio) and 14 pedestrians along the south leg (Rosecrans St.).

Table 5.1
Rosecrans Corridor 2-Hour AM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	3/9	0/0 (Taylor St.)	7/0 (Congress St.)	0/0 (Taylor St.)	19
Rosecrans Street - Taylor Street / Pacific Coast Highway	3/10 (PCH)	5/0 (Taylor St.)	7/0 (PCH)	0/5 (Rosecrans St.)	30
Rosecrans Street / Jefferson Street	2/13 (Jefferson St.)	0/0 (Rosecrans St.)	0/0 (Jefferson St.)	0/0 (Rosecrans St.)	15
Rosecrans Street / Moore Street	4/12 (Moore St.)	0/0 (Rosecrans St.)	10/2 (Moore St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Hancock Street	4/12 (Hancock St.)	0/0 (Rosecrans St.)	10/2 (Hancock St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Kurtz Street	1/8 (Kurtz St.)	2/0 (Rosecrans St.)	14/0 (Kurtz St.)	0/1 (Rosecrans St.)	26
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	0/0 (Sports Arena Blvd.)	0/1 (Rosecrans St.)	7/3 (Sports Arena Blvd.)	0/6 (Rosecrans St.)	20
Rosecrans Street / Midway Drive	0/7 (Midway Dr.)	3/1 (Rosecrans St.)	6/3 (Midway Dr.)	2/3 (Rosecrans St.)	25
Rosecrans Street / N. Evergreen Street	0/6 (Evergreen St.)	1/2 (Rosecrans St.)	6/2 (Evergreen St.)	0/0 (Rosecrans St.)	17
Rosecrans Street / Lytton Street	0/5 (Lytton St.)	2/1 (Rosecrans St.)	1/0 (Lytton St.)	0/0 (Rosecrans St.)	9
Rosecrans Street / Roosevelt Road	1/6	0/1 (Rosecrans St.)	7/1 (Roosevelt Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Curtis Street	1/6 (Curtis St.)	3/0 (Rosecrans St.)	0/0	1/3 (Rosecrans St.)	14
Rosecrans Street / Womble Road		2/4 (Rosecrans St.)	9/1 (Womble Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Xenophon Street	0/2 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	2
Rosecrans Street / Farragut Road-Voltaire Street	0/5 (Voltaire St.)	0/0 (Rosecrans St.)	3/0 (Farragut Rd.)	0/0 (Rosecrans St.)	8
Rosecrans Street / Russell Street-Laning Road	0/4 (Russell St.)	5/0 (Rosecrans St.)	17/0 (Laning Rd.)	0/12 (Rosecrans St.)	38
Rosecrans Street / Oliphant Street	0/4 (Oliphant St.)	0/0 (Rosecrans St.)	8/0	0/0 (Rosecrans St.)	12
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	7/1 (DW)	0/0 (Rosecrans St.)	13
Rosecrans Street / Nimitz Boulevard	1/4 (Nimitz Blvd.)	12/0 (Rosecrans St.)	8/1 (Nimitz Blvd.)	0/6 (Rosecrans St.)	32
Rosecrans Street / Jarvis Street	0/13 (Jarvis St.)	0/0 (Rosecrans St.)	5/0 (Jarvis St.)	1/0 (Rosecrans St.)	19
Rosecrans Street / N. Harbor Drive-Hugo Street	0/3 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/1 (Rosecrans St.)	7
Rosecrans Street / Garrison Street	0/4 (Garrison St.)	0/0	8/0 (Garrison St.)	0/0 (Rosecrans St.)	12
Rosecrans Street / Carleton Street	1/3 (Carleton St.)	1/0 (Rosecrans St.)	3/0 (Carleton St.)	1/0 (Rosecrans St.)	9

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/4 *(Byron St.)*	2/1 *(Rosecrans St.)*	2/0 *(Shelter Island Dr.)*	0/0 *(Rosecrans St.)*	9
Rosecrans Street / Canon Street	0/5 *(Canon St.)*	10/0 *(Rosecrans St.)*	2/0 *(Canon St.)*	0/12 *(Rosecrans St.)*	29
Rosecrans Street / Talbot Street	0/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	2/0 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6
Camino del Rio W. / Moore Street	0/6 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	3/0 *(Camino del Rio)*	9
#23 Camino del Rio W. / Hancock Street	0/1 *(Hancock St.)*	2/0 *(Rosecrans St.)*	1/0 *(Hancock St.)*	0/0 *(Rosecrans St.)*	4
#19 Camino del Rio W. / Kurtz Street	0/1 *(Kurtz St.)*	2/0 *(Rosecrans St.)*	1/0 *(Kurtz St.)*	0/0 *(Rosecrans St.)*	4
TOTAL	183	63	170	57	476

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 1 bicyclist southwest bound along the northwest leg of the intersection (Camino del Rio) and 0 west bound and 2 east bound along the south leg (Rosecrans St.).

Table 5.2
Rosecrans Corridor 2-Hour PM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	9/12	4/0 (Taylor St.)	18/2 (Congress St.)	1/1 (Taylor St.)	47
Rosecrans Street-Taylor Street / Pacific Coast Highway	9/12 (PCH)	21/2 (Taylor St.)	15/3 (PCH)	1/9 (Rosecrans St.)	72
Rosecrans Street / Jefferson Street	7/28 (Jefferson St.)	0/0 (Rosecrans St.)	4/1 (Jefferson St.)	0/0 (Rosecrans St.)	40
Rosecrans Street / Moore Street	4/20 (Moore St.)	0/0 (Rosecrans St.)	20/2 (Moore St.)	0/0 (Rosecrans St.)	46
Rosecrans Street / Hancock Street	1/1 (Hancock St.)	0/0 (Rosecrans St.)	20/5 (Hancock St.)	0/0 (Rosecrans St.)	27
Rosecrans Street / Kurtz Street	2/3 (Kurtz St.)	29/1 (Rosecrans St.)	3/0 (Kurtz St.)	3/15 (Rosecrans St.)	56
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	2/3 (Sports Arena Blvd.)	2/2 (Rosecrans St.)	6/4 (Sports Arena Blvd.)	6/13 (Rosecrans St.)	43
Rosecrans Street / Midway Drive	3/7 (Midway Dr.)	5/4 (Rosecrans St.)	8/3 (Midway Dr.)	0/7 (Rosecrans St.)	37
Rosecrans Street / N. Evergreen Street	2/5 (Evergreen St.)	0/2 (Rosecrans St.)	3/1 (Evergreen St.)	0/1 (Rosecrans St.)	14
Rosecrans Street / Lytton Street	0/3 (Lytton St.)	1/0 (Rosecrans St.)	2/0 (Lytton St.)	1/3 (Rosecrans St.)	10
Rosecrans Street / Roosevelt Road	2/1	0/2 (Rosecrans St.)	7/2 (Roosevelt Rd.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Curtis Street	0/1 (Curtis St.)	0/0 (Rosecrans St.)	0/0	0/0 (Rosecrans St.)	1
Rosecrans Street / Womble Road		2/2 (Rosecrans St.)	6/1 (Womble Rd.)	0/0 (Rosecrans St.)	11
Rosecrans Street / Xenophon Street	0/6 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	6
Rosecrans Street / Farragut Road-Voltaire Street	0/9 (Voltaire St.)	0/0 (Rosecrans St.)	10/0 (Farragut Rd.)	0/0 (Rosecrans St.)	19
Rosecrans Street / Russell Street-Laning Road	0/1 (Russell St.)	5/0 (Rosecrans St.)	11/0 (Laning Rd.)	0/20 (Rosecrans St.)	37
Rosecrans Street / Oliphant Street	0/3 (Oliphant St.)	0/0 (Rosecrans St.)	11/0	0/0 (Rosecrans St.)	14
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	6/2 (DW)	0/1 (Rosecrans St.)	14
Rosecrans Street / Nimitz Boulevard	0/2 (Nimitz Blvd.)	12/1 (Rosecrans St.)	6/2 (Nimitz Blvd.)	0/8 (Rosecrans St.)	31
Rosecrans Street / Jarvis Street	0/0 (Jarvis St.)	9/0 (Rosecrans St.)	0/0 (Jarvis St.)	0/1 (Rosecrans St.)	10
Rosecrans Street / N. Harbor Drive-Hugo Street	0/2 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/4 (Rosecrans St.)	9
Rosecrans Street / Garrison Street	0/3 (Garrison St.)	0/0 (Rosecrans St.)	11/0 (Garrison St.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Carleton Street	1/1 (Carleton St.)	1/0 (Rosecrans St.)	5/4 (Carleton St.)	1/0 (Rosecrans St.)	13

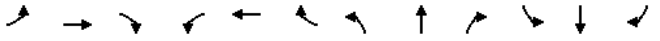
Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/2 *(Byron St.)*	5/0 *(Rosecrans St.)*	4/1 *(Shelter Island Dr.)*	1/0 *(Rosecrans St.)*	13
Rosecrans Street / Canon Street	1/5 *(Canon St.)*	12/0 *(Rosecrans St.)*	8/1 *(Canon St.)*	0/6 *(Rosecrans St.)*	33
Rosecrans Street / Talbot Street	1/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6/1 *(Talbot St.)*	0/0 *(Rosecrans St.)*	12
Camino del Rio W. / Moore Street	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0
Camino del Rio W. / Hancock Street	0/12 *(Hancock St.)*	8/0 *(Rosecrans St.)*	0/0 *(Hancock St.)*	0/2 *(Rosecrans St.)*	22
Camino del Rio W. / Kurtz Street	0/12 *(Kurtz St.)*	8/0 *(Rosecrans St.)*	0/0 *(Kurtz St.)*	0/2 *(Rosecrans St.)*	22
TOTAL	207	140	228	107	687

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:
*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 2 bicyclists southwest bound along the northwest leg of the intersection (Camino del Rio) and 2 bicyclists west bound and 1 bicyclist east bound along the south leg (Rosecrans St.).

Appendix E
Peak Hour Intersection Worksheets – Existing Conditions

Existing AM
1: Rosecrans St. & Lytton St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Volume (vph)	3	1019	308	142	1311	161	349	285	15	546	254	77
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	1084	328	151	1395	171	371	303	16	581	270	82
RTOR Reduction (vph)	0	0	227	0	0	68	0	0	12	0	8	0
Lane Group Flow (vph)	3	1084	101	151	1395	103	371	303	4	581	344	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	0.8	38.9	38.9	7.6	45.6	45.6	17.6	28.6	28.6	37.4	46.6	
Effective Green, g (s)	1.2	40.2	40.2	8.0	47.0	47.0	18.0	29.4	29.4	36.4	47.8	
Actuated g/C Ratio	0.01	0.31	0.31	0.06	0.36	0.36	0.14	0.23	0.23	0.28	0.37	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	16	1572	483	211	1279	542	475	421	353	496	659	
v/s Ratio Prot	0.00	0.21		c0.04	c0.39		c0.11	c0.16		c0.33	0.19	
v/s Ratio Perm			0.06			0.07			0.00			
v/c Ratio	0.19	0.69	0.21	0.72	1.09	0.19	0.78	0.72	0.01	1.17	0.52	
Uniform Delay, d1	63.9	39.4	33.2	59.9	41.5	28.4	54.1	46.5	39.0	46.8	32.2	
Progression Factor	1.00	1.00	1.00	1.39	0.60	0.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	2.5	1.0	5.9	49.6	0.5	7.5	6.1	0.0	96.9	0.3	
Delay (s)	66.0	41.9	34.2	89.4	74.3	15.1	61.6	52.6	39.0	143.7	32.5	
Level of Service	E	D	C	F	E	B	E	D	D	F	C	
Approach Delay (s)		40.2			69.7			57.2			101.7	
Approach LOS		D			E			E			F	

Intersection Summary				
HCM Average Control Delay	65.4	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/5/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	452	1054	306	0	0	428
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	1158	333	0	0	465
RTOR Reduction (vph)	0	540	0	0	0	0
Lane Group Flow (vph)	497	618	333	0	0	465
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	10.7	10.7	13.9			13.9
Effective Green, g (s)	10.7	10.7	13.9			13.9
Actuated g/C Ratio	0.28	0.28	0.36			0.36
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	952	773	1274			671
v/s Ratio Prot	0.14		0.09			c0.25
v/s Ratio Perm		c0.22				
v/c Ratio	0.52	0.80	0.26			0.69
Uniform Delay, d1	11.8	13.0	8.7			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.2	5.4	0.0			2.5
Delay (s)	12.0	18.4	8.8			13.0
Level of Service	B	B	A			B
Approach Delay (s)	16.5		8.8			13.0
Approach LOS	B		A			B

Intersection Summary				
HCM Average Control Delay	14.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	57.0%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
3: Channel Way & W Mission Bay Dr 4/5/2012

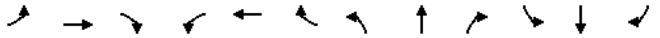


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	34	921	41	0	897
Peak Hour Factor	0.65	0.65	0.92	0.92	0.91	0.91
Hourly flow rate (vph)	0	52	1001	45	0	986
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked						
vC, conflicting volume	1352	359			1046	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1352	359			1046	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	141	636			661	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	52	400	400	245	329	329	329
Volume Left	0	0	0	0	0	0	0
Volume Right	52	0	0	45	0	0	0
cSH	636	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.24	0.24	0.14	0.19	0.19	0.19
Queue Length 95th (ft)	7	0	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	11.2	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	29.7%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
4: Sports Arena & W Mission Bay Dr 4/5/2012

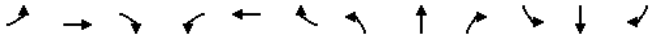


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Volume (vph)	412	277	244	16	125	223	149	327	19	298	428	171
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.79	0.79	0.79	0.94	0.94	0.94
Adj. Flow (vph)	438	295	260	19	147	262	189	414	24	317	455	182
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	357	376	122	19	147	262	189	414	24	249	523	182
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Split		pm+ov	Split		Free	Split		Free	Split		Free
Protected Phases	2	2	3	1	1		3	3		4	4	
Permitted Phases			2			Free			Free			Free
Actuated Green, G (s)	32.2	32.2	54.0	19.4	19.4	119.4	21.8	21.8	119.4	26.3	26.3	119.4
Effective Green, g (s)	33.1	33.1	55.8	20.4	20.4	119.4	22.7	22.7	119.4	27.2	27.2	119.4
Actuated g/C Ratio	0.28	0.28	0.47	0.17	0.17	1.00	0.19	0.19	1.00	0.23	0.23	1.00
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0		3.1	3.1		5.5	5.5	
Lane Grp Cap (vph)	466	485	785	302	605	1563	337	673	1562	367	767	1561
v/s Ratio Prot	0.21	c0.21	0.03	0.01	c0.04		0.11	c0.12		0.15	c0.16	
v/s Ratio Perm			0.05			0.17			0.02			0.12
v/c Ratio	0.77	0.78	0.15	0.06	0.24	0.17	0.56	0.62	0.02	0.68	0.68	0.12
Uniform Delay, d1	39.6	39.7	18.3	41.5	42.8	0.0	43.8	44.3	0.0	42.1	42.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	6.9	0.1	0.4	0.9	0.2	2.2	1.7	0.0	7.0	3.5	0.2
Delay (s)	46.3	46.7	18.4	41.9	43.7	0.2	46.0	46.0	0.0	49.1	45.7	0.2
Level of Service	D	D	B	D	D	A	D	D	A	D	D	A
Approach Delay (s)		39.1			17.0			44.3			37.9	
Approach LOS		D			B			D			D	

Intersection Summary					
HCM Average Control Delay	36.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.61				
Actuated Cycle Length (s)	119.4	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	69.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Existing AM
5: Kemper St & Midway Dr 4/5/2012

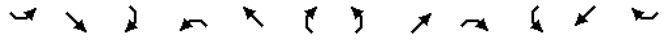


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Volume (vph)	97	95	91	25	89	53	64	309	35	62	390	70
Peak-hour factor, PHF	0.80	0.80	0.80	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Adj. Flow (vph)	121	119	114	27	98	58	73	351	40	67	419	75
RTOR Reduction (vph)	0	0	88	0	0	49	0	5	0	0	0	44
Lane Group Flow (vph)	121	119	26	27	98	9	73	386	0	67	419	31
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	12.9	12.9	17.6	11.9	11.9	11.9	4.7	33.1		4.7	33.1	33.1
Effective Green, g (s)	13.8	13.8	18.9	12.8	12.8	12.8	5.1	34.0		5.1	34.0	34.0
Actuated g/C Ratio	0.17	0.17	0.23	0.16	0.16	0.16	0.06	0.42		0.06	0.42	0.42
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	284	299	437	277	292	244	214	1448		110	1473	659
v/s Ratio Prot	c0.07	0.07	0.00	0.02	c0.05		0.02	0.11		c0.04	c0.12	
v/s Ratio Perm			0.01			0.01						0.02
v/c Ratio	0.43	0.40	0.06	0.10	0.34	0.04	0.34	0.27		0.61	0.28	0.05
Uniform Delay, d1	30.4	30.2	24.5	29.5	30.7	29.2	36.7	15.7		37.3	15.8	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.9	0.0	0.2	0.7	0.1	0.3	0.2		6.4	0.2	0.1
Delay (s)	31.4	31.1	24.5	29.7	31.3	29.3	37.0	15.8		43.7	16.0	14.3
Level of Service	C	C	C	C	C	C	D	B		D	B	B
Approach Delay (s)		29.1			30.4			19.2			19.1	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	22.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
6: Midway Dr & East Dr 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.98			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	3528		1770	3487			1750			1691	
Flt Permitted	0.33	1.00		0.42	1.00			0.76			0.83	
Satd. Flow (perm)	612	3528		791	3487			1382			1430	
Volume (vph)	16	537	10	25	629	68	19	3	5	16	2	15
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.61	0.61	0.61	0.75	0.75	0.75
Adj. Flow (vph)	18	590	11	29	740	80	31	5	8	21	3	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	7	0	0	18	0
Lane Group Flow (vph)	18	600	0	29	813	0	0	37	0	0	26	0
Confl. Peds. (#/hr)			3						1			10
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.4	41.6		42.4	41.6			4.1			4.1	
Effective Green, g (s)	43.7	42.5		43.7	42.5			5.0			5.0	
Actuated g/C Ratio	0.72	0.70		0.72	0.70			0.08			0.08	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	463	2470		589	2441			114			118	
v/s Ratio Prot	0.00	0.17		c0.00	c0.23							
v/s Ratio Perm	0.03			0.03				c0.03			0.02	
v/c Ratio	0.04	0.24		0.05	0.33			0.32			0.22	
Uniform Delay, d1	2.4	3.3		2.4	3.6			26.3			26.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.6			0.3	
Delay (s)	2.4	3.3		2.4	3.6			26.8			26.4	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		3.3			3.6			26.8			26.4	
Approach LOS		A			A			C			C	

Intersection Summary				
HCM Average Control Delay	4.8	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.33			
Actuated Cycle Length (s)	60.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	35.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
7: Rosecrans St. & Midway Dr 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Volume (vph)	156	1299	67	204	1658	246	207	255	152	64	297	169
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	1367	71	215	1745	259	218	268	160	67	313	178
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	125	0	0	144
Lane Group Flow (vph)	164	1433	0	215	1990	0	218	268	35	67	313	34
Confl. Peds. (#/hr)	14		25	25		14	27		14	18		27
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	13.9	50.4		25.8	62.4		11.0	27.6	27.6	7.4	24.0	24.0
Effective Green, g (s)	14.3	51.5		26.2	63.4		11.4	28.5	28.5	7.8	24.9	24.9
Actuated g/C Ratio	0.11	0.40		0.20	0.49		0.09	0.22	0.22	0.06	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	195	1995		692	2421		301	776	337	106	678	290
v/s Ratio Prot	c0.09	0.28		0.06	c0.40		c0.06	0.08		c0.04	c0.09	
v/s Ratio Perm									0.02			0.02
v/c Ratio	0.84	0.72		0.31	0.82		0.72	0.35	0.10	0.63	0.46	0.12
Uniform Delay, d1	56.7	33.1		44.2	28.5		57.8	42.9	40.5	59.7	46.6	43.5
Progression Factor	0.81	0.69		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	1.1		0.1	2.5		7.1	0.1	0.0	8.7	0.2	0.1
Delay (s)	60.2	24.1		44.3	30.9		64.9	43.0	40.6	68.4	46.8	43.5
Level of Service	E	C		D	C		E	D	D	E	D	D
Approach Delay (s)		27.8			32.2			49.8			48.3	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM Average Control Delay	34.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	84.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

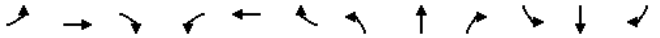
Existing AM
9: Enterprise St & Midway Dr 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	82	502	25	0	492
Peak Hour Factor	0.85	0.85	0.89	0.89	0.85	0.85
Hourly flow rate (vph)	0	96	564	28	0	579
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	870	301			594	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	870	301			594	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			100	
cM capacity (veh/h)	291	692			976	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	96	376	216	289	289
Volume Left	0	0	0	0	0
Volume Right	96	0	28	0	0
cSH	692	1700	1700	1700	1700
Volume to Capacity	0.14	0.22	0.13	0.17	0.17
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	11.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
10: Barnett Ave & Midway Dr 4/5/2012

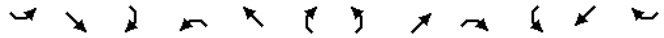


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	784	0	0	1211	527	0	0	0	397	0	95
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.81	0.92	0.81
Adj. Flow (vph)	0	852	0	0	1302	567	0	0	0	490	0	117
RTOR Reduction (vph)	0	0	0	0	0	267	0	0	0	0	0	90
Lane Group Flow (vph)	0	852	0	0	1302	300	0	0	0	490	0	27
Confl. Peds. (#/hr)						8				8		
Turn Type						custom				Prot		custom
Protected Phases		2			2	8				1		
Permitted Phases												1
Actuated Green, G (s)		26.8			26.8	22.3				12.9		12.9
Effective Green, g (s)		26.8			26.8	21.8				12.9		12.9
Actuated g/C Ratio		0.48			0.48	0.39				0.23		0.23
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	3.0				2.5		2.5
Lane Grp Cap (vph)		1688			1688	1081				788		363
v/s Ratio Prot		0.24			c0.37	0.11				c0.14		
v/s Ratio Perm												0.02
v/c Ratio		0.50			0.77	0.28				0.62		0.07
Uniform Delay, d1		10.1			12.2	11.8				19.5		17.0
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		0.2			2.2	0.1				1.3		0.1
Delay (s)		10.4			14.4	11.9				20.8		17.0
Level of Service		B			B	B				C		B
Approach Delay (s)		10.4			13.6			0.0			20.1	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	14.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	52.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
11: Sports Arena & Hancock 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9					4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91					1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes	1.00	1.00		0.78	1.00					1.00		1.00
Frt	1.00	1.00		1.00	0.98					1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)	1770	3532		1384	4970					1770		1583
Flt Permitted	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (perm)	1770	3532		1384	4970					1770		1583
Volume (vph)	104	484	6	1	331	52	0	0	0	18	0	33
Peak-hour factor, PHF	0.96	0.96	0.96	0.80	0.80	0.80	0.92	0.92	0.92	0.63	0.63	0.63
Adj. Flow (vph)	108	504	6	1	414	65	0	0	0	29	0	52
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	0	44
Lane Group Flow (vph)	108	510	0	1	462	0	0	0	0	29	0	8
Confl. Peds. (#/hr)	9		14	14		9			4	4		11
Turn Type	Prot			Prot					Free	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases									Free			
Actuated Green, G (s)	7.1	42.6		0.6	36.1					9.4		9.4
Effective Green, g (s)	7.1	42.6		0.6	36.1					9.4		10.3
Actuated g/C Ratio	0.11	0.64		0.01	0.54					0.14		0.15
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	188	2252		12	2686					249		244
v/s Ratio Prot	c0.06	c0.14		0.00	0.09					c0.02		0.01
v/s Ratio Perm												
v/c Ratio	0.57	0.23		0.08	0.17					0.12		0.03
Uniform Delay, d1	28.4	5.1		32.8	7.8					25.1		24.0
Progression Factor	1.00	1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2	2.6	0.1		1.1	0.1					0.1		0.0
Delay (s)	31.0	5.2		33.9	7.8					25.1		24.0
Level of Service	C	A		C	A					C		C
Approach Delay (s)		9.7			7.9			0.0			24.4	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	10.0	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.24			
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	9.3	
Intersection Capacity Utilization	33.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
12: Kemper Street & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Volume (vph)	62	40	90	46	23	100	68	481	76	117	327	80
Peak-hour factor, PHF	0.80	0.80	0.80	0.78	0.78	0.78	0.94	0.94	0.94	0.83	0.83	0.83
Adj. Flow (vph)	78	50	112	59	29	128	72	512	81	141	394	96
RTOR Reduction (vph)	0	94	0	0	0	117	0	13	0	0	38	0
Lane Group Flow (vph)	78	68	0	59	29	11	72	580	0	141	452	0
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	9.9	9.9		5.0	5.0	5.0	2.8	24.1		8.8	30.1	
Effective Green, g (s)	10.8	10.8		5.9	5.9	5.9	3.2	25.0		9.2	31.0	
Actuated g/C Ratio	0.16	0.16		0.09	0.09	0.09	0.05	0.37		0.14	0.46	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	286	270		156	164	140	164	1296		243	2287	
v/s Ratio Prot	c0.04	0.04		c0.03	0.02		0.02	c0.17		c0.08	0.09	
v/s Ratio Perm						0.01						
v/c Ratio	0.27	0.25		0.38	0.18	0.08	0.44	0.45		0.58	0.20	
Uniform Delay, d1	24.6	24.5		28.8	28.3	28.0	31.0	15.8		27.0	10.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.5		0.6	0.2	0.1	0.7	0.3		2.3	0.0	
Delay (s)	25.1	25.0		29.3	28.4	28.1	31.7	16.1		29.3	10.6	
Level of Service	C	C		C	C	C	C	B		C	B	
Approach Delay (s)		25.0			28.5			17.8			14.8	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	19.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
13: Sports Arena & 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99			0.97		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	3433	3464		1759	5042			1747		1770	1602	
Flt Permitted	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (perm)	3433	3464		1759	5042			1747		1770	1602	
Volume (vph)	72	482	63	20	458	25	26	5	8	25	3	40
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.71	0.71	0.71
Adj. Flow (vph)	77	513	67	24	539	29	35	7	11	35	4	56
RTOR Reduction (vph)	0	5	0	0	3	0	0	10	0	0	54	0
Lane Group Flow (vph)	77	575	0	24	565	0	0	43	0	35	6	0
Confl. Peds. (#/hr)	4		9	9		4			7	7		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Effective Green, g (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Actuated g/C Ratio	0.03	0.58		0.01	0.56			0.09		0.04	0.04	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	118	2021		20	2825			161		69	62	
v/s Ratio Prot	c0.02	c0.17		0.01	0.11			c0.02		c0.02	0.00	
v/s Ratio Perm												
v/c Ratio	0.65	0.28		1.20	0.20			0.27		0.51	0.10	
Uniform Delay, d1	33.2	7.2		34.4	7.6			29.4		32.8	32.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	9.5	0.0		270.0	0.0			0.3		2.1	0.3	
Delay (s)	42.6	7.3		304.4	7.6			29.7		34.9	32.5	
Level of Service	D	A		F	A			C		C	C	
Approach Delay (s)		11.4			19.6			29.7			33.4	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	17.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
14: Sports Arena & East Dr 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (prot)	1770	5037		1770	5024			1770	1542			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (perm)	1770	5037		1770	5024			1770	1542			1611
Volume (vph)	30	524	26	41	544	36	13	0	34	0	0	2
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.78	0.78	0.78	0.50	0.50	0.50
Adj. Flow (vph)	33	576	29	44	579	38	17	0	44	0	0	4
RTOR Reduction (vph)	0	4	0	0	5	0	0	0	39	0	0	0
Lane Group Flow (vph)	33	601	0	44	612	0	0	17	5	0	0	4
Confl. Peds. (#/hr)	21		15	15		21			21	21		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Effective Green, g (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Actuated g/C Ratio	0.02	0.65		0.02	0.65			0.11	0.11			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	27	3288		27	3280			199	174			1611
v/s Ratio Prot	0.02	0.12		c0.02	c0.12							
v/s Ratio Perm								0.01	0.00			0.00
v/c Ratio	1.22	0.18		1.63	0.19			0.09	0.03			0.00
Uniform Delay, d1	31.9	4.4		31.9	4.4			25.8	25.6			0.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	247.9	0.0		404.3	0.0			0.1	0.0			0.0
Delay (s)	279.8	4.5		436.2	4.5			25.8	25.6			0.0
Level of Service	F	A		F	A			C	C			A
Approach Delay (s)		18.7			33.2			25.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary				
HCM Average Control Delay	26.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.20			
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
15: Rosecrans St. & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (prot)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (perm)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Volume (vph)	171	1325	179	0	1887	296	155	154	10	242	215	101
Peak-hour factor, PHF	0.86	0.95	0.90	1.00	0.95	0.90	0.82	0.80	0.62	0.76	0.81	0.92
Adj. Flow (vph)	199	1395	199	0	1986	329	189	192	16	318	265	110
RTOR Reduction (vph)	0	13	0	0	0	0	0	4	0	0	0	87
Lane Group Flow (vph)	199	1581	0	0	1986	329	128	265	0	195	388	23
Confl. Peds. (#/hr)				45			18		9	9		45
Confl. Bikes (#/hr)									1			10
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	11.1	71.0			54.7	125.0	10.1	10.1		26.0	26.0	26.0
Effective Green, g (s)	12.5	73.1			56.6	125.0	10.1	10.1		26.0	26.0	26.0
Actuated g/C Ratio	0.10	0.58			0.45	1.00	0.08	0.08		0.21	0.21	0.21
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	343	2918			2302	1583	130	268		335	656	300
v/s Ratio Prot	0.06	c0.32			c0.39		0.08	c0.08		0.12	c0.12	0.02
v/s Ratio Perm						0.21						
v/c Ratio	0.58	0.54			0.86	0.21	0.98	0.99		0.58	0.59	0.08
Uniform Delay, d1	53.7	15.8			30.7	0.0	57.4	57.4		44.6	44.7	39.8
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.7			4.6	0.3	73.7	52.1		3.1	1.7	0.2
Delay (s)	55.4	16.5			35.3	0.3	131.1	109.5		47.7	46.4	40.0
Level of Service	E	B			D	A	F	F		D	D	D
Approach Delay (s)		20.8			30.3			116.4			45.8	
Approach LOS		C			C			F			D	

Intersection Summary				
HCM Average Control Delay	35.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	88.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	678	568	24
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	737	598	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	979	312	623			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	979	312	623			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	247	684	954			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	368	368	399	225
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	25
cSH	684	1700	1700	1700	1700
Volume to Capacity	0.06	0.22	0.22	0.23	0.13
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Existing AM
19: Kurtz & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1681	1752	1583		5085		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1681	1752	1583		5085		1770	6408	
Volume (vph)	0	0	0	112	78	45	0	1577	0	83	2142	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	122	85	47	0	1660	0	86	2208	0
RTOR Reduction (vph)	0	0	0	0	0	6	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	101	106	41	0	1660	0	86	2208	0
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				22.3	22.3	22.3		84.2		9.0	97.9	
Effective Green, g (s)				23.2	23.2	23.2		85.4		9.4	98.8	
Actuated g/C Ratio				0.18	0.18	0.18		0.66		0.07	0.76	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				300	313	283		3340		128	4870	
v/s Ratio Prot								c0.33		c0.05	0.34	
v/s Ratio Perm				0.06	0.06	0.03						
v/c Ratio				0.34	0.34	0.15		0.50		0.67	0.45	
Uniform Delay, d1				46.7	46.7	45.0		11.4		58.8	5.7	
Progression Factor				1.00	1.00	1.00		1.00		1.10	0.16	
Incremental Delay, d2				0.2	0.2	0.1		0.5		3.9	0.1	
Delay (s)				46.9	46.9	45.1		11.9		68.8	1.0	
Level of Service				D	D	D		B		E	A	
Approach Delay (s)		0.0			46.6			11.9			3.5	
Approach LOS		A			D			B			A	

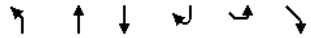
Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
20: Rosecrans St & Kurtz 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3364		1744	3539		1770		1548	1770	1863	
Flt Permitted		1.00		0.44	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3364		804	3539		1770		1548	1770	1863	
Volume (vph)	0	349	84	87	294	0	103	0	142	41	125	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.97	0.97	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	367	88	90	303	0	112	0	154	44	133	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	65	0	0	0
Lane Group Flow (vph)	0	446	0	90	303	0	112	0	89	44	133	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		74.3		85.7	85.7		13.1		74.3	17.0	17.0	
Effective Green, g (s)		75.2		86.6	86.6		13.5		75.2	17.9	17.9	
Actuated g/C Ratio		0.58		0.67	0.67		0.10		0.58	0.14	0.14	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1946		589	2358		184		895	244	257	
v/s Ratio Prot		c0.13		c0.01	0.09		c0.06			0.02	c0.07	
v/s Ratio Perm				0.09					0.06			
v/c Ratio		0.23		0.15	0.13		0.61		0.10	0.18	0.52	
Uniform Delay, d1		13.3		7.9	7.9		55.7		12.3	49.6	52.0	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.82	0.81	
Incremental Delay, d2		0.3		0.0	0.1		5.6		0.2	0.3	1.6	
Delay (s)		13.6		8.0	8.0		61.3		12.5	41.1	44.0	
Level of Service		B		A	A		E		B	D	D	
Approach Delay (s)		13.6			8.0			33.0			43.2	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
21: Pacific Highway & Kurtz St 4/5/2012

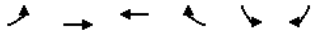


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	294	391	444	7	0	247
Peak Hour Factor	0.91	0.91	0.94	0.94	0.92	0.92
Hourly flow rate (vph)	323	430	472	7	0	268
Pedestrians		2				
Lane Width (ft)		12.0				
Walking Speed (ft/s)		4.0				
Percent Blockage		0				
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	480				1265	163
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	480				1265	163
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	65				100	68
cM capacity (veh/h)	918				104	851

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	323	143	143	143	189	189	102	268
Volume Left	323	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	7	268
cSH	918	1700	1700	1700	1700	1700	1700	851
Volume to Capacity	0.35	0.08	0.08	0.08	0.11	0.11	0.06	0.32
Queue Length 95th (ft)	40	0	0	0	0	0	0	34
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Lane LOS	B							B
Approach Delay (s)	4.7				0.0			11.2
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
22: Hancock & Channel Way 4/5/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	31	125	67	26	4	14
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	38	154	84	32	5	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1157				
pX, platoon unblocked						
vC, conflicting volume	116				331	100
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	116				331	100
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	98
cM capacity (veh/h)	1472				647	956

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	38	154	116	24
Volume Left	38	0	0	5
Volume Right	0	0	32	19
cSH	1472	1700	1700	864
Volume to Capacity	0.03	0.09	0.07	0.03
Queue Length 95th (ft)	2	0	0	2
Control Delay (s)	7.5	0.0	0.0	9.3
Lane LOS	A			A
Approach Delay (s)	1.5		0.0	9.3
Approach LOS				A

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
23: Hancock St & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frt		0.98					1.00	1.00			1.00	0.85
Flt Protected		1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3475					1770	5078			5085	1583
Flt Permitted		1.00					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3475					1770	5078			5085	1583
Volume (vph)	10	184	23	0	0	0	75	1594	15	0	2215	286
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	194	24	0	0	0	82	1752	16	0	2434	314
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	224	0	0	0	0	82	1768	0	0	2434	241
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		30.1					19.8	90.1			65.9	65.9
Effective Green, g (s)		31.0					20.2	91.0			66.8	66.8
Actuated g/C Ratio		0.24					0.16	0.70			0.51	0.51
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		829					275	3555			2613	813
v/s Ratio Prot		c0.06					0.05	c0.35			c0.48	
v/s Ratio Perm												0.15
v/c Ratio		0.27					0.30	0.50			0.93	0.30
Uniform Delay, d1		40.3					48.6	9.0			29.5	18.1
Progression Factor		0.90					0.89	0.52			1.00	1.00
Incremental Delay, d2		0.1					0.2	0.5			7.5	0.9
Delay (s)		36.4					43.3	5.1			37.0	19.1
Level of Service		D					D	A			D	B
Approach Delay (s)		36.4			0.0			6.8			34.9	
Approach LOS		D			A			A			C	

Intersection Summary				
HCM Average Control Delay	24.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
25: Old Town St & Hancock St 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	157	0	0	113	250	489
Peak Hour Factor	0.88	0.88	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	178	0	0	131	275	537

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	178	131	275	537
Volume Left (vph)	178	0	275	0
Volume Right (vph)	0	131	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.0	4.8	5.7	5.2
Degree Utilization, x	0.30	0.18	0.44	0.78
Capacity (veh/h)	566	707	615	674
Control Delay (s)	11.5	8.9	12.0	23.3
Approach Delay (s)	11.5	8.9	19.4	
Approach LOS	B	A	C	

Intersection Summary			
Delay	16.9		
HCM Level of Service	C		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
26: Witherby St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	93	2	35	0	1	1	7	19	3	9	166	471
Peak Hour Factor	0.84	0.84	0.84	0.76	0.76	0.76	0.91	0.91	0.91	0.91	0.72	0.72
Hourly flow rate (vph)	111	2	42	0	1	1	8	21	3	10	231	654

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	155	3	32	240	654
Volume Left (vph)	111	0	8	10	0
Volume Right (vph)	42	1	3	0	654
Hadj (s)	0.02	-0.27	0.02	0.05	-0.67
Departure Headway (s)	5.6	5.6	5.3	5.1	4.3
Degree Utilization, x	0.24	0.00	0.05	0.34	0.79
Capacity (veh/h)	609	592	646	697	816
Control Delay (s)	10.4	8.6	8.5	9.4	20.2
Approach Delay (s)	10.4	8.6	8.5	17.3	
Approach LOS	B	A	A	C	

Intersection Summary				
Delay		16.0		
HCM Level of Service		C		
Intersection Capacity Utilization		45.8%	ICU Level of Service	A
Analysis Period (min)		15		

Existing AM
27: Washington St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	1583
Volume (vph)	0	256	95	448	396	0	0	0	0	158	188	233
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	278	103	487	430	0	0	0	0	172	204	253
RTOR Reduction (vph)	0	0	54	0	0	0	0	0	0	0	0	207
Lane Group Flow (vph)	0	278	49	487	430	0	0	0	0	121	255	46
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		41.8	41.8	18.4	64.6					15.6	15.6	15.6
Effective Green, g (s)		42.7	42.7	18.8	65.5					16.5	16.5	16.5
Actuated g/C Ratio		0.47	0.47	0.21	0.73					0.18	0.18	0.18
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1679	751	717	2576					295	615	290
v/s Ratio Prot		0.08		c0.14	c0.12							
v/s Ratio Perm			0.03							0.08	0.08	0.03
v/c Ratio		0.17	0.07	0.68	0.17					0.41	0.41	0.16
Uniform Delay, d1		13.5	12.8	32.8	3.8					32.5	32.5	30.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	2.0	0.1					0.3	0.2	0.1
Delay (s)		13.7	13.0	34.8	3.9					32.8	32.6	31.0
Level of Service		B	B	C	A					C	C	C
Approach Delay (s)		13.5			20.4			0.0			32.0	
Approach LOS		B			C			A			C	

Intersection Summary						
HCM Average Control Delay		22.8	HCM Level of Service		C	
HCM Volume to Capacity ratio		0.35				
Actuated Cycle Length (s)		90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization		37.6%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

Existing AM
28: Vine St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	10	28	0	0	0	0	0	0	1404	14
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	20	40	0	0	0	0	0	0	1478	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1485	1485	500	513	1493	0	1493			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1485	1485	500	513	1493	0	1493			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	91	100	100	100			100		
cM capacity (veh/h)	86	124	516	427	122	1084	446			1622		

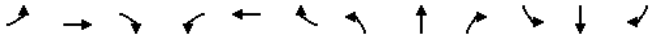
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	20	40	591	591	310
Volume Left	0	40	0	0	0
Volume Right	20	0	0	0	15
cSH	516	427	1700	1700	1700
Volume to Capacity	0.04	0.09	0.35	0.35	0.18
Queue Length 95th (ft)	3	8	0	0	0
Control Delay (s)	12.3	14.3	0.0	0.0	0.0
Lane LOS	B	B			
Approach Delay (s)	12.3	14.3	0.0		
Approach LOS	B	B			

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
29: Sassafras St & Kettner Bl 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3468					1770	4951	
Flt Permitted		1.00	1.00		0.81					0.95	1.00	
Satd. Flow (perm)		1863	1583		2850					1770	4951	
Volume (vph)	0	64	59	135	192	0	0	0	0	353	1036	221
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	70	64	147	209	0	0	0	0	384	1126	240
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	60	0
Lane Group Flow (vph)	0	70	40	0	356	0	0	0	0	384	1306	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		19.0	19.0		19.0					23.0	23.0	
Effective Green, g (s)		21.7	21.7		21.7					25.3	25.3	
Actuated g/C Ratio		0.39	0.39		0.39					0.46	0.46	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		735	625		1124					814	2277	
v/s Ratio Prot		0.04									c0.26	
v/s Ratio Perm			0.03		c0.12					0.22		
v/c Ratio		0.10	0.06		0.32					0.47	0.57	
Uniform Delay, d1		10.5	10.3		11.5					10.2	10.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.3	0.2		0.7					2.0	1.1	
Delay (s)		10.7	10.5		12.3					12.2	11.9	
Level of Service		B	B		B					B	B	
Approach Delay (s)		10.6			12.3			0.0			12.0	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM Average Control Delay	12.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	47.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3510		1770	3539						4657	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3510		1770	3539						4657	1362
Volume (vph)	0	637	37	29	178	0	0	0	0	510	287	250
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	692	40	32	193	0	0	0	0	554	312	272
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	728	0	32	193	0	0	0	0	0	866	90
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		37.3		3.0	43.0						25.0	25.0
Effective Green, g (s)		35.5		3.4	42.9						24.1	26.4
Actuated g/C Ratio		0.44		0.04	0.54						0.30	0.33
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1558		75	1898						1403	449
v/s Ratio Prot		c0.21		c0.02	0.05							
v/s Ratio Perm											0.19	0.07
v/c Ratio		0.47		0.43	0.10						1.09dl	0.20
Uniform Delay, d1		15.6		37.3	9.1						24.0	19.2
Progression Factor		1.00		1.33	0.85						1.00	1.00
Incremental Delay, d2		1.0		1.4	0.1						0.6	0.1
Delay (s)		16.6		50.9	7.9						24.6	19.3
Level of Service		B		D	A						C	B
Approach Delay (s)		16.6			14.0			0.0			23.3	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	20.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.5%	ICU Level of Service	C	
Analysis Period (min)	15			

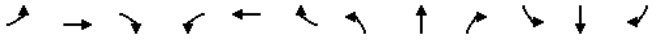
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Existing AM

32: Washington St & Pacific Highway NB Frontage Road

4/5/2012



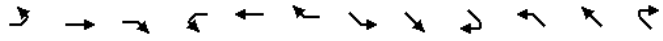
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.94			0.94	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97			0.97	
Satd. Flow (prot)	1770	3539			3539	1583	1610	3106			1702	
Flt Permitted	0.95	1.00			1.00	1.00	0.72	0.78			0.49	
Satd. Flow (perm)	1770	3539			3539	1583	1218	2502			856	
Volume (vph)	49	267	0	0	352	277	154	9	55	29	0	22
Peak-hour factor, PHF	0.95	0.92	0.95	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.83	0.83
Adj. Flow (vph)	52	290	0	0	383	301	164	10	60	32	0	27
RTOR Reduction (vph)	0	0	0	0	0	150	0	48	0	0	25	0
Lane Group Flow (vph)	52	290	0	0	383	151	82	104	0	0	34	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	2.3	48.7			41.5	41.5	14.0	14.0			6.3	
Effective Green, g (s)	2.8	48.7			41.9	41.9	16.4	16.4			6.3	
Actuated g/C Ratio	0.03	0.58			0.50	0.50	0.20	0.20			0.08	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	59	2067			1778	795	240	492			65	
v/s Ratio Prot	c0.03	0.08			c0.11							
v/s Ratio Perm						0.10	c0.07	0.04			c0.04	
v/c Ratio	0.88	0.14			0.22	0.19	0.34	0.21			0.52	
Uniform Delay, d1	40.1	7.9			11.6	11.4	28.9	28.1			37.1	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	76.9	0.0			0.3	0.5	0.3	0.1			3.5	
Delay (s)	117.0	7.9			11.9	11.9	29.2	28.2			40.6	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		24.5			11.9			28.5			40.6	
Approach LOS		C			B			C			D	

Intersection Summary				
HCM Average Control Delay	19.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	83.4	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

33: Washington St & Pacific Highway SB

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.97		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3411		1756	1863		1681	1701	1583			
Flt Permitted		1.00		0.60	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3411		1100	1863		1681	1701	1583			
Volume (vph)	0	186	47	131	397	0	130	15	224	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	202	51	142	432	0	141	16	243	0	0	0
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	69	0	0	0
Lane Group Flow (vph)	0	224	0	142	432	0	76	81	174	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		9.2		22.6	22.6		16.5	16.5	25.7			
Effective Green, g (s)		9.2		22.9	22.9		18.7	18.7	27.9			
Actuated g/C Ratio		0.15		0.36	0.36		0.30	0.30	0.44			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		500		401	679		501	507	804			
v/s Ratio Prot		c0.07			c0.23				c0.06			
v/s Ratio Perm				0.13			0.05	0.05	0.05			
v/c Ratio		0.45		0.35	0.64		0.15	0.16	0.22			
Uniform Delay, d1		24.5		14.6	16.5		16.2	16.3	10.7			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.2		2.4	4.5		0.1	0.1	0.0			
Delay (s)		24.7		17.0	21.0		16.3	16.3	10.8			
Level of Service		C		B	C		B	B	B			
Approach Delay (s)		24.7			20.0			12.9			0.0	
Approach LOS		C			C			B			A	

Intersection Summary				
HCM Average Control Delay	18.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	62.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	41.4%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
34: Sassafras St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.94		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1715		1766	1746		1770	4908		1770	5025	
Flt Permitted	0.65	1.00		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1207	1715		1368	1746		1770	4908		1770	5025	
Volume (vph)	2	16	15	276	93	66	27	231	70	26	258	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	17	16	300	101	72	29	251	76	28	280	21
RTOR Reduction (vph)	0	11	0	0	45	0	0	43	0	0	10	0
Lane Group Flow (vph)	2	22	0	300	128	0	29	284	0	28	291	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	17.2	17.2		16.5	16.5		1.6	22.0		1.3	21.5	
Effective Green, g (s)	17.2	17.2		16.9	16.9		1.6	23.4		1.8	23.6	
Actuated g/C Ratio	0.32	0.32		0.31	0.31		0.03	0.43		0.03	0.43	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	382	542		425	542		52	2111		59	2180	
v/s Ratio Prot		0.01			0.07		c0.02	0.06		0.02	c0.06	
v/s Ratio Perm	0.00			c0.22								
v/c Ratio	0.01	0.04		0.71	0.24		0.56	0.13		0.47	0.13	
Uniform Delay, d1	12.7	12.9		16.6	13.9		26.1	9.4		25.8	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		5.3	0.2		7.2	0.1		5.9	0.1	
Delay (s)	12.7	12.9		21.8	14.2		33.2	9.5		31.7	9.4	
Level of Service	B	B		C	B		C	A		C	A	
Approach Delay (s)		12.9			19.0			11.4			11.3	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM Average Control Delay	14.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	54.4	Sum of lost time (s)	8.3	
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
35: W Laurel St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Volume (vph)	208	401	36	49	319	60	73	222	64	209	148	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	226	436	39	53	347	65	79	241	70	227	161	43
RTOR Reduction (vph)	0	9	0	0	20	0	0	48	0	0	0	38
Lane Group Flow (vph)	226	466	0	53	392	0	79	263	0	227	161	5
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	8.7	20.9		6.6	18.2		6.2	23.7		8.7	26.1	8.7
Effective Green, g (s)	9.1	22.1		7.0	20.0		6.6	24.6		9.1	27.1	9.1
Actuated g/C Ratio	0.12	0.28		0.09	0.25		0.08	0.31		0.12	0.34	0.12
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	204	980		157	875		148	1529		204	1749	178
v/s Ratio Prot	c0.13	c0.13		0.03	0.11		0.04	c0.05		c0.13	0.03	
v/s Ratio Perm												0.00
v/c Ratio	1.11	0.48		0.34	0.45		0.53	0.17		1.11	0.09	0.03
Uniform Delay, d1	34.9	23.5		33.7	24.8		34.6	19.7		34.9	17.5	30.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	94.9	0.5		5.7	0.3		1.8	0.2		96.5	0.1	0.0
Delay (s)	129.7	24.0		39.5	25.1		36.5	19.9		131.4	17.6	30.9
Level of Service	F	C		D	C		D	B		F	B	C
Approach Delay (s)		58.1			26.7			23.3			78.9	
Approach LOS		E			C			C			E	

Intersection Summary				
HCM Average Control Delay	48.4	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.9%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
36: Rosecrans St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Volume (vph)	81	204	90	230	270	91	127	85	161	63	138	44
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	89	224	99	253	297	100	137	91	173	68	150	48
RTOR Reduction (vph)	0	0	47	0	0	54	0	0	132	0	0	38
Lane Group Flow (vph)	89	224	52	253	297	46	137	91	41	68	150	10
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	4.1	35.5	39.7	4.2	35.6	35.6	4.2	16.0	20.2	4.4	16.2	16.2
Effective Green, g (s)	4.5	36.4	41.0	4.6	36.5	36.5	4.6	15.4	18.5	4.8	15.7	15.7
Actuated g/C Ratio	0.06	0.46	0.52	0.06	0.46	0.46	0.06	0.20	0.24	0.06	0.20	0.20
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	101	1637	905	201	864	734	103	693	483	108	706	316
v/s Ratio Prot	0.05	0.06	0.00	c0.07	c0.16		c0.08	0.03	0.00	0.04	c0.04	
v/s Ratio Perm			0.03			0.03			0.02			0.01
v/c Ratio	0.88	0.14	0.06	1.26	0.34	0.06	1.33	0.13	0.08	0.63	0.21	0.03
Uniform Delay, d1	36.8	12.1	9.3	37.1	13.5	11.7	37.1	26.1	23.5	36.1	26.3	25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	52.4	0.2	0.0	150.2	1.1	0.2	200.7	0.1	0.0	8.0	0.3	0.1
Delay (s)	89.2	12.3	9.3	187.2	14.5	11.8	237.7	26.3	23.5	44.1	26.6	25.4
Level of Service	F	B	A	F	B	B	F	C	C	D	C	C
Approach Delay (s)		28.2			81.3			97.3			30.9	
Approach LOS		C			F			F			C	

Intersection Summary				
HCM Average Control Delay	64.6	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	46.1%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
37: Old Town St & Moore St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.91			0.93			0.88	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1807			1699			1703			1638	
Flt Permitted		0.80			1.00			0.97			0.97	
Satd. Flow (perm)		1465			1698			1663			1594	
Volume (vph)	109	219	35	2	105	196	36	161	185	2	1	16
Peak-hour factor, PHF	0.88	0.88	0.88	0.84	0.84	0.84	0.87	0.87	0.87	0.68	0.68	0.68
Adj. Flow (vph)	124	249	40	2	125	233	41	185	213	3	1	24
RTOR Reduction (vph)	0	5	0	0	53	0	0	51	0	0	17	0
Lane Group Flow (vph)	0	408	0	0	307	0	0	388	0	0	11	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		38.3			38.3			17.9			17.9	
Effective Green, g (s)		39.2			39.2			18.8			18.8	
Actuated g/C Ratio		0.59			0.59			0.28			0.28	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		870			1009			474			454	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.18			c0.23			0.01	
v/c Ratio		0.47			0.30			0.82			0.02	
Uniform Delay, d1		7.5			6.6			22.0			17.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.8			10.0			0.0	
Delay (s)		7.7			7.4			32.0			17.0	
Level of Service		A			A			C			B	
Approach Delay (s)		7.7			7.4			32.0			17.0	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	75.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
38: Taylor St & Congress St 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4974		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4974		1770	3539	1770	1583
Volume (vph)	376	52	124	517	74	84
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.86	0.86
Adj. Flow (vph)	409	57	141	588	86	98
RTOR Reduction (vph)	21	0	0	0	0	77
Lane Group Flow (vph)	445	0	141	588	86	21
Confl. Peds. (#/hr)		7	7		30	15
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.8		5.9	40.1	12.5	12.5
Effective Green, g (s)	31.7		6.3	40.1	13.4	13.4
Actuated g/C Ratio	0.51		0.10	0.64	0.21	0.21
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2527		179	2274	380	340
v/s Ratio Prot	0.09		c0.08	c0.17	c0.05	0.01
v/s Ratio Perm						
v/c Ratio	0.18		0.79	0.26	0.23	0.06
Uniform Delay, d1	8.3		27.4	4.8	20.2	19.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2		18.7	0.3	0.1	0.0
Delay (s)	8.4		46.1	5.1	20.3	19.5
Level of Service	A		D	A	C	B
Approach Delay (s)	8.4			13.0	19.9	
Approach LOS	A			B	B	

Intersection Summary				
HCM Average Control Delay	12.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

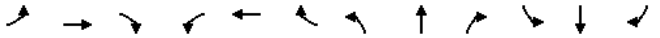
Existing AM
39: Twiggs St & Congress St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	0	1	22	0	25	5	122	7	20	91	1
Peak Hour Factor	0.63	0.63	0.63	0.73	0.73	0.73	0.88	0.88	0.88	0.72	0.72	0.72
Hourly flow rate (vph)	6	0	2	30	0	34	6	139	8	28	126	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	8	64	152	156
Volume Left (vph)	6	30	6	28
Volume Right (vph)	2	34	8	1
Hadj (s)	0.07	-0.19	0.01	0.06
Departure Headway (s)	4.7	4.4	4.2	4.3
Degree Utilization, x	0.01	0.08	0.18	0.19
Capacity (veh/h)	697	755	823	819
Control Delay (s)	7.8	7.8	8.2	8.3
Approach Delay (s)	7.8	7.8	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
HCM Level of Service	A			
Intersection Capacity Utilization	24.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
40: Harney St & Congress St 4/5/2012

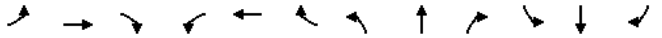


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	2	3	10	14	5	5	116	8	5	91	18
Peak Hour Factor	0.54	0.54	0.54	0.81	0.81	0.81	0.85	0.85	0.85	0.71	0.71	0.71
Hourly flow rate (vph)	24	4	6	12	17	6	6	136	9	7	128	25

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	33	36	152	161
Volume Left (vph)	24	12	6	7
Volume Right (vph)	6	6	9	25
Hadj (s)	0.08	0.00	0.00	-0.05
Departure Headway (s)	4.7	4.6	4.2	4.2
Degree Utilization, x	0.04	0.05	0.18	0.19
Capacity (veh/h)	704	717	824	842
Control Delay (s)	7.9	7.9	8.2	8.1
Approach Delay (s)	7.9	7.9	8.2	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.1		
HCM Level of Service		A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
41: Ampudia St & Congress St 4/5/2012

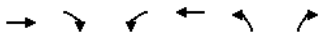


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	10	9	90	8	8	15	128	223	0	67	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	2	11	10	145	13	13	16	138	240	0	75	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								376				
pX, platoon unblocked												
vC, conflicting volume	273	497	78	271	258	152	80			386		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273	497	78	271	258	152	80			386		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	78	98	99	99			100		
cM capacity (veh/h)	646	465	981	648	633	884	1516			1163		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	23	171	154	240	78
Volume Left	2	145	16	0	0
Volume Right	10	13	0	240	2
cSH	622	660	1516	1700	1163
Volume to Capacity	0.04	0.26	0.01	0.14	0.00
Queue Length 95th (ft)	3	26	1	0	0
Control Delay (s)	11.0	12.3	0.9	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.0	12.3	0.3		0.0
Approach LOS	B	B			

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization	33.6%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
42: Twiggs St & San Diego Ave 4/5/2012

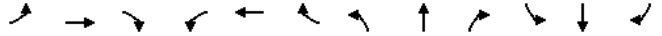


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	18	9	29	29	18	124
Peak Hour Factor	0.58	0.58	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	31	16	41	41	22	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	47	82	175
Volume Left (vph)	0	41	22
Volume Right (vph)	16	0	153
Hadj (s)	-0.17	0.13	-0.46
Departure Headway (s)	4.2	4.4	3.7
Degree Utilization, x	0.05	0.10	0.18
Capacity (veh/h)	821	779	931
Control Delay (s)	7.4	7.9	7.5
Approach Delay (s)	7.4	7.9	7.5
Approach LOS	A	A	A

Intersection Summary			
Delay		7.6	
HCM Level of Service		A	
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
43: Harney St & San Diego Ave 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	5	7	3	37	18	12	3	125	83	3	27	8
Peak Hour Factor	0.69	0.69	0.69	0.80	0.80	0.80	0.89	0.89	0.89	0.73	0.73	0.73
Hourly flow rate (vph)	7	10	4	46	22	15	3	140	93	4	37	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	22	84	237	52
Volume Left (vph)	7	46	3	4
Volume Right (vph)	4	15	93	11
Hadj (s)	-0.02	0.04	-0.20	-0.08
Departure Headway (s)	4.6	4.6	4.0	4.3
Degree Utilization, x	0.03	0.11	0.26	0.06
Capacity (veh/h)	718	731	871	792
Control Delay (s)	7.7	8.1	8.4	7.6
Approach Delay (s)	7.7	8.1	8.4	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
44: San Diego Ave & Old Town St 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.91			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1764	1850		1763	1668			1763			1819	
Flt Permitted	0.68	1.00		0.63	1.00			0.79			1.00	
Satd. Flow (perm)	1265	1850		1164	1668			1438			1819	
Volume (vph)	218	159	6	9	40	63	254	87	65	0	22	4
Peak-hour factor, PHF	0.79	0.79	0.79	0.87	0.87	0.87	0.78	0.78	0.78	0.81	0.81	0.81
Adj. Flow (vph)	276	201	8	10	46	72	326	112	83	0	27	5
RTOR Reduction (vph)	0	2	0	0	41	0	0	14	0	0	3	0
Lane Group Flow (vph)	276	207	0	10	78	0	0	507	0	0	29	0
Confl. Peds. (#/hr)	3		4	4		3	5					5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Effective Green, g (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Actuated g/C Ratio	0.44	0.44		0.44	0.44			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	4.4	4.4		2.1	2.1			2.0			2.0	
Lane Grp Cap (vph)	553	809		509	730			577			730	
v/s Ratio Prot		0.11			0.05						0.02	
v/s Ratio Perm	c0.22			0.01				c0.35				
v/c Ratio	0.50	0.26		0.02	0.11			0.88			0.04	
Uniform Delay, d1	10.0	8.8		7.9	8.2			13.7			9.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	3.2	0.8		0.1	0.3			13.8			0.0	
Delay (s)	13.2	9.6		8.0	8.5			27.6			9.0	
Level of Service	B	A		A	A			C			A	
Approach Delay (s)		11.7			8.5			27.6			9.0	
Approach LOS		B			A			C			A	

Intersection Summary				
HCM Average Control Delay	18.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	54.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

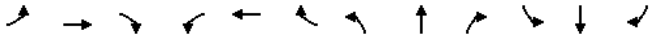
Existing AM
45: Taylor St & 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.90			0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1769	3499		1770	3467			1623			1632	
Flt Permitted	0.39	1.00		0.38	1.00			0.92			0.94	
Satd. Flow (perm)	728	3499		716	3467			1511			1535	
Volume (vph)	33	395	32	98	563	75	62	4	229	2	0	16
Peak-hour factor, PHF	0.78	0.77	0.77	0.93	0.93	0.93	0.82	0.82	0.82	0.75	0.75	0.75
Adj. Flow (vph)	42	513	42	105	605	81	76	5	279	3	0	21
RTOR Reduction (vph)	0	6	0	0	11	0	0	222	0	0	17	0
Lane Group Flow (vph)	42	549	0	105	675	0	0	138	0	0	7	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	29.7	27.9		35.2	30.7			10.9			10.9	
Effective Green, g (s)	31.1	28.9		36.5	31.6			11.8			11.8	
Actuated g/C Ratio	0.54	0.50		0.63	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	433	1756		543	1902			310			314	
v/s Ratio Prot	0.00	0.16		c0.02	c0.19							
v/s Ratio Perm	0.05			0.11				c0.09			0.00	
v/c Ratio	0.10	0.31		0.19	0.35			0.45			0.02	
Uniform Delay, d1	6.2	8.5		4.3	7.3			20.0			18.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.5		0.1	0.5			0.4			0.0	
Delay (s)	6.3	8.9		4.4	7.8			20.4			18.3	
Level of Service	A	A		A	A			C			B	
Approach Delay (s)		8.8			7.3			20.4			18.3	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	10.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
46: Twiggs St & Juan St 4/5/2012

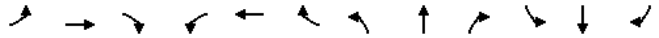


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	54	5	6	2	3	1	5	130	5	30	92	54
Peak Hour Factor	0.60	0.60	0.60	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77
Hourly flow rate (vph)	90	8	10	3	4	1	7	171	7	39	119	70

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	8	184	229
Volume Left (vph)	90	3	7	39
Volume Right (vph)	10	1	7	70
Hadj (s)	0.14	0.00	0.02	-0.12
Departure Headway (s)	5.0	5.0	4.5	4.3
Degree Utilization, x	0.15	0.01	0.23	0.27
Capacity (veh/h)	665	645	774	803
Control Delay (s)	8.9	8.0	8.8	8.9
Approach Delay (s)	8.9	8.0	8.8	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.8		
HCM Level of Service		A		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
47: Harney St & Juan St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	26	9	26	0	0	5	41	109	0	13	54	33
Peak Hour Factor	0.93	0.93	0.93	0.42	0.42	0.42	0.71	0.71	0.71	0.77	0.77	0.77
Hourly flow rate (vph)	28	10	28	0	0	12	58	154	0	17	70	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	12	211	130
Volume Left (vph)	28	0	58	17
Volume Right (vph)	28	12	0	43
Hadj (s)	-0.14	-0.57	0.09	-0.14
Departure Headway (s)	4.5	4.2	4.3	4.2
Degree Utilization, x	0.08	0.01	0.25	0.15
Capacity (veh/h)	730	780	814	829
Control Delay (s)	7.9	7.2	8.8	7.9
Approach Delay (s)	7.9	7.2	8.8	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.3		
HCM Level of Service		A		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
48: Taylor St & Morena Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95			0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00			1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Frt	1.00	1.00			0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3528			3397				1590	1681	1698	1583
Flt Permitted	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3528			3397				1590	1681	1698	1583
Volume (vph)	368	253	5	0	522	192	0	0	4	59	5	214
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.50	0.50	0.50	0.74	0.74	0.74
Adj. Flow (vph)	460	316	6	0	580	213	0	0	8	80	7	289
RTOR Reduction (vph)	0	1	0	0	42	0	0	0	0	0	0	190
Lane Group Flow (vph)	460	321	0	0	751	0	0	0	8	42	45	99
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	7.7	35.5			23.4				57.6	11.9	11.9	11.9
Effective Green, g (s)	8.1	36.4			24.3				57.6	13.2	13.2	13.2
Actuated g/C Ratio	0.14	0.63			0.42				1.00	0.23	0.23	0.23
Clearance Time (s)	4.4	4.9			4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3			3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	483	2230			1433				1590	385	389	363
v/s Ratio Prot	c0.13	0.09			c0.22					0.02	0.03	
v/s Ratio Perm									0.01			c0.06
v/c Ratio	0.95	0.14			0.52				0.01	0.11	0.12	0.27
Uniform Delay, d1	24.6	4.3			12.4				0.0	17.6	17.6	18.2
Progression Factor	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	28.9	0.1			1.4				0.0	0.2	0.2	0.7
Delay (s)	53.4	4.4			13.7				0.0	17.8	17.8	18.9
Level of Service	D	A			B				A	B	B	B
Approach Delay (s)		33.3			13.7			0.0			18.7	
Approach LOS		C			B			A			B	

Intersection Summary				
HCM Average Control Delay	22.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
49: Rosecrans St. & Hugo St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.99		1.00	1.00		1.00	0.89			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1678	3382		1671	3434		1633	1515			1675	
Flt Permitted	0.95	1.00		0.95	1.00		0.68	1.00			0.80	
Satd. Flow (perm)	1678	3382		1671	3434		1175	1515			1381	
Volume (vph)	6	679	66	24	1355	12	217	20	58	56	32	8
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	6	730	71	26	1457	13	233	22	62	60	34	9
RTOR Reduction (vph)	0	6	0	0	0	0	0	47	0	0	3	0
Lane Group Flow (vph)	6	795	0	26	1470	0	233	37	0	0	100	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.2	69.8		4.3	72.9		27.7	27.7			27.7	
Effective Green, g (s)	1.6	70.7		4.7	73.8		28.6	28.6			28.6	
Actuated g/C Ratio	0.01	0.61		0.04	0.64		0.25	0.25			0.25	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	23	2061		68	2185		290	374			340	
v/s Ratio Prot	0.00	0.24		c0.02	c0.43			0.02				
v/s Ratio Perm							c0.20				0.07	
v/c Ratio	0.26	0.39		0.38	0.67		0.80	0.10			0.29	
Uniform Delay, d1	56.6	11.6		54.2	13.4		41.1	33.8			35.5	
Progression Factor	1.00	1.00		1.38	0.37		1.00	1.00			1.00	
Incremental Delay, d2	2.2	0.5		0.7	0.9		14.0	0.0			0.2	
Delay (s)	58.8	12.1		75.7	5.9		55.1	33.8			35.7	
Level of Service	E	B		E	A		E	C			D	
Approach Delay (s)		12.5			7.1			49.4			35.7	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	14.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
50: Rosecrans St. & Lowell St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Volume (vph)	140	612	23	110	1192	29	33	103	80	233	341	215
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	644	24	116	1255	31	35	108	84	245	359	226
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	56	0	87	0
Lane Group Flow (vph)	147	666	0	116	1285	0	35	108	28	245	498	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	11.2	44.5		11.6	44.4		3.7	21.4	33.0	19.8	37.6	
Effective Green, g (s)	11.6	45.4		12.0	45.8		4.1	22.4	34.4	20.2	38.5	
Actuated g/C Ratio	0.10	0.39		0.10	0.39		0.04	0.19	0.30	0.17	0.33	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	177	1375		183	1391		63	683	458	308	1087	
v/s Ratio Prot	c0.08	0.19		0.07	c0.36		c0.02	0.03	0.01	c0.14	c0.15	
v/s Ratio Perm									0.01			
v/c Ratio	0.83	0.48		0.63	0.92		0.56	0.16	0.06	0.80	0.46	
Uniform Delay, d1	51.2	26.5		49.9	33.4		55.1	39.0	29.2	45.9	30.5	
Progression Factor	0.87	1.52		1.23	0.82		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.8	1.2		4.5	10.4		5.9	0.1	0.0	12.4	0.2	
Delay (s)	69.6	41.3		66.1	37.7		61.0	39.1	29.2	58.3	30.8	
Level of Service	E	D		E	D		E	D	C	E	C	
Approach Delay (s)		46.4			40.0			38.8			38.9	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	41.2	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	79.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
51: Rosecrans St. & Laning Rd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected		1.00		0.95	1.00			0.96	1.00		0.96	
Satd. Flow (prot)		5021		1770	3539			1778	1552		1747	
Flt Permitted		1.00		0.95	1.00			0.74	1.00		0.73	
Satd. Flow (perm)		5021		1770	3539			1377	1552		1329	
Volume (vph)	0	947	70	303	1318	1	54	4	132	55	1	8
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	76	329	1433	1	59	4	143	60	1	9
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	118	0	5	0
Lane Group Flow (vph)	0	1100	0	329	1434	0	0	63	25	0	65	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		57.5		24.8	86.7			19.1	19.1		19.1	
Effective Green, g (s)		58.8		25.2	88.0			20.0	20.0		20.0	
Actuated g/C Ratio		0.51		0.22	0.76			0.17	0.17		0.17	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		2545		385	2685			237	268		229	
v/s Ratio Prot		0.22		c0.19	c0.41							
v/s Ratio Perm								0.05	0.02		c0.05	
v/c Ratio		0.43		0.85	0.53			0.27	0.09		0.28	
Uniform Delay, d1		18.1		43.6	5.7			41.6	40.4		41.8	
Progression Factor		0.40		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		16.1	0.8			0.2	0.1		0.2	
Delay (s)		7.7		59.7	6.4			41.9	40.4		42.0	
Level of Service		A		E	A			D	D		D	
Approach Delay (s)		7.7			16.4			40.9			42.0	
Approach LOS		A			B			D			D	

Intersection Summary				
HCM Average Control Delay	15.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	60.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
52: Hawthorne St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.97	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5058						4892	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5058						4892	
Volume (vph)	0	0	0	168	1696	0	0	0	0	0	218	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	179	1804	0	0	0	0	0	303	86
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	0	0	0	1974	0	0	0	0	0	380	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3546						1027	
v/s Ratio Prot											c0.08	
v/s Ratio Perm					0.39							
v/c Ratio					0.56						0.37	
Uniform Delay, d1					6.6						30.4	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.6						0.1	
Delay (s)					7.2						30.5	
Level of Service					A						C	
Approach Delay (s)		0.0			7.2			0.0			30.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	11.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

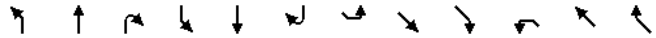
Existing AM
53: Grape St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5055									4985	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5055									4985	
Volume (vph)	0	833	30	0	0	0	0	0	0	110	276	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	896	32	0	0	0	0	0	0	124	310	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	926	0	0	0	0	0	0	0	0	364	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		62.0									19.0	
Effective Green, g (s)		62.0									20.0	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3482									1108	
v/s Ratio Prot		c0.18										
v/s Ratio Perm											0.07	
v/c Ratio		0.27									0.33	
Uniform Delay, d1		5.3									29.4	
Progression Factor		0.54									0.57	
Incremental Delay, d2		0.2									0.2	
Delay (s)		3.1									16.8	
Level of Service		A									B	
Approach Delay (s)		3.1			0.0			0.0			16.8	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	7.4	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.28			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
54: Seaworld Dr & E Mission Bay Dr 4/5/2012

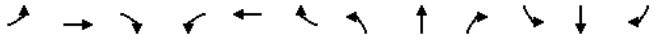


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Volume (vph)	100	926	35	111	691	116	59	70	189	37	32	77
Peak-hour factor, PHF	0.93	0.93	0.93	0.85	0.85	0.85	0.92	0.92	0.92	0.85	0.85	0.85
Adj. Flow (vph)	108	996	38	131	813	136	64	76	205	44	38	91
RTOR Reduction (vph)	0	0	37	0	0	130	0	0	170	0	0	77
Lane Group Flow (vph)	108	996	1	131	813	6	64	76	35	44	38	14
Confl. Peds. (#/hr)	2								2			
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	4.0	29.9	2.3	6.9	32.9	3.2	3.2	10.6	10.6	2.3	8.8	8.8
Effective Green, g (s)	4.0	31.4	2.3	6.9	34.3	3.2	3.2	11.5	11.5	2.3	10.6	10.6
Actuated g/C Ratio	0.06	0.46	0.03	0.10	0.50	0.05	0.05	0.17	0.17	0.03	0.16	0.16
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	202	1632	53	179	1782	74	161	315	264	60	290	246
v/s Ratio Prot	0.03	c0.28		c0.07	c0.23		0.02	c0.04		c0.02	0.02	
v/s Ratio Perm			0.00			0.00			0.02			0.01
v/c Ratio	0.53	0.61	0.02	0.73	0.46	0.09	0.40	0.24	0.13	0.73	0.13	0.06
Uniform Delay, d1	31.1	13.8	31.8	29.7	10.9	31.1	31.5	24.5	24.1	32.6	24.8	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	1.7	0.1	12.4	0.8	0.2	0.6	0.4	0.2	32.5	0.1	0.0
Delay (s)	32.5	15.5	31.9	42.1	11.7	31.2	32.1	24.9	24.3	65.1	24.9	24.5
Level of Service	C	B	C	D	B	C	C	C	C	E	C	C
Approach Delay (s)		17.6			17.9			25.9			34.9	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	19.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
55: Hawthorne St & Pacific Highway 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	5.0
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes				0.94	1.00		1.00	1.00			1.00	1.00
Frt				1.00	0.99		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1665	3509		1770	5085			5085	1545
Flt Permitted				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)				1665	3509		1770	5085			5085	1545
Volume (vph)	0	0	0	362	1326	70	64	158	0	0	139	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	381	1396	74	69	170	0	0	162	22
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	0	0	381	1466	0	69	170	0	0	162	3
Confl. Peds. (#/hr)				68		10	8					8
Turn Type				Perm			Prot					Perm
Protected Phases					6		3	8			4	
Permitted Phases				6								4
Actuated Green, G (s)				35.1	35.1		29.3	45.1			11.4	11.4
Effective Green, g (s)				35.6	34.2		29.3	45.1			11.3	11.3
Actuated g/C Ratio				0.40	0.38		0.33	0.50			0.13	0.13
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	4.9
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	3.3
Lane Grp Cap (vph)				659	1333		576	2548			638	194
v/s Ratio Prot					c0.42		c0.04	0.03			c0.03	
v/s Ratio Perm				0.23								0.00
v/c Ratio				0.58	1.10		0.12	0.07			0.25	0.01
Uniform Delay, d1				21.3	27.9		21.3	11.6			35.5	34.5
Progression Factor				0.77	0.82		0.78	0.85			1.00	1.00
Incremental Delay, d2				3.1	55.1		0.4	0.0			0.2	0.0
Delay (s)				19.6	78.1		17.0	9.9			35.8	34.5
Level of Service				B	E		B	A			D	C
Approach Delay (s)		0.0			66.0			12.0			35.6	
Approach LOS		A			E			B			D	

Intersection Summary				
HCM Average Control Delay	57.9	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
56: Grape St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.92		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5069	1549					4632		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5069	1549					4632		1770	5085	
Volume (vph)	39	609	25	0	0	0	0	209	213	41	460	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.93	0.93	0.93	0.75	0.75	0.75
Adj. Flow (vph)	44	684	28	0	0	0	0	225	229	55	613	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	160	0	0	0	0
Lane Group Flow (vph)	0	728	12	0	0	0	0	294	0	55	613	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		37.8	37.8					27.0		11.0	42.4	
Effective Green, g (s)		38.7	38.7					27.0		11.4	42.4	
Actuated g/C Ratio		0.43	0.43					0.30		0.13	0.47	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2180	666					1390		224	2396	
v/s Ratio Prot								0.06		0.03	c0.12	
v/s Ratio Perm		0.14	0.01									
v/c Ratio		0.33	0.02					0.21		0.25	0.26	
Uniform Delay, d1		17.1	14.7					23.5		35.4	14.3	
Progression Factor		1.00	1.00					1.00		0.89	0.81	
Incremental Delay, d2		0.4	0.0					0.3		2.5	0.2	
Delay (s)		17.5	14.8					23.9		34.2	11.9	
Level of Service		B	B					C		C	B	
Approach Delay (s)		17.4			0.0			23.9			13.7	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	17.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.9	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
57: Seaworld Dr & Friars Rd 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.97	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3360	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3360	1421
Volume (vph)	963	244	138	779	197	98
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.85	0.50
Adj. Flow (vph)	1047	265	144	811	232	196
RTOR Reduction (vph)	0	28	0	0	36	109
Lane Group Flow (vph)	1047	237	144	811	255	28
Confl. Peds. (#/hr)						2
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.5	43.9	5.1	42.8	11.4	11.4
Effective Green, g (s)	34.7	48.3	5.0	44.2	13.6	13.6
Actuated g/C Ratio	0.53	0.73	0.08	0.67	0.21	0.21
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1866	1258	261	2377	694	294
v/s Ratio Prot	c0.30	0.04	c0.04	0.23	c0.08	
v/s Ratio Perm		0.11				0.02
v/c Ratio	0.56	0.19	0.55	0.34	0.37	0.10
Uniform Delay, d1	10.4	2.7	29.3	4.6	22.4	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	1.4	0.4	0.1	0.1
Delay (s)	11.7	2.7	30.8	5.0	22.5	21.2
Level of Service	B	A	C	A	C	C
Approach Delay (s)	9.9			8.9	22.1	
Approach LOS	A			A	C	

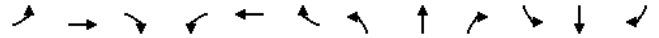
Intersection Summary				
HCM Average Control Delay	11.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM

58: I-5 SB On/I-5 SB Off & Seaworld Dr

12/07/2017



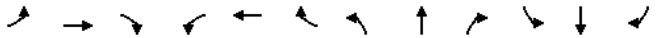
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Future Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1139	68	358	331	0	0	0	0	341	0	712
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1139	29	358	331	0	0	0	0	341	0	713
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		23.6	23.6	7.7	35.5					12.8		57.9
Effective Green, g (s)		24.6	24.6	7.9	36.5					13.4		57.9
Actuated g/C Ratio		0.42	0.42	0.14	0.63					0.23		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1503	663	468	2230					409		1583
v/s Ratio Prot		c0.32		c0.10	0.09					c0.19		
v/s Ratio Perm			0.02									0.45
v/c Ratio		0.76	0.04	0.76	0.15					0.83		0.45
Uniform Delay, d1		14.1	9.8	24.1	4.4					21.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.6	0.1	6.6	0.1					13.0		0.9
Delay (s)		17.7	9.9	30.7	4.5					34.2		0.9
Level of Service		B	A	C	A					C		A
Approach Delay (s)		17.3			18.1			0.0			11.7	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

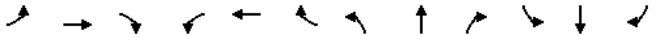
59: Seaworld Dr & I-5 NB On

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.92			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3266			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3266			1770	1583			
Volume (vph)	797	505	0	0	438	464	168	0	276	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88
Adj. Flow (vph)	866	549	0	0	461	488	183	0	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	162	0	0	0	268	0	0	0
Lane Group Flow (vph)	866	549	0	0	787	0	0	183	32	0	0	0
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	15.5	37.8			18.1			5.0	5.0			
Effective Green, g (s)	15.7	38.3			18.6			5.6	5.6			
Actuated g/C Ratio	0.30	0.72			0.35			0.11	0.11			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1019	2562			1148			187	168			
v/s Ratio Prot	c0.25	0.16			c0.24			c0.10				
v/s Ratio Perm									0.02			
v/c Ratio	0.85	0.21			0.69			0.98	0.19			
Uniform Delay, d1	17.5	2.4			14.7			23.6	21.6			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	6.5	0.2			3.3			58.7	0.2			
Delay (s)	24.0	2.6			18.0			82.3	21.8			
Level of Service	C	A			B			F	C			
Approach Delay (s)		15.7			18.0			44.7			0.0	
Approach LOS		B			B			D			A	

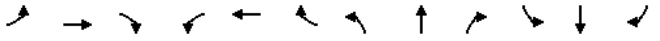
Intersection Summary				
HCM Average Control Delay	21.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	3433	1863			3302			3510	1583			
Flt Permitted	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	3433	1863			3302			3510	1583			
Volume (vph)	359	788	0	0	186	150	21	106	20	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	390	857	0	0	202	163	23	115	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	73	0	0	0	20	0	0	0
Lane Group Flow (vph)	390	857	0	0	292	0	0	138	2	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	15.7	64.1			44.0			6.1	6.1			
Effective Green, g (s)	15.7	64.1			44.0			6.1	6.1			
Actuated g/C Ratio	0.20	0.80			0.55			0.08	0.08			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	674	1493			1816			268	121			
v/s Ratio Prot	0.11	c0.46			0.09							
v/s Ratio Perm								0.04	0.00			
v/c Ratio	0.58	0.57			0.16			0.51	0.01			
Uniform Delay, d1	29.2	2.9			8.9			35.5	34.2			
Progression Factor	1.04	1.61			1.00			1.00	1.00			
Incremental Delay, d2	1.1	1.4			0.2			0.7	0.0			
Delay (s)	31.5	6.2			9.1			36.2	34.2			
Level of Service	C	A			A			D	C			
Approach Delay (s)		14.1			9.1			35.9			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Exisitng PM
1: Rosecrans St. & Lytton St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Volume (vph)	15	1495	429	102	1142	346	414	329	144	279	238	11
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	16	1557	447	106	1190	360	431	343	150	291	248	11
RTOR Reduction (vph)	0	0	173	0	0	123	0	0	93	0	1	0
Lane Group Flow (vph)	16	1557	274	106	1190	237	431	343	57	291	258	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.4	71.6	71.6	8.2	76.3	76.3	23.7	33.3	33.3	29.4	37.2	
Effective Green, g (s)	3.8	72.9	72.9	8.6	77.7	77.7	24.1	34.1	34.1	28.4	38.4	
Actuated g/C Ratio	0.02	0.46	0.46	0.05	0.49	0.49	0.15	0.21	0.21	0.18	0.24	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	42	2317	711	185	1719	730	517	397	331	314	444	
v/s Ratio Prot	0.01	0.31		c0.03	c0.34		0.13	c0.18		c0.16	0.14	
v/s Ratio Perm			0.18			0.16			0.04			
v/c Ratio	0.38	0.67	0.39	0.57	0.69	0.32	0.83	0.86	0.17	0.93	0.58	
Uniform Delay, d1	76.9	34.2	28.8	73.9	31.9	25.1	66.0	60.7	51.4	64.8	53.7	
Progression Factor	1.00	1.00	1.00	0.94	0.77	1.09	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	1.6	1.6	1.7	1.5	0.7	10.6	17.9	0.3	31.7	1.3	
Delay (s)	79.0	35.7	30.3	70.9	26.1	28.1	76.6	78.6	51.7	96.4	55.0	
Level of Service	E	D	C	E	C	C	E	E	D	F	D	
Approach Delay (s)		34.9			29.4			73.3			76.9	
Approach LOS		C			C			E			E	

Intersection Summary				
HCM Average Control Delay	44.5	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/9/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	689	1585	603	0	0	573
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	757	1742	655	0	0	623
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	757	1674	655	0	0	623
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	65.0	65.0	40.5			40.5
Effective Green, g (s)	65.0	65.0	40.5			40.5
Actuated g/C Ratio	0.54	0.54	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1867	1516	1199			631
v/s Ratio Prot	0.22		0.19			c0.33
v/s Ratio Perm		c0.60				
v/c Ratio	0.41	1.10	0.55			0.99
Uniform Delay, d1	15.9	27.2	32.0			39.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	57.1	0.3			32.2
Delay (s)	16.0	84.4	32.3			71.5
Level of Service	B	F	C			E
Approach Delay (s)	63.6		32.3			71.5
Approach LOS	E		C			E

Intersection Summary				
HCM Average Control Delay	59.5	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.06			
Actuated Cycle Length (s)	119.5	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	83.8%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
3: Channel Way & W Mission Bay Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	136	1380	25	0	1200
Peak Hour Factor	0.65	0.87	0.98	0.98	0.90	0.90
Hourly flow rate (vph)	0	156	1408	26	0	1333
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.98	0.98			0.98	
vC, conflicting volume	1865	485			1434	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1847	444			1408	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	72			100	
cM capacity (veh/h)	65	551			473	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	156	563	563	307	444	444	444
Volume Left	0	0	0	0	0	0	0
Volume Right	156	0	0	26	0	0	0
cSH	551	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.33	0.33	0.18	0.26	0.26	0.26
Queue Length 95th (ft)	29	0	0	0	0	0	0
Control Delay (s)	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	14.1	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Exisitng PM
4: Midway Dr & W Point Loma Blvd 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Volume (vph)	359	445	30	312	594	294	350	206	287	39	503	610
Peak-hour factor, PHF	0.88	0.88	0.88	0.90	0.90	0.90	0.99	0.99	0.99	0.84	0.84	0.84
Adj. Flow (vph)	408	506	34	347	660	327	354	208	290	46	599	726
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	159	0	0	0
Lane Group Flow (vph)	408	506	34	324	683	327	274	288	131	46	599	726
Confl. Peds. (#/hr)	6					6	6		3	3		6
Turn Type	Split		Free	Split		Free	Split		pm+ov	Split		Free
Protected Phases	3	3		4	4		2	2	3	1	1	
Permitted Phases			Free			Free			2			Free
Actuated Green, G (s)	39.9	39.9	150.0	34.0	34.0	150.0	25.9	25.9	65.8	30.5	30.5	150.0
Effective Green, g (s)	40.8	40.8	150.0	34.9	34.9	150.0	26.8	26.8	67.6	31.5	31.5	150.0
Actuated g/C Ratio	0.27	0.27	1.00	0.23	0.23	1.00	0.18	0.18	0.45	0.21	0.21	1.00
Clearance Time (s)	4.9	4.9		4.9	4.9		4.9	4.9	4.9	5.0	5.0	
Vehicle Extension (s)	3.1	3.1		5.5	5.5		0.2	0.2	3.1	8.0	8.0	
Lane Grp Cap (vph)	481	963	1583	375	787	1562	300	312	751	372	743	1562
v/s Ratio Prot	c0.23	0.14		0.20	c0.20		0.16	c0.17	0.05	0.03	c0.17	
v/s Ratio Perm			0.02			0.21			0.04			0.46
v/c Ratio	0.85	0.53	0.02	0.86	0.87	0.21	0.91	0.92	0.17	0.12	0.81	0.46
Uniform Delay, d1	51.7	46.4	0.0	55.3	55.3	0.0	60.5	60.6	24.6	48.1	56.3	0.0
Progression Factor	0.90	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.6	1.9	0.0	20.0	11.0	0.3	30.0	31.2	0.0	0.6	8.3	1.0
Delay (s)	61.9	41.5	0.0	75.3	66.4	0.3	90.4	91.8	24.6	48.7	64.6	1.0
Level of Service	E	D	A	E	E	A	F	F	C	D	E	A
Approach Delay (s)		48.8			52.4			68.5			30.4	
Approach LOS		D			D			E			C	

Intersection Summary				
HCM Average Control Delay	48.0	HCM Level of Service		D
HCM Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		16.0
Intersection Capacity Utilization	84.6%	ICU Level of Service		E
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
5: Kemper St & Midway Dr 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Volume (vph)	186	122	157	53	141	74	225	621	59	122	500	140
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	209	137	176	57	152	80	247	682	65	136	556	156
RTOR Reduction (vph)	0	0	126	0	0	70	0	3	0	0	0	81
Lane Group Flow (vph)	168	178	50	57	152	10	247	744	0	136	556	75
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	41.7	18.4	18.4	18.4	17.8	65.8		22.8	70.8	70.8
Effective Green, g (s)	24.8	24.8	43.0	19.3	19.3	19.3	18.2	66.7		23.2	71.7	71.7
Actuated g/C Ratio	0.17	0.17	0.29	0.13	0.13	0.13	0.12	0.44		0.15	0.48	0.48
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	278	289	488	228	240	199	417	1549		274	1692	729
v/s Ratio Prot	0.10	c0.10	0.01	0.03	c0.08		c0.07	c0.21		c0.08	0.16	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.60	0.62	0.10	0.25	0.63	0.05	0.59	0.48		0.50	0.33	0.10
Uniform Delay, d1	58.1	58.2	39.3	58.8	62.0	57.3	62.4	29.4		58.1	24.2	21.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.81		1.13	0.56	0.79
Incremental Delay, d2	3.7	3.9	0.0	0.6	5.4	0.1	1.3	0.9		0.4	0.4	0.2
Delay (s)	61.7	62.0	39.4	59.4	67.4	57.4	59.4	24.6		65.8	13.9	17.2
Level of Service	E	E	D	E	E	E	E	C		E	B	B
Approach Delay (s)		54.3			63.0			33.2			22.8	
Approach LOS		D			E			C			C	

Intersection Summary				
HCM Average Control Delay	37.3	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	70.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
6: Midway Dr & East Dr 4/9/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	1.00		1.00	0.98			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	3530		1770	3452			1682			1676	
Flt Permitted	0.14	1.00		0.23	1.00			0.86			0.82	
Satd. Flow (perm)	269	3530		431	3452			1479			1406	
Volume (vph)	46	943	16	27	1008	164	24	6	34	69	4	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.79	0.79	0.79	0.74	0.74	0.74
Adj. Flow (vph)	51	1036	18	29	1096	178	30	8	43	93	5	70
RTOR Reduction (vph)	0	1	0	0	10	0	0	35	0	0	46	0
Lane Group Flow (vph)	51	1053	0	29	1264	0	0	46	0	0	122	0
Confl. Peds. (#/hr)	3					3	33					33
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.0	45.9		46.2	44.0			12.7			12.7	
Effective Green, g (s)	51.3	46.8		47.5	44.9			13.6			13.6	
Actuated g/C Ratio	0.68	0.62		0.63	0.60			0.18			0.18	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	274	2203		319	2067			268			255	
v/s Ratio Prot	c0.01	0.30		0.00	c0.37							
v/s Ratio Perm	0.12			0.05				0.03			c0.09	
v/c Ratio	0.19	0.48		0.09	0.61			0.17			0.48	
Uniform Delay, d1	5.8	7.6		5.4	9.5			25.9			27.5	
Progression Factor	1.14	1.63		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.7		0.0	1.4			0.1			0.5	
Delay (s)	6.6	13.1		5.5	10.9			26.0			28.0	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		12.8			10.8			26.0			28.0	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	13.2	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
7: Rosecrans St. & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.92	1.00	1.00	0.93
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Volume (vph)	290	1688	63	425	1298	332	312	490	244	130	577	328
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	293	1705	64	429	1311	335	315	495	246	131	583	331
RTOR Reduction (vph)	0	2	0	0	27	0	0	0	195	0	0	202
Lane Group Flow (vph)	293	1767	0	429	1619	0	315	495	51	131	583	129
Confl. Peds. (#/hr)	48		65	65		48	40		42	42		40
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	29.1	68.0		26.5	65.5		17.0	32.3	32.3	14.4	29.7	29.7
Effective Green, g (s)	29.5	69.1		26.9	66.5		17.4	33.2	33.2	14.8	30.6	30.6
Actuated g/C Ratio	0.18	0.43		0.17	0.42		0.11	0.21	0.21	0.09	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	326	2174		577	2005		373	734	304	164	677	281
v/s Ratio Prot	c0.17	c0.35		0.12	c0.34		c0.09	0.14		0.07	c0.16	
v/s Ratio Perm									0.03			0.09
v/c Ratio	0.90	0.81		0.74	0.81		0.84	0.67	0.17	0.80	0.86	0.46
Uniform Delay, d1	63.8	39.8		63.3	41.1		70.0	58.4	52.1	71.1	62.6	57.4
Progression Factor	1.06	0.44		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.8	2.7		4.5	2.6		15.3	1.9	0.1	21.8	10.6	0.4
Delay (s)	88.3	20.2		67.8	43.7		85.3	60.4	52.2	92.9	73.2	57.8
Level of Service	F	C		E	D		F	E	D	F	E	E
Approach Delay (s)		29.8			48.7			65.9			70.8	
Approach LOS		C			D			E			E	

Intersection Summary				
HCM Average Control Delay	49.1	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
9: Enterprise St & Midway Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	228	763	6	0	863
Peak Hour Factor	0.80	0.80	0.87	0.87	0.93	0.93
Hourly flow rate (vph)	0	285	877	7	0	928
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	1346	447			886	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1346	447			886	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	49			100	
cM capacity (veh/h)	142	557			759	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	285	585	299	464	464
Volume Left	0	0	0	0	0
Volume Right	285	0	7	0	0
cSH	557	1700	1700	1700	1700
Volume to Capacity	0.51	0.34	0.18	0.27	0.27
Queue Length 95th (ft)	72	0	0	0	0
Control Delay (s)	18.1	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	18.1	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	42.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
10: Barnett Ave & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	1232	0	0	891	769	0	0	0	739	0	124
Peak-hour factor, PHF	0.86	0.86	0.86	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1433	0	0	938	809	0	0	0	803	0	135
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	0	97
Lane Group Flow (vph)	0	1433	0	0	938	408	0	0	0	803	0	38
Confl. Peds. (#/hr)						6				3		
Turn Type						custom				Prot		custom
Protected Phases		2			2	2				1		
Permitted Phases						8						1
Actuated Green, G (s)		43.0			43.0	43.0				24.0		24.0
Effective Green, g (s)		43.0			43.0	42.5				24.0		24.0
Actuated g/C Ratio		0.51			0.51	0.50				0.29		0.29
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	2.9				2.5		2.5
Lane Grp Cap (vph)		1807			1807	1407				979		451
v/s Ratio Prot		c0.40			0.27	0.15				c0.23		
v/s Ratio Perm												0.02
v/c Ratio		0.79			0.52	0.29				0.82		0.09
Uniform Delay, d1		16.9			13.7	12.1				28.1		22.1
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		2.5			0.2	0.1				5.5		0.1
Delay (s)		19.4			14.0	12.2				33.6		22.1
Level of Service		B			B	B				C		C
Approach Delay (s)		19.4			13.1			0.0			31.9	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	19.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	84.2	Sum of lost time (s)	17.2	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
11: Sport Arena Blvd & Hancock 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9				4.0	4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91				1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99				0.86	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (prot)	1770	3529		1770	5041				1611	1770		1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (perm)	1770	3529		1770	5041				1611	1770		1583
Volume (vph)	86	905	14	20	996	51	0	0	10	56	0	185
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	90	943	15	24	1172	60	0	0	11	62	0	206
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	11	0	0	166
Lane Group Flow (vph)	90	957	0	24	1229	0	0	0	0	62	0	40
Confl. Peds. (#/hr)	18		10	10		18				11		16
Turn Type	Prot			Prot					NA	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases												
Actuated Green, G (s)	8.5	67.0		4.1	62.6				0.0	19.7		19.7
Effective Green, g (s)	8.5	67.0		4.1	62.6				0.0	19.7		20.6
Actuated g/C Ratio	0.08	0.64		0.04	0.60				0.00	0.19		0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	143	2252		69	3005				0	332		311
v/s Ratio Prot	c0.05	c0.27		0.01	0.24					c0.04		0.03
v/s Ratio Perm												
v/c Ratio	0.63	0.43		0.35	0.41				0.00	0.19		0.13
Uniform Delay, d1	46.7	9.4		49.1	11.3				52.5	35.9		34.8
Progression Factor	1.00	1.00		1.50	0.58				1.00	1.00		1.00
Incremental Delay, d2	6.1	0.6		1.0	0.4				0.0	0.1		0.1
Delay (s)	52.8	10.0		74.5	6.9				52.5	36.0		34.9
Level of Service	D	B		E	A				D	D		C
Approach Delay (s)		13.7			8.2			52.5			35.1	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	13.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.40			
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	53.8%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
12: Kemper Street & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Volume (vph)	27	14	40	102	21	102	136	806	19	56	938	108
Peak-hour factor, PHF	0.92	0.92	0.92	0.78	0.78	0.78	0.95	0.95	0.95	0.91	0.91	0.91
Adj. Flow (vph)	29	15	43	131	27	131	143	848	20	62	1031	119
RTOR Reduction (vph)	0	37	0	0	0	115	0	1	0	0	9	0
Lane Group Flow (vph)	29	21	0	131	27	16	143	867	0	62	1141	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	14.8	14.8		11.9	11.9	11.9	8.7	50.1		9.1	50.5	
Effective Green, g (s)	15.7	15.7		12.8	12.8	12.8	9.1	51.0		9.5	51.4	
Actuated g/C Ratio	0.15	0.15		0.12	0.12	0.12	0.09	0.49		0.09	0.49	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	265	244		216	227	189	298	1712		160	2443	
v/s Ratio Prot	c0.02	0.01		c0.07	0.01		0.04	c0.25		0.04	c0.23	
v/s Ratio Perm						0.01						
v/c Ratio	0.11	0.09		0.61	0.12	0.08	0.48	0.51		0.39	0.47	
Uniform Delay, d1	38.6	38.5		43.7	41.1	40.9	45.7	18.4		45.0	17.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.74	0.99		0.59	0.35	
Incremental Delay, d2	0.2	0.2		3.3	0.1	0.1	0.4	1.0		0.5	0.6	
Delay (s)	38.8	38.6		47.0	41.2	41.0	34.2	19.2		27.0	6.9	
Level of Service	D	D		D	D	D	C	B		C	A	
Approach Delay (s)		38.7			43.7			21.3			7.9	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
13: Sport Arena Blvd & 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.94		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	3433	3492		1770	5034			1694		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (perm)	3433	3492		1770	5034			1694		1770	1610	
Volume (vph)	101	786	61	34	931	53	50	11	54	129	13	121
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.79	0.79	0.79	0.93	0.93	0.93
Adj. Flow (vph)	107	836	65	36	990	56	63	14	68	139	14	130
RTOR Reduction (vph)	0	4	0	0	4	0	0	38	0	0	115	0
Lane Group Flow (vph)	107	897	0	36	1042	0	0	107	0	139	29	0
Confl. Peds. (#/hr)	18		7	7		18			6	6		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Effective Green, g (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Actuated g/C Ratio	0.09	0.48		0.08	0.48			0.14		0.12	0.12	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	314	1686		148	2392			231		204	186	
v/s Ratio Prot	c0.03	c0.26		0.02	0.21			c0.06		c0.08	0.02	
v/s Ratio Perm												
v/c Ratio	0.34	0.53		0.24	0.44			0.46		0.68	0.16	
Uniform Delay, d1	44.7	18.9		45.0	18.2			41.8		44.6	41.8	
Progression Factor	1.10	1.07		1.23	0.77			1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.1		0.3	0.6			0.5		7.3	0.1	
Delay (s)	49.6	21.4		55.6	14.6			42.3		51.9	42.0	
Level of Service	D	C		E	B			D		D	D	
Approach Delay (s)		24.4			15.9			42.3			46.8	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
14: Sport Arena Blvd & East Dr 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00	0.99			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.98		1.00	1.00			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (prot)	1770	4954		1770	5074			1788	1563			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (perm)	1770	4954		1770	5074			1788	1563			1611
Volume (vph)	22	837	110	123	989	11	24	5	56	0	0	5
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.78	0.78	0.78	0.30	0.30	0.30
Adj. Flow (vph)	23	890	117	135	1087	12	31	6	72	0	0	17
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	23	999	0	135	1098	0	0	37	6	0	0	17
Confl. Peds. (#/hr)	19		19	19		19			1	1		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Effective Green, g (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Actuated g/C Ratio	0.03	0.66		0.11	0.75			0.09	0.09			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	49	3274		202	3793			160	140			1611
v/s Ratio Prot	0.01	c0.20		c0.08	0.22							
v/s Ratio Perm								0.02	0.00			0.01
v/c Ratio	0.47	0.31		0.67	0.29			0.23	0.05			0.01
Uniform Delay, d1	50.3	7.6		44.6	4.3			44.4	43.7			0.0
Progression Factor	0.81	1.40		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	2.3	0.2		6.3	0.2			0.3	0.0			0.0
Delay (s)	42.9	10.8		50.9	4.5			44.7	43.8			0.0
Level of Service	D	B		D	A			D	D			A
Approach Delay (s)		11.5			9.5			44.1			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
15: Rosecrans St. & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	0.99			1.00	0.98	1.00	0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Volume (vph)	274	1612	442	0	1621	587	251	262	26	372	338	183
Peak-hour factor, PHF	0.86	0.95	0.90	0.25	0.95	0.89	0.85	0.82	0.81	0.93	0.94	0.93
Adj. Flow (vph)	319	1697	491	0	1706	660	295	320	32	400	360	197
RTOR Reduction (vph)	0	33	0	0	0	0	0	3	0	0	0	159
Lane Group Flow (vph)	319	2155	0	0	1706	660	210	434	0	254	506	38
Confl. Peds. (#/hr)	29		31	31		29	63		31	10		63
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	15.6	79.9			59.1	150.0	23.0	23.0		29.2	29.2	29.2
Effective Green, g (s)	17.0	82.0			61.0	150.0	23.0	23.0		29.2	29.2	29.2
Actuated g/C Ratio	0.11	0.55			0.41	1.00	0.15	0.15		0.19	0.19	0.19
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	389	2652			2068	1551	247	506		313	615	281
v/s Ratio Prot	0.09	c0.44			0.34		0.13	c0.13		0.16	c0.16	0.03
v/s Ratio Perm						0.43						
v/c Ratio	0.82	0.81			0.82	0.43	0.85	0.86		0.81	0.82	0.14
Uniform Delay, d1	65.0	27.7			39.7	0.0	61.8	61.9		57.8	57.9	50.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.4	2.8			3.9	0.9	23.3	13.4		15.5	9.2	0.3
Delay (s)	77.4	30.6			43.6	0.9	85.1	75.3		73.3	67.1	50.3
Level of Service	E	C			D	A	F	E		E	E	D
Approach Delay (s)		36.5			31.7			78.5			65.3	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.8
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	852	844	19
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	926	888	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1361	454	908			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1361	454	908			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	100			
cM capacity (veh/h)	139	553	745			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	463	463	592	316
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	20
cSH	553	1700	1700	1700	1700
Volume to Capacity	0.07	0.27	0.27	0.35	0.19
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.0	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM
19: Kurtz & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frpb, ped/bikes				1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes				0.98	1.00	1.00		1.00		1.00	1.00	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1654	1738	1559		5080		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1654	1738	1559		5080		1770	6408	
Volume (vph)	0	0	0	295	177	75	0	1996	14	85	2133	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	311	186	79	0	2101	15	88	2199	0
RTOR Reduction (vph)	0	0	0	0	0	10	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	240	257	69	0	2116	0	88	2199	0
Confl. Peds. (#/hr)				14		3				13		
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				30.4	30.4	30.4		104.1		11.0	119.8	
Effective Green, g (s)				31.3	31.3	31.3		105.3		11.4	120.7	
Actuated g/C Ratio				0.20	0.20	0.20		0.66		0.07	0.75	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				324	340	305		3343		126	4834	
v/s Ratio Prot								c0.42		c0.05	0.34	
v/s Ratio Perm				0.15	0.15	0.04						
v/c Ratio				0.74	0.76	0.22		0.63		0.70	0.45	
Uniform Delay, d1				60.5	60.7	54.1		16.0		72.6	7.3	
Progression Factor				1.00	1.00	1.00		1.00		0.89	1.20	
Incremental Delay, d2				7.7	8.2	0.1		0.9		8.7	0.2	
Delay (s)				68.3	69.0	54.3		16.9		73.3	9.0	
Level of Service				E	E	D		B		E	A	
Approach Delay (s)		0.0			66.7			16.9			11.5	
Approach LOS		A			E			B			B	

Intersection Summary				
HCM Average Control Delay	20.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	68.5%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

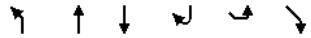
Exisitng PM
20: Rosecrans St & Kurtz 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.94		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3227		1770	3539		1770		1549	1770	1863	
Flt Permitted		1.00		0.23	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3227		435	3539		1770		1549	1770	1863	
Volume (vph)	0	672	199	80	464	0	167	0	124	67	209	0
Peak-hour factor, PHF	1.00	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Adj. Flow (vph)	0	693	205	82	478	0	172	0	128	73	227	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	56	0	0	0
Lane Group Flow (vph)	0	888	0	82	478	0	172	0	72	73	227	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		89.4		101.3	101.3		19.8		89.4	24.7	24.7	
Effective Green, g (s)		90.3		102.2	102.2		20.2		90.3	25.6	25.6	
Actuated g/C Ratio		0.56		0.64	0.64		0.13		0.56	0.16	0.16	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1821		344	2261		223		874	283	298	
v/s Ratio Prot		c0.28		0.01	c0.14		c0.10			0.04	c0.12	
v/s Ratio Perm				0.14					0.05			
v/c Ratio		0.49		0.24	0.21		0.77		0.08	0.26	0.76	
Uniform Delay, d1		20.9		13.2	12.1		67.7		15.9	58.9	64.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.95	0.99	
Incremental Delay, d2		0.9		0.1	0.2		15.1		0.2	0.4	9.1	
Delay (s)		21.9		13.3	12.3		82.8		16.1	56.1	72.6	
Level of Service		C		B	B		F		B	E	E	
Approach Delay (s)		21.9			12.4			54.3			68.6	
Approach LOS		C			B			D			E	

Intersection Summary				
HCM Average Control Delay	30.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	66.6%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
21: Pacific Highway & Kurtz St 4/9/2012

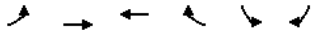


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	214	656	444	7	0	423
Peak Hour Factor	0.92	0.92	0.87	0.87	0.99	0.99
Hourly flow rate (vph)	233	713	510	8	0	427
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	520				1219	176
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	520				1219	176
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	74				100	49
cM capacity (veh/h)	905				128	835

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	233	238	238	238	204	204	110	427
Volume Left	233	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	427
cSH	905	1700	1700	1700	1700	1700	1700	835
Volume to Capacity	0.26	0.14	0.14	0.14	0.12	0.12	0.06	0.51
Queue Length 95th (ft)	26	0	0	0	0	0	0	74
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Lane LOS	B							B
Approach Delay (s)	2.5				0.0			13.7
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
22: Hancock & Channel Way 4/9/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	51	72	159	59	10	70
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	63	89	199	74	13	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1226				
pX, platoon unblocked						
vC, conflicting volume	272				450	236
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				450	236
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	88
cM capacity (veh/h)	1291				539	803

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	63	89	272	107
Volume Left	63	0	0	13
Volume Right	0	0	74	93
cSH	1291	1700	1700	757
Volume to Capacity	0.05	0.05	0.16	0.14
Queue Length 95th (ft)	4	0	0	12
Control Delay (s)	7.9	0.0	0.0	10.5
Lane LOS	A			B
Approach Delay (s)	3.3		0.0	10.5
Approach LOS				B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
23: Hancock St & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frpb, ped/bikes		0.98					1.00	1.00			1.00	0.96
Flpb, ped/bikes		1.00					1.00	1.00			1.00	1.00
Frt		0.92					1.00	1.00			1.00	0.85
Flt Protected		0.99					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3165					1770	5073			5085	1516
Flt Permitted		0.99					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3165					1770	5073			5085	1516
Volume (vph)	40	81	146	0	0	0	87	2175	29	0	2178	83
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	88	159	0	0	0	95	2364	32	0	2367	90
RTOR Reduction (vph)	0	6	0	0	0	0	0	1	0	0	0	21
Lane Group Flow (vph)	0	284	0	0	0	0	95	2395	0	0	2367	69
Confl. Peds. (#/hr)	1		20				15		2			15
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		32.1					13.6	118.1			100.1	100.1
Effective Green, g (s)		33.0					14.0	119.0			101.0	101.0
Actuated g/C Ratio		0.21					0.09	0.74			0.63	0.63
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		653					155	3773			3210	957
v/s Ratio Prot		c0.09					0.05	c0.47			c0.47	
v/s Ratio Perm												0.05
v/c Ratio		0.43					0.61	0.63			0.74	0.07
Uniform Delay, d1		55.4					70.4	10.0			20.4	11.4
Progression Factor		0.81					1.08	1.20			1.00	1.00
Incremental Delay, d2		0.2					4.0	0.7			1.6	0.1
Delay (s)		44.9					79.8	12.6			21.9	11.5
Level of Service		D					E	B			C	B
Approach Delay (s)		44.9			0.0			15.2			21.5	
Approach LOS		D			A			B			C	

Intersection Summary				
HCM Average Control Delay	19.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	79.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

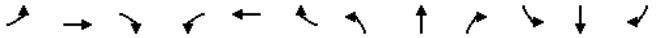
Exisitng PM
25: Old Town St & Hancock St 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	242	0	0	304	294	258
Peak Hour Factor	0.85	0.85	0.93	0.93	0.84	0.84
Hourly flow rate (vph)	285	0	0	327	350	307

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	285	327	350	307
Volume Left (vph)	285	0	350	0
Volume Right (vph)	0	327	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.3	5.3	6.5	5.9
Degree Utilization, x	0.50	0.48	0.63	0.51
Capacity (veh/h)	530	658	547	593
Control Delay (s)	15.5	13.0	18.5	13.7
Approach Delay (s)	15.5	13.0	16.3	
Approach LOS	C	B	C	

Intersection Summary				
Delay	15.2			
HCM Level of Service	C			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
26: Witherby St & Hancock St 4/9/2012

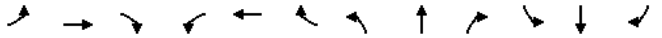


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	87	154	172	10	75	0	422	217	50	15	270	215
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.91	0.91	0.91	0.72	0.72	0.72
Hourly flow rate (vph)	104	183	205	12	94	0	464	238	55	21	375	299

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	492	106	757	396	299
Volume Left (vph)	104	13	464	21	0
Volume Right (vph)	205	0	55	0	299
Hadj (s)	-0.17	0.06	0.11	0.06	-0.67
Departure Headway (s)	7.4	9.5	7.8	8.2	7.5
Degree Utilization, x	1.02	0.28	1.64	0.90	0.62
Capacity (veh/h)	492	371	465	427	469
Control Delay (s)	72.3	16.1	319.6	50.2	20.9
Approach Delay (s)	72.3	16.1	319.6	37.6	
Approach LOS	F	C	F	E	

Intersection Summary				
Delay	149.0			
HCM Level of Service	F			
Intersection Capacity Utilization	93.1%	ICU Level of Service	F	
Analysis Period (min)	15			

Exisitng PM
27: Washington St & Hancock St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Volume (vph)	0	547	124	346	378	0	0	0	0	96	228	760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	595	135	376	411	0	0	0	0	104	248	826
RTOR Reduction (vph)	0	0	99	0	0	0	0	0	0	0	0	253
Lane Group Flow (vph)	0	595	36	376	411	0	0	0	0	104	248	573
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		20.5	20.5	12.7	37.6					32.6	32.6	32.6
Effective Green, g (s)		21.4	21.4	13.1	38.5					33.5	33.5	33.5
Actuated g/C Ratio		0.27	0.27	0.16	0.48					0.42	0.42	0.42
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		947	423	562	1703					674	1420	663
v/s Ratio Prot		c0.17		c0.11	0.12						0.07	
v/s Ratio Perm			0.02							0.06		c0.36
v/c Ratio		0.63	0.09	0.67	0.24					0.15	0.17	0.86
Uniform Delay, d1		25.8	22.0	31.4	12.2					14.4	14.6	21.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2	0.4	2.3	0.3					0.0	0.0	11.0
Delay (s)		29.0	22.4	33.8	12.5					14.5	14.6	32.2
Level of Service		C	C	C	B					B	B	C
Approach Delay (s)		27.7			22.7			0.0			26.9	
Approach LOS		C			C			A			C	

Intersection Summary						
HCM Average Control Delay	25.9	HCM Level of Service		C		
HCM Volume to Capacity ratio	0.75					
Actuated Cycle Length (s)	80.0	Sum of lost time (s)		12.0		
Intersection Capacity Utilization	64.2%	ICU Level of Service		C		
Analysis Period (min)	15					
c Critical Lane Group						

Exisitng PM
28: Vine St & Hancock St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	18	51	0	0	0	0	0	0	2034	4
Peak Hour Factor	0.56	0.56	0.56	0.75	0.75	0.75	0.95	0.95	0.95	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	32	68	0	0	0	0	0	0	2211	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	2213	2213	739	769	2215	0	2215			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2213	2213	739	769	2215	0	2215			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	91	74	100	100	100			100		
cM capacity (veh/h)	24	43	360	265	43	1084	233			1622		

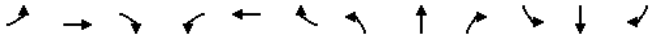
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	32	68	884	884	447
Volume Left	0	68	0	0	0
Volume Right	32	0	0	0	4
cSH	360	265	1700	1700	1700
Volume to Capacity	0.09	0.26	0.52	0.52	0.26
Queue Length 95th (ft)	7	25	0	0	0
Control Delay (s)	16.0	23.2	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	16.0	23.2	0.0		
Approach LOS	C	C			

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Exisitng PM
29: Sassafras St & Kettner Bl 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.96	
Flt Protected		1.00	1.00		0.97					0.95	1.00	
Satd. Flow (prot)		1863	1583		3418					1770	4887	
Flt Permitted		1.00	1.00		0.72					0.95	1.00	
Satd. Flow (perm)		1863	1583		2557					1770	4887	
Volume (vph)	0	202	97	82	34	0	0	0	0	248	686	241
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	220	105	89	37	0	0	0	0	270	746	262
RTOR Reduction (vph)	0	0	52	0	0	0	0	0	0	0	115	0
Lane Group Flow (vph)	0	220	53	0	126	0	0	0	0	270	893	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		22.0	22.0		22.0					20.0	20.0	
Effective Green, g (s)		24.7	24.7		24.7					22.3	22.3	
Actuated g/C Ratio		0.45	0.45		0.45					0.41	0.41	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		837	711		1148					718	1981	
v/s Ratio Prot		c0.12									c0.18	
v/s Ratio Perm			0.03		0.05					0.15		
v/c Ratio		0.26	0.07		0.11					0.38	0.45	
Uniform Delay, d1		9.5	8.6		8.8					11.5	11.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.8	0.2		0.2					1.5	0.7	
Delay (s)		10.2	8.8		9.0					13.0	12.6	
Level of Service		B	A		A					B	B	
Approach Delay (s)		9.8			9.0			0.0			12.7	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	11.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3481		1770	3539						4718	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3481		1770	3539						4718	1362
Volume (vph)	0	813	100	49	196	0	0	0	0	438	732	334
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	884	109	53	213	0	0	0	0	476	796	363
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	0	241
Lane Group Flow (vph)	0	985	0	53	213	0	0	0	0	0	1272	122
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		49.6		6.2	58.5						33.5	33.5
Effective Green, g (s)		47.8		6.6	58.4						32.6	34.9
Actuated g/C Ratio		0.46		0.06	0.56						0.31	0.34
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1600		112	1987						1479	457
v/s Ratio Prot		c0.28		c0.03	0.06							
v/s Ratio Perm											0.27	0.09
v/c Ratio		0.62		0.47	0.11						0.90dl	0.27
Uniform Delay, d1		21.2		47.0	10.6						33.6	25.2
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		1.8		1.1	0.1						5.2	0.1
Delay (s)		23.0		48.2	10.7						38.7	25.3
Level of Service		C		D	B						D	C
Approach Delay (s)		23.0			18.2			0.0			35.8	
Approach LOS		C			B			A			D	

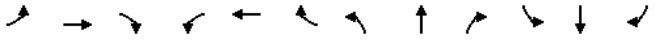
Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM

32: Washington St & Pacific Highway NB Frontage Road 4/9/2012

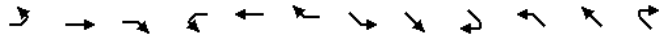


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.88			0.90	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99			0.99	
Satd. Flow (prot)	1770	3539			3539	1583	1610	2969			1653	
Flt Permitted	0.95	1.00			1.00	1.00	0.70	0.90			0.31	
Satd. Flow (perm)	1770	3539			3539	1583	1184	2690			514	
Volume (vph)	139	511	0	0	766	372	93	11	140	20	0	63
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	151	555	0	0	833	404	101	12	152	22	0	68
RTOR Reduction (vph)	0	0	0	0	0	228	0	121	0	0	61	0
Lane Group Flow (vph)	151	555	0	0	833	176	71	73	0	0	29	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	4.0	42.9			34.0	34.0	13.5	13.5			8.1	
Effective Green, g (s)	4.5	42.9			34.4	34.4	15.9	15.9			8.1	
Actuated g/C Ratio	0.06	0.54			0.44	0.44	0.20	0.20			0.10	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	101	1924			1543	690	239	542			53	
v/s Ratio Prot	c0.09	0.16			c0.24							
v/s Ratio Perm						0.11	c0.06	0.03			c0.06	
v/c Ratio	1.50	0.29			0.54	0.26	0.30	0.13			0.55	
Uniform Delay, d1	37.2	9.7			16.4	14.1	26.8	25.9			33.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	267.6	0.0			1.4	0.9	0.3	0.0			6.0	
Delay (s)	304.8	9.8			17.8	15.0	27.0	25.9			39.7	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		72.9			16.9			26.2			39.7	
Approach LOS		E			B			C			D	

Intersection Summary				
HCM Average Control Delay	36.0	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	52.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM

33: Washington St & Pacific Highway SB 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.98		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3457		1757	1863		1681	1699	1583			
Flt Permitted		1.00		0.49	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3457		904	1863		1681	1699	1583			
Volume (vph)	0	367	53	270	652	0	283	27	358	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	399	58	293	709	0	308	29	389	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	0	444	0	293	709	0	164	173	348	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		12.7		32.2	32.2		18.3	18.3	31.0			
Effective Green, g (s)		12.7		32.5	32.5		20.5	20.5	33.2			
Actuated g/C Ratio		0.16		0.42	0.42		0.26	0.26	0.43			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		565		378	779		444	448	758			
v/s Ratio Prot		c0.13			c0.38				c0.12			
v/s Ratio Perm				0.32			0.10	0.10	0.10			
v/c Ratio		0.79		0.78	0.91		0.37	0.39	0.46			
Uniform Delay, d1		31.2		19.5	21.2		23.3	23.4	15.9			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		6.6		14.4	16.6		0.2	0.2	0.2			
Delay (s)		37.8		33.8	37.8		23.5	23.6	16.0			
Level of Service		D		C	D		C	C	B			
Approach Delay (s)		37.8			36.7			19.5			0.0	
Approach LOS		D			D			B			A	

Intersection Summary				
HCM Average Control Delay	31.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
34: Sassafras St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.89		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1833		1763	1665		1767	4984		1770	5083	
Flt Permitted	0.69	1.00		0.64	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1278	1833		1182	1665		1767	4984		1770	5083	
Volume (vph)	23	139	15	174	29	72	19	549	84	76	404	1
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	151	16	189	32	78	21	597	91	83	439	1
RTOR Reduction (vph)	0	7	0	0	58	0	0	23	0	0	0	0
Lane Group Flow (vph)	25	160	0	189	52	0	21	665	0	83	440	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	15.3	15.3		14.6	14.6		0.8	24.8		4.1	27.4	
Effective Green, g (s)	15.3	15.3		15.0	15.0		0.8	26.2		1.9	29.5	
Actuated g/C Ratio	0.27	0.27		0.26	0.26		0.01	0.45		0.03	0.51	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	339	487		308	434		25	2267		58	2603	
v/s Ratio Prot		0.09			0.03		0.01	c0.13		c0.05	c0.09	
v/s Ratio Perm	0.02			c0.16								
v/c Ratio	0.07	0.33		0.61	0.12		0.84	0.29		1.43	0.17	
Uniform Delay, d1	15.8	17.0		18.7	16.3		28.3	9.9		27.9	7.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1		3.6	0.1		106.1	0.3		268.4	0.1	
Delay (s)	15.9	17.2		22.4	16.4		134.4	10.2		296.3	7.6	
Level of Service	B	B		C	B		F	B		F	A	
Approach Delay (s)		17.0			20.2			13.9			53.4	
Approach LOS		B			C			B			D	

Intersection Summary				
HCM Average Control Delay	27.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	18.5	
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
35: W Laurel St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Volume (vph)	278	524	64	89	352	89	155	421	51	338	562	150
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	302	570	70	97	383	97	168	458	55	367	611	163
RTOR Reduction (vph)	0	9	0	0	22	0	0	13	0	0	0	134
Lane Group Flow (vph)	302	631	0	97	458	0	168	500	0	367	611	29
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	17.7	27.0		12.3	21.0		13.2	20.9		21.2	28.8	17.7
Effective Green, g (s)	18.1	28.2		12.7	22.8		13.6	21.8		21.6	29.8	18.1
Actuated g/C Ratio	0.18	0.28		0.13	0.23		0.14	0.22		0.22	0.30	0.18
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	319	979		224	778		240	1086		381	1511	280
v/s Ratio Prot	c0.17	c0.18		0.05	0.13		0.09	c0.10		c0.21	0.12	
v/s Ratio Perm												0.02
v/c Ratio	0.95	0.64		0.43	0.59		0.70	0.46		0.96	0.40	0.11
Uniform Delay, d1	40.6	31.6		40.5	34.6		41.4	34.1		39.0	28.2	34.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	35.8	1.6		6.0	1.0		7.0	1.4		36.1	0.8	0.1
Delay (s)	76.5	33.3		46.5	35.6		48.4	35.5		75.1	29.0	34.4
Level of Service	E	C		D	D		D	D		E	C	C
Approach Delay (s)		47.1			37.4			38.7			44.6	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	42.9	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	90.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
36: Rosecrans St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.84	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Volume (vph)	100	685	78	143	257	80	235	206	456	57	97	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	753	86	157	282	88	258	226	501	63	107	57
RTOR Reduction (vph)	0	0	39	0	0	54	0	0	88	0	0	47
Lane Group Flow (vph)	110	753	47	157	282	34	258	226	413	63	107	10
Confl. Peds. (#/hr)	170		27	27		170	23		15	15		23
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	7.2	34.4	46.4	5.8	33.0	33.0	12.0	21.9	27.7	5.8	15.7	15.7
Effective Green, g (s)	7.6	35.3	47.7	6.2	33.9	33.9	12.4	21.3	26.0	6.2	15.2	15.2
Actuated g/C Ratio	0.09	0.41	0.55	0.07	0.39	0.39	0.14	0.25	0.30	0.07	0.18	0.18
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	156	1444	923	246	730	520	254	871	565	127	622	270
v/s Ratio Prot	c0.06	c0.21	0.01	0.05	0.15		c0.15	0.06	c0.04	0.04	0.03	
v/s Ratio Perm			0.02			0.03			0.23			0.01
v/c Ratio	0.71	0.52	0.05	0.64	0.39	0.07	1.02	0.26	0.73	0.50	0.17	0.04
Uniform Delay, d1	38.4	19.2	9.0	39.1	18.8	16.4	37.0	26.2	27.1	38.6	30.3	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	1.3	0.0	4.0	1.5	0.2	60.6	0.3	4.2	1.1	0.2	0.1
Delay (s)	49.6	20.6	9.0	43.0	20.4	16.7	97.6	26.5	31.3	39.8	30.5	29.7
Level of Service	D	C	A	D	C	B	F	C	C	D	C	C
Approach Delay (s)		22.9			26.5			47.6			32.9	
Approach LOS		C			C			D			C	

Intersection Summary				
HCM Average Control Delay	33.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	86.5	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	77.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
37: Old Town St & Moore St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.94			0.95			0.88	
Flt Protected		0.97			1.00			0.99			1.00	
Satd. Flow (prot)		1796			1726			1725			1605	
Flt Permitted		0.62			0.99			0.90			0.99	
Satd. Flow (perm)		1147			1714			1570			1596	
Volume (vph)	406	183	9	5	150	137	71	88	95	1	2	21
Peak-hour factor, PHF	0.98	0.98	0.98	0.86	0.86	0.86	0.89	0.89	0.89	0.67	0.67	0.67
Adj. Flow (vph)	414	187	9	6	174	159	80	99	107	1	3	31
RTOR Reduction (vph)	0	1	0	0	21	0	0	29	0	0	24	0
Lane Group Flow (vph)	0	609	0	0	318	0	0	257	0	0	11	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		49.4			49.4			15.4			15.4	
Effective Green, g (s)		50.3			50.3			16.3			16.3	
Actuated g/C Ratio		0.67			0.67			0.22			0.22	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		773			1156			343			349	
v/s Ratio Prot												
v/s Ratio Perm		c0.53			0.19			c0.16			0.01	
v/c Ratio		0.79			0.27			0.75			0.03	
Uniform Delay, d1		8.4			4.9			27.2			22.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.9			0.6			7.6			0.0	
Delay (s)		13.4			5.4			34.9			22.9	
Level of Service		B			A			C			C	
Approach Delay (s)		13.4			5.4			34.9			22.9	
Approach LOS		B			A			C			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	74.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
38: Taylor St & Congress St 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4770		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4770		1770	3539	1770	1583
Volume (vph)	902	296	132	392	88	157
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.90	0.90
Adj. Flow (vph)	1013	333	148	440	98	174
RTOR Reduction (vph)	67	0	0	0	0	136
Lane Group Flow (vph)	1279	0	148	440	98	38
Confl. Peds. (#/hr)		53	53		46	81
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	33.8		6.3	44.5	14.0	14.0
Effective Green, g (s)	35.7		6.7	44.5	14.9	14.9
Actuated g/C Ratio	0.52		0.10	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2493		174	2306	386	345
v/s Ratio Prot	c0.27		c0.08	0.12	c0.06	0.02
v/s Ratio Perm						
v/c Ratio	0.51		0.85	0.19	0.25	0.11
Uniform Delay, d1	10.6		30.3	4.7	22.1	21.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		29.8	0.2	0.1	0.1
Delay (s)	11.4		60.1	4.9	22.2	21.4
Level of Service	B		E	A	C	C
Approach Delay (s)	11.4			18.8	21.7	
Approach LOS	B			B	C	

Intersection Summary				
HCM Average Control Delay	14.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	55.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

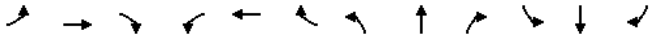
Exisitng PM
39: Twiggs St & Congress St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	2	3	17	5	47	12	106	13	43	136	9
Peak Hour Factor	0.80	0.80	0.80	0.66	0.66	0.66	0.82	0.82	0.82	0.90	0.90	0.90
Hourly flow rate (vph)	10	2	4	26	8	71	15	129	16	48	151	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	105	160	209
Volume Left (vph)	10	26	15	48
Volume Right (vph)	4	71	16	10
Hadj (s)	0.02	-0.33	-0.01	0.05
Departure Headway (s)	4.9	4.4	4.4	4.4
Degree Utilization, x	0.02	0.13	0.20	0.26
Capacity (veh/h)	666	744	783	782
Control Delay (s)	8.0	8.1	8.5	8.9
Approach Delay (s)	8.0	8.1	8.5	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
HCM Level of Service	A			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
40: Harney St & Congress St 4/9/2012

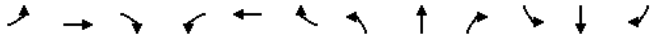


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	10	5	19	29	8	5	102	15	20	96	40
Peak Hour Factor	0.75	0.75	0.75	0.73	0.73	0.73	0.87	0.87	0.87	0.92	0.92	0.92
Hourly flow rate (vph)	28	13	7	26	40	11	6	117	17	22	104	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	48	77	140	170
Volume Left (vph)	28	26	6	22
Volume Right (vph)	7	11	17	43
Hadj (s)	0.07	0.02	-0.03	-0.09
Departure Headway (s)	4.8	4.7	4.4	4.3
Degree Utilization, x	0.06	0.10	0.17	0.20
Capacity (veh/h)	695	712	791	805
Control Delay (s)	8.1	8.2	8.2	8.3
Approach Delay (s)	8.1	8.2	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.3	
HCM Level of Service			A	
Intersection Capacity Utilization			30.3%	ICU Level of Service
Analysis Period (min)			15	A

Exisitng PM
41: Ampudia St & Congress St 4/9/2012

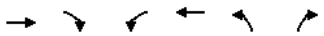


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	5	6	51	18	11	9	99	290	0	107	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	7	5	7	82	29	18	10	106	312	0	120	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								320				
pX, platoon unblocked												
vC, conflicting volume	286	570	123	265	259	120	124			427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	286	570	123	265	259	120	124			427		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	88	95	98	99			100		
cM capacity (veh/h)	619	425	926	662	635	920	1460			1124		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	19	129	116	312	122
Volume Left	7	82	10	0	0
Volume Right	7	18	0	312	2
cSH	608	682	1460	1700	1124
Volume to Capacity	0.03	0.19	0.01	0.18	0.00
Queue Length 95th (ft)	2	17	1	0	0
Control Delay (s)	11.1	11.5	0.7	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.1	11.5	0.2		0.0
Approach LOS	B	B			

Intersection Summary					
Average Delay			2.5		
Intersection Capacity Utilization			38.5%	ICU Level of Service	
Analysis Period (min)			15		A

Exisitng PM
42: Twiggs St & San Diego Ave 4/9/2012

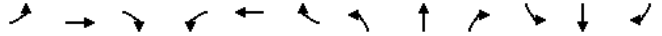


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	30	28	41	35	34	85
Peak Hour Factor	0.89	0.89	0.78	0.78	0.83	0.83
Hourly flow rate (vph)	34	31	53	45	41	102

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	65	97	143
Volume Left (vph)	0	53	41
Volume Right (vph)	31	0	102
Hadj (s)	-0.26	0.14	-0.34
Departure Headway (s)	4.0	4.4	3.9
Degree Utilization, x	0.07	0.12	0.16
Capacity (veh/h)	851	787	877
Control Delay (s)	7.4	8.0	7.6
Approach Delay (s)	7.4	8.0	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay		7.7	
HCM Level of Service		A	
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
43: Harney St & San Diego Ave 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	18	13	40	18	6	30	99	46	3	58	8
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.91	0.91	0.91	0.81	0.81	0.81
Hourly flow rate (vph)	17	22	16	47	21	7	33	109	51	4	72	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	74	192	85
Volume Left (vph)	17	47	33	4
Volume Right (vph)	16	7	51	10
Hadj (s)	-0.08	0.10	-0.09	-0.03
Departure Headway (s)	4.5	4.7	4.2	4.4
Degree Utilization, x	0.07	0.10	0.23	0.10
Capacity (veh/h)	732	713	822	777
Control Delay (s)	7.9	8.2	8.4	7.9
Approach Delay (s)	7.9	8.2	8.4	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
44: Old Town St & San Diego Ave 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.97		1.00	1.00		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1728			1785		1765	1852		1763	1623	
Flt Permitted		0.77			0.95		0.62	1.00		0.66	1.00	
Satd. Flow (perm)		1377			1713		1149	1852		1219	1623	
Volume (vph)	160	28	91	7	45	17	100	121	4	8	48	147
Peak-hour factor, PHF	0.78	0.78	0.78	0.81	0.81	0.81	0.79	0.79	0.79	0.87	0.87	0.87
Adj. Flow (vph)	205	36	117	9	56	21	127	153	5	9	55	169
RTOR Reduction (vph)	0	41	0	0	14	0	0	2	0	0	83	0
Lane Group Flow (vph)	0	317	0	0	72	0	127	156	0	9	141	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Effective Green, g (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.31			0.31		0.51	0.51		0.51	0.51	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		431			536		582	939		618	822	
v/s Ratio Prot								0.08			0.09	
v/s Ratio Perm		c0.23			0.04		c0.11			0.01		
v/c Ratio		0.73			0.13		0.22	0.17		0.01	0.17	
Uniform Delay, d1		13.6			10.9		6.1	5.9		5.4	5.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.5			0.0		0.9	0.4		0.0	0.5	
Delay (s)		19.1			11.0		6.9	6.3		5.5	6.4	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		19.1			11.0			6.6			6.3	
Approach LOS		B			B			A			A	

Intersection Summary				
HCM Average Control Delay	11.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	44.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	55.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

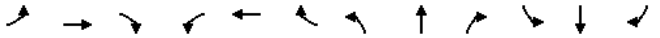
Exisitng PM
45: Taylor St & 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.90			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1764	3473		1769	3530			1640			1742	
Flt Permitted	0.46	1.00		0.14	1.00			0.90			0.73	
Satd. Flow (perm)	856	3473		264	3530			1500			1315	
Volume (vph)	52	909	98	188	454	6	65	2	179	15	2	5
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.95	0.95	0.95	0.79	0.79	0.79
Adj. Flow (vph)	56	977	105	211	510	7	68	2	188	19	3	6
RTOR Reduction (vph)	0	10	0	0	1	0	0	148	0	0	5	0
Lane Group Flow (vph)	56	1072	0	211	516	0	0	110	0	0	23	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.1	25.8		37.3	30.6			10.5			10.5	
Effective Green, g (s)	29.5	26.8		38.2	31.5			11.4			11.4	
Actuated g/C Ratio	0.51	0.47		0.66	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	481	1616		368	1930			297			260	
v/s Ratio Prot	0.01	c0.31		c0.07	0.15							
v/s Ratio Perm	0.05			0.31				c0.07			0.02	
v/c Ratio	0.12	0.66		0.57	0.27			0.37			0.09	
Uniform Delay, d1	7.1	11.9		6.8	6.9			20.0			18.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	2.2		1.3	0.3			0.3			0.1	
Delay (s)	7.1	14.1		8.1	7.3			20.3			18.9	
Level of Service	A	B		A	A			C			B	
Approach Delay (s)		13.7			7.5			20.3			18.9	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	12.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
46: Twiggs St & Juan St 4/9/2012

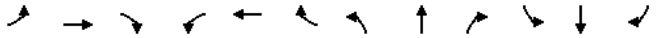


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	98	4	13	0	1	5	4	91	3	6	127	71
Peak Hour Factor	0.93	0.93	0.93	0.50	0.50	0.50	0.87	0.87	0.87	0.96	0.96	0.96
Hourly flow rate (vph)	105	4	14	0	2	10	5	105	3	6	132	74

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	124	12	113	213
Volume Left (vph)	105	0	5	6
Volume Right (vph)	14	10	3	74
Hadj (s)	0.14	-0.47	0.02	-0.17
Departure Headway (s)	4.8	4.3	4.5	4.2
Degree Utilization, x	0.16	0.01	0.14	0.25
Capacity (veh/h)	701	753	765	819
Control Delay (s)	8.7	7.4	8.2	8.6
Approach Delay (s)	8.7	7.4	8.2	8.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.5		
HCM Level of Service		A		
Intersection Capacity Utilization		33.9%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
47: Harney St & Juan St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	22	3	42	0	3	9	21	67	4	4	96	40
Peak Hour Factor	0.90	0.90	0.90	0.50	0.50	0.50	0.92	0.92	0.92	0.88	0.88	0.80
Hourly flow rate (vph)	24	3	47	0	6	18	23	73	4	5	109	50

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	74	24	100	164
Volume Left (vph)	24	0	23	5
Volume Right (vph)	47	18	4	50
Hadj (s)	-0.28	-0.42	0.05	-0.14
Departure Headway (s)	4.2	4.1	4.3	4.1
Degree Utilization, x	0.09	0.03	0.12	0.19
Capacity (veh/h)	790	799	798	858
Control Delay (s)	7.6	7.3	7.9	8.0
Approach Delay (s)	7.6	7.3	7.9	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.9		
HCM Level of Service		A		
Intersection Capacity Utilization		33.2%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
48: Taylor St & Morena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3510		1770	3426				1611	1681	1699	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3510		1770	3426				1611	1681	1699	1561
Volume (vph)	468	606	29	3	448	107	0	0	14	78	7	200
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	498	645	31	3	477	114	0	0	16	88	8	225
RTOR Reduction (vph)	0	3	0	0	21	0	0	0	0	0	0	181
Lane Group Flow (vph)	498	673	0	3	570	0	0	0	16	47	49	44
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	12.0	38.5		0.6	27.1				65.3	11.6	11.6	11.6
Effective Green, g (s)	12.4	39.4		1.0	28.0				65.3	12.9	12.9	12.9
Actuated g/C Ratio	0.19	0.60		0.02	0.43				1.00	0.20	0.20	0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	652	2118		27	1469				1611	332	336	308
v/s Ratio Prot	c0.15	0.19		0.00	c0.17					0.03	c0.03	
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.76	0.32		0.11	0.39				0.01	0.14	0.15	0.14
Uniform Delay, d1	25.1	6.4		31.7	12.8				0.0	21.6	21.6	21.6
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	0.4		0.7	0.8				0.0	0.3	0.3	0.4
Delay (s)	29.8	6.8		32.4	13.6				0.0	22.0	22.0	22.0
Level of Service	C	A		C	B				A	C	C	C
Approach Delay (s)		16.5			13.6			0.0			22.0	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
49: Rosecrans St. & Hugo St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.92			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3420		1671	3423		1644	1575			1736	
Flt Permitted	0.95	1.00		0.95	1.00		0.55	1.00			0.51	
Satd. Flow (perm)	1678	3420		1671	3423		949	1575			900	
Volume (vph)	16	1386	63	32	969	26	105	99	124	24	76	3
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	1540	70	36	1077	29	117	110	138	27	84	3
RTOR Reduction (vph)	0	1	0	0	1	0	0	34	0	0	1	0
Lane Group Flow (vph)	18	1609	0	36	1105	0	117	214	0	0	113	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	105.3		6.8	109.0		23.7	23.7			23.7	
Effective Green, g (s)	3.5	106.2		7.2	109.9		24.6	24.6			24.6	
Actuated g/C Ratio	0.02	0.71		0.05	0.73		0.16	0.16			0.16	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	39	2421		80	2508		156	258			148	
v/s Ratio Prot	0.01	c0.47		c0.02	c0.32			c0.14				
v/s Ratio Perm							0.12				0.13	
v/c Ratio	0.46	0.66		0.45	0.44		0.75	0.83			0.76	
Uniform Delay, d1	72.3	12.1		69.5	7.9		59.8	60.7			59.9	
Progression Factor	1.00	1.00		0.91	0.44		1.00	1.00			1.00	
Incremental Delay, d2	3.1	1.5		1.0	0.4		16.3	18.4			18.8	
Delay (s)	75.4	13.5		64.3	3.8		76.1	79.0			78.7	
Level of Service	E	B		E	A		E	E			E	
Approach Delay (s)		14.2			5.8			78.1			78.7	
Approach LOS		B			A			E			E	

Intersection Summary				
HCM Average Control Delay	20.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	72.2%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
50: Rosecrans St. & Lowell St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Volume (vph)	352	1316	24	165	799	184	18	370	181	287	190	135
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	371	1385	25	174	841	194	19	389	191	302	200	142
RTOR Reduction (vph)	0	1	0	0	13	0	0	0	31	0	85	0
Lane Group Flow (vph)	371	1409	0	174	1022	0	19	389	160	302	257	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	33.0	60.9		16.7	44.1		3.6	24.8	41.5	28.9	50.2	
Effective Green, g (s)	33.4	61.8		17.1	45.5		4.0	25.8	42.9	29.3	51.1	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.03	0.17	0.29	0.20	0.34	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	394	1453		202	1030		47	609	437	346	1084	
v/s Ratio Prot	c0.21	c0.40		0.10	0.30		0.01	c0.11	0.04	c0.17	0.08	
v/s Ratio Perm									0.06			
v/c Ratio	0.94	0.97		0.86	0.99		0.40	0.64	0.37	0.87	0.24	
Uniform Delay, d1	57.3	43.2		65.3	52.1		71.8	57.8	42.7	58.5	35.5	
Progression Factor	1.19	0.83		1.16	0.91		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.0	15.0		26.6	25.0		2.1	2.5	0.2	20.2	0.1	
Delay (s)	94.0	50.7		102.4	72.3		73.9	60.2	42.9	78.8	35.6	
Level of Service	F	D		F	E		E	E	D	E	D	
Approach Delay (s)		59.7			76.7			55.1			55.8	
Approach LOS		E			E			E			E	

Intersection Summary				
HCM Average Control Delay	63.3	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.3%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
51: Rosecrans St. & Laning Rd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (prot)		5045		1770	3539			1775	1552		1787	
Flt Permitted		1.00		0.95	1.00			0.71	1.00		0.70	
Satd. Flow (perm)		5045		1770	3539			1329	1552		1302	
Volume (vph)	0	1855	83	142	1217	1	87	1	203	40	10	1
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1953	87	149	1281	1	92	1	214	42	11	1
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	184	0	1	0
Lane Group Flow (vph)	0	2038	0	149	1282	0	0	93	30	0	53	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		98.8		16.5	119.7			20.1	20.1		20.1	
Effective Green, g (s)		100.1		16.9	121.0			21.0	21.0		21.0	
Actuated g/C Ratio		0.67		0.11	0.81			0.14	0.14		0.14	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		3367		199	2855			186	217		182	
v/s Ratio Prot		c0.40		c0.08	0.36							
v/s Ratio Perm								c0.07	0.02		0.04	
v/c Ratio		0.61		0.75	0.45			0.50	0.14		0.29	
Uniform Delay, d1		13.9		64.5	4.4			59.6	56.6		57.8	
Progression Factor		0.35		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		12.6	0.5			0.8	0.1		0.3	
Delay (s)		5.4		77.1	4.9			60.4	56.7		58.2	
Level of Service		A		E	A			E	E		E	
Approach Delay (s)		5.4			12.4			57.8			58.2	
Approach LOS		A			B			E			E	

Intersection Summary				
HCM Average Control Delay	12.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
52: Hawthorne St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.98	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5031						4958	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5031						4958	
Volume (vph)	0	0	0	197	900	0	0	0	0	0	393	67
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	210	957	0	0	0	0	0	546	93
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	0	0	0	1141	0	0	0	0	0	607	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3527						1041	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.23							
v/c Ratio					0.32						0.58	
Uniform Delay, d1					5.2						32.0	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.2						0.5	
Delay (s)					5.4						32.5	
Level of Service					A						C	
Approach Delay (s)		0.0			5.4			0.0			32.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	15.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

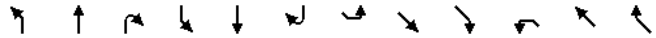
Exisitng PM
53: Grape St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		1.00									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5063									4943	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5063									4943	
Volume (vph)	0	1526	39	0	0	0	0	0	0	240	350	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	1641	42	0	0	0	0	0	0	270	393	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	1681	0	0	0	0	0	0	0	0	655	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		61.8									19.2	
Effective Green, g (s)		61.8									20.2	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3477									1109	
v/s Ratio Prot		c0.33										
v/s Ratio Perm											0.13	
v/c Ratio		0.48									0.59	
Uniform Delay, d1		6.6									31.2	
Progression Factor		0.40									0.72	
Incremental Delay, d2		0.4									0.8	
Delay (s)		3.0									23.3	
Level of Service		A									C	
Approach Delay (s)		3.0			0.0			0.0			23.3	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	8.7	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
54: Seaworld Dr & E Mission Bay Dr 4/9/2012

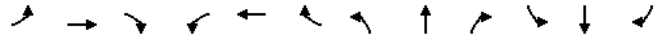


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Volume (vph)	78	1077	116	142	1276	13	59	70	189	102	41	116
Peak-hour factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96	0.82	0.82	0.82	0.74	0.74	0.74
Adj. Flow (vph)	80	1110	120	148	1329	14	72	85	230	138	55	157
RTOR Reduction (vph)	0	0	89	0	0	9	0	0	115	0	0	116
Lane Group Flow (vph)	80	1110	31	148	1329	5	72	85	115	138	55	41
Confl. Peds. (#/hr)	1					1			1	1		
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	3.1	31.6	8.0	8.1	36.7	3.9	3.9	11.8	11.8	8.0	15.0	15.0
Effective Green, g (s)	3.1	33.1	8.0	8.1	38.1	3.9	3.9	12.7	12.7	8.0	16.8	16.8
Actuated g/C Ratio	0.04	0.42	0.10	0.10	0.49	0.05	0.05	0.16	0.16	0.10	0.22	0.22
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	137	1504	163	184	1731	78	172	304	255	182	402	341
v/s Ratio Prot	0.02	0.31		c0.08	c0.38		0.02	0.05		c0.08	0.03	
v/s Ratio Perm			0.02			0.00			c0.07			0.03
v/c Ratio	0.58	0.74	0.19	0.80	0.77	0.07	0.42	0.28	0.45	0.76	0.14	0.12
Uniform Delay, d1	36.8	18.8	32.0	34.1	16.3	35.3	35.9	28.6	29.5	34.0	24.7	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	3.3	0.2	20.8	3.3	0.1	0.6	0.5	1.3	14.8	0.1	0.1
Delay (s)	40.8	22.0	32.2	54.9	19.6	35.4	36.5	29.1	30.7	48.8	24.7	24.7
Level of Service	D	C	C	D	B	D	D	C	C	D	C	C
Approach Delay (s)		24.1			23.3			31.4			34.2	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM Average Control Delay	25.6	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	77.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
55: Hawthorne St & Pacific Highway 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				0.97	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			0.99	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1716	3482		1770	5085			5029	
Flt Permitted				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)				1716	3482		1770	5085			5029	
Volume (vph)	0	0	0	110	775	82	52	375	0	0	258	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.88	0.88	0.88	0.84	0.84	0.84
Adj. Flow (vph)	0	0	0	124	871	92	59	426	0	0	307	21
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	124	954	0	59	426	0	0	318	0
Confl. Peds. (#/hr)				35		10	7					7
Turn Type				Perm			Prot					
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)				40.5	40.5		23.3	39.7			12.0	
Effective Green, g (s)				41.0	39.6		23.3	39.7			11.9	
Actuated g/C Ratio				0.46	0.44		0.26	0.44			0.13	
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	
Lane Grp Cap (vph)				782	1532		458	2243			665	
v/s Ratio Prot					c0.27		0.03	c0.08			c0.06	
v/s Ratio Perm				0.07								
v/c Ratio				0.16	0.62		0.13	0.19			0.48	
Uniform Delay, d1				14.4	19.4		25.6	15.3			36.2	
Progression Factor				1.07	1.09		0.47	0.53			1.00	
Incremental Delay, d2				0.4	1.8		0.5	0.2			0.6	
Delay (s)				15.8	23.1		12.4	8.2			36.8	
Level of Service				B	C		B	A			D	
Approach Delay (s)		0.0			22.3			8.7			36.8	
Approach LOS		A			C			A			D	

Intersection Summary				
HCM Average Control Delay	21.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.44			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.8	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
56: Grape St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5075	1532					4668		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5075	1532					4668		1770	5085	
Volume (vph)	43	1141	24	0	0	0	0	384	332	92	276	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.92	0.92	0.92	0.95	0.95
Adj. Flow (vph)	47	1240	26	0	0	0	0	417	361	100	291	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	119	0	0	0	0
Lane Group Flow (vph)	0	1287	10	0	0	0	0	659	0	100	291	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		34.6	34.6					26.0		15.2	45.6	
Effective Green, g (s)		35.5	35.5					26.0		15.6	45.6	
Actuated g/C Ratio		0.39	0.39					0.29		0.17	0.51	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2002	604					1349		307	2576	
v/s Ratio Prot								c0.14		c0.06	0.06	
v/s Ratio Perm		0.25	0.01									
v/c Ratio		0.64	0.02					0.49		0.33	0.11	
Uniform Delay, d1		22.1	16.6					26.5		32.6	11.6	
Progression Factor		1.00	1.00					1.00		1.77	0.56	
Incremental Delay, d2		1.6	0.1					1.3		2.8	0.1	
Delay (s)		23.7	16.7					27.8		60.3	6.6	
Level of Service		C	B					C		E	A	
Approach Delay (s)		23.6			0.0			27.8			20.4	
Approach LOS		C			A			C			C	

Intersection Summary				
HCM Average Control Delay	24.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

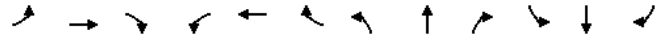
Exisitng PM
57: Seaworld Dr & Friars Rd 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1568	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1568	3433	3539	3433	1418
Volume (vph)	1153	391	270	1297	301	118
Peak-hour factor, PHF	0.96	0.96	0.99	0.99	0.93	0.93
Adj. Flow (vph)	1201	407	273	1310	324	127
RTOR Reduction (vph)	0	7	0	0	0	98
Lane Group Flow (vph)	1201	400	273	1310	324	29
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.8	41.6	7.8	41.8	12.8	12.8
Effective Green, g (s)	31.0	46.0	7.7	43.2	15.0	15.0
Actuated g/C Ratio	0.47	0.69	0.12	0.65	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1657	1184	399	2309	778	321
v/s Ratio Prot	c0.34	0.08	0.08	c0.37	c0.09	
v/s Ratio Perm		0.18				0.02
v/c Ratio	0.72	0.34	0.68	0.57	0.42	0.09
Uniform Delay, d1	14.2	4.0	28.1	6.3	21.9	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	3.8	1.0	0.1	0.0
Delay (s)	17.0	4.1	31.9	7.4	22.0	20.3
Level of Service	B	A	C	A	C	C
Approach Delay (s)	13.7			11.6	21.5	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Existing PM
58: I-5 SB On/I-5 SB Off & Seaworld Dr 12/07/2017

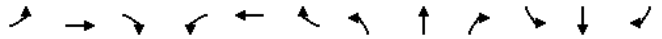


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Future Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.86	0.86	0.86	0.25	0.25	0.25	0.96	0.96	0.96
Adj. Flow (vph)	0	1116	259	340	356	0	0	0	0	347	0	1172
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1116	131	340	356	0	0	0	0	347	0	1172
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		36.8	36.8	9.4	50.4					15.0		75.0
Effective Green, g (s)		37.8	37.8	9.6	51.4					15.6		75.0
Actuated g/C Ratio		0.50	0.50	0.13	0.69					0.21		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1783	786	439	2425					368		1583
v/s Ratio Prot		0.32		0.10	0.10					c0.20		
v/s Ratio Perm			0.08									c0.74
v/c Ratio		0.63	0.17	0.77	0.15					0.94		0.74
Uniform Delay, d1		13.5	10.1	31.7	4.1					29.3		0.0
Progression Factor		1.00	1.00	0.91	1.16					1.00		1.00
Incremental Delay, d2		1.7	0.5	6.7	0.1					32.1		3.2
Delay (s)		15.1	10.5	35.5	4.9					61.3		3.2
Level of Service		B	B	D	A					E		A
Approach Delay (s)		14.3			19.9			0.0			16.4	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
59: Seaworld Dr & I-5 NB On 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3265			1775	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3265			1775	1583			
Volume (vph)	783	566	0	0	432	384	166	3	418	0	0	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.90	0.90	0.90	0.25	0.25	0.25
Adj. Flow (vph)	833	602	0	0	436	388	184	3	464	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	328	0	0	0
Lane Group Flow (vph)	833	602	0	0	622	0	0	187	136	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	19.5	55.7			32.0			9.2	9.2			
Effective Green, g (s)	19.7	56.2			32.5			9.8	9.8			
Actuated g/C Ratio	0.26	0.75			0.43			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	902	2652			1415			232	207			
v/s Ratio Prot	c0.24	0.17			c0.19			c0.11				
v/s Ratio Perm									0.09			
v/c Ratio	0.92	0.23			0.44			0.81	0.66			
Uniform Delay, d1	26.9	2.8			14.9			31.7	31.0			
Progression Factor	1.47	0.76			1.00			1.00	1.00			
Incremental Delay, d2	11.1	0.1			1.0			17.2	5.7			
Delay (s)	50.6	2.3			15.9			48.9	36.7			
Level of Service	D	A			B			D	D			
Approach Delay (s)		30.3			15.9			40.2			0.0	
Approach LOS		C			B			D			A	

Intersection Summary				
HCM Average Control Delay	28.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	87.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Appendix F
Caltrans Freeway Count Worksheets

Dist	Rte		Description	CO		Poast Mile	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak hour	Ahead Peak Month	Ahead AADT	Peak Hour
	11	8	NIMITZ BLVD	SD	T	0.466	740	11,000	10,500	4,050	48,500	46,500	8.7%
	11	8	MIDWAY DRIVE	SD	L	1.213	4,050	48,500	46,500	8,800	113,000	102,000	8.6%
	11	8	JCT RTE 5 LT LANES	SD	L	2.379	8,800	113,000	102,000	11,100	144,000	132,000	8.4%
	11	8	SAN DIEGO, MORENA BLVD	SD	R	0.364	11,100	144,000	132,000	15,700	194,000	191,000	8.2%
	11	5	CLAIREMONT DRIVE	SD	R	22.262	Ahead Peak hour 18,300	Ahead Peak Month 230,000	Ahead AADT 220,000	Back Peak Hour 16,800	Back Peak Month 208,000	Back AADT 203,000	8.3%
	11	5	MISSION BAY/SEA WORLD	SD	R	20.818	16,700	212,000	199,000	18,300	230,000	220,000	8.4%
	11	5	JCT. RTE. 8/CAMINO DEL RIO	SD	R	20.056	16,300	212,000	199,000	16,700	212,000	199,000	8.2%
	11	5	SAN DIEGO, OLD TOWN AVE	SD	R	19.033	15,400	205,000	192,000	16,300	212,000	199,000	8.0%
	11	5	SAN DIEGO, WASHINGTON ST	SD	R	18.283	11,500	152,000	142,000	15,400	205,000	192,000	8.1%
	11	5	SAN DIEGO, SASSAFRAS ST	SD	R	17.77	12,400	157,000	147,000	11,500	152,000	142,000	8.4%
	11	5	PACIFIC HIGHWAY VIADUCT	SD	R	17.53	14,400	200,000	183,000	12,400	157,000	147,000	7.9%

Location (I.D.)	Route	Dir	Period	Cars per green	Fast. rate (cyc./min.)	Slow. rate (cyc./min.)	Rate Delta	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV	Flow/lane			Total Flow
												High	Low	Average	Average
W. Mission Bay Dr (251)	8	EB	1500 - 1900	2	8.3	5.8	0.18	7.2 - 10.4	996 - 694	2	No	996	694	845	1690
Sports Arena Blvd (252)	8	EB	1500 - 1900	2	6.6	4.1	0.18	9.1 - 14.7	396 - 245	3	Lt	396	245	320.5	641
Sea World Dr (97)	5	SB	0530 - 0930	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
Sea World Dr (223)	5	NB	0530 - 0930	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555
			1500 - 1900	2	8.3	5.5	0.20	7.2 - 10.9	996 - 660	2	No	996	660	828	1656
Old Town Ave (187)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	1	No	570	352	461	461
Old Town Ave (188)	5	NB	0530 - 0930	1	9.5	5.6	0.28	6.3 - 10.8	570 - 335	2	No	570	335	452.5	905
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	No	570	318	444	888
Washington St (184)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Washington St (186)	5	NB	0530 - 0930	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Hawthorne St (181)	5	NB	0530 - 0930	2	8.3	4.8	0.25	7.2 - 12.5	996 - 576	2	No	996	576	786	1572
			1500 - 1900	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555

There are 15 separate rates or steps that depend on the mainlane volumes. The Cycles/min. have a definite rate delta whereas the seconds/cycle from one rate to another can vary from 0.1 - 0.4 sec.

RTE	DIST	CNTY	POST MILE	LEG	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
008	11	SD	T.407	A	SAN DIEGO, SUNSET CLIFFS BOULEVARD	10500	105	1	86	8	3	8	82.3	7.4	2.9	7.4	7	78E
008	11	SD	L2.379	B	JCT RTE 5 LT LANES	102000	1224	1.2	1038	87	9	91	84.8	7.1	.7	7.4	77	78V
008	11	SD	L2.379	A	JCT RTE 5 LT LANES	129000	3612	2.8	2416	520	155	520	66.9	14.4	4.3	14.4	335	83V
008	11	SD	2.41	B	SAN DIEGO, JCT. RTE. 163	201000	5427	2.7	4200	586	136	505	77.4	10.8	2.5	9.3	395	83E
008	11	SD	2.41	A	SAN DIEGO, JCT. RTE. 163	205000	5740	2.8	4483	574	138	545	78.1	10	2.4	9.5	418	83E
008	11	SD	4.378	B	SAN DIEGO, JCT. RTE. 805	194000	6208	3.2	4662	615	211	720	75.1	9.9	3.4	11.6	499	83E
008	11	SD	5.638	B	JCT. RTE. 15	241000	7230	3	4230	918	304	1779	58.5	12.7	4.2	24.6	891	83V
008	11	SD	5.638	A	JCT. RTE. 15	214000	7490	3.5	4794	861	337	1498	64	11.5	4.5	20	813	84E
008	11	SD	10.57	B	FLETCHER PARKWAY	190000	7030	3.7	4204	893	246	1687	59.8	12.7	3.5	24	847	84V
008	11	SD	10.57	A	FLETCHER PARKWAY	174000	7656	4.4	4326	1179	390	1761	56.5	15.4	5.1	23	925	78V
008	11	SD	15.8	B	EL CAJON, JCT. RTE. 67 NORTH	166000	7802	4.7	4205	1022	359	2216	53.9	13.1	4.6	28.4	1058	78V
008	11	SD	15.8	A	EL CAJON, JCT. RTE. 67 NORTH	134000	3886	2.9	2153	439	136	1158	55.4	11.3	3.5	29.8	535	78V
008	11	SD	R18.727	A	GREENFIELD DRIVE	80000	5520	6.9	2909	431	132	2048	52.7	7.8	2.4	37.1	867	86V
008	11	SD	R37.831	B	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	24900	2988	12	1174	176	90	1548	39.3	5.9	3	51.8	605	86E
008	11	SD	R37.831	A	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	19300	2625	13.6	853	205	76	1491	32.5	7.8	2.9	56.8	574	00E
008	11	SD	R51.98	B	CAMERON ROAD	15700	2013	12.82	843	94	40	1036	41.89	4.67	1.99	51.46	401	09V

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
005	11	SD	R.09	A	SAN DIEGO, MEXICAN BORDER, TIE OFF	74000	1628	2.2	1014	62	46	506	62.3	3.8	2.8	31.1	223	83E
005	11	SD	R.878	A	SOUTH JCT. RTE. 805	40000	1520	3.8	800	195	15	511	52.6	12.8	1	33.6	224	83V
005	11	SD	4.632	B	JCT. RTE. 75 WEST	117000	4914	4.2	3155	595	147	1017	64.2	12.1	3	20.7	538	78V
005	11	SD	4.632	A	JCT. RTE. 75 WEST	143000	5291	3.7	2974	857	254	1206	56.2	16.2	4.8	22.8	636	83V
005	11	SD	R11.129	B	8TH STREET	168000	8400	5	4259	1344	445	2352	50.7	16	5.3	28	1150	85V
005	11	SD	R12.647	B	JCT. RTE. 15 NORTH	187000	9350	5	4740	1496	496	2618	50.7	16	5.3	28	1280	85E
005	11	SD	R12.647	A	JCT. RTE. 15 NORTH	152000	6232	4.1	3509	897	287	1539	56.3	14.4	4.6	24.7	778	85V
005	11	SD	R14.077	B	SAN DIEGO, JCT. RTE. 75 SOUTH	159000	6519	4.1	3670	939	300	1610	56.3	14.4	4.6	24.7	814	85E
005	11	SD	R14.077	A	SAN DIEGO, JCT. RTE. 75 SOUTH	163000	6520	4	3984	782	254	1500	61.1	12	3.9	23	766	78E
005	11	SD	R15.036	B	SAN DIEGO, JCT. RTE. 94	163000	6194	3.8	3785	743	242	1425	61.1	12	3.9	23	728	78V
005	11	SD	R15.036	A	SAN DIEGO, JCT. RTE. 94	209000	8360	4	5827	920	242	1371	69.7	11	2.9	16.4	797	87V
005	11	SD	R16.069	B	SAN DIEGO, JCT. RTE. 163	209000	7733	3.7	5119	773	286	1554	66.2	10	3.7	20.1	828	78E
005	11	SD	R16.069	A	SAN DIEGO, JCT. RTE. 163	200000	8200	4.1	5150	730	230	2091	62.8	8.9	2.8	25.5	1003	85V
005	11	SD	R20.056	B	JCT. RTE. 8/CAMINO DEL RIO	197000	8077	4.1	5072	719	226	2060	62.8	8.9	2.8	25.5	988	85V
005	11	SD	R20.056	A	JCT. RTE. 8/CAMINO DEL RIO	198000	6732	3.4	4443	673	289	1326	66	10	4.3	19.7	717	84V
005	11	SD	R23.476	B	SAN DIEGO, BALBOA	162000	7290	4.5	4811	729	313	1436	66	10	4.3	19.7	777	84E

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Mainline VDS 1111514 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM T.68 (Abs PM 0.3)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	60.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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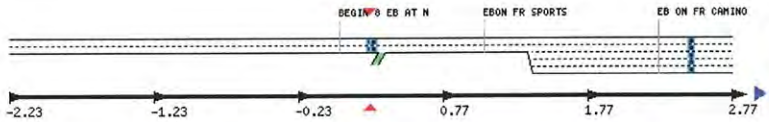
Performance > Planning Analysis > AADT ABOUT THIS REPORT

From Sep 2010 *Max Range:*10 years

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,292	23,244		23,357	23,356	23,244	23,255	23,357	67	2,3
10/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,251	23,190		23,335	23,329	23,190	23,200	23,335	68	2,3
11/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,242	23,238		23,349	23,342	23,238	23,247	23,349	71	2,2
12/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,170	23,207		23,295	23,302	23,207	23,212	23,295	75	2,2
01/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,265	23,289		23,346	23,346	23,289	23,295	23,346	74	2,2
02/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,202	23,274		23,343	23,346	23,274	23,281	23,343	75	2,2
03/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,212	23,290		23,333	23,343	23,290	23,297	23,333	76	2,2
04/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,182	23,261		23,312	23,322	23,261	23,268	23,312	76	2,2
05/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,144	23,262		23,301	23,315	23,262	23,269	23,301	76	2,2
06/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,211	23,285		23,343	23,384	23,285	23,292	23,343	79	2,2
07/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,188	23,266		23,343	23,380	23,266	23,273	23,343	78	2,2
08/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,073	23,218		23,312	23,349	23,218	22,994	23,312	73	2,2



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Used for D Factor

$$\frac{23,300}{23,300 + 21,700} = .52$$

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Mainline VDS 1111515 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM T.54 (Abs PM 0.1)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	40.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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09/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,684	21,626		21,708	21,722	21,626	21,630	21,708	65	2,(
10/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,627	21,547		21,675	21,686	21,547	21,550	21,675	67	2,(
11/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,616	21,598		21,686	21,694	21,598	21,601	21,686	70	2,(
12/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,535	21,566		21,637	21,654	21,566	21,566	21,637	74	2,(
01/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,637	21,649		21,685	21,701	21,649	21,651	21,685	73	2,(
02/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,576	21,631		21,682	21,697	21,631	21,633	21,682	74	2,(
03/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,594	21,658		21,685	21,703	21,658	21,660	21,685	76	2,(
04/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,557	21,624		21,658	21,678	21,624	21,626	21,658	75	2,(
05/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,505	21,606		21,633	21,653	21,606	21,607	21,633	75	2,(
06/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,551	21,610		21,649	21,691	21,610	21,611	21,649	78	2,(
07/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,516	21,589		21,646	21,682	21,589	21,589	21,646	77	2,(
08/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,391	21,548		21,621	21,647	21,548	21,358	21,621	72	2,(



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Mainline VDS 1115528 - E/O MORENA BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM R.589 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10308
LDS	1115522
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	134.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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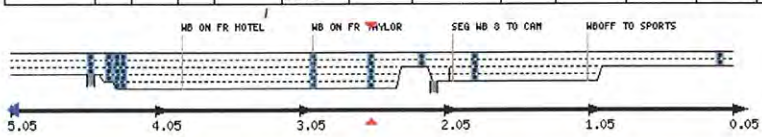
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09/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,314	84,891		85,180	85,215	84,891	84,899	85,180	68
10/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,083	84,566		85,019	85,059	84,566	84,567	85,019	69
11/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,957	84,644		84,970	84,986	84,644	84,643	84,970	72
12/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,605	84,457		84,760	84,820	84,457	84,439	84,760	76
01/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,819	84,729		84,830	84,875	84,729	84,712	84,830	77
02/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,468	84,564		84,723	84,761	84,564	84,547	84,723	78
03/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,364	84,581		84,710	84,748	84,581	84,564	84,710	80
04/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,178	84,392		84,544	84,629	84,392	84,372	84,544	79
05/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,035	84,357		84,470	84,526	84,357	84,336	84,470	79
06/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,277	84,502		84,584	84,727	84,502	84,481	84,584	80
07/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,234	84,471		84,647	84,795	84,471	84,448	84,647	79
08/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	83,631	84,381		84,609	84,681	84,381	83,667	84,609	74



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$$\frac{85{,}000}{85000 + 92{,}000} = .48$$

(WB) (EB)

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Mainline VDS 1115356 - EB 8 E/O Morena

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM R.535 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10307
LDS	1115357
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	150.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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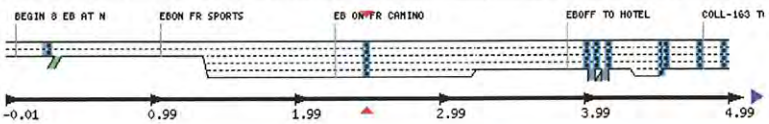
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09/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,802				92,959				45	8,2
10/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
11/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
12/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	93,070				92,984				39	8,2
01/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	94,431				94,074				33	8,2
02/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,379				95,149				28	8,1
03/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	96,142				95,919				22	8,1
04/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,987				95,888				15	8,0
05/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,805				95,761				8	7,9
06/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	98,871				97,707				2	7,1



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Mainline VDS 1108457 - SEA WORLD DR

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R20.719 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 97
LDS	1108113
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	148.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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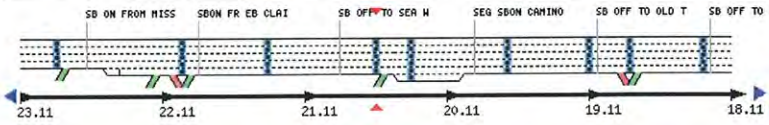
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09/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,407	90,808		89,922	89,853	90,808		89,922	3
10/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,017	90,111		89,788	89,630	90,111		89,788	3
11/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,990	89,582		88,612	89,628	89,582		88,612	3
12/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,517	88,234			89,867	88,234		86,475	2
01/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,253	89,079			90,438	89,079		86,658	2
02/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,388				91,039	89,267		81,735	1
03/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,567				91,403				1
04/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,971				91,538				1
05/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,395				91,660				
06/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,053				92,054				
07/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,811				91,310				
08/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,847				90,103				



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$$\frac{88{,}000}{88{,}000 + 97{,}000} = .48$$

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Mainline VDS 1118496 - 5 NB S/O Sea World

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R20.7 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 16202
LDS	1118490
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	159.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	ISS RTMS	Mainline
2	2	ISS RTMS	Mainline
3	3	ISS RTMS	Mainline
4	4	ISS RTMS	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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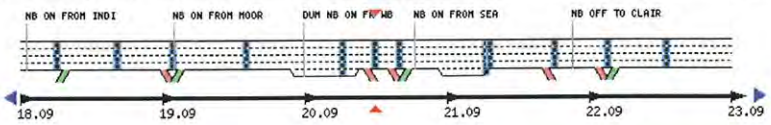
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09/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,464	97,291		97,753	97,684	97,291	97,355	97,753	67	8,
10/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,301	97,106		97,606	97,542	97,106	97,167	97,606	68	8,
11/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,304	97,277		97,735	97,653	97,277	97,338	97,735	71	8,
12/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,174	97,282		97,589	97,553	97,282	97,330	97,589	75	8,
01/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,496	97,618		97,746	97,678	97,618	97,669	97,746	76	8,
02/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,533		97,692	97,637	97,533	97,585	97,692	77	8,
03/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,134	97,553		97,694	97,657	97,553	97,603	97,694	79	8,
04/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,079	97,521		97,661	97,638	97,521	97,573	97,661	78	8,
05/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,086	97,619		97,729	97,696	97,619	97,673	97,729	78	8,
06/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,621		97,812	97,873	97,621	97,674	97,812	79	8,
07/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,115	97,517		97,782	97,821	97,517	97,569	97,782	78	8,
08/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	96,570	97,463		97,751	97,682	97,463	96,393	97,751	73	8,



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Mainline VDS 1115355 - SB 5 S/O 8

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Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10304
LDS	1115349
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	157.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

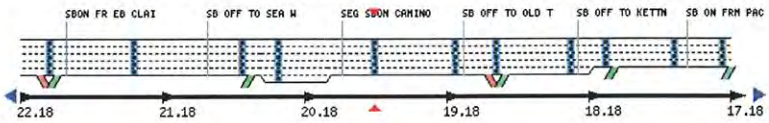
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,377	98,871		99,305	99,501	98,871	98,912	99,305	63
10/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,035	98,563		99,132	99,345	98,563	98,601	99,132	64
11/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,002	98,719		99,174	99,354	98,719	98,756	99,174	67
12/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,709	98,645		98,988	99,215	98,645	98,666	98,988	70
01/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,723	98,892		99,035	99,155	98,892	98,916	99,035	73
02/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,093	98,626		98,807	98,817	98,626	98,648	98,807	75
03/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,842	98,594		98,805	98,822	98,594	98,614	98,805	77
04/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,975	98,466		98,733	98,819	98,466	98,487	98,733	76
05/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,980	98,523		98,700	98,748	98,523	98,545	98,700	76
06/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,259	98,667		98,831	99,000	98,667	98,689	98,831	77
07/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,137	98,572		98,858	99,033	98,572	98,591	98,858	76
08/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,278	98,480		98,805	98,893	98,480	97,276	98,805	71



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

$$\frac{99{,}000}{99{,}000 + 64{,}700} = .61$$

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Mainline VDS 1115269 - NB 5 @ I-8

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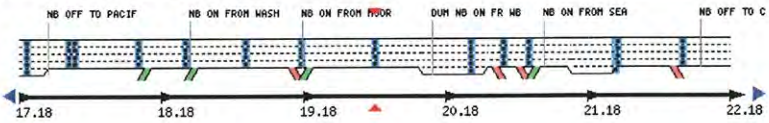
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From Sep 2010 To Sep 2011

Max Range: 10 years

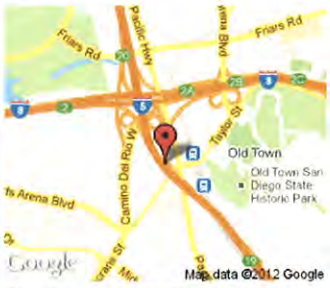
DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,282				64,658				50
10/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,182				64,373				46
11/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,245				64,467				42
12/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,053				64,370				43
01/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,160				64,347				45
02/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,760				64,156				48
03/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,710				64,228				50
04/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,727				64,238				49
05/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,742				64,273				48
06/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,135				64,575				50
07/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,355				64,892				51
08/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,704				65,656				54



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10303
LDS	1115262
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	111.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1108615 - OLD TOWN AVE

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R18.931 (Abs PM 18.8)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10411
LDS	1108200
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	145.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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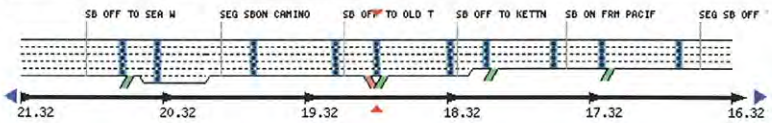
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From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,546	87,579		88,554	88,360	87,579	86,924	88,554	60
10/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,512				88,153	87,233		88,401	57
11/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,518				88,236	87,295		88,315	54
12/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,164				88,067	87,241		88,120	58
01/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,556				88,195	87,507		88,247	57
02/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,881				88,010	87,329		88,093	59
03/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,902				88,074	87,161		87,935	57
04/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,820				88,010				50
05/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,494				87,789				43
06/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,638				87,966				42
07/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	86,430				86,950				36
08/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	84,971				86,227				32



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{88{,}500}{88{,}500 + 91{,}500} = .49$$

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Mainline VDS 1114050 - OLD TOWN AVE

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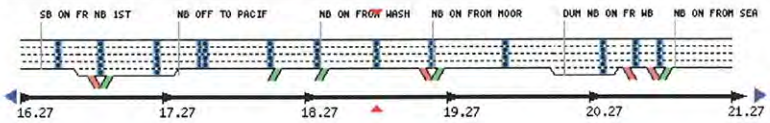
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To Sep 2011

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,821	90,949			91,722	90,949	90,139	91,630	63
10/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,665	90,808			91,614	90,808	89,973	91,529	64
11/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,719	91,038			91,725	91,038	90,243	91,653	67
12/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,472	91,079			91,657	91,079	90,480	91,544	71
01/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,792	91,334			91,789	91,334	90,777	91,687	70
02/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,388	91,213			91,664	91,213	90,607	91,594	71
03/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,447	91,104			91,758	91,104	90,512	91,485	69
04/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,396				91,703	91,018			62
05/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,107				91,505				55
06/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,203				91,623				54
07/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	90,387				90,837				48
08/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	89,232				90,428				44



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R18.874 (Abs PM 18.8)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10412
LDS	1114045
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	138.8 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1117724 - SB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.681 (Abs PM 17.6)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10406
LDS	1117700
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	181.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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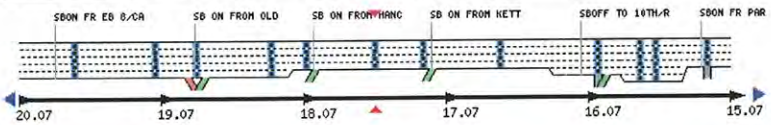
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*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	D. Us
09/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	147,017	146,263		146,781	146,818	146,263	146,432	146,781	
10/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	146,711	145,795		146,583	146,622	145,795	145,259	146,583	
11/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	144,957	144,852		144,969	144,760	144,852	143,905	144,969	
12/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	136,029	137,637		137,478	136,968	137,637	136,817	137,478	
01/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	127,132	130,565		130,273	129,050	130,565	129,832	130,273	
02/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	119,356	122,914		122,738	121,367	122,914	122,160	122,738	
03/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	111,112	115,457		115,296	113,899	115,457	114,729	115,296	
04/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	101,795	107,589		107,418	105,619	107,589	106,848	107,418	
05/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	94,870	99,619		99,395	98,300	99,619	98,839	99,395	
06/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	86,902	91,837		91,628	90,213	91,837	91,049	91,628	
07/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	80,939	83,787		83,655	82,609	83,787	82,961	83,655	
08/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	71,906	75,617		75,543	73,989	75,617	75,108	75,543	



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{115000}{115{,}000 + 75{,}000} = .62$$

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Mainline VDS 1117717 - NB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.68 (Abs PM 17.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10405
LDS	1117710
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	126.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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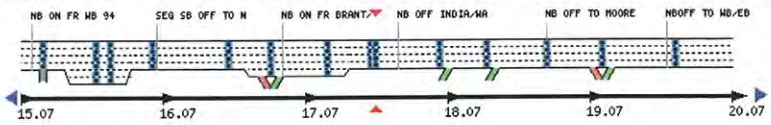
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*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,877	75,545		75,830	75,835	75,545	75,539	75,830	68
10/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,720	75,304		75,693	75,713	75,304	75,298	75,693	69
11/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,721	75,474		75,789	75,792	75,474	75,468	75,789	72
12/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,471	75,450		75,664	75,710	75,450	75,434	75,664	76
01/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,717	75,729		75,810	75,840	75,729	75,715	75,810	76
02/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,408	75,604		75,713	75,744	75,604	75,592	75,713	77
03/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,291	75,597		75,693	75,731	75,597	75,584	75,693	79
04/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,190	75,513		75,618	75,678	75,513	75,499	75,618	78
05/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,100	75,523		75,566	75,603	75,523	75,512	75,566	78
06/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,334	75,667		75,686	75,795	75,667	75,657	75,686	80
07/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,248	75,574		75,707	75,808	75,574	75,562	75,707	79
08/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	74,658	75,568		75,701	75,736	75,568	74,731	75,701	74



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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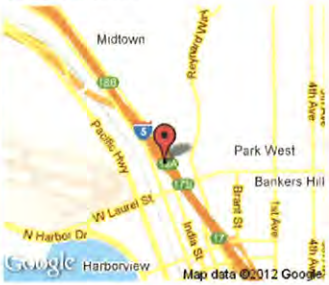
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Mainline VDS 1108605 - KETTNER BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.339 (Abs PM 17.2)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10403
LDS	1108195
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	156.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Change Log | Performance | Data Quality | Events

Performance > Planning Analysis > AADT

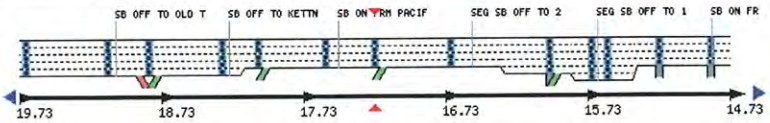
ABOUT THIS REPORT

From Sep 2010 *Max Range:10 years*

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	Da Us
09/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,935	88,657		88,989	88,883	88,657	88,698	88,989	
10/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,770	88,297		88,601	88,560	88,297	88,337	88,601	
11/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,698	88,451		88,643	88,572	88,451	88,491	88,643	
12/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,907	88,734		88,795	88,811	88,734	88,781	88,795	
01/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,772				89,521	89,594	88,303	89,515	
02/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,291				90,119				
03/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,581				90,490				
04/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,757				90,590				
05/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,722				90,572				
06/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,972				90,943				
07/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,255				90,332				
08/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,112				90,024				



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

90,000

90,000 + 86,000
(SB) (NB)

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Mainline VDS 1117835 - NB S/O Pacific

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.34 (Abs PM 17.2)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10404
LDS	1117827
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	160.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

Quick Links

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Change Log | Performance | Data Quality | Events

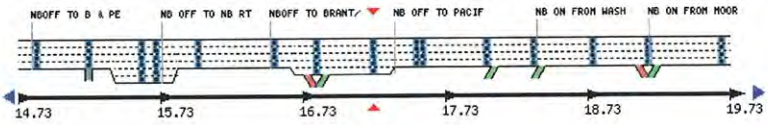
Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 To Sep 2011
Max Range: 10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,750	94,616		94,964	94,829	94,616	94,624	94,964	67
10/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,691				94,636	94,308	92,994	94,810	64
11/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,479				94,520	93,820		94,105	61
12/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	92,229				92,636	92,158		92,315	65
01/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	90,594				90,959	90,917		90,874	66
02/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	88,426				89,009	89,103		89,084	67
03/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	86,468				87,218	87,380		87,341	69
04/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	84,180				85,145	85,461		85,439	68
05/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	82,279				83,228	83,703		83,640	68
06/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	80,653				81,496	82,041		81,976	69
07/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	78,905				79,563	80,181		80,200	68
08/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	76,079				77,390	78,272		78,313	64

Average = 86,000



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Appendix G
VMT Analysis Worksheet – Preferred Plan

2035d - Alt 2 land uses / updated network

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	E-E
CARLSBAD TOTAL	4,343,892	2,995	-	2,995	4,340,897
CHULA VISTA TOTAL	5,601,896	7,476	-	7,476	5,594,420
CORONADO TOTAL	467,271	1,339	-	1,339	465,932
DEL MAR TOTAL	101,571	58	-	58	101,513
EL CAJON TOTAL	2,444,080	3,795	-	3,795	2,440,285
ENCINITAS TOTAL	2,559,079	3,678	-	3,678	2,555,401
ESCONDIDO TOTAL	3,479,557	1,924	-	1,924	3,477,633
External TOTAL	526,693	421	-	421	526,272
IMPERIAL BEACH TOTAL	131,442	25	-	25	131,417
LA MESA TOTAL	2,094,058	6,056	-	6,056	2,088,002
LEMON GROVE TOTAL	960,558	1,713	-	1,713	958,845
NATIONAL CITY TOTAL	1,960,909	6,306	-	6,306	1,954,603
OCEANSIDE TOTAL	4,087,645	992	-	992	4,086,653
POWAY TOTAL	1,307,207	604	-	604	1,306,603
SAN DIEGO TOTAL	47,196,613	275,127	18,123	257,004	46,921,486
SAN MARCOS TOTAL	2,645,332	266	-	266	2,645,066
SANTEE TOTAL	1,347,400	800	-	800	1,346,600
SOLANA BEACH TOTAL	716,127	1,349	-	1,349	714,778
Unincorporated TOTAL	24,624,252	12,683	-	12,683	24,611,569
VISTA TOTAL	2,206,825	103	-	103	2,206,722
REGIONWIDE TOTAL	108,802,407	172,916 500,626	18,123	309,587	108,474,697

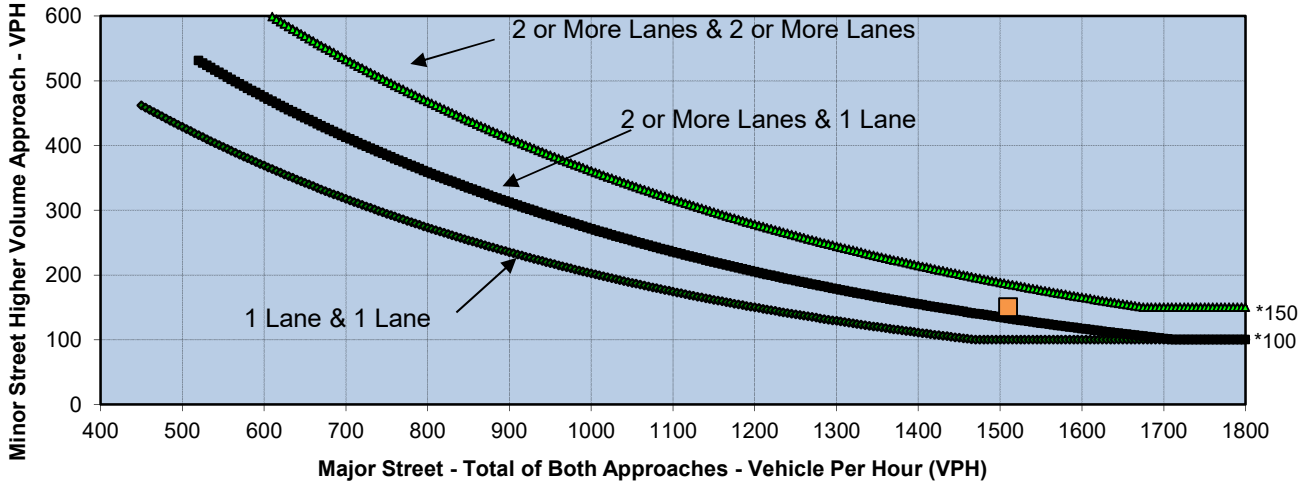
2035d - Alt 2 land uses / updated network

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	E-E
CARLSBAD TOTAL	4,343,892	12,892	-	12,892	4,331,000
CHULA VISTA TOTAL	5,601,896	28,828	-	28,828	5,573,068
CORONADO TOTAL	467,271	5,552	-	5,552	461,719
DEL MAR TOTAL	101,571	210	-	210	101,361
EL CAJON TOTAL	2,444,080	13,894	-	13,894	2,430,186
ENCINITAS TOTAL	2,559,079	15,069	-	15,069	2,544,010
ESCONDIDO TOTAL	3,479,557	7,754	-	7,754	3,471,803
External TOTAL	526,693	2,119	-	2,119	524,574
IMPERIAL BEACH TOTAL	131,442	251	-	251	131,191
LA MESA TOTAL	2,094,058	22,370	-	22,370	2,071,688
LEMON GROVE TOTAL	960,558	6,139	-	6,139	954,419
NATIONAL CITY TOTAL	1,960,909	24,063	-	24,063	1,936,846
OCEANSIDE TOTAL	4,087,645	4,682	-	4,682	4,082,963
POWAY TOTAL	1,307,207	2,287	-	2,287	1,304,920
MIDWAY TOTAL	47,196,613	1,137,579	180,500	957,079	46,059,034
SAN MARCOS TOTAL	2,645,332	1,123	-	1,123	2,644,209
SANTEE TOTAL	1,347,400	3,145	-	3,145	1,344,255
SOLANA BEACH TOTAL	716,127	5,425	-	5,425	710,702
Unincorporated TOTAL	24,624,252	54,741	-	54,741	24,569,511
VISTA TOTAL	2,206,825	633	-	633	2,206,192
REGIONWIDE TOTAL	108,802,407	764,628.01 2,113,384 764,628	180,500	1,168,256	107,453,651

Appendix H
Signal Warrant Worksheets

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	140	0	120
Through	600	680	0	0
Right	90	0	0	30
Total	690	820	0	150

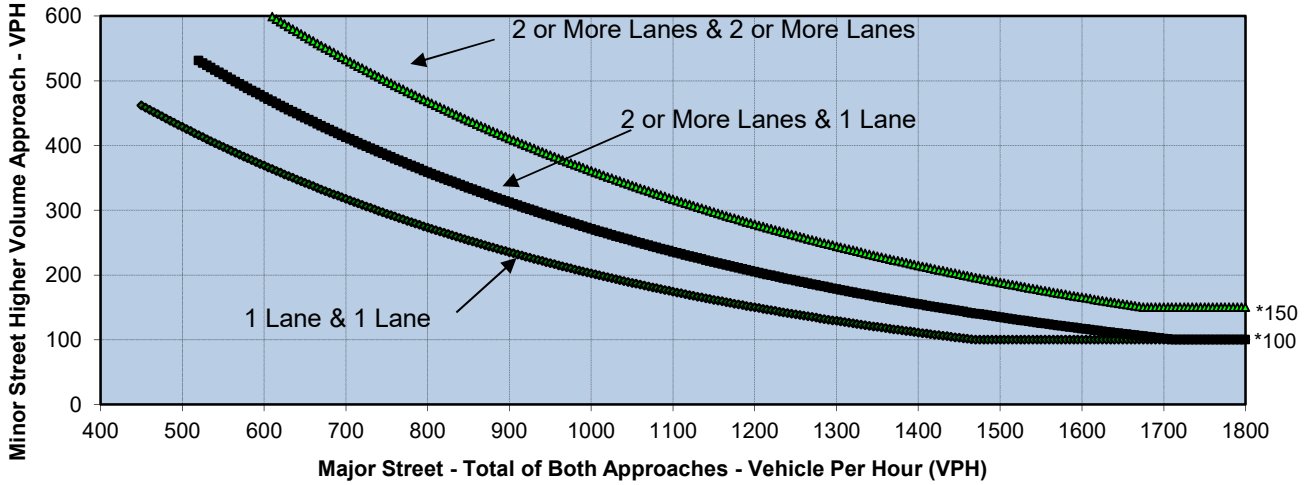
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,510**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	400	0	120
Through	780	840	0	0
Right	120	0	0	300
Total	900	1,240	0	420

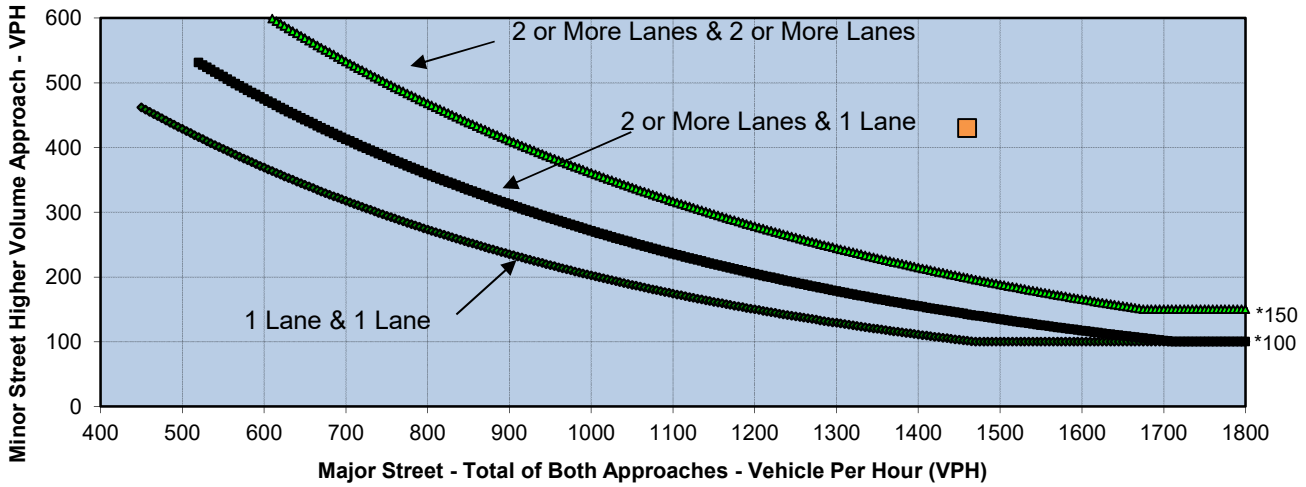
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,140	420	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	200	80	80	160
Through	410	540	50	140
Right	100	130	110	130
Total	710	750	240	430

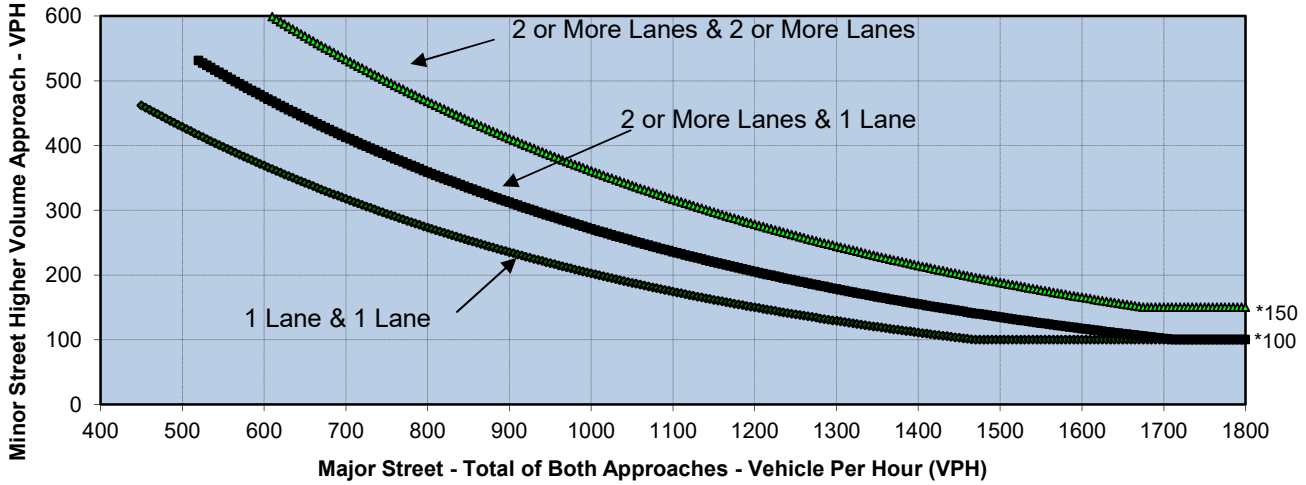
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,460**	**430**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	230	150	90	130
Through	1,120	890	130	40
Right	120	90	150	180
Total	1,470	1,130	370	350

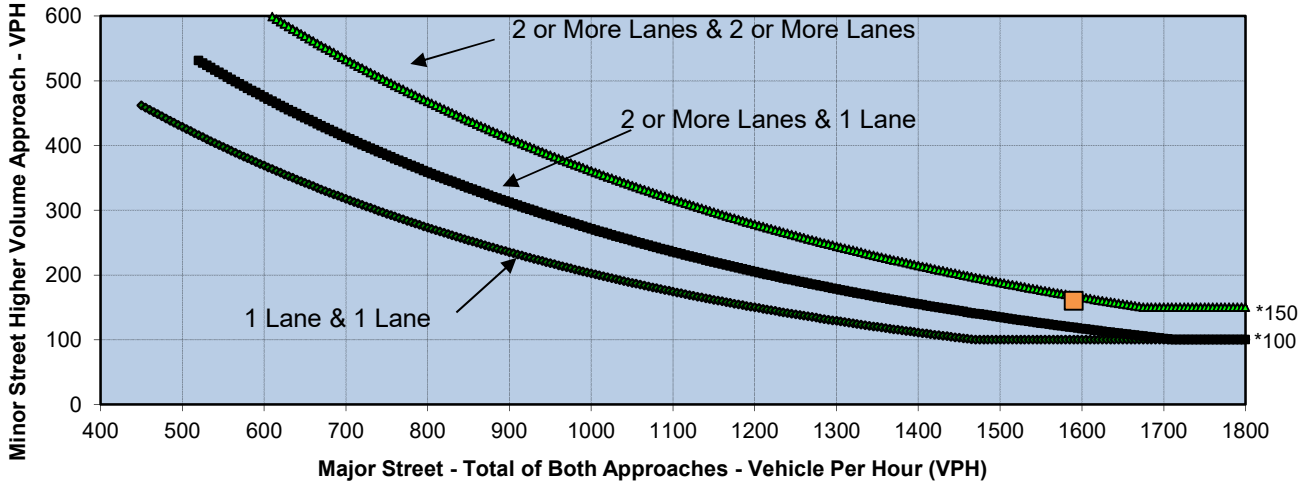
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,600	370	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	30	130	40	90
Through	620	640	20	20
Right	90	80	20	50
Total	740	850	80	160

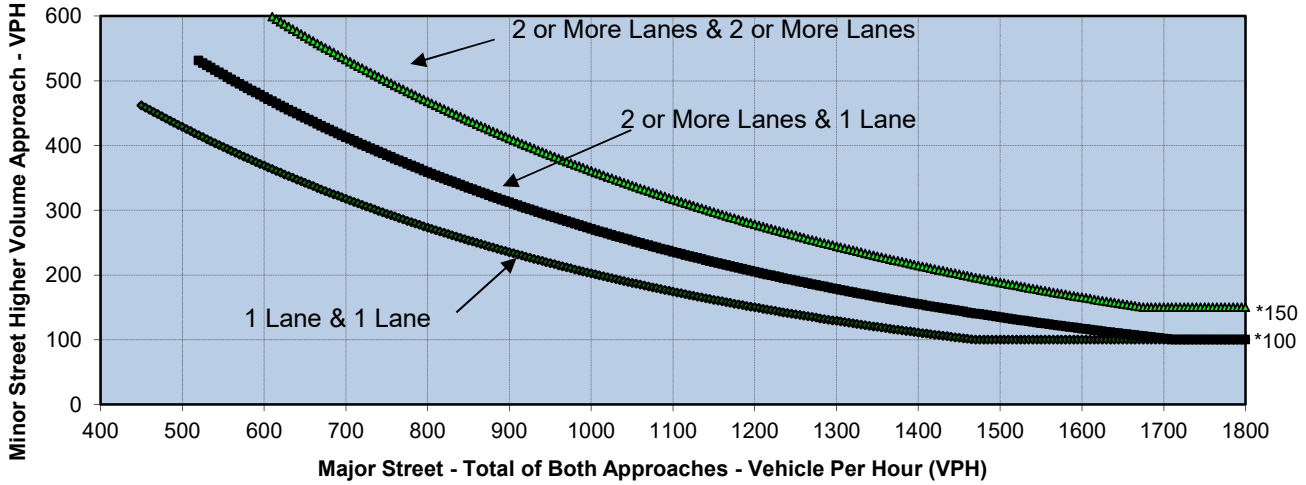
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,590**	**160**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	50	120	60	150
Through	1,250	1,080	30	30
Right	70	80	70	140
Total	1,370	1,280	160	320

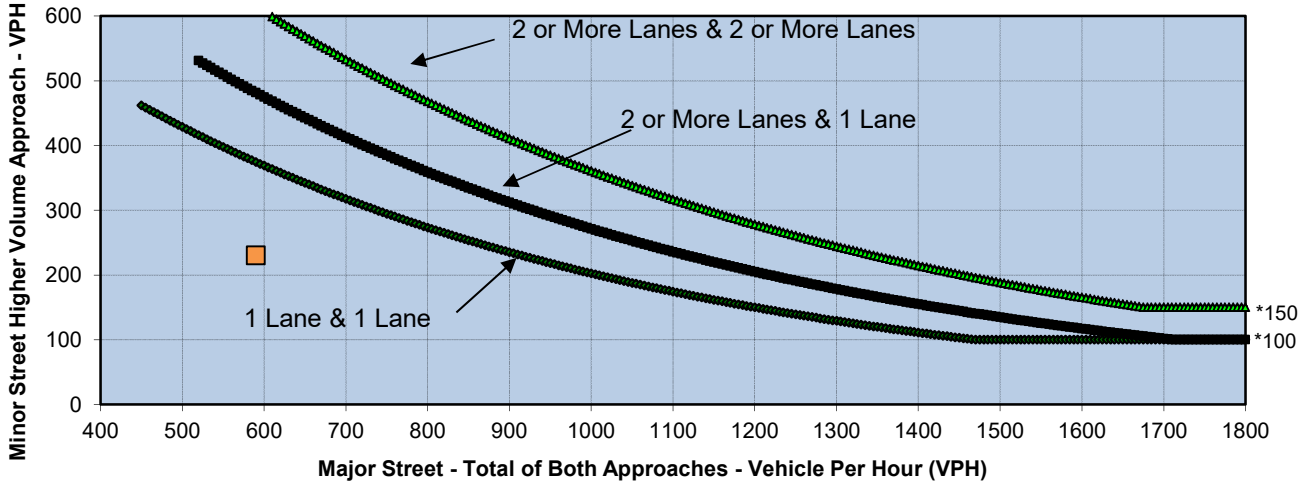
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,650	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	30	50	90
Through	50	80	130	140
Right	110	90	100	80
Total	230	200	280	310

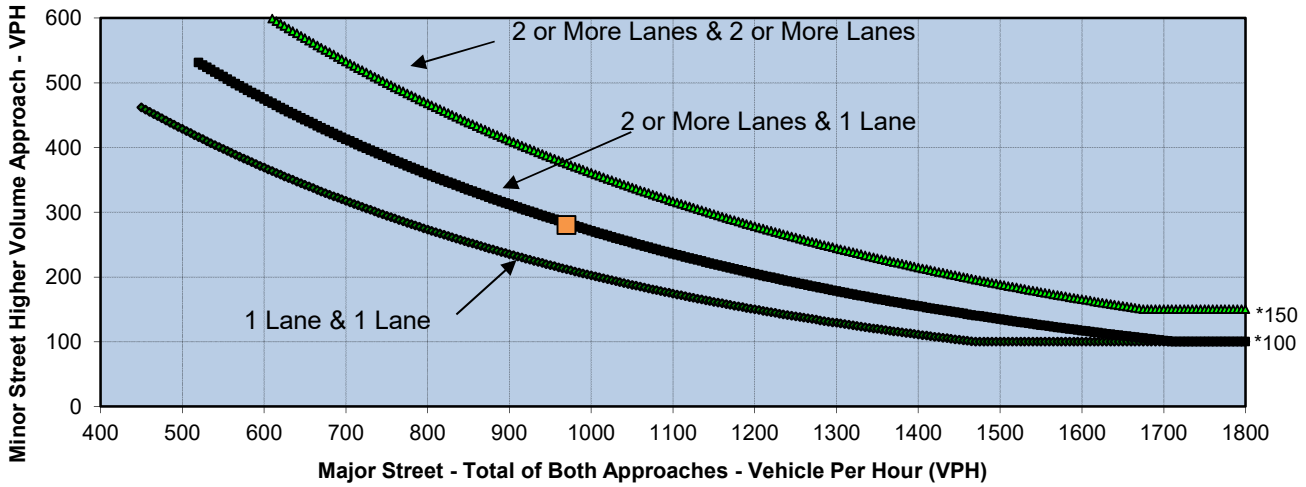
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**590**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	90	100	130
Through	90	90	120	250
Right	120	100	300	70
Total	280	280	520	450

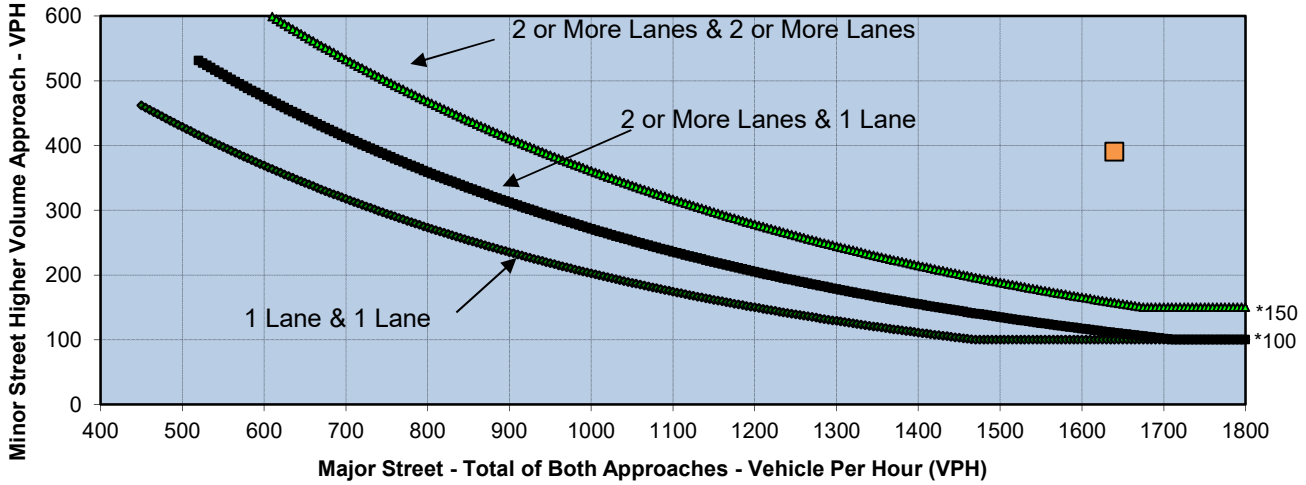
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	970	280	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway	Project	Midway & Old Town CPU
Minor Street	Sports Arena Blvd	Scenario	1A
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	300	0	200	0
Through	610	600	0	0
Right	0	130	190	0
Total	910	730	390	0

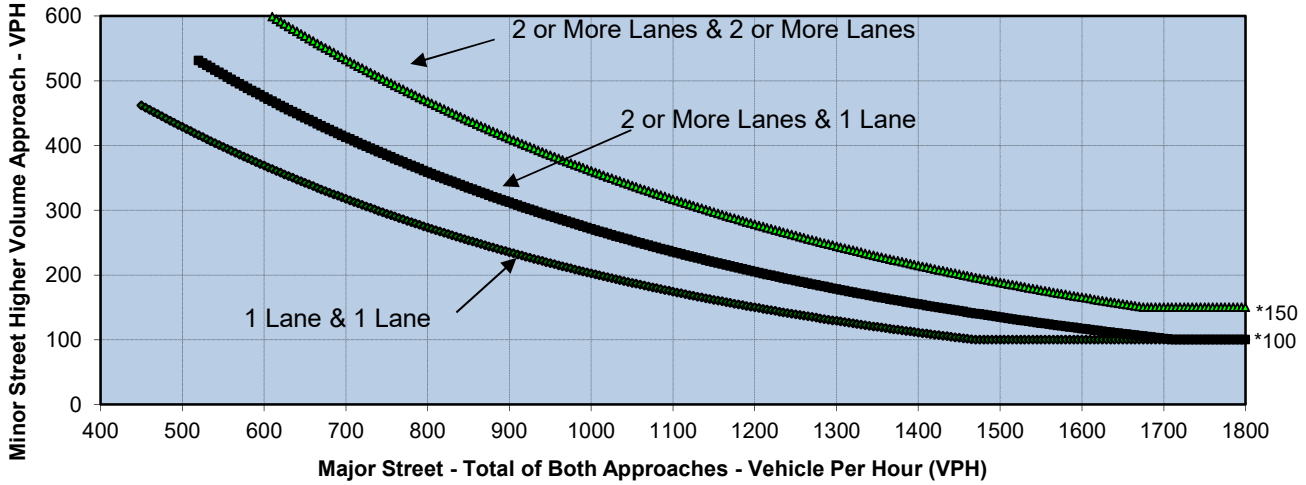
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,640**	**390**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	290	0	50	0
Through	1,320	830	0	0
Right	0	50	480	0
Total	1,610	880	530	0

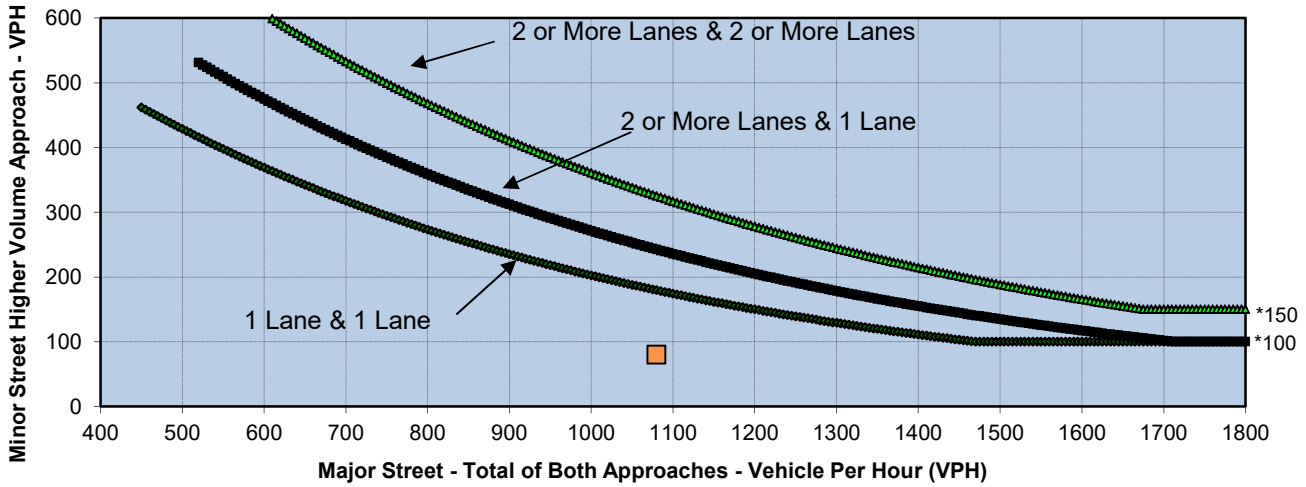
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,490	530	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18

Major Street	Kurtz Street
Minor Street	Hancock Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	30	460
Through	0	70	0	390
Right	0	10	100	100
Total	0	80	130	950

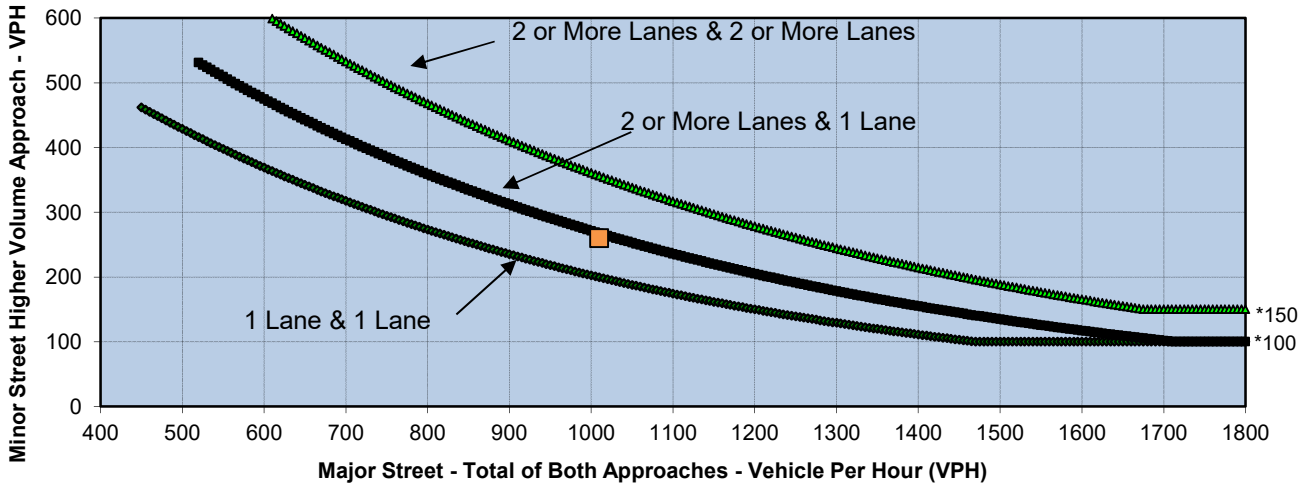
Major Street Direction

	North/South
X	East/West

	Major Street Kurtz Street	Minor Street Hancock Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,080**	**80**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	1A
Minor Street	Hancock Street	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	100	310
Through	0	170	0	310
Right	0	90	140	150
Total	0	260	240	770

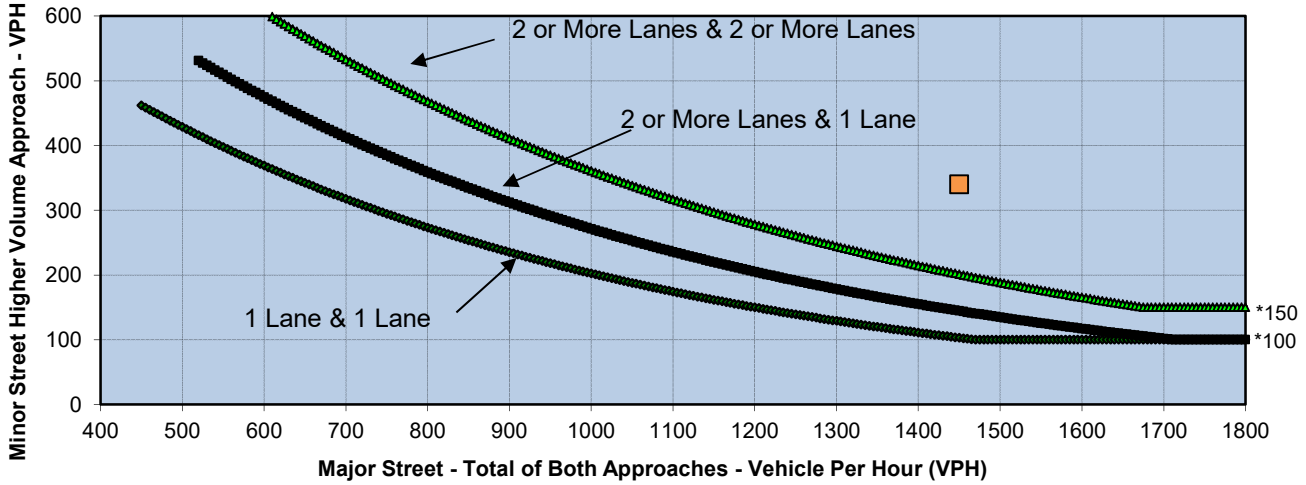
Major Street Direction

	North/South
X	East/West

	Major Street Kurtz Street	Minor Street Hancock Street	Warrant Met
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	1,010	260	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	350	0	100	0
Through	460	490	0	0
Right	0	150	240	0
Total	810	640	340	0

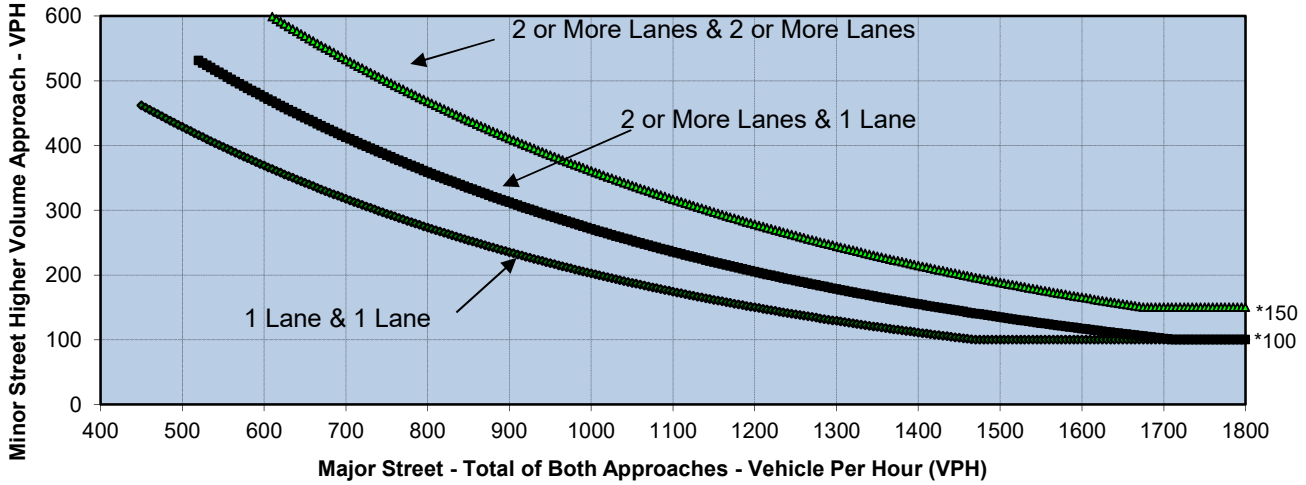
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,450**	**340**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	490	0	230	0
Through	880	430	0	0
Right	0	100	450	0
Total	1,370	530	680	0

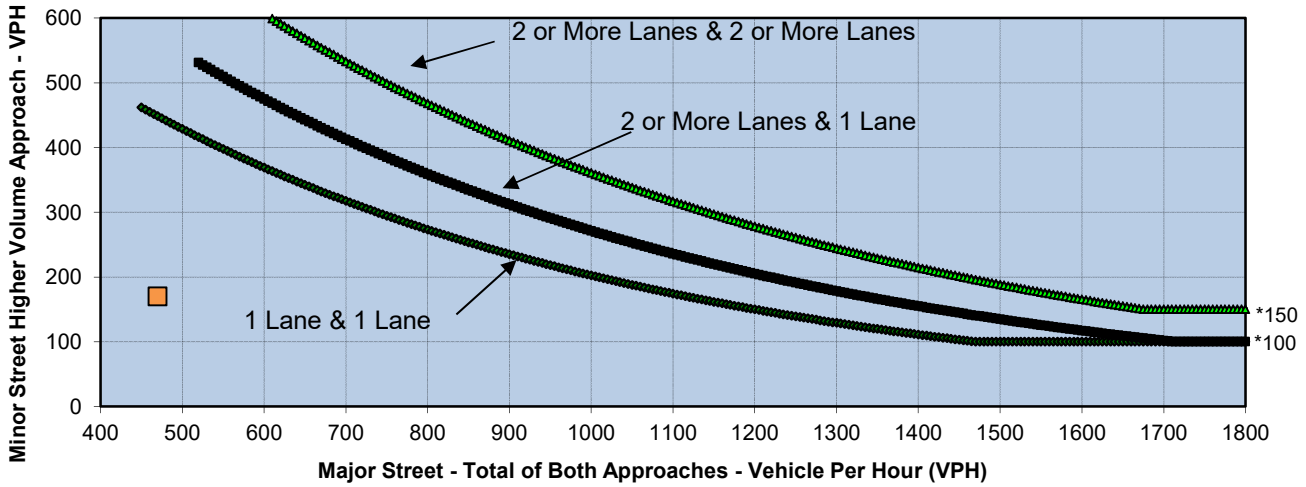
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	1,900	680	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street	Project	Midway & Old Town CPU
Minor Street	Greenwood Street	Scenario	1A
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	0	60
Through	0	420	20	90
Right	0	10	150	0
Total	0	470	170	150

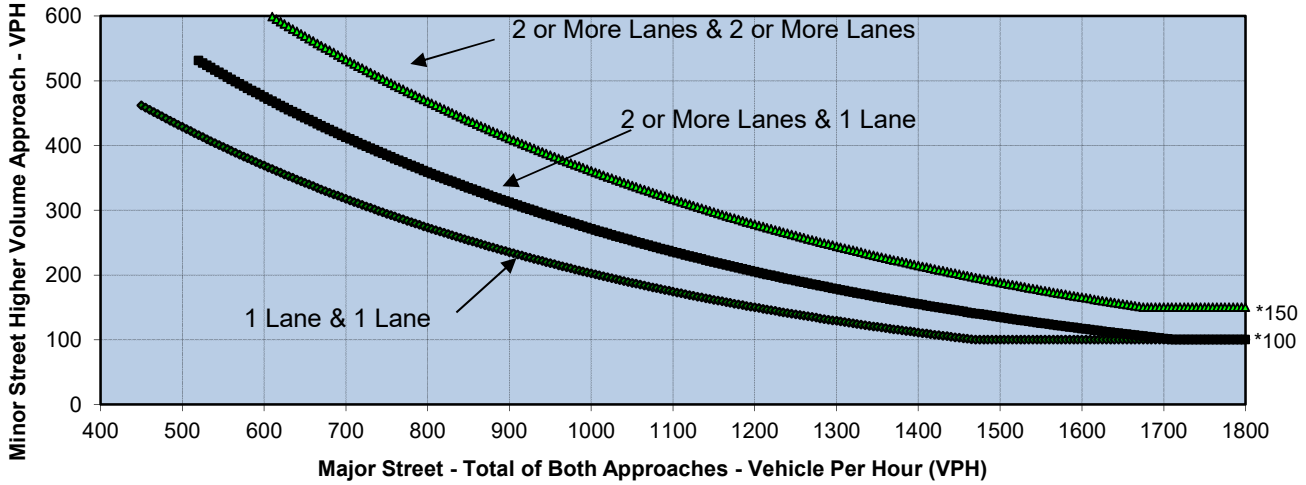
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**470**	**170**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	50	0	370
Through	0	820	30	340
Right	0	70	310	0
Total	0	940	340	710

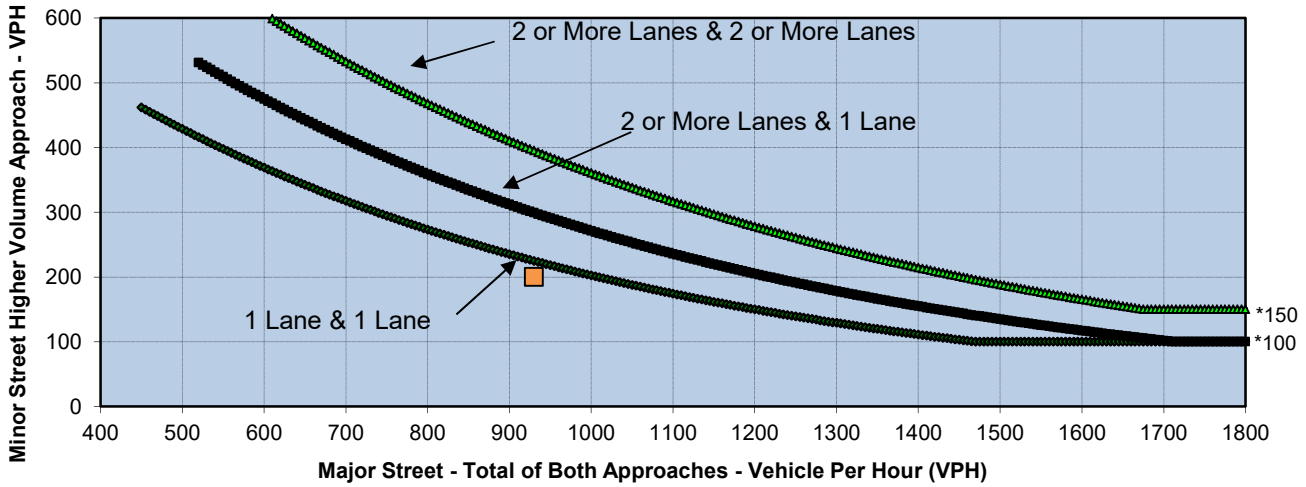
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	940	710	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	170	0	50	0
Through	330	370	0	0
Right	0	60	150	0
Total	500	430	200	0

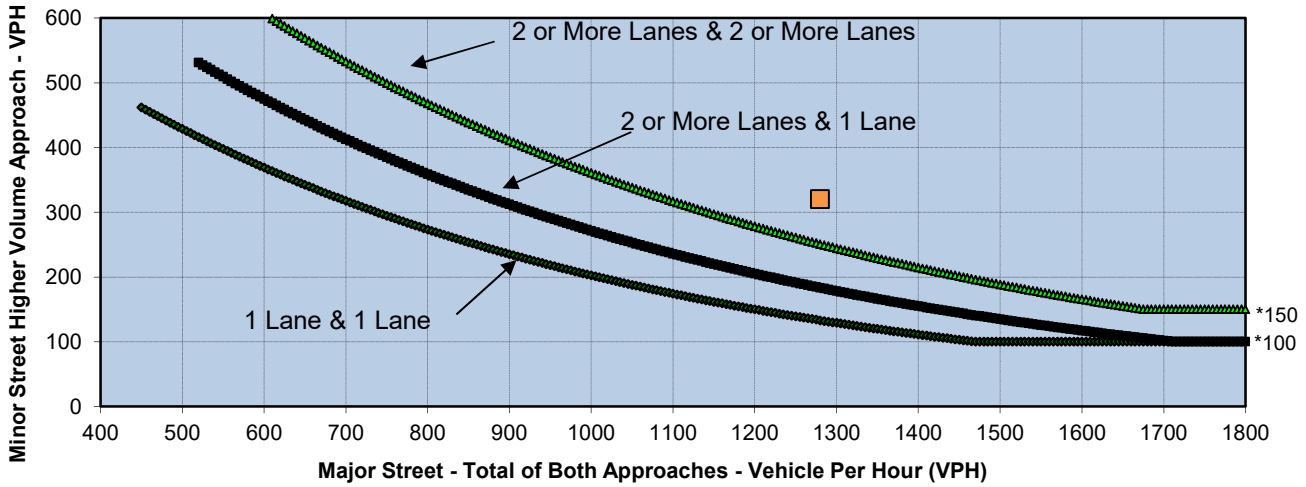
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**930**	**200**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	180	0	120	0
Through	370	480	0	0
Right	0	250	200	0
Total	550	730	320	0

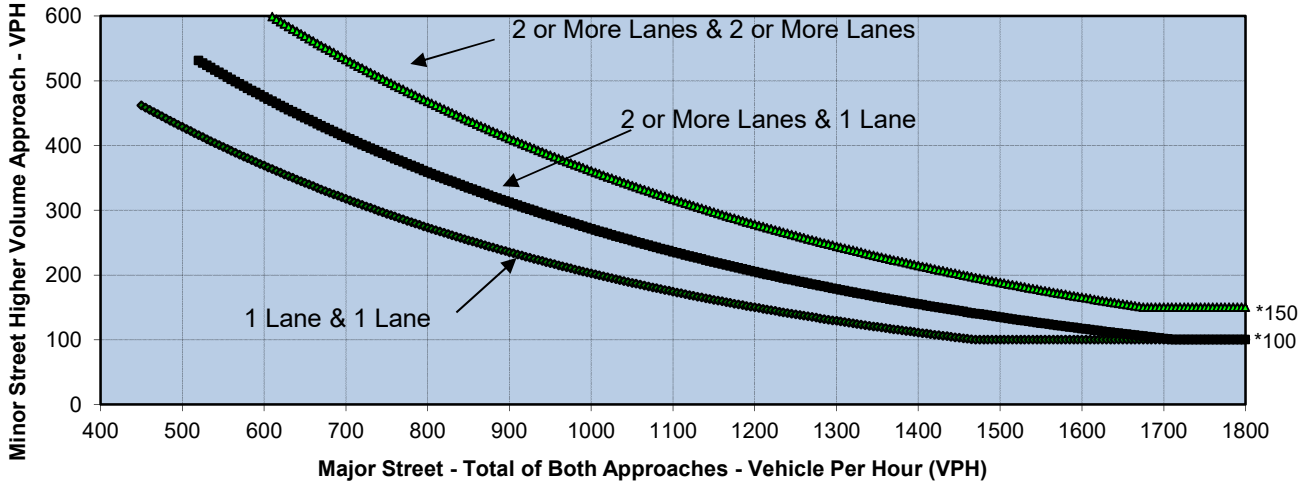
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,280	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	1A
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	50	0
Through	0	150	670	1,410
Right	0	250	0	40
Total	0	400	720	1,450

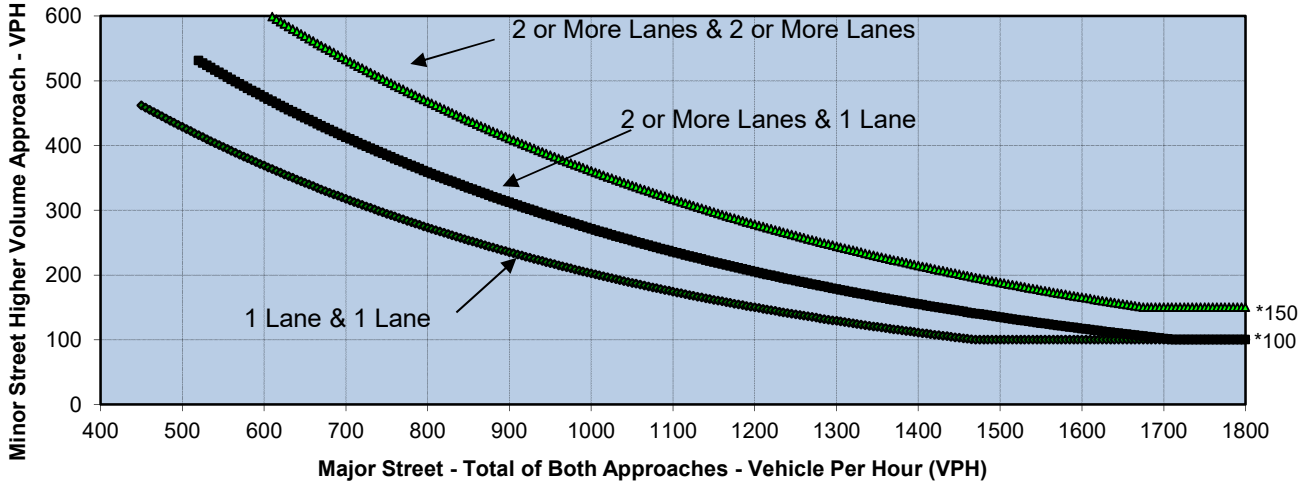
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**2,170**	**400**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	1A
Minor Street	Dutch Flats Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	60	0
Through	0	160	1,090	1,200
Right	0	240	0	70
Total	0	400	1,150	1,270

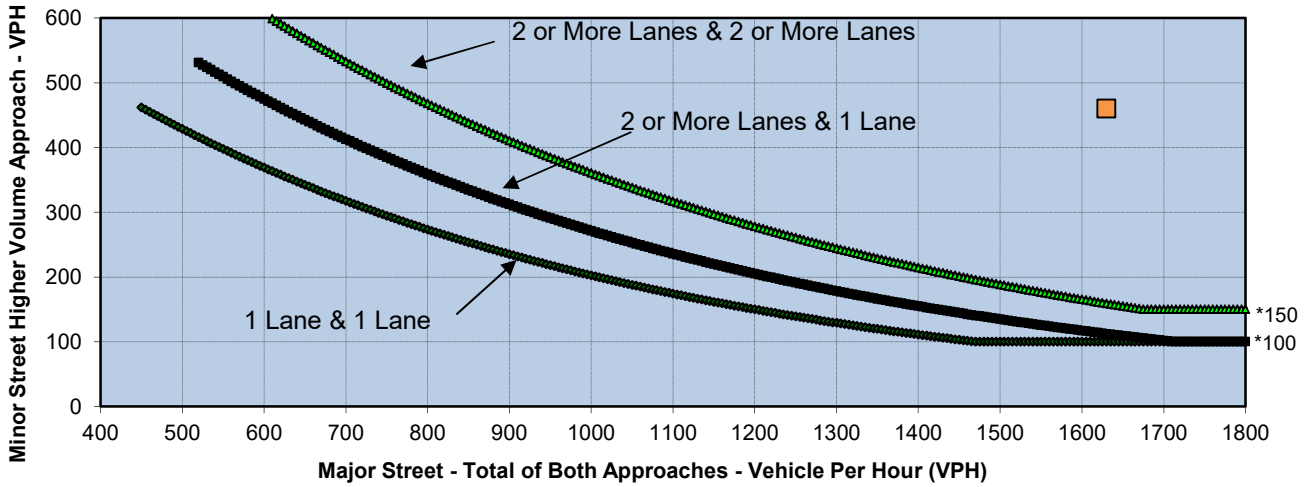
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,420	400	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	200	260	60	40
Through	400	450	10	180
Right	130	190	90	240
Total	730	900	160	460

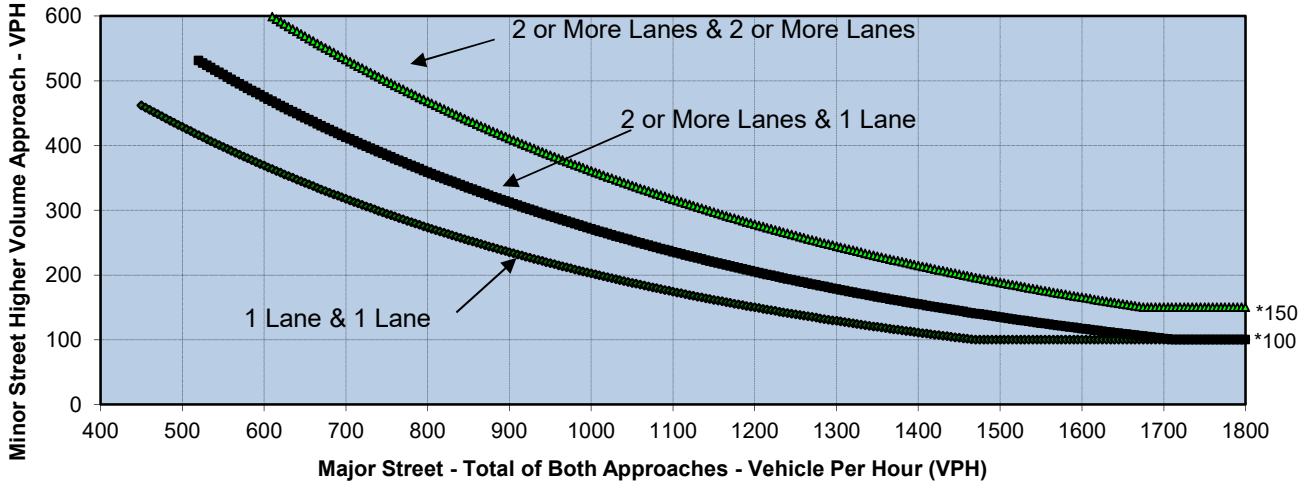
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,630**	**460**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	160	210	110	60
Through	510	520	20	110
Right	370	140	80	280
Total	1,040	870	210	450

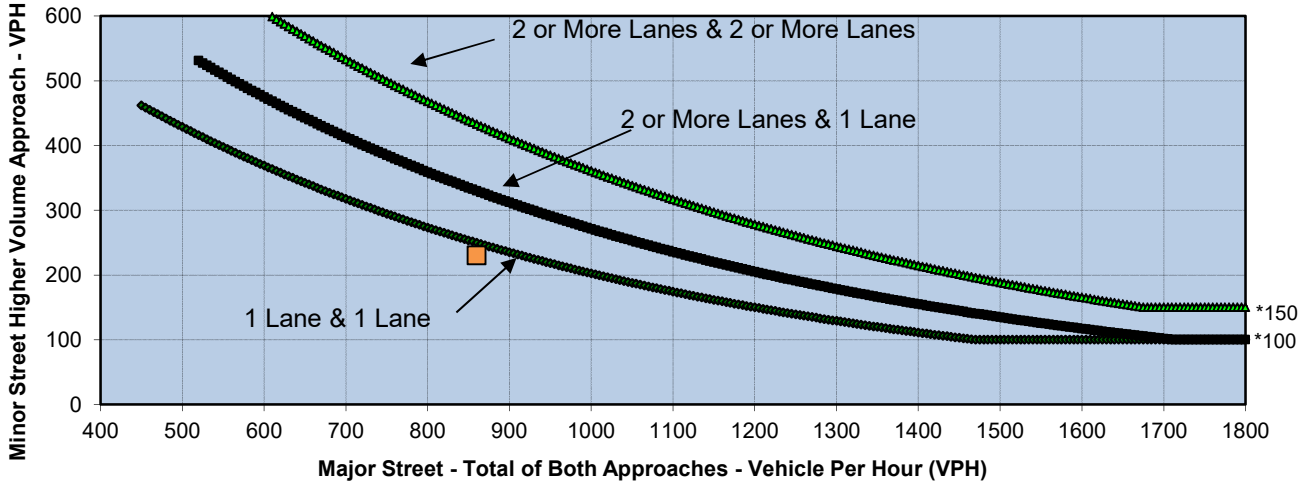
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,910**	**450**	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	1A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	370	0	30	0
Through	210	190	0	0
Right	0	90	200	0
Total	580	280	230	0

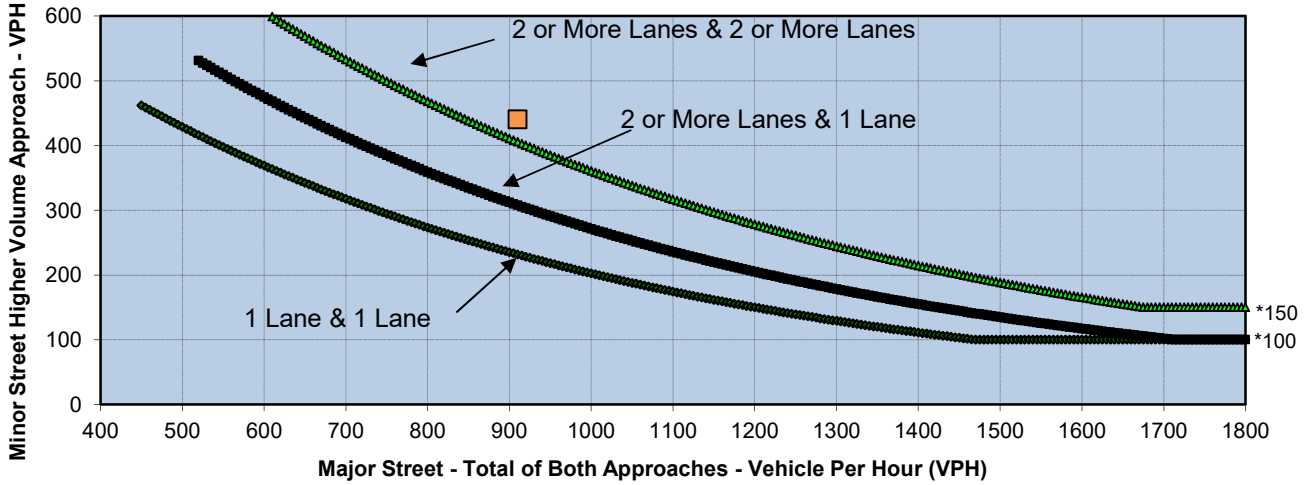
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**860**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66		Project	Midway & Old Town CPU
Major Street	Sports Arena Boulevard	Scenario	1A
Minor Street	Dutch Flats Parkway	Peak Hour	PM

Turn Movement Volumes

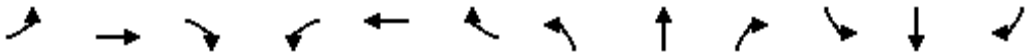
	NB	SB	EB	WB
Left	200	0	180	0
Through	140	270	0	0
Right	0	300	260	0
Total	340	570	440	0

Major Street Direction

X	North/South
	East/West

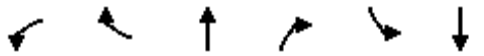
	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	910	440	

Appendix I
Peak Hour Intersection Worksheets – Preferred Plan Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	286	0	0	85	0	0	99	0	12	0
Lane Group Flow (vph)	54	1239	149	174	1446	111	522	435	64	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.0	37.7	37.7	10.8	44.4	44.4	31.4	33.2	33.2	35.8	35.8	
Effective Green, g (s)	4.4	39.0	39.0	11.2	45.8	45.8	31.8	34.0	34.0	34.8	37.0	
Actuated g/C Ratio	0.03	0.29	0.29	0.08	0.34	0.34	0.24	0.25	0.25	0.26	0.27	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	57	1469	451	284	1200	507	808	469	392	456	485	
v/s Ratio Prot	0.03	0.24		c0.05	c0.41		0.15	c0.23		c0.36	0.24	
v/s Ratio Perm			0.10			0.07			0.04			
v/c Ratio	0.95	0.84	0.33	0.61	1.21	0.22	0.65	0.93	0.16	1.38	0.87	
Uniform Delay, d1	65.2	45.1	37.7	59.8	44.6	31.8	46.5	49.3	39.4	50.1	46.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	98.4	6.1	2.0	2.7	100.4	1.0	1.3	24.8	0.3	185.0	14.8	
Delay (s)	163.6	51.2	39.7	62.5	145.0	32.8	47.9	74.1	39.7	235.1	61.5	
Level of Service	F	D	D	E	F	C	D	E	D	F	E	
Approach Delay (s)		51.8			125.0			56.9			164.3	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	96.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	530	1180	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	576	1283	402	0	0	717
RTOR Reduction (vph)	0	303	0	0	0	0
Lane Group Flow (vph)	576	980	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	19.4	19.4	13.1			13.1
Effective Green, g (s)	19.4	19.4	13.1			13.1
Actuated g/C Ratio	0.42	0.42	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1432	1162	997			997
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.35				
v/c Ratio	0.40	0.84	0.40			0.72
Uniform Delay, d1	9.5	12.2	13.5			15.0
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	5.5	0.1			2.1
Delay (s)	9.6	17.7	13.6			17.1
Level of Service	A	B	B			B
Approach Delay (s)	15.2		13.6			17.1
Approach LOS	B		B			B

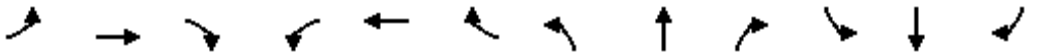
Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	46.5	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	110	990	240	0	1160
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	120	1076	261	0	1261
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked						
vC, conflicting volume	1627	492			1337	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1627	492			1337	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	77			100	
cM capacity (veh/h)	93	521			512	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	120	430	430	476	420	420	420
Volume Left	0	0	0	0	0	0	0
Volume Right	120	0	0	261	0	0	0
cSH	521	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.23	0.25	0.25	0.28	0.25	0.25	0.25
Queue Length 95th (ft)	22	0	0	0	0	0	0
Control Delay (s)	14.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	14.0	0.0			0.0		
Approach LOS	B						

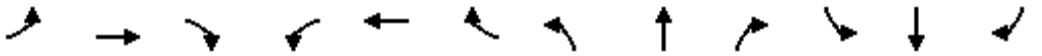
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	460	310	290	30	140	290	210	480	70	380	530	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1565	1770	3539	1573	1770	3464		1770	3539	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1565	1770	3539	1573	1770	3464		1770	3539	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	500	337	315	33	152	315	228	522	76	413	576	272
RTOR Reduction (vph)	0	0	52	0	0	47	0	9	0	0	0	126
Lane Group Flow (vph)	500	337	263	33	152	268	228	589	0	413	576	146
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	33.3	49.2	68.8	3.4	19.2	45.4	19.6	25.7		26.2	32.3	65.6
Effective Green, g (s)	34.2	50.1	70.6	4.4	20.2	45.4	20.5	26.6		27.1	33.2	65.6
Actuated g/C Ratio	0.28	0.41	0.58	0.04	0.17	0.37	0.17	0.22		0.22	0.27	0.54
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	494	763	903	63	584	583	296	753		392	960	841
v/s Ratio Prot	c0.28	c0.18	0.05	0.02	0.04	0.10	0.13	c0.17		c0.23	0.16	0.05
v/s Ratio Perm			0.12			0.07						0.05
v/c Ratio	1.01	0.44	0.29	0.52	0.26	0.46	0.77	0.78		1.05	0.60	0.17
Uniform Delay, d1	44.0	26.0	13.1	57.9	44.5	29.2	48.6	45.1		47.6	38.8	14.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	43.6	0.1	0.2	7.6	1.0	0.6	11.7	5.4		60.2	1.7	0.1
Delay (s)	87.6	26.2	13.3	65.6	45.5	29.7	60.3	50.5		107.8	40.5	14.6
Level of Service	F	C	B	E	D	C	E	D		F	D	B
Approach Delay (s)		49.3			36.9			53.2			57.0	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	51.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	122.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		

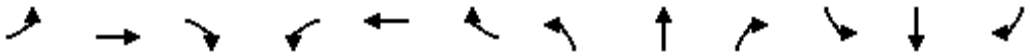
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	110	110	90	100	170	80	330	50	80	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1556	1770	1863	1551	3433	3461		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1556	1770	1863	1551	3433	3461		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	120	120	98	109	185	87	359	54	87	446	98
RTOR Reduction (vph)	0	0	96	0	0	159	0	7	0	0	0	47
Lane Group Flow (vph)	120	120	25	98	109	26	87	406	0	87	446	51
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	17.0	17.0	23.7	16.0	16.0	16.0	6.7	57.2		10.7	61.2	61.2
Effective Green, g (s)	17.9	17.9	24.5	16.9	16.9	16.9	7.1	58.1		11.1	62.1	62.1
Actuated g/C Ratio	0.15	0.15	0.20	0.14	0.14	0.14	0.06	0.48		0.09	0.52	0.52
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	250	264	317	249	262	218	203	1675		163	1831	819
v/s Ratio Prot	c0.07	0.07	0.00	0.06	c0.06		0.03	0.12		c0.05	c0.13	
v/s Ratio Perm			0.01			0.02						0.03
v/c Ratio	0.48	0.45	0.08	0.39	0.42	0.12	0.43	0.24		0.53	0.24	0.06
Uniform Delay, d1	46.8	46.6	38.6	46.9	47.0	45.0	54.5	18.1		52.0	16.0	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.5	1.2	0.0	1.0	1.1	0.2	0.5	0.3		1.7	0.3	0.1
Delay (s)	48.2	47.8	38.6	47.9	48.1	45.3	55.0	18.4		53.7	16.3	14.6
Level of Service	D	D	D	D	D	D	E	B		D	B	B
Approach Delay (s)		44.9			46.7			24.8			21.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

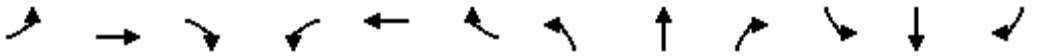
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	20	20	30	20	30	60	660	100	40	560	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.98		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1746			1724		1770	3469		1770	3498	
Flt Permitted		0.86			0.84		0.37	1.00		0.32	1.00	
Satd. Flow (perm)		1542			1482		687	3469		600	3498	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	22	22	33	22	33	65	717	109	43	609	43
RTOR Reduction (vph)	0	19	0	0	28	0	0	15	0	0	7	0
Lane Group Flow (vph)	0	58	0	0	60	0	65	811	0	43	645	0
Confl. Peds. (#/hr)			1			10						3
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.0			5.0		24.9	22.4		22.7	21.3	
Effective Green, g (s)		5.9			5.9		25.7	23.3		23.5	22.2	
Actuated g/C Ratio		0.14			0.14		0.60	0.54		0.55	0.52	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		211			203		483	1879		376	1805	
v/s Ratio Prot							c0.01	c0.23		0.00	0.18	
v/s Ratio Perm		0.04			c0.04		0.07			0.06		
v/c Ratio		0.27			0.29		0.13	0.43		0.11	0.36	
Uniform Delay, d1		16.6			16.7		3.7	5.9		4.5	6.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			0.3		0.0	0.2		0.0	0.1	
Delay (s)		16.9			17.0		3.7	6.0		4.6	6.3	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		16.9			17.0			5.9			6.2	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	43.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

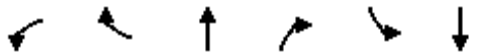
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	230	1470	140	280	1850	270	90	320	190	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5001		3433	5085	1544	1770	3539	1542	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5001		3433	5085	1544	1770	3539	1542	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1598	152	304	2011	293	98	348	207	250	304	196
RTOR Reduction (vph)	0	10	0	0	0	79	0	0	77	0	0	78
Lane Group Flow (vph)	250	1740	0	304	2011	214	98	348	130	250	304	118
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	9.2	42.4		10.8	44.1	53.2	8.0	23.9	34.7	9.1	25.0	34.2
Effective Green, g (s)	9.6	43.5		11.2	45.1	53.2	8.4	24.8	36.5	9.5	25.9	36.0
Actuated g/C Ratio	0.09	0.41		0.11	0.43	0.51	0.08	0.24	0.35	0.09	0.25	0.34
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	313	2071		366	2184	782	141	835	587	310	872	532
v/s Ratio Prot	0.07	c0.35		0.09	c0.40	0.02	c0.06	c0.10	0.02	c0.07	0.09	0.02
v/s Ratio Perm						0.11			0.06			0.05
v/c Ratio	0.80	0.84		0.83	0.92	0.27	0.70	0.42	0.22	0.81	0.35	0.22
Uniform Delay, d1	46.8	27.6		46.0	28.3	14.8	47.1	34.0	24.2	46.8	32.6	24.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.4	4.3		14.1	7.9	0.1	11.3	0.1	0.1	13.4	0.1	0.1
Delay (s)	59.2	31.9		60.1	36.1	14.9	58.4	34.1	24.3	60.3	32.7	24.6
Level of Service	E	C		E	D	B	E	C	C	E	C	C
Approach Delay (s)		35.3			36.5			34.6			39.8	
Approach LOS		D			D			C			D	

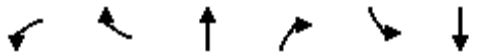
Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	120	30	600	90	150	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1742		3470		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1742		3470		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	33	652	98	163	652
RTOR Reduction (vph)	16	0	14	0	0	0
Lane Group Flow (vph)	147	0	736	0	163	652
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	8.9		30.2		8.8	43.5
Effective Green, g (s)	8.9		30.2		8.8	43.5
Actuated g/C Ratio	0.14		0.49		0.14	0.71
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	252		1706		253	2507
v/s Ratio Prot	c0.08		c0.21		c0.09	0.18
v/s Ratio Perm						
v/c Ratio	0.58		0.43		0.64	0.26
Uniform Delay, d1	24.5		10.1		24.8	3.2
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	3.4		0.8		5.5	0.3
Delay (s)	27.9		10.9		30.4	3.5
Level of Service	C		B		C	A
Approach Delay (s)	27.9		10.9			8.8
Approach LOS	C		B			A

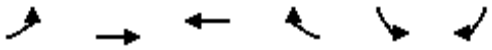
Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	180	520	100	0	540
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	565	109	0	587
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			491
pX, platoon unblocked	0.87					
vC, conflicting volume	915	342			676	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	609	342			676	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	70			100	
cM capacity (veh/h)	372	651			910	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	196	377	297	293	293
Volume Left	0	0	0	0	0
Volume Right	196	0	109	0	0
cSH	651	1700	1700	1700	1700
Volume to Capacity	0.30	0.22	0.17	0.17	0.17
Queue Length 95th (ft)	32	0	0	0	0
Control Delay (s)	12.9	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.9	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	810	1320	610	410	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	880	1435	663	446	152
RTOR Reduction (vph)	0	0	0	253	0	123
Lane Group Flow (vph)	0	880	1435	410	446	29
Confl. Peds. (#/hr)				8	8	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	8	1	
Permitted Phases						1
Actuated Green, G (s)		33.8	33.8	29.2	11.9	11.9
Effective Green, g (s)		33.8	33.8	28.7	11.9	11.9
Actuated g/C Ratio		0.54	0.54	0.46	0.19	0.19
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	3.0	2.5	2.5
Lane Grp Cap (vph)		1910	1910	1277	652	300
v/s Ratio Prot		0.25	c0.41	0.15	c0.13	
v/s Ratio Perm						0.02
v/c Ratio		0.46	0.75	0.32	0.68	0.10
Uniform Delay, d1		8.8	11.1	10.8	23.6	20.9
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	1.7	0.1	2.7	0.1
Delay (s)		9.0	12.8	10.9	26.3	21.0
Level of Service		A	B	B	C	C
Approach Delay (s)		9.0	12.2		25.0	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	62.6	Sum of lost time (s)	17.1
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

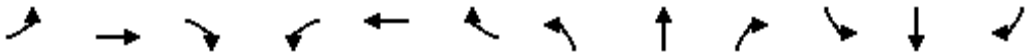
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	30	50	400	70	120	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.0	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1550	4956		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1550	4956		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	54	435	76	130	696
RTOR Reduction (vph)	0	48	12	0	0	0
Lane Group Flow (vph)	33	6	499	0	130	696
Confl. Peds. (#/hr)	4	11		9	9	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.9	11.9	71.5		12.4	88.3
Effective Green, g (s)	11.9	12.8	71.5		12.4	88.3
Actuated g/C Ratio	0.11	0.12	0.65		0.11	0.80
Clearance Time (s)	4.9	4.9	4.9		4.4	4.9
Vehicle Extension (s)	2.0	2.0	5.0		2.0	3.2
Lane Grp Cap (vph)	191	180	3221		199	4081
v/s Ratio Prot	c0.02		0.10		c0.07	c0.14
v/s Ratio Perm		0.00				
v/c Ratio	0.17	0.03	0.16		0.65	0.17
Uniform Delay, d1	44.6	43.1	7.5		46.7	2.5
Progression Factor	1.00	1.00	2.15		1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1		5.8	0.1
Delay (s)	44.7	43.1	16.2		52.5	2.6
Level of Service	D	D	B		D	A
Approach Delay (s)	43.8		16.2			10.4
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		

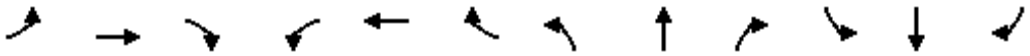
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	50	100	160	140	110	190	400	90	80	520	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.5	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.93		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1676		1770	1739		1770	4781		3433	3446	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1676		1770	1739		1770	4781		3433	3446	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	54	109	174	152	120	207	435	98	87	565	120
RTOR Reduction (vph)	0	80	0	0	25	0	0	29	0	0	14	0
Lane Group Flow (vph)	87	83	0	174	247	0	207	504	0	87	671	0
Confl. Peds. (#/hr)									120			
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	13.9	13.9		19.0	19.0		16.2	33.9		23.6	41.8	
Effective Green, g (s)	14.8	14.8		19.9	19.9		16.6	34.8		24.0	42.7	
Actuated g/C Ratio	0.13	0.13		0.18	0.18		0.15	0.32		0.22	0.39	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		3.9	3.9	
Lane Grp Cap (vph)	238	225		320	314		267	1512		749	1337	
v/s Ratio Prot	0.05	c0.05		0.10	c0.14		c0.12	0.11		0.03	c0.19	
v/s Ratio Perm												
v/c Ratio	0.37	0.37		0.54	0.79		0.78	0.33		0.12	0.50	
Uniform Delay, d1	43.3	43.4		40.9	43.0		44.9	28.7		34.5	25.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.72	0.72	
Incremental Delay, d2	1.0	1.0		1.0	11.4		12.1	0.6		0.1	1.3	
Delay (s)	44.3	44.4		41.9	54.5		57.0	29.3		24.8	19.7	
Level of Service	D	D		D	D		E	C		C	B	
Approach Delay (s)		44.4			49.6			37.1			20.3	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

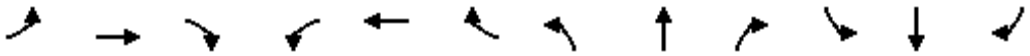
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	20	20	40	20	50	30	590	40	90	650	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.97		1.00	0.89		1.00	0.99		1.00	0.98	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1749		1770	1664		1770	5029		3433	3469	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1749		1770	1664		1770	5029		3433	3469	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	22	43	22	54	33	641	43	98	707	87
RTOR Reduction (vph)	0	10	0	0	50	0	0	5	0	0	6	0
Lane Group Flow (vph)	0	77	0	43	26	0	33	679	0	98	788	0
Confl. Peds. (#/hr)			7	7			9		4	4		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		9.0		5.4	5.4		2.1	19.2		13.4	31.0	
Effective Green, g (s)		9.0		5.4	5.4		2.1	19.2		13.4	31.0	
Actuated g/C Ratio		0.14		0.08	0.08		0.03	0.29		0.20	0.47	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		236		143	134		55	1449		690	1614	
v/s Ratio Prot		c0.04		c0.02	0.02		c0.02	0.14		0.03	c0.23	
v/s Ratio Perm												
v/c Ratio		0.32		0.30	0.20		0.60	0.47		0.14	0.49	
Uniform Delay, d1		26.1		28.8	28.6		31.8	19.5		21.9	12.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.4	0.3		11.2	0.1		0.0	0.1	
Delay (s)		26.3		29.3	28.8		43.0	19.6		21.9	12.4	
Level of Service		C		C	C		D	B		C	B	
Approach Delay (s)		26.3			29.0			20.7			13.4	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	66.6	Sum of lost time (s)	19.6
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	10	50	10	10	20	60	610	50	40	680	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.9	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1795	1583		1817	1583	1770	5028		1770	5043	
Flt Permitted		0.77	1.00		0.82	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1426	1583		1526	1583	1770	5028		1770	5043	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	54	11	11	22	65	663	54	43	739	43
RTOR Reduction (vph)	0	0	48	0	0	20	0	11	0	0	8	0
Lane Group Flow (vph)	0	44	6	0	22	2	65	706	0	43	774	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		8						
Actuated Green, G (s)		6.2	6.2		6.2	6.2	4.4	34.3		2.5	32.4	
Effective Green, g (s)		6.2	6.2		5.3	6.2	4.4	34.3		2.5	32.4	
Actuated g/C Ratio		0.11	0.11		0.10	0.11	0.08	0.62		0.05	0.59	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		160	178		147	178	141	3135		80	2970	
v/s Ratio Prot							c0.04	0.14		c0.02	c0.15	
v/s Ratio Perm		c0.03	0.00		0.01	0.00						
v/c Ratio		0.28	0.03		0.15	0.01	0.46	0.23		0.54	0.26	
Uniform Delay, d1		22.3	21.7		22.8	21.7	24.2	4.5		25.7	5.5	
Progression Factor		1.00	1.00		1.00	1.00	0.79	0.58		1.00	1.00	
Incremental Delay, d2		0.9	0.1		0.5	0.0	2.0	0.1		6.8	0.2	
Delay (s)		23.3	21.8		23.3	21.7	21.1	2.7		32.5	5.7	
Level of Service		C	C		C	C	C	A		C	A	
Approach Delay (s)		22.5			22.5			4.3			7.1	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



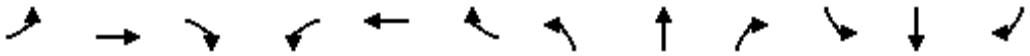
Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Volume (vph)	240	1410	140	100	2150	310	100	270	180	100	80	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	7.8	5.9	5.9	5.9	5.9	5.9	5.9
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (prot)	3433	4737		1362	5085	1583	1611	1681	1610	1655	1398	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (perm)	3433	4737		1362	5085	1583	1611	1681	1610	1655	1398	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1533	152	109	2337	337	109	293	196	109	87	185
RTOR Reduction (vph)	0	0	0	42	0	33	75	0	0	0	75	0
Lane Group Flow (vph)	261	1696	0	56	2337	304	34	179	206	213	12	185
Confl. Peds. (#/hr)								9			45	18
Confl. Bikes (#/hr)											10	
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	8.6	63.3		63.3	50.9	66.7	34.7	15.8	15.8	15.8	15.8	13.0
Effective Green, g (s)	10.0	65.4		63.3	52.8	62.9	34.7	15.8	15.8	15.8	15.8	13.0
Actuated g/C Ratio	0.09	0.59		0.58	0.48	0.57	0.32	0.14	0.14	0.14	0.14	0.12
Clearance Time (s)	4.0	6.1		6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Vehicle Extension (s)	3.0	2.8		2.8	3.2	2.9	4.1	2.9	2.9	2.9	2.9	2.9
Lane Grp Cap (vph)	312	2816		783	2440	905	508	241	231	237	200	209
v/s Ratio Prot	c0.08	0.36			c0.46	0.04		0.11	0.13	c0.13		c0.10
v/s Ratio Perm				0.04		0.15	0.02				0.01	
v/c Ratio	0.84	0.60		0.07	0.96	0.34	0.07	0.74	0.89	0.90	0.06	0.89
Uniform Delay, d1	49.2	14.1		10.3	27.5	12.5	26.3	45.2	46.3	46.3	40.7	47.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.86	0.87	0.87	3.01	1.00
Incremental Delay, d2	17.4	1.0		0.2	10.7	0.2	0.1	11.4	31.7	32.2	0.1	32.8
Delay (s)	66.6	15.0		10.5	38.2	12.7	26.4	50.4	72.1	72.6	122.8	80.6
Level of Service	E	B		B	D	B	C	D	E	E	F	F
Approach Delay (s)		21.4			35.0					73.0		61.3
Approach LOS		C			D					E		E

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWR	NWR2
Lane Configurations		
Volume (vph)	170	30
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.9	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	185	33
RTOR Reduction (vph)	114	0
Lane Group Flow (vph)	104	0
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		1
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	13.0	
Effective Green, g (s)	13.0	
Actuated g/C Ratio	0.12	
Clearance Time (s)	5.9	
Vehicle Extension (s)	2.9	
Lane Grp Cap (vph)	329	
v/s Ratio Prot	0.04	
v/s Ratio Perm		
v/c Ratio	0.32	
Uniform Delay, d1	44.4	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	45.0	
Level of Service	D	
Approach Delay (s)		
Approach LOS		

Intersection Summary



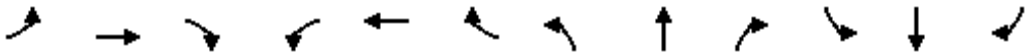
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	100	100	90	80	80	70	50	90	20	30	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.95			0.96			0.94			0.95	
Flt Protected		0.99			0.98			0.98			0.99	
Satd. Flow (prot)		1745			1751			1726			1747	
Flt Permitted		0.90			0.75			0.89			0.92	
Satd. Flow (perm)		1577			1335			1563			1635	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	109	109	98	87	87	76	54	98	22	33	33
RTOR Reduction (vph)	0	50	0	0	35	0	0	32	0	0	15	0
Lane Group Flow (vph)	0	222	0	0	237	0	0	196	0	0	73	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		12.9			12.9			26.7			27.2	
Effective Green, g (s)		12.9			12.9			26.7			27.2	
Actuated g/C Ratio		0.27			0.27			0.55			0.56	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		418			354			858			915	
v/s Ratio Prot												
v/s Ratio Perm		0.14			c0.18			c0.13			0.04	
v/c Ratio		0.53			0.67			0.23			0.08	
Uniform Delay, d1		15.3			15.9			5.6			4.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.3			4.7			0.6			0.0	
Delay (s)		16.6			20.7			6.3			5.0	
Level of Service		B			C			A			A	
Approach Delay (s)		16.6			20.7			6.3			5.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	48.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



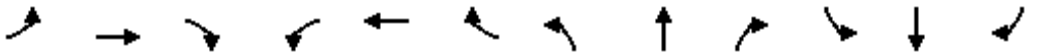
Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Volume (vph)	300	580	550	70	200	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	4999		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	4999		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	630	598	76	217	207
RTOR Reduction (vph)	0	0	9	0	0	172
Lane Group Flow (vph)	326	630	665	0	217	35
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	27.5	91.7	60.2		20.3	20.3
Effective Green, g (s)	27.5	91.7	60.2		20.3	20.3
Actuated g/C Ratio	0.23	0.76	0.50		0.17	0.17
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	405	3885	2507		299	267
v/s Ratio Prot	c0.18	0.12	c0.13		c0.12	
v/s Ratio Perm						0.02
v/c Ratio	0.80	0.16	0.27		0.73	0.13
Uniform Delay, d1	43.7	3.8	17.2		47.2	42.4
Progression Factor	1.14	0.17	1.20		1.00	1.00
Incremental Delay, d2	10.9	0.1	0.2		8.5	0.2
Delay (s)	60.6	0.7	20.9		55.7	42.6
Level of Service	E	A	C		E	D
Approach Delay (s)		21.2	20.9		49.3	
Approach LOS		C	C		D	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



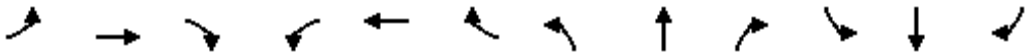
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	0	100	80	300	100	0	0	0	0	70	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.96						0.98	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1793						1831	
Flt Permitted	0.55		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1021		1583	1770	1793						1831	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	0	109	87	326	109	0	0	0	0	76	11
RTOR Reduction (vph)	0	0	90	56	17	0	0	0	0	0	9	0
Lane Group Flow (vph)	33	0	19	31	418	0	0	0	0	0	78	0
Turn Type	Perm		Perm	Split	NA						NA	
Protected Phases				8	8						6	
Permitted Phases	4		4									
Actuated Green, G (s)	7.3		7.3	15.4	15.4						7.9	
Effective Green, g (s)	7.3		7.3	15.4	15.4						7.9	
Actuated g/C Ratio	0.17		0.17	0.36	0.36						0.19	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	174		271	639	648						339	
v/s Ratio Prot				0.02	c0.23						c0.04	
v/s Ratio Perm	c0.03		0.01									
v/c Ratio	0.19		0.07	0.05	0.65						0.23	
Uniform Delay, d1	15.1		14.8	8.8	11.3						14.8	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.5		0.1	0.0	2.2						0.3	
Delay (s)	15.6		14.9	8.9	13.5						15.1	
Level of Service	B		B	A	B						B	
Approach Delay (s)		15.1			12.8			0.0			15.1	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	42.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1700	10	270	2410	0	0	0	0	300	90	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frt		1.00		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		5081		1770	6408					1681	1738	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (perm)		5081		1770	6408					1681	1738	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1848	11	293	2620	0	0	0	0	326	98	65
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	41
Lane Group Flow (vph)	0	1858	0	293	2620	0	0	0	0	271	153	24
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		65.6		24.7	95.0					30.2	30.2	30.2
Effective Green, g (s)		66.8		25.1	95.9					31.1	31.1	31.1
Actuated g/C Ratio		0.49		0.19	0.71					0.23	0.23	0.23
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2514		329	4552					387	400	364
v/s Ratio Prot		c0.37		c0.17	0.41							
v/s Ratio Perm										c0.16	0.09	0.02
v/c Ratio		0.74		0.89	0.58					0.70	0.38	0.07
Uniform Delay, d1		27.2		53.6	9.6					47.7	43.8	40.6
Progression Factor		1.00		1.29	0.02					1.00	1.00	1.00
Incremental Delay, d2		2.0		7.5	0.1					4.6	0.2	0.0
Delay (s)		29.2		76.5	0.3					52.3	44.1	40.6
Level of Service		C		E	A					D	D	D
Approach Delay (s)		29.2			8.0			0.0			48.2	
Approach LOS		C			A			A			D	

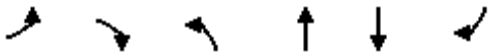
Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	320	100	160	240	0	120	0	160	60	140	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.96		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3324		1746	3539		1770		1548	1770	1842	
Flt Permitted		1.00		0.43	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3324		784	3539		1770		1548	1770	1842	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	348	109	174	261	0	130	0	174	65	152	11
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	81	0	3	0
Lane Group Flow (vph)	0	443	0	174	261	0	130	0	93	65	160	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		68.7		83.0	83.0		14.9		68.7	17.9	17.9	
Effective Green, g (s)		69.6		83.4	83.9		15.3		69.6	18.8	18.8	
Actuated g/C Ratio		0.54		0.64	0.65		0.12		0.54	0.14	0.14	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1779		579	2284		208		828	255	266	
v/s Ratio Prot		0.13		c0.02	0.07		c0.07			0.04	c0.09	
v/s Ratio Perm				c0.17					0.06			
v/c Ratio		0.25		0.30	0.11		0.62		0.11	0.25	0.60	
Uniform Delay, d1		16.2		9.7	8.8		54.6		14.9	49.4	52.1	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		0.3		0.1	0.1		5.7		0.3	0.5	3.8	
Delay (s)		16.5		9.8	8.9		60.4		15.2	49.9	55.9	
Level of Service		B		A	A		E		B	D	E	
Approach Delay (s)		16.5			9.3			34.5			54.2	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

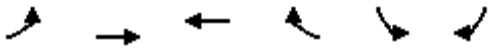
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	80	190	320	460	430	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.90		1.00	1.00	0.96	
Flt Protected	0.99		0.95	1.00	1.00	
Satd. Flow (prot)	1642		1770	5085	4888	
Flt Permitted	0.99		0.95	1.00	1.00	
Satd. Flow (perm)	1642		1770	5085	4888	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	207	348	500	467	163
RTOR Reduction (vph)	81	0	0	0	34	0
Lane Group Flow (vph)	213	0	348	500	596	0
Confl. Peds. (#/hr)		2				
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	20.6		29.9	91.4	57.5	
Effective Green, g (s)	20.6		29.5	91.4	56.6	
Actuated g/C Ratio	0.17		0.25	0.76	0.47	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	281		435	3873	2305	
v/s Ratio Prot	c0.13		c0.20	0.10	c0.12	
v/s Ratio Perm						
v/c Ratio	0.76		0.80	0.13	0.26	
Uniform Delay, d1	47.3		42.5	3.8	19.1	
Progression Factor	1.00		0.94	1.42	1.00	
Incremental Delay, d2	11.1		10.0	0.1	0.3	
Delay (s)	58.4		50.1	5.5	19.3	
Level of Service	E		D	A	B	
Approach Delay (s)	58.4			23.8	19.3	
Approach LOS	E			C	B	

Intersection Summary			
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		

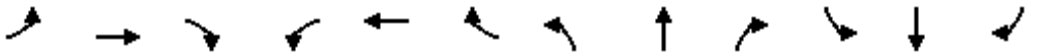
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	50	140	80	40	20	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	152	87	43	22	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1157	644			
pX, platoon unblocked						
vC, conflicting volume	130				370	109
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130				370	109
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				96	97
cM capacity (veh/h)	1455				607	945

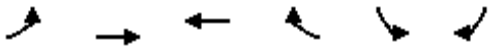
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	54	152	130	54
Volume Left	54	0	0	22
Volume Right	0	0	43	33
cSH	1455	1700	1700	773
Volume to Capacity	0.04	0.09	0.08	0.07
Queue Length 95th (ft)	3	0	0	6
Control Delay (s)	7.6	0.0	0.0	10.0
Lane LOS	A			B
Approach Delay (s)	2.0		0.0	10.0
Approach LOS				B

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	1890	0	0	2660	590	20	200	40	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frt	1.00	1.00			1.00	0.85		0.98				
Flt Protected	0.95	1.00			1.00	1.00		1.00				
Satd. Flow (prot)	1770	5085			5085	1583		3445				
Flt Permitted	0.95	1.00			1.00	1.00		1.00				
Satd. Flow (perm)	1770	5085			5085	1583		3445				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	2054	0	0	2891	641	22	217	43	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	145	0	8	0	0	0	0
Lane Group Flow (vph)	120	2054	0	0	2891	496	0	274	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	13.6	94.0			76.0	76.0		31.2				
Effective Green, g (s)	14.0	94.9			76.9	76.9		32.1				
Actuated g/C Ratio	0.10	0.70			0.57	0.57		0.24				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	183	3574			2896	901		819				
v/s Ratio Prot	0.07	c0.40			c0.57			c0.08				
v/s Ratio Perm						0.31						
v/c Ratio	0.66	0.57			1.00	0.55		0.33				
Uniform Delay, d1	58.2	10.0			29.0	18.2		42.6				
Progression Factor	0.82	0.84			1.00	1.00		1.00				
Incremental Delay, d2	4.5	0.5			16.3	2.4		0.1				
Delay (s)	52.1	8.9			45.3	20.6		42.7				
Level of Service	D	A			D	C		D				
Approach Delay (s)		11.2			40.8			42.7			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	10	530	400	300	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	576	435	326	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		480	811			
pX, platoon unblocked	0.94				0.96	0.94
vC, conflicting volume	761				908	380
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	618				625	213
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	100
cM capacity (veh/h)	901				396	744

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	11	288	288	290	471
Volume Left	11	0	0	0	0
Volume Right	0	0	0	0	326
cSH	901	1700	1700	1700	1700
Volume to Capacity	0.01	0.17	0.17	0.17	0.28
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.0	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.2			0.0	
Approach LOS					

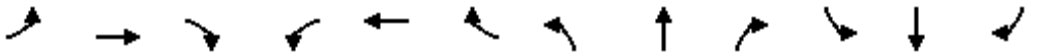
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	24.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	170	0	0	130	310	570
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	185	0	0	141	337	620

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	185	141	337	620
Volume Left (vph)	185	0	337	0
Volume Right (vph)	0	141	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.2	5.0	5.8	5.3
Degree Utilization, x	0.32	0.19	0.54	0.91
Capacity (veh/h)	567	702	611	675
Control Delay (s)	12.0	9.1	14.3	37.9
Approach Delay (s)	12.0	9.1	29.6	
Approach LOS	B	A	D	

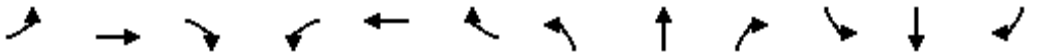
Intersection Summary			
Delay	24.8		
Level of Service	C		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	109	22	54	43	22	11	22	33	22	22	250	533

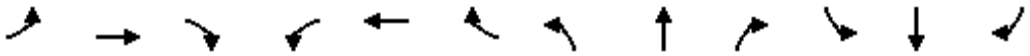
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	120	65	76	76	272	533
Volume Left (vph)	109	0	43	22	22	0
Volume Right (vph)	0	54	11	22	0	533
Hadj (s)	0.49	-0.55	0.06	-0.08	0.07	-0.67
Departure Headway (s)	7.1	6.1	6.7	6.1	5.5	4.8
Degree Utilization, x	0.24	0.11	0.14	0.13	0.42	0.71
Capacity (veh/h)	473	547	493	553	632	730
Control Delay (s)	11.1	8.6	10.9	10.0	11.3	17.5
Approach Delay (s)	10.2		10.9	10.0	15.4	
Approach LOS	B		B	B	C	

Intersection Summary				
Delay	13.9			
Level of Service	B			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	340	180	540	520	10	0	0	0	250	320	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3529					1610	3358	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3529					1610	3358	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	196	587	565	11	0	0	0	272	348	380
RTOR Reduction (vph)	0	0	105	0	1	0	0	0	0	0	0	231
Lane Group Flow (vph)	0	370	91	587	575	0	0	0	0	190	430	149
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		31.2	31.2	16.1	51.7					18.5	18.5	18.5
Effective Green, g (s)		32.1	32.1	16.5	52.6					19.4	19.4	19.4
Actuated g/C Ratio		0.40	0.40	0.21	0.66					0.24	0.24	0.24
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1420	635	708	2320					390	814	383
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.06							0.12	0.13	0.09
v/c Ratio		0.26	0.14	0.83	0.25					0.49	0.53	0.39
Uniform Delay, d1		16.0	15.2	30.4	5.6					26.0	26.3	25.3
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.4	0.5	7.6	0.3					0.4	0.3	0.2
Delay (s)		16.5	15.7	38.0	5.9					26.4	26.6	25.6
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		16.2			22.1			0.0			26.2	
Approach LOS		B			C			A			C	

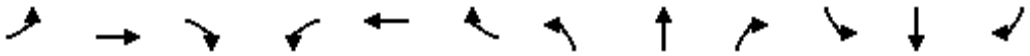
Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	30	40	0	0	0	0	0	0	1510	70
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	33	43	0	0	0	0	0	0	1641	76
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1679	1679	585	580	1717	0	1717			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1679	1679	585	580	1717	0	1717			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	93	88	100	100	100			100		
cM capacity (veh/h)	62	94	454	369	89	1084	365			1622		

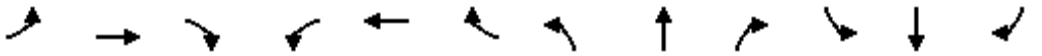
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	33	43	657	657	404
Volume Left	0	43	0	0	0
Volume Right	33	0	0	0	76
cSH	454	369	1700	1700	1700
Volume to Capacity	0.07	0.12	0.39	0.39	0.24
Queue Length 95th (ft)	6	10	0	0	0
Control Delay (s)	13.5	16.0	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	13.5	16.0	0.0		
Approach LOS	B	C			

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	49.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	180	150	170	340	0	0	0	0	430	1240	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3481					1770	4921	
Flt Permitted		1.00	1.00		0.77					0.95	1.00	
Satd. Flow (perm)		1863	1583		2711					1770	4921	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	196	163	185	370	0	0	0	0	467	1348	370
RTOR Reduction (vph)	0	0	35	0	0	0	0	0	0	0	76	0
Lane Group Flow (vph)	0	196	128	0	555	0	0	0	0	467	1642	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		21.3	21.3		21.3					30.7	30.7	
Effective Green, g (s)		24.0	24.0		24.0					33.0	33.0	
Actuated g/C Ratio		0.37	0.37		0.37					0.51	0.51	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		687	584		1000					898	2498	
v/s Ratio Prot		0.11									c0.33	
v/s Ratio Perm			0.08		c0.20					0.26		
v/c Ratio		0.29	0.22		0.56					0.52	0.66	
Uniform Delay, d1		14.5	14.1		16.3					10.7	11.8	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		1.0	0.9		2.2					2.2	1.4	
Delay (s)		15.5	14.9		18.5					12.9	13.2	
Level of Service		B	B		B					B	B	
Approach Delay (s)		15.2			18.5			0.0			13.1	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

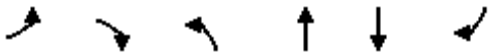


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	660	80	40	500	0	0	0	0	540	340	510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3482		1770	3539						4663	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3482		1770	3539						4663	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	717	87	43	543	0	0	0	0	587	370	554
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	124
Lane Group Flow (vph)	0	790	0	43	543	0	0	0	0	0	957	430
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.4		2.8	27.9						25.1	25.1
Effective Green, g (s)		20.6		3.2	27.8						24.2	26.5
Actuated g/C Ratio		0.32		0.05	0.43						0.37	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1103		87	1513						1736	555
v/s Ratio Prot		c0.23		0.02	c0.15							
v/s Ratio Perm											0.21	c0.32
v/c Ratio		0.72		0.49	0.36						0.94dl	0.78
Uniform Delay, d1		19.6		30.1	12.6						16.1	16.7
Progression Factor		1.00		1.34	0.84						1.00	1.00
Incremental Delay, d2		4.0		1.5	0.6						0.2	6.1
Delay (s)		23.6		42.0	11.1						16.3	22.8
Level of Service		C		D	B						B	C
Approach Delay (s)		23.6			13.4			0.0			18.7	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



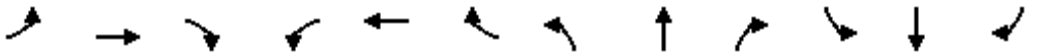
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	120	1100	1800	760	610	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2766	3433	5085	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2766	3433	5085	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	1196	1957	826	663	141
RTOR Reduction (vph)	0	25	0	0	0	1
Lane Group Flow (vph)	130	1171	1957	826	663	140
Confl. Peds. (#/hr)	129	61	34			
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	14.1	76.0	61.9	97.9	32.0	46.1
Effective Green, g (s)	14.1	76.0	61.9	97.9	32.0	46.1
Actuated g/C Ratio	0.12	0.63	0.52	0.82	0.27	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	1844	1770	4148	1356	660
v/s Ratio Prot	0.07	c0.33	c0.57	0.16	c0.13	0.02
v/s Ratio Perm		0.10				0.06
v/c Ratio	0.63	0.64	1.11	0.20	0.49	0.21
Uniform Delay, d1	50.5	13.5	29.1	2.4	37.1	24.8
Progression Factor	1.00	1.00	0.42	0.57	0.80	0.94
Incremental Delay, d2	5.8	0.7	51.3	0.0	1.2	0.2
Delay (s)	56.3	14.2	63.4	1.4	31.1	23.4
Level of Service	E	B	E	A	C	C
Approach Delay (s)	18.3			45.0	29.7	
Approach LOS	B			D	C	

Intersection Summary			
HCM 2000 Control Delay	35.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	100	280	0	0	550	320	60	0	60	250	20	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.95	0.95	1.00
Frt	1.00	1.00			1.00	0.85		0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539			3539	1583		1695		1681	1697	1583
Flt Permitted	0.95	1.00			1.00	1.00		0.76		0.50	0.54	1.00
Satd. Flow (perm)	1770	3539			3539	1583		1326		893	964	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	304	0	0	598	348	65	0	65	272	22	196
RTOR Reduction (vph)	0	0	0	0	0	232	0	118	0	0	0	151
Lane Group Flow (vph)	109	304	0	0	598	116	0	12	0	147	147	45
Turn Type	Prot	NA			NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		7
Actuated Green, G (s)	4.6	28.4			19.8	19.8		5.3		13.7	13.7	13.7
Effective Green, g (s)	4.6	28.4			19.8	19.8		5.3		13.7	13.7	13.7
Actuated g/C Ratio	0.08	0.48			0.33	0.33		0.09		0.23	0.23	0.23
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	137	1692			1179	527		118		205	222	365
v/s Ratio Prot	c0.06	0.09			c0.17							
v/s Ratio Perm						0.07		c0.01		c0.16	0.15	0.03
v/c Ratio	0.80	0.18			0.51	0.22		0.10		0.72	0.66	0.12
Uniform Delay, d1	26.9	8.8			15.9	14.2		24.9		21.1	20.7	18.1
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	26.5	0.2			1.6	1.0		0.4		11.3	7.2	0.2
Delay (s)	53.4	9.1			17.4	15.2		25.2		32.4	28.0	18.3
Level of Service	D	A			B	B		C		C	C	B
Approach Delay (s)		20.8			16.6			25.2			25.4	
Approach LOS		C			B			C			C	

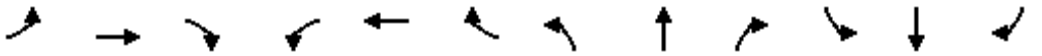
Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	59.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	210	60	250	610	0	0	0	0	170	30	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3408		1763	1863					1681	1708	1583
Flt Permitted		1.00		0.57	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3408		1063	1863					1681	1708	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	228	65	272	663	0	0	0	0	185	33	261
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	76
Lane Group Flow (vph)	0	259	0	272	663	0	0	0	0	100	118	185
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Perm	NA					Perm	NA	custom
Protected Phases		7			8						6	7
Permitted Phases				8						6		6
Actuated Green, G (s)		11.1		25.9	25.9					10.0	10.0	21.1
Effective Green, g (s)		11.1		26.2	26.2					12.2	12.2	25.5
Actuated g/C Ratio		0.18		0.43	0.43					0.20	0.20	0.42
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		618		455	797					335	340	706
v/s Ratio Prot		c0.08			c0.36							0.06
v/s Ratio Perm				0.26						0.06	0.07	0.06
v/c Ratio		0.42		0.60	0.83					0.30	0.35	0.26
Uniform Delay, d1		22.2		13.5	15.5					20.9	21.1	11.7
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5		1.4	7.1					0.5	0.6	0.2
Delay (s)		22.7		14.9	22.6					21.4	21.7	11.9
Level of Service		C		B	C					C	C	B
Approach Delay (s)		22.7			20.4			0.0			16.3	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	61.2	Sum of lost time (s)	11.7
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		

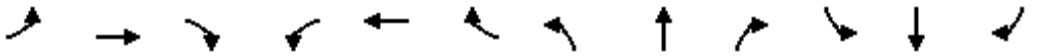
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	20	30	30	400	110	170	40	1290	160	140	730	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1693		1770	5001		1770	4953	
Flt Permitted	0.44	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	823	1710		1326	1693		1770	5001		1770	4953	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	435	120	185	43	1402	174	152	793	141
RTOR Reduction (vph)	0	21	0	0	64	0	0	16	0	0	26	0
Lane Group Flow (vph)	22	45	0	435	241	0	43	1560	0	152	908	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	31.8	31.8		31.1	31.1		3.5	33.5		9.3	39.1	
Effective Green, g (s)	31.8	31.8		31.5	31.5		3.5	34.9		9.8	41.2	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.04	0.39		0.11	0.47	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	295	614		471	602		70	1972		196	2305	
v/s Ratio Prot		0.03			0.14		0.02	c0.31		c0.09	0.18	
v/s Ratio Perm	0.03			c0.33								
v/c Ratio	0.07	0.07		0.92	0.40		0.61	0.79		0.78	0.39	
Uniform Delay, d1	18.7	18.7		27.3	21.4		41.8	23.6		38.3	15.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		23.8	0.4		10.7	3.3		17.3	0.5	
Delay (s)	18.7	18.7		51.1	21.8		52.6	26.9		55.6	16.0	
Level of Service	B	B		D	C		D	C		E	B	
Approach Delay (s)		18.7			39.1			27.6			21.5	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	88.5	Sum of lost time (s)	12.3
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

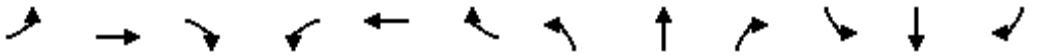
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	660	570	160	140	720	150	300	680	100	80	670	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3423		1770	3438		1770	4978		1770	5085	1571
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3423		1770	3438		1770	4978		1770	5085	1571
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	717	620	174	152	783	163	326	739	109	87	728	239
RTOR Reduction (vph)	0	19	0	0	13	0	0	15	0	0	0	51
Lane Group Flow (vph)	717	775	0	152	933	0	326	833	0	87	728	188
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	40.6	57.2		15.0	31.0		18.6	30.2		8.7	20.2	60.8
Effective Green, g (s)	41.0	58.4		15.4	32.8		19.0	31.1		9.1	21.2	61.6
Actuated g/C Ratio	0.32	0.45		0.12	0.25		0.15	0.24		0.07	0.16	0.47
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	558	1537		209	867		258	1190		123	829	744
v/s Ratio Prot	c0.41	0.23		0.09	c0.27		c0.18	0.17		0.05	c0.14	0.08
v/s Ratio Perm												0.04
v/c Ratio	1.28	0.50		0.73	1.08		1.26	0.70		0.71	0.88	0.25
Uniform Delay, d1	44.5	25.5		55.3	48.6		55.5	45.2		59.1	53.1	20.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	141.4	0.3		10.2	53.0		145.8	3.4		14.1	12.7	0.1
Delay (s)	185.9	25.8		65.5	101.6		201.3	48.6		73.2	65.8	20.5
Level of Service	F	C		E	F		F	D		E	E	C
Approach Delay (s)		101.8			96.6			91.0			56.2	
Approach LOS		F			F			F			E	

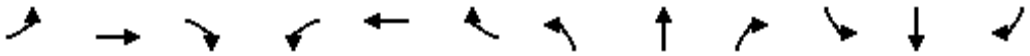
Intersection Summary			
HCM 2000 Control Delay	88.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	300	110	320	380	110	220	120	200	80	150	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	326	120	348	413	120	239	130	217	87	163	109
RTOR Reduction (vph)	0	0	65	0	0	74	0	0	146	0	0	85
Lane Group Flow (vph)	130	326	55	348	413	46	239	130	71	87	163	24
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.6	32.8	40.4	10.9	34.1	34.1	7.6	20.8	31.7	7.3	20.5	20.5
Effective Green, g (s)	10.0	33.7	41.2	11.3	35.0	35.0	8.0	20.2	29.5	7.7	20.0	20.0
Actuated g/C Ratio	0.11	0.37	0.46	0.12	0.39	0.39	0.09	0.22	0.33	0.09	0.22	0.22
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	195	1319	1270	429	1370	612	303	416	516	150	1125	350
v/s Ratio Prot	0.07	0.09	0.00	c0.10	c0.12		c0.07	c0.07	0.01	0.05	0.03	
v/s Ratio Perm			0.02			0.03			0.03			0.02
v/c Ratio	0.67	0.25	0.04	0.81	0.30	0.08	0.79	0.31	0.14	0.58	0.14	0.07
Uniform Delay, d1	38.6	19.6	13.7	38.5	19.2	17.5	40.4	29.3	21.5	39.8	28.3	27.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.4	0.0	10.6	0.6	0.2	11.8	0.7	0.0	3.4	0.1	0.1
Delay (s)	45.1	20.0	13.7	49.1	19.8	17.7	52.2	30.0	21.5	43.1	28.4	28.0
Level of Service	D	C	B	D	B	B	D	C	C	D	C	C
Approach Delay (s)		24.4			31.1			35.9			31.9	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.92			0.93			0.94	
Flt Protected		0.98			1.00			0.99			0.99	
Satd. Flow (prot)		1787			1715			1691			1728	
Flt Permitted		0.78			0.97			0.96			0.80	
Satd. Flow (perm)		1410			1664			1634			1398	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	228	54	196	272	22	22	33
RTOR Reduction (vph)	0	10	0	0	40	0	0	57	0	0	23	0
Lane Group Flow (vph)	0	468	0	0	362	0	0	465	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		39.1			39.1			20.3			20.3	
Effective Green, g (s)		40.0			40.0			21.2			21.2	
Actuated g/C Ratio		0.58			0.58			0.31			0.31	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		815			961			500			428	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.22			c0.28			0.04	
v/c Ratio		0.57			0.38			0.93			0.13	
Uniform Delay, d1		9.2			7.9			23.3			17.3	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			1.1			23.8			0.0	
Delay (s)		9.8			9.0			47.1			17.4	
Level of Service		A			A			D			B	
Approach Delay (s)		9.8			9.0			47.1			17.4	
Approach LOS		A			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		

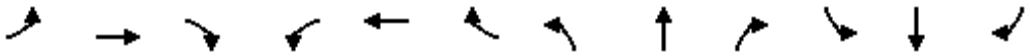
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	430	150	220	660	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4850		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4850		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	467	163	239	717	163	163
RTOR Reduction (vph)	81	0	0	0	0	124
Lane Group Flow (vph)	549	0	239	717	163	39
Confl. Peds. (#/hr)		7	7		30	15
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	21.9		10.4	36.7	13.4	13.4
Effective Green, g (s)	23.8		10.8	36.7	14.3	14.3
Actuated g/C Ratio	0.40		0.18	0.61	0.24	0.24
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1927		319	2168	422	377
v/s Ratio Prot	0.11		c0.14	c0.20	c0.09	0.02
v/s Ratio Perm						
v/c Ratio	0.29		0.75	0.33	0.39	0.10
Uniform Delay, d1	12.3		23.3	5.6	19.1	17.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4		8.2	0.4	0.2	0.0
Delay (s)	12.6		31.4	6.0	19.3	17.8
Level of Service	B		C	A	B	B
Approach Delay (s)	12.6			12.4	18.6	
Approach LOS	B			B	B	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	59.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

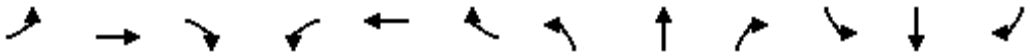
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	10	20	40	10	40	30	150	30	50	180	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	11	22	43	11	43	33	163	33	54	196	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	54	98	228	293
Volume Left (vph)	22	43	33	54
Volume Right (vph)	22	43	33	43
Hadj (s)	-0.13	-0.14	-0.02	-0.02
Departure Headway (s)	5.1	5.1	4.6	4.6
Degree Utilization, x	0.08	0.14	0.29	0.37
Capacity (veh/h)	618	637	744	756
Control Delay (s)	8.6	8.9	9.5	10.2
Approach Delay (s)	8.6	8.9	9.5	10.2
Approach LOS	A	A	A	B

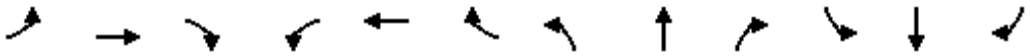
Intersection Summary				
Delay	9.7			
Level of Service	A			
Intersection Capacity Utilization	36.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	20	20	20	30	20	30	140	30	40	110	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	22	22	33	22	33	152	33	43	120	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	76	76	217	228
Volume Left (vph)	33	22	33	43
Volume Right (vph)	22	22	33	65
Hadj (s)	-0.05	-0.08	-0.03	-0.10
Departure Headway (s)	5.0	5.0	4.5	4.4
Degree Utilization, x	0.11	0.10	0.27	0.28
Capacity (veh/h)	651	654	760	770
Control Delay (s)	8.6	8.5	9.2	9.2
Approach Delay (s)	8.6	8.5	9.2	9.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	30.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	100	20	20	30	250	300	10	90	20
Future Volume (vph)	20	20	20	100	20	20	30	250	300	10	90	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	109	22	22	33	272	326	11	98	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	153	305	326	131
Volume Left (vph)	22	109	33	0	11
Volume Right (vph)	22	22	0	326	22
Hadj (s)	-0.10	0.09	0.09	-0.67	-0.05
Departure Headway (s)	5.7	5.7	5.4	4.6	5.3
Degree Utilization, x	0.10	0.24	0.46	0.42	0.19
Capacity (veh/h)	568	583	652	757	641
Control Delay (s)	9.4	10.5	11.7	9.8	9.5
Approach Delay (s)	9.4	10.5	10.7		9.5
Approach LOS	A	B	B		A

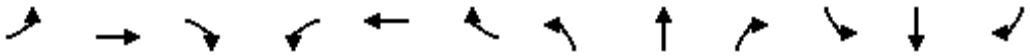
Intersection Summary				
Delay	10.4			
Level of Service	B			
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	30	20	40	40	40	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	43	43	43	163

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	54	87	207
Volume Left (vph)	0	43	43
Volume Right (vph)	22	0	163
Hadj (s)	-0.21	0.13	-0.40
Departure Headway (s)	4.2	4.5	3.8
Degree Utilization, x	0.06	0.11	0.22
Capacity (veh/h)	806	750	906
Control Delay (s)	7.5	8.1	7.9
Approach Delay (s)	7.5	8.1	7.9
Approach LOS	A	A	A

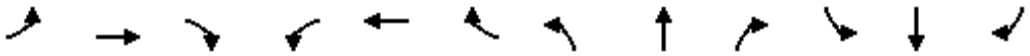
Intersection Summary			
Delay	7.9		
Level of Service	A		
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	54	33	33	22	152	109	22	43	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	65	120	283	87
Volume Left (vph)	22	54	22	22
Volume Right (vph)	22	33	109	22
Hadj (s)	-0.10	-0.04	-0.18	-0.07
Departure Headway (s)	4.8	4.8	4.3	4.6
Degree Utilization, x	0.09	0.16	0.34	0.11
Capacity (veh/h)	681	691	806	729
Control Delay (s)	8.3	8.7	9.4	8.2
Approach Delay (s)	8.3	8.7	9.4	8.2
Approach LOS	A	A	A	A

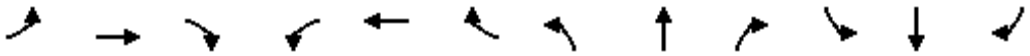
Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	300	110	90	10	40	20	250	260	40	20	50	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.96		1.00	0.98		1.00	0.91	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760			1769		1763	1820		1764	1665	
Flt Permitted		0.77			0.93		0.67	1.00		0.49	1.00	
Satd. Flow (perm)		1401			1659		1238	1820		903	1665	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	120	98	11	43	22	272	283	43	22	54	87
RTOR Reduction (vph)	0	14	0	0	12	0	0	7	0	0	50	0
Lane Group Flow (vph)	0	530	0	0	64	0	272	319	0	22	91	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		
Actuated Green, G (s)		25.2			25.2		24.4	24.4		24.4	24.4	
Effective Green, g (s)		25.2			25.2		24.4	24.4		24.4	24.4	
Actuated g/C Ratio		0.44			0.44		0.42	0.42		0.42	0.42	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		4.4	4.4		2.1	2.1	
Lane Grp Cap (vph)		612			725		524	770		382	705	
v/s Ratio Prot								0.18			0.05	
v/s Ratio Perm		c0.38			0.04		c0.22			0.02		
v/c Ratio		0.87			0.09		0.52	0.41		0.06	0.13	
Uniform Delay, d1		14.7			9.5		12.3	11.6		9.8	10.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.9			0.0		3.6	1.6		0.3	0.4	
Delay (s)		26.5			9.5		15.9	13.2		10.1	10.5	
Level of Service		C			A		B	B		B	B	
Approach Delay (s)		26.5			9.5			14.5			10.4	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

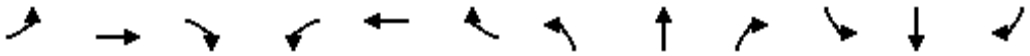
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	420	150	210	700	90	110	20	270	20	10	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.98			0.91			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1769	4885		1770	3470			1646			1706	
Flt Permitted	0.32	1.00		0.32	1.00			0.89			0.82	
Satd. Flow (perm)	602	4885		595	3470			1478			1425	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	457	163	228	761	98	120	22	293	22	11	33
RTOR Reduction (vph)	0	78	0	0	12	0	0	127	0	0	24	0
Lane Group Flow (vph)	54	542	0	228	847	0	0	308	0	0	42	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	22.7	20.5		33.2	26.6			15.5			15.5	
Effective Green, g (s)	23.5	21.5		33.6	27.5			16.4			16.4	
Actuated g/C Ratio	0.40	0.37		0.57	0.47			0.28			0.28	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	293	1795		514	1631			414			399	
v/s Ratio Prot	0.01	0.11		c0.07	c0.24							
v/s Ratio Perm	0.07			0.19				c0.21			0.03	
v/c Ratio	0.18	0.30		0.44	0.52			0.74			0.11	
Uniform Delay, d1	10.8	13.2		6.4	10.9			19.1			15.6	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.4		0.2	1.2			6.2			0.0	
Delay (s)	10.9	13.6		6.7	12.1			25.3			15.7	
Level of Service	B	B		A	B			C			B	
Approach Delay (s)		13.4			10.9			25.3			15.7	
Approach LOS		B			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	58.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

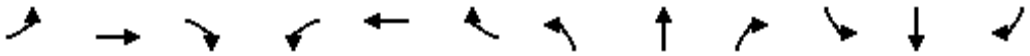
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	70	20	20	20	20	20	20	160	30	60	120	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	22	22	22	22	22	22	174	33	65	130	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	120	65	228	272
Volume Left (vph)	76	22	22	65
Volume Right (vph)	22	22	33	76
Hadj (s)	0.05	-0.10	-0.03	-0.09
Departure Headway (s)	5.2	5.2	4.7	4.6
Degree Utilization, x	0.17	0.09	0.30	0.35
Capacity (veh/h)	622	616	729	744
Control Delay (s)	9.3	8.7	9.7	10.0
Approach Delay (s)	9.3	8.7	9.7	10.0
Approach LOS	A	A	A	B

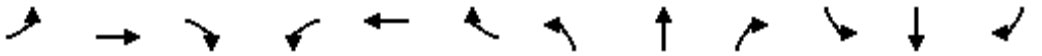
Intersection Summary				
Delay	9.7			
Level of Service	A			
Intersection Capacity Utilization	45.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	40	20	40	10	10	20	60	120	10	30	90	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	43	11	11	22	65	130	11	33	98	54

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	109	43	207	185
Volume Left (vph)	43	11	65	33
Volume Right (vph)	43	22	11	54
Hadj (s)	-0.13	-0.22	0.07	-0.11
Departure Headway (s)	4.7	4.7	4.6	4.4
Degree Utilization, x	0.14	0.06	0.26	0.23
Capacity (veh/h)	696	683	758	775
Control Delay (s)	8.5	8.0	9.2	8.7
Approach Delay (s)	8.5	8.0	9.2	8.7
Approach LOS	A	A	A	A

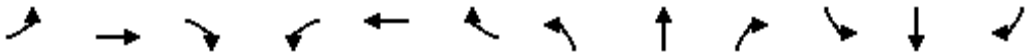
Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	34.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	400	270	30	10	650	250	0	0	20	190	150	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3478		1770	3392				1590	1681	1737	1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3478		1770	3392				1590	1681	1737	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	293	33	11	707	272	0	0	22	207	163	348
RTOR Reduction (vph)	0	8	0	0	44	0	0	0	0	0	0	215
Lane Group Flow (vph)	435	318	0	11	935	0	0	0	22	108	262	133
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	11.2	38.3		0.7	27.8				71.1	17.5	17.5	17.5
Effective Green, g (s)	11.6	39.2		1.1	28.7				71.1	18.8	18.8	18.8
Actuated g/C Ratio	0.16	0.55		0.02	0.40				1.00	0.26	0.26	0.26
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	560	1917		27	1369				1590	444	459	418
v/s Ratio Prot	c0.13	0.09		0.01	c0.28					0.06	c0.15	
v/s Ratio Perm									0.01			0.08
v/c Ratio	0.78	0.17		0.41	0.68				0.01	0.24	0.57	0.32
Uniform Delay, d1	28.5	7.9		34.7	17.5				0.0	20.6	22.7	21.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	0.2		3.6	2.8				0.0	0.5	2.3	0.7
Delay (s)	34.6	8.1		38.3	20.2				0.0	21.0	25.0	21.7
Level of Service	C	A		D	C				A	C	C	C
Approach Delay (s)		23.2			20.4			0.0			22.8	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	71.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

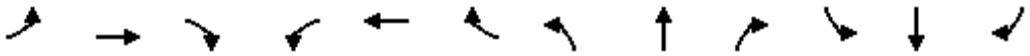
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	710	100	70	1410	60	230	30	70	70	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.98		1.00	0.99		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1678	3356		1671	3411		1635	1527			1669	
Flt Permitted	0.95	1.00		0.95	1.00		0.63	1.00			0.80	
Satd. Flow (perm)	1678	3356		1671	3411		1078	1527			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	772	109	76	1533	65	250	33	76	76	54	22
RTOR Reduction (vph)	0	8	0	0	2	0	0	56	0	0	5	0
Lane Group Flow (vph)	43	873	0	76	1596	0	250	53	0	0	147	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	4.6	67.0		8.0	70.4		30.8	30.8			30.8	
Effective Green, g (s)	5.0	67.9		8.4	71.3		31.7	31.7			31.7	
Actuated g/C Ratio	0.04	0.57		0.07	0.59		0.26	0.26			0.26	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	69	1898		116	2026		284	403			362	
v/s Ratio Prot	0.03	0.26		c0.05	c0.47			0.03				
v/s Ratio Perm							c0.23				0.11	
v/c Ratio	0.62	0.46		0.66	0.79		0.88	0.13			0.41	
Uniform Delay, d1	56.6	15.3		54.4	18.6		42.3	33.7			36.4	
Progression Factor	1.00	1.00		0.84	1.52		1.00	1.00			1.00	
Incremental Delay, d2	11.9	0.8		2.8	0.9		25.0	0.1			0.3	
Delay (s)	68.5	16.1		48.5	29.1		67.3	33.7			36.7	
Level of Service	E	B		D	C		E	C			D	
Approach Delay (s)		18.5			30.0			57.1			36.7	
Approach LOS		B			C			E			D	

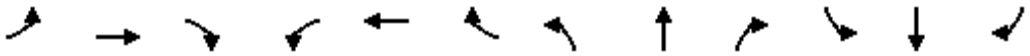
Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



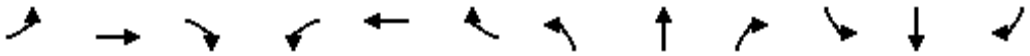
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	180	650	80	170	1240	70	60	130	100	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3461		1770	3501		1770	3539	1550	1770	3267	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3461		1770	3501		1770	3539	1550	1770	3267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	707	87	185	1348	76	65	141	109	283	413	272
RTOR Reduction (vph)	0	7	0	0	3	0	0	0	45	0	92	0
Lane Group Flow (vph)	196	787	0	185	1421	0	65	141	64	283	593	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	13.9	41.0		16.3	42.9		7.0	21.4	37.7	22.6	37.1	
Effective Green, g (s)	14.3	41.9		16.7	44.3		7.4	22.4	38.5	23.0	38.0	
Actuated g/C Ratio	0.12	0.35		0.14	0.37		0.06	0.19	0.32	0.19	0.32	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	210	1208		246	1292		109	660	497	339	1034	
v/s Ratio Prot	c0.11	0.23		0.10	c0.41		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.02			
v/c Ratio	0.93	0.65		0.75	1.10		0.60	0.21	0.13	0.83	0.57	
Uniform Delay, d1	52.4	32.9		49.7	37.9		54.8	41.3	28.9	46.7	34.2	
Progression Factor	1.21	0.77		1.05	0.84		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	41.2	2.6		9.1	55.2		5.7	0.2	0.0	15.4	0.7	
Delay (s)	104.5	28.0		61.0	87.1		60.6	41.6	28.9	62.1	34.9	
Level of Service	F	C		E	F		E	D	C	E	C	
Approach Delay (s)		43.1			84.1			41.1			42.9	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	59.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	980	80	320	1380	60	70	20	150	70	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5014		1770	3514			1792	1552		1750	
Flt Permitted	0.95	1.00		0.95	1.00			0.70	1.00		0.70	
Satd. Flow (perm)	1770	5014		1770	3514			1309	1552		1267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1065	87	348	1500	65	76	22	163	76	22	22
RTOR Reduction (vph)	0	6	0	0	2	0	0	0	135	0	7	0
Lane Group Flow (vph)	11	1146	0	348	1563	0	0	98	28	0	113	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	0.8	57.1		28.3	84.6			20.0	20.0		20.0	
Effective Green, g (s)	1.2	58.4		28.7	85.9			20.9	20.9		20.9	
Actuated g/C Ratio	0.01	0.49		0.24	0.72			0.17	0.17		0.17	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	17	2440		423	2515			227	270		220	
v/s Ratio Prot	0.01	0.23		c0.20	c0.44							
v/s Ratio Perm								0.07	0.02		c0.09	
v/c Ratio	0.65	0.47		0.82	0.62			0.43	0.11		0.51	
Uniform Delay, d1	59.2	20.5		43.2	8.7			44.2	41.7		44.9	
Progression Factor	0.83	1.50		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	40.4	0.5		11.6	1.2			0.5	0.1		0.8	
Delay (s)	89.3	31.3		54.9	9.9			44.7	41.7		45.8	
Level of Service	F	C		D	A			D	D		D	
Approach Delay (s)		31.9			18.1			42.9			45.8	
Approach LOS		C			B			D			D	

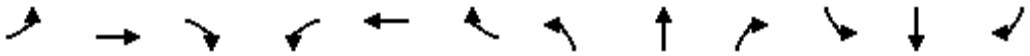
Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	290	3130	0	0	0	0	0	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.93	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5060						4651	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5060						4651	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	315	3402	0	0	0	0	0	163	163
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3708	0	0	0	0	0	326	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3547						976	
v/s Ratio Prot											c0.07	
v/s Ratio Perm					0.73							
v/c Ratio					1.05						0.33	
Uniform Delay, d1					13.4						30.2	
Progression Factor					1.00						1.00	
Incremental Delay, d2					28.7						0.1	
Delay (s)					42.2						30.3	
Level of Service					D						C	
Approach Delay (s)		0.0			42.2			0.0			30.3	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

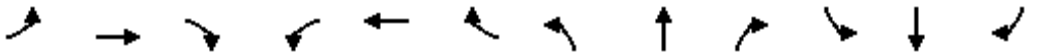
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	900	100	0	0	0	0	0	0	170	340	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.98									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		4997									4974	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		4997									4974	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	978	109	0	0	0	0	0	0	185	370	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	1072	0	0	0	0	0	0	0	0	485	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		47.0									19.0	
Effective Green, g (s)		47.0									20.0	
Actuated g/C Ratio		0.63									0.27	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3131									1326	
v/s Ratio Prot		c0.21										
v/s Ratio Perm											0.10	
v/c Ratio		0.34									0.37	
Uniform Delay, d1		6.7									22.3	
Progression Factor		0.58									1.00	
Incremental Delay, d2		0.3									0.2	
Delay (s)		4.1									22.5	
Level of Service		A									C	
Approach Delay (s)		4.1			0.0			0.0			22.5	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		

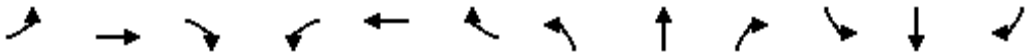
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	230	1080	40	120	780	190	50	40	90	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1174	43	130	848	207	54	43	98	87	87	228
RTOR Reduction (vph)	0	3	0	0	0	192	0	0	84	0	0	187
Lane Group Flow (vph)	250	1214	0	130	848	15	54	43	14	87	87	41
Confl. Peds. (#/hr)	2											2
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	8.5	34.2		7.1	32.9	5.5	2.8	8.9	8.9	5.5	12.5	12.5
Effective Green, g (s)	8.5	35.7		7.1	34.3	5.5	2.8	10.7	10.7	5.5	13.4	13.4
Actuated g/C Ratio	0.11	0.48		0.09	0.46	0.07	0.04	0.14	0.14	0.07	0.18	0.18
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	389	1675		167	1618	116	66	265	225	251	332	279
v/s Ratio Prot	0.07	c0.34		c0.07	0.24		c0.03	0.02		0.03	c0.05	
v/s Ratio Perm						0.01			0.01			0.03
v/c Ratio	0.64	0.73		0.78	0.52	0.13	0.82	0.16	0.06	0.35	0.26	0.15
Uniform Delay, d1	31.8	15.7		33.2	14.5	32.5	35.8	28.2	27.8	33.0	26.5	26.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	2.8		18.5	1.2	0.2	50.1	0.1	0.0	0.3	0.4	0.2
Delay (s)	34.5	18.5		51.7	15.7	32.7	85.9	28.3	27.9	33.3	27.0	26.2
Level of Service	C	B		D	B	C	F	C	C	C	C	C
Approach Delay (s)		21.2			22.7			44.0			27.9	
Approach LOS		C			C			D			C	

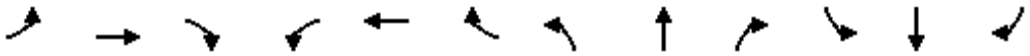
Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	540	2550	160	300	290	0	0	210	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6276		1770	3539			3376	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6276		1770	3539			3376	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	568	2684	168	316	305	0	0	221	84
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	27	0
Lane Group Flow (vph)	0	0	0	0	3414	0	316	305	0	0	278	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					62.7		20.6	37.5			12.0	
Effective Green, g (s)					62.7		20.6	37.5			12.0	
Actuated g/C Ratio					0.57		0.19	0.34			0.11	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					3577		331	1206			368	
v/s Ratio Prot							c0.18	0.09			c0.08	
v/s Ratio Perm					0.54							
v/c Ratio					0.95		0.95	0.25			0.76	
Uniform Delay, d1					22.3		44.2	26.1			47.6	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					7.7		37.3	0.1			8.1	
Delay (s)					30.0		81.5	26.3			55.7	
Level of Service					C		F	C			E	
Approach Delay (s)		0.0			30.0			54.4			55.7	
Approach LOS		A			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	35.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	700	60	0	0	0	0	510	230	70	680	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5058	1551					4809		1770	5085	
Flt Permitted		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5058	1551					4809		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	761	65	0	0	0	0	554	250	76	739	0
RTOR Reduction (vph)	0	0	36	0	0	0	0	106	0	0	0	0
Lane Group Flow (vph)	0	848	29	0	0	0	0	698	0	76	739	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		32.2	32.2					22.0		6.6	33.0	
Effective Green, g (s)		33.1	33.1					22.0		7.0	33.0	
Actuated g/C Ratio		0.44	0.44					0.29		0.09	0.44	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2232	684					1410		165	2237	
v/s Ratio Prot								c0.15		c0.04	0.15	
v/s Ratio Perm		0.17	0.02									
v/c Ratio		0.38	0.04					0.50		0.46	0.33	
Uniform Delay, d1		14.1	11.9					21.9		32.2	13.8	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1					1.2		9.0	0.4	
Delay (s)		14.6	12.0					23.2		41.2	14.2	
Level of Service		B	B					C		D	B	
Approach Delay (s)		14.4			0.0			23.2			16.7	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.9	
Intersection Capacity Utilization	85.5%	ICU Level of Service	E	
Analysis Period (min)	15			

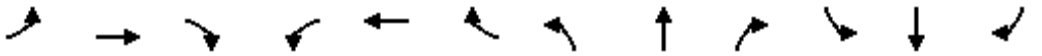
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1170	520	270	890	310	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.98	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3377	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3377	1421
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1272	565	293	967	337	217
RTOR Reduction (vph)	0	5	0	0	24	116
Lane Group Flow (vph)	1272	560	293	967	378	36
Confl. Peds. (#/hr)						2
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.6	42.3	8.0	41.8	13.7	13.7
Effective Green, g (s)	30.8	46.7	7.9	43.2	15.9	15.9
Actuated g/C Ratio	0.46	0.70	0.12	0.64	0.24	0.24
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1624	1196	404	2278	800	336
v/s Ratio Prot	c0.36	c0.11	c0.09	0.27	0.11	
v/s Ratio Perm		0.24				0.03
v/c Ratio	0.78	0.47	0.73	0.42	0.47	0.11
Uniform Delay, d1	15.3	4.6	28.6	5.9	22.0	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	0.1	5.4	0.6	0.2	0.1
Delay (s)	19.2	4.7	34.0	6.4	22.2	20.1
Level of Service	B	A	C	A	C	C
Approach Delay (s)	14.7			12.8	21.6	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	67.1	Sum of lost time (s)	12.5
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

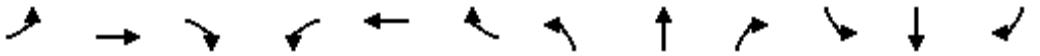
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1060	140	380	330	0	0	0	0	350	0	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1152	152	413	359	0	0	0	0	380	0	728
RTOR Reduction (vph)	0	0	88	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1152	64	413	359	0	0	0	0	380	0	728
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		25.9	25.9	9.0	39.1					14.8		63.5
Effective Green, g (s)		26.9	26.9	9.2	40.1					15.4		63.5
Actuated g/C Ratio		0.42	0.42	0.14	0.63					0.24		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1499	661	497	2234					429		1583
v/s Ratio Prot		c0.33		c0.12	0.10					c0.21		
v/s Ratio Perm			0.04									0.46
v/c Ratio		0.77	0.10	0.83	0.16					0.89		0.46
Uniform Delay, d1		15.6	11.0	26.4	4.8					23.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.8	0.3	10.8	0.2					18.7		1.0
Delay (s)		19.5	11.3	37.2	5.0					41.9		1.0
Level of Service		B	B	D	A					D		A
Approach Delay (s)		18.5			22.2			0.0			15.0	
Approach LOS		B			C			A			B	

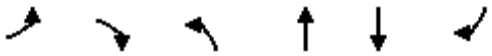
Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	63.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



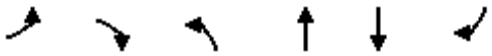
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	880	650	0	0	610	590	190	0	300	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3278			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3278			1770	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	957	707	0	0	663	641	207	0	326	0	0	0
RTOR Reduction (vph)	0	0	0	0	201	0	0	0	277	0	0	0
Lane Group Flow (vph)	957	707	0	0	1103	0	0	207	49	0	0	0
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	23.5	59.4			31.7			10.0	10.0			
Effective Green, g (s)	23.7	59.9			32.2			10.6	10.6			
Actuated g/C Ratio	0.30	0.75			0.41			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1023	2666			1327			236	211			
v/s Ratio Prot	c0.28	0.20			c0.34			c0.12				
v/s Ratio Perm									0.03			
v/c Ratio	0.94	0.27			0.83			0.88	0.23			
Uniform Delay, d1	27.2	3.0			21.2			33.8	30.8			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	14.8	0.2			6.2			27.8	0.2			
Delay (s)	41.9	3.3			27.4			61.6	31.0			
Level of Service	D	A			C			E	C			
Approach Delay (s)		25.5			27.4			42.9			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	79.5	Sum of lost time (s)	13.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	210	210	110	500	700	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.93		1.00	1.00	0.98	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1695		1770	3539	3467	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1695		1770	3539	3467	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	228	120	543	761	120
RTOR Reduction (vph)	35	0	0	0	9	0
Lane Group Flow (vph)	421	0	120	543	872	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	35.5		13.1	76.5	59.4	
Effective Green, g (s)	35.5		13.1	76.5	59.4	
Actuated g/C Ratio	0.30		0.11	0.64	0.49	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	501		193	2256	1716	
v/s Ratio Prot	c0.25		c0.07	0.15	c0.25	
v/s Ratio Perm						
v/c Ratio	0.84		0.62	0.24	0.51	
Uniform Delay, d1	39.6		51.1	9.3	20.4	
Progression Factor	1.00		1.01	0.92	1.00	
Incremental Delay, d2	11.8		6.0	0.2	1.1	
Delay (s)	51.4		57.3	8.8	21.5	
Level of Service	D		E	A	C	
Approach Delay (s)	51.4			17.6	21.5	
Approach LOS	D			B	C	

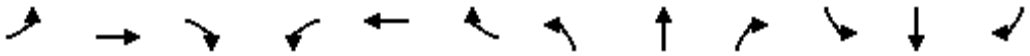
Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	180	0	0	160	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	0	0	174	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				973	1298	
pX, platoon unblocked						
vC, conflicting volume	190	103	207			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	190	103	207			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	79	100			
cM capacity (veh/h)	781	932	1362			

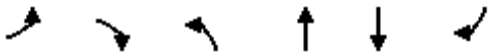
Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	196	116	91
Volume Left	0	0	0
Volume Right	196	0	33
cSH	932	1700	1700
Volume to Capacity	0.21	0.07	0.05
Queue Length 95th (ft)	20	0	0
Control Delay (s)	9.9	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.9	0.0	
Approach LOS	A		

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		



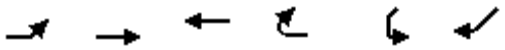
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	20	100	60	90	0	0	0	0	40	220	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.89			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		1654			1826						3494	
Flt Permitted		1.00			0.86						0.99	
Satd. Flow (perm)		1654			1598						3494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	22	109	65	98	0	0	0	0	43	239	11
RTOR Reduction (vph)	0	56	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	75	0	0	163	0	0	0	0	0	289	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases				6						4		
Actuated Green, G (s)		31.5			31.5						24.5	
Effective Green, g (s)		31.5			31.5						24.5	
Actuated g/C Ratio		0.48			0.48						0.38	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		801			774						1316	
v/s Ratio Prot		0.05										
v/s Ratio Perm					c0.10						0.08	
v/c Ratio		0.09			0.21						0.22	
Uniform Delay, d1		9.0			9.6						13.8	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			0.6						0.4	
Delay (s)		9.1			10.2						14.1	
Level of Service		A			B						B	
Approach Delay (s)		9.1			10.2			0.0			14.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



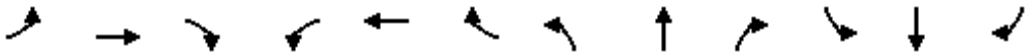
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	50	150	140	330	310	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.90			1.00	0.99	
Flt Protected	0.99			0.99	1.00	
Satd. Flow (prot)	1653			1835	1840	
Flt Permitted	0.99			0.80	1.00	
Satd. Flow (perm)	1653			1481	1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	163	152	359	337	33
RTOR Reduction (vph)	141	0	0	0	4	0
Lane Group Flow (vph)	76	0	0	511	366	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.3			45.5	45.5	
Effective Green, g (s)	8.3			45.5	45.5	
Actuated g/C Ratio	0.13			0.74	0.74	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	222			1090	1354	
v/s Ratio Prot	c0.05				0.20	
v/s Ratio Perm				c0.35		
v/c Ratio	0.34			0.47	0.27	
Uniform Delay, d1	24.3			3.3	2.7	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.9			1.4	0.5	
Delay (s)	25.2			4.7	3.2	
Level of Service	C			A	A	
Approach Delay (s)	25.2			4.7	3.2	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



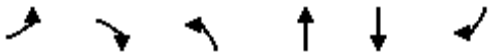
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Volume (vph)	50	670	1420	40	150	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3525		1674	
Flt Permitted	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	3525		1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	728	1543	43	163	272
RTOR Reduction (vph)	0	0	3	0	74	0
Lane Group Flow (vph)	54	728	1583	0	361	0
Turn Type	Prot	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases						
Actuated Green, G (s)	3.5	46.0	38.0		23.6	
Effective Green, g (s)	3.5	46.0	38.0		23.6	
Actuated g/C Ratio	0.04	0.59	0.48		0.30	
Clearance Time (s)	4.5	4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	78	2071	1704		502	
v/s Ratio Prot	c0.03	0.21	c0.45		c0.22	
v/s Ratio Perm						
v/c Ratio	0.69	0.35	0.93		0.72	
Uniform Delay, d1	37.0	8.5	19.0		24.5	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	23.3	0.1	9.4		8.6	
Delay (s)	60.3	8.6	28.4		33.1	
Level of Service	E	A	C		C	
Approach Delay (s)		12.2	28.4		33.1	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



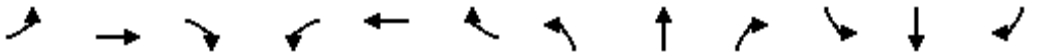
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	10	30	40	100	240	150	390	130	220	450	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.96			0.91		1.00	0.96		1.00	0.96	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1735			1695		1770	3407		1770	3406	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1735			1695		1770	3407		1770	3406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	11	33	43	109	261	163	424	141	239	489	163
RTOR Reduction (vph)	0	20	0	0	67	0	0	35	0	0	35	0
Lane Group Flow (vph)	0	89	0	0	346	0	163	530	0	239	617	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		7.6			19.3		10.8	15.5		14.1	18.8	
Effective Green, g (s)		7.6			19.3		10.8	15.5		14.1	18.8	
Actuated g/C Ratio		0.10			0.26		0.14	0.21		0.19	0.25	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		176			439		256	708		334	859	
v/s Ratio Prot		c0.05			c0.20		0.09	0.16		c0.14	c0.18	
v/s Ratio Perm												
v/c Ratio		0.51			0.79		0.64	0.75		0.72	0.72	
Uniform Delay, d1		31.7			25.7		30.0	27.7		28.3	25.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.3			9.1		5.1	4.3		7.1	2.9	
Delay (s)		34.0			34.8		35.1	32.0		35.4	28.3	
Level of Service		C			C		D	C		D	C	
Approach Delay (s)		34.0			34.8			32.7			30.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



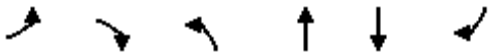
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	30	200	340	190	190	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			4.5	4.5	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.88			1.00	0.98	
Flt Protected	0.99			0.97	1.00	
Satd. Flow (prot)	1634			1805	1819	
Flt Permitted	0.99			0.66	1.00	
Satd. Flow (perm)	1634			1237	1819	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	217	370	207	207	43
RTOR Reduction (vph)	188	0	0	0	8	0
Lane Group Flow (vph)	62	0	0	577	242	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.1			43.5	43.5	
Effective Green, g (s)	8.1			43.5	43.5	
Actuated g/C Ratio	0.13			0.72	0.72	
Clearance Time (s)	4.5			4.5	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	218			887	1305	
v/s Ratio Prot	c0.04				0.13	
v/s Ratio Perm				c0.47		
v/c Ratio	0.28			0.65	0.19	
Uniform Delay, d1	23.6			4.5	2.8	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.7			3.7	0.3	
Delay (s)	24.4			8.2	3.1	
Level of Service	C			A	A	
Approach Delay (s)	24.4			8.2	3.1	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	60.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	50	20	50	200	180	150	70	2360	70	80	1580	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.89		1.00	0.93		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3162		1770	3298		1770	5063		1770	5062	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3162		1770	3298		1770	5063		1770	5062	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	54	217	196	163	76	2565	76	87	1717	54
RTOR Reduction (vph)	0	46	0	0	122	0	0	3	0	0	3	0
Lane Group Flow (vph)	54	30	0	217	237	0	76	2638	0	87	1768	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Effective Green, g (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Actuated g/C Ratio	0.06	0.14		0.12	0.21		0.07	0.54		0.07	0.53	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	101	442		221	684		122	2712		116	2695	
v/s Ratio Prot	0.03	0.01		c0.12	c0.07		0.04	c0.52		c0.05	0.35	
v/s Ratio Perm												
v/c Ratio	0.53	0.07		0.98	0.35		0.62	0.97		0.75	0.66	
Uniform Delay, d1	55.0	44.8		52.4	40.6		54.3	27.0		55.1	20.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.83	0.94	
Incremental Delay, d2	5.4	0.3		55.1	1.4		9.5	12.0		19.3	1.0	
Delay (s)	60.3	45.1		107.5	42.0		63.8	39.0		65.1	19.9	
Level of Service	E	D		F	D		E	D		E	B	
Approach Delay (s)		51.4			66.7			39.7			22.1	
Approach LOS		D			E			D			C	

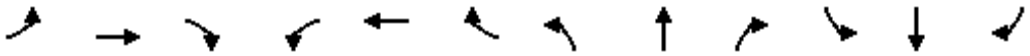
Intersection Summary			
HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	110	0	200	700	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	0	217	761	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	120	0	217	761	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.07			c0.22		
v/s Ratio Perm			0.12			
v/c Ratio	0.17		0.31	0.54		
Uniform Delay, d1	7.7		8.2	9.2		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		1.1	1.5		
Delay (s)	8.2		9.3	10.6		
Level of Service	A		A	B		
Approach Delay (s)	8.2			10.4	0.0	
Approach LOS	A			B	A	

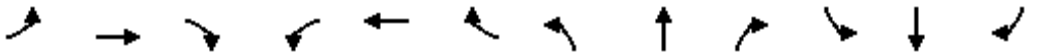
Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	410	790	0	0	390	200	150	200	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.95			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (prot)	3433	1863			3359			3465	1583			
Flt Permitted	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (perm)	3433	1863			3359			3465	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	859	0	0	424	217	163	217	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	92	0	0	0	18	0	0	0
Lane Group Flow (vph)	446	859	0	0	549	0	0	380	4	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	14.4	43.5			24.7			11.7	11.7			
Effective Green, g (s)	14.4	43.5			24.7			11.7	11.7			
Actuated g/C Ratio	0.22	0.67			0.38			0.18	0.18			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	760	1246			1276			623	284			
v/s Ratio Prot	0.13	c0.46			0.16							
v/s Ratio Perm								0.11	0.00			
v/c Ratio	0.59	0.69			0.43			0.61	0.01			
Uniform Delay, d1	22.6	6.6			14.9			24.5	21.9			
Progression Factor	0.98	1.16			1.00			1.00	1.00			
Incremental Delay, d2	0.9	2.5			1.1			1.2	0.0			
Delay (s)	23.2	10.2			16.0			25.7	21.9			
Level of Service	C	B			B			C	C			
Approach Delay (s)		14.6			16.0			25.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	1660	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1804	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	241	0	0	160	0	0	95	0	4	0
Lane Group Flow (vph)	98	1804	368	130	1261	231	500	380	101	326	322	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.7	59.6	59.6	10.0	60.8	60.8	23.1	32.9	32.9	30.0	38.0	
Effective Green, g (s)	9.1	60.9	60.9	10.4	62.2	62.2	23.5	33.7	33.7	29.0	39.2	
Actuated g/C Ratio	0.06	0.41	0.41	0.07	0.41	0.41	0.16	0.22	0.22	0.19	0.26	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	107	2064	633	238	1467	624	537	418	348	342	476	
v/s Ratio Prot	c0.06	0.35		0.04	c0.36		0.15	c0.20		c0.18	0.18	
v/s Ratio Perm			0.24			0.15			0.06			
v/c Ratio	0.92	0.87	0.58	0.55	0.86	0.37	0.93	0.91	0.29	0.95	0.68	
Uniform Delay, d1	70.1	41.0	34.6	67.5	39.9	30.4	62.5	56.7	48.2	59.8	49.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	59.6	5.5	3.9	1.4	6.8	1.7	22.8	23.5	0.6	36.0	3.0	
Delay (s)	129.7	46.5	38.5	68.9	46.7	32.0	85.3	80.2	48.8	95.8	52.7	
Level of Service	F	D	D	E	D	C	F	F	D	F	D	
Approach Delay (s)		47.8			45.1			76.8			74.3	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	55.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	810	1770	920	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	880	1924	1000	0	0	957
RTOR Reduction (vph)	0	5	0	0	0	0
Lane Group Flow (vph)	880	1919	1000	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	94.0	94.0	42.0			42.0
Effective Green, g (s)	94.0	94.0	42.0			42.0
Actuated g/C Ratio	0.63	0.63	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	2151	1746	990			990
v/s Ratio Prot	0.26		c0.28			0.27
v/s Ratio Perm		c0.69				
v/c Ratio	0.41	1.10	1.01			0.97
Uniform Delay, d1	14.1	28.0	54.0			53.3
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.0	54.0	31.1			20.6
Delay (s)	14.1	82.0	85.1			73.9
Level of Service	B	F	F			E
Approach Delay (s)	60.7		85.1			73.9
Approach LOS	E		F			E

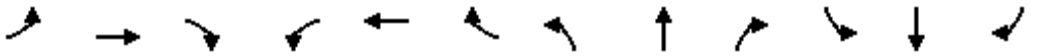
Intersection Summary			
HCM 2000 Control Delay	68.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	99.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	290	1480	130	0	1530
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	315	1609	141	0	1663
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.81					
vC, conflicting volume	2234	610			1750	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1708	610			1750	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	28			100	
cM capacity (veh/h)	67	436			354	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	315	643	643	463	554	554	554
Volume Left	0	0	0	0	0	0	0
Volume Right	315	0	0	141	0	0	0
cSH	436	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.72	0.38	0.38	0.27	0.33	0.33	0.33
Queue Length 95th (ft)	142	0	0	0	0	0	0
Control Delay (s)	31.9	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D						
Approach Delay (s)	31.9	0.0			0.0		
Approach LOS	D						

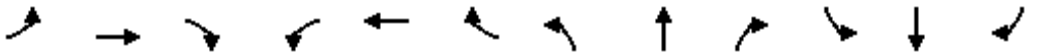
Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	390	340	330	60	520	670	450	550	120	410	720	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1568	1770	3539	1568	1770	3444		1770	3539	1567
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1568	1770	3539	1568	1770	3444		1770	3539	1567
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	424	370	359	65	565	728	489	598	130	446	783	435
RTOR Reduction (vph)	0	0	42	0	0	28	0	12	0	0	0	49
Lane Group Flow (vph)	424	370	317	65	565	700	489	716	0	446	783	386
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	30.1	52.4	86.5	8.8	31.1	66.5	34.1	33.7		35.4	35.0	65.1
Effective Green, g (s)	31.0	53.3	88.3	9.8	32.1	66.5	35.0	34.6		36.3	35.9	65.1
Actuated g/C Ratio	0.21	0.36	0.59	0.07	0.21	0.44	0.23	0.23		0.24	0.24	0.43
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	365	661	964	115	757	746	413	794		428	847	680
v/s Ratio Prot	c0.24	0.20	0.08	0.04	0.16	c0.22	c0.28	0.21		c0.25	0.22	0.11
v/s Ratio Perm			0.13			0.23						0.13
v/c Ratio	1.16	0.56	0.33	0.57	0.75	0.94	1.18	0.90		1.04	0.92	0.57
Uniform Delay, d1	59.5	38.9	15.7	68.0	55.1	39.8	57.5	56.0		56.9	55.7	31.9
Progression Factor	1.00	1.00	1.00	0.86	0.65	0.60	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	98.8	3.4	0.2	16.4	6.3	19.3	104.9	13.4		54.9	16.4	0.7
Delay (s)	158.3	42.3	16.0	74.7	41.9	43.0	162.4	69.5		111.7	72.1	32.5
Level of Service	F	D	B	E	D	D	F	E		F	E	C
Approach Delay (s)		76.8			44.1			106.8			72.4	
Approach LOS		E			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	74.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	200	140	170	70	160	90	260	660	90	150	730	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1750	1558	1770	1863	1547	3433	3462		1770	3539	1531
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1750	1558	1770	1863	1547	3433	3462		1770	3539	1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	152	185	76	174	98	283	717	98	163	793	185
RTOR Reduction (vph)	0	0	131	0	0	80	0	6	0	0	0	107
Lane Group Flow (vph)	174	195	54	76	174	18	283	809	0	163	793	78
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	37.2	22.4	22.4	22.4	13.3	50.2		14.4	51.3	51.3
Effective Green, g (s)	24.8	24.8	38.0	23.3	23.3	23.3	13.7	51.1		14.8	52.2	52.2
Actuated g/C Ratio	0.19	0.19	0.29	0.18	0.18	0.18	0.11	0.39		0.11	0.40	0.40
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	320	333	455	317	333	277	361	1360		201	1421	614
v/s Ratio Prot	0.10	c0.11	0.01	0.04	c0.09		0.08	c0.23		c0.09	0.22	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.54	0.59	0.12	0.24	0.52	0.06	0.78	0.59		0.81	0.56	0.13
Uniform Delay, d1	47.5	47.9	33.7	45.8	48.3	44.3	56.7	31.2		56.2	30.0	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.27	0.90	1.12
Incremental Delay, d2	1.9	2.6	0.0	0.4	1.5	0.1	9.9	1.9		8.7	0.6	0.2
Delay (s)	49.4	50.5	33.8	46.1	49.8	44.4	66.6	33.2		80.2	27.5	27.5
Level of Service	D	D	C	D	D	D	E	C		F	C	C
Approach Delay (s)		44.6			47.5			41.8			35.0	
Approach LOS		D			D			D			D	

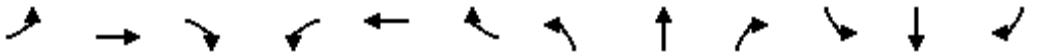
Intersection Summary			
HCM 2000 Control Delay	40.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	20	50	80	20	70	80	1050	210	80	970	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.97		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.94		1.00	0.98		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1696			1659		1770	3430		1770	3508	
Flt Permitted		0.78			0.71		0.21	1.00		0.15	1.00	
Satd. Flow (perm)		1351			1208		398	3430		283	3508	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	54	87	22	76	87	1141	228	87	1054	65
RTOR Reduction (vph)	0	22	0	0	18	0	0	8	0	0	2	0
Lane Group Flow (vph)	0	97	0	0	167	0	87	1361	0	87	1117	0
Confl. Peds. (#/hr)	33					33			3	3		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		23.6			23.6		112.2	105.9		112.2	105.9	
Effective Green, g (s)		24.5			24.5		113.0	106.8		113.0	106.8	
Actuated g/C Ratio		0.16			0.16		0.75	0.71		0.75	0.71	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		220			197		361	2442		279	2497	
v/s Ratio Prot							0.01	c0.40		c0.01	0.32	
v/s Ratio Perm		0.07			c0.14		0.17			0.22		
v/c Ratio		0.44			0.85		0.24	0.56		0.31	0.45	
Uniform Delay, d1		56.6			60.9		6.0	10.3		7.5	9.1	
Progression Factor		1.00			1.25		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			24.3		0.1	0.9		0.2	0.6	
Delay (s)		57.1			100.8		6.1	11.2		7.7	9.7	
Level of Service		E			F		A	B		A	A	
Approach Delay (s)		57.1			100.8			10.9			9.6	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

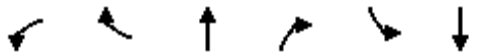
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	380	1880	160	450	1500	350	180	610	370	350	520	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4979		3433	5085	1464	1770	3539	1522	3433	3539	1516
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4979		3433	5085	1464	1770	3539	1522	3433	3539	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2043	174	489	1630	380	196	663	402	380	565	315
RTOR Reduction (vph)	0	7	0	0	0	38	0	0	55	0	0	55
Lane Group Flow (vph)	413	2210	0	489	1630	342	196	663	347	380	565	260
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.7	59.0		19.9	59.3	76.6	16.2	30.0	49.9	17.3	31.1	50.8
Effective Green, g (s)	20.1	60.1		20.3	60.3	76.6	16.6	30.9	51.7	17.7	32.0	52.6
Actuated g/C Ratio	0.14	0.41		0.14	0.42	0.53	0.11	0.21	0.36	0.12	0.22	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	475	2063		480	2114	773	202	754	579	419	781	549
v/s Ratio Prot	0.12	c0.44		c0.14	0.32	0.05	c0.11	c0.19	0.09	c0.11	0.16	0.07
v/s Ratio Perm						0.18			0.14			0.10
v/c Ratio	0.87	1.07		1.02	0.77	0.44	0.97	0.88	0.60	0.91	0.72	0.47
Uniform Delay, d1	61.2	42.5		62.4	36.4	21.0	64.0	55.2	38.2	62.8	52.4	35.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.0	42.1		45.9	1.9	0.1	54.4	11.1	1.1	22.4	2.8	0.2
Delay (s)	76.2	84.5		108.2	38.3	21.2	118.3	66.3	39.3	85.2	55.2	35.8
Level of Service	E	F		F	D	C	F	E	D	F	E	D
Approach Delay (s)		83.2			49.4			65.8			59.4	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	65.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	100.5%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	120	250	710	120	400	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.91		0.98		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1666		3463		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1666		3463		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	272	772	130	435	793
RTOR Reduction (vph)	110	0	19	0	0	0
Lane Group Flow (vph)	292	0	883	0	435	793
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	14.5		21.9		18.7	45.1
Effective Green, g (s)	14.5		21.9		18.7	45.1
Actuated g/C Ratio	0.21		0.32		0.27	0.66
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	352		1105		482	2326
v/s Ratio Prot	c0.18		c0.25		c0.25	0.22
v/s Ratio Perm						
v/c Ratio	0.83		0.80		0.90	0.34
Uniform Delay, d1	25.9		21.3		24.1	5.2
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	15.2		6.1		20.0	0.4
Delay (s)	41.1		27.4		44.0	5.6
Level of Service	D		C		D	A
Approach Delay (s)	41.1		27.4			19.2
Approach LOS	D		C			B

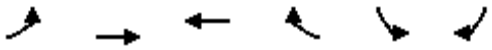
Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	68.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	350	680	170	0	580
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	380	739	185	0	630
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			407
pX, platoon unblocked	0.86					
vC, conflicting volume	1149	467			926	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	849	467			926	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	30			100	
cM capacity (veh/h)	258	540			733	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	380	493	431	315	315
Volume Left	0	0	0	0	0
Volume Right	380	0	185	0	0
cSH	540	1700	1700	1700	1700
Volume to Capacity	0.70	0.29	0.25	0.19	0.19
Queue Length 95th (ft)	140	0	0	0	0
Control Delay (s)	26.0	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	26.0	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	52.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1240	990	840	340	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1348	1076	913	370	272
RTOR Reduction (vph)	0	0	0	420	0	223
Lane Group Flow (vph)	0	1348	1076	493	370	49
Confl. Peds. (#/hr)				6	3	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	2	1	
Permitted Phases				8		1
Actuated Green, G (s)		34.0	34.0	34.0	11.2	11.2
Effective Green, g (s)		34.0	34.0	33.5	11.2	11.2
Actuated g/C Ratio		0.55	0.55	0.54	0.18	0.18
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	2.9	2.5	2.5
Lane Grp Cap (vph)		1940	1940	1505	620	285
v/s Ratio Prot		c0.38	0.30	0.18	c0.11	
v/s Ratio Perm						0.03
v/c Ratio		0.69	0.55	0.33	0.60	0.17
Uniform Delay, d1		10.2	9.1	8.0	23.3	21.5
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1	0.3	0.1	1.3	0.2
Delay (s)		11.3	9.4	8.1	24.6	21.7
Level of Service		B	A	A	C	C
Approach Delay (s)		11.3	8.8		23.4	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	62.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		

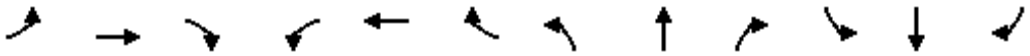
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	70	200	1040	70	100	920
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.1	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.94	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1495	5025		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1495	5025		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	217	1130	76	109	1000
RTOR Reduction (vph)	0	199	2	0	0	0
Lane Group Flow (vph)	76	18	1204	0	109	1000
Confl. Peds. (#/hr)	11	16		18	18	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.8	11.8	111.2		13.7	129.3
Effective Green, g (s)	11.8	12.7	111.2		13.7	129.3
Actuated g/C Ratio	0.08	0.08	0.74		0.09	0.86
Clearance Time (s)	4.0	4.0	4.9		4.4	4.9
Vehicle Extension (s)	3.0	3.0	5.0		2.0	3.2
Lane Grp Cap (vph)	139	126	3725		161	4383
v/s Ratio Prot	c0.04		c0.24		c0.06	0.20
v/s Ratio Perm		0.01				
v/c Ratio	0.55	0.15	0.32		0.68	0.23
Uniform Delay, d1	66.5	63.6	6.6		66.0	1.8
Progression Factor	1.00	1.00	1.45		1.17	1.09
Incremental Delay, d2	4.3	0.5	0.2		6.0	0.1
Delay (s)	70.9	64.2	9.8		83.1	2.0
Level of Service	E	E	A		F	A
Approach Delay (s)	65.9		9.8			10.0
Approach LOS	E		A			A

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

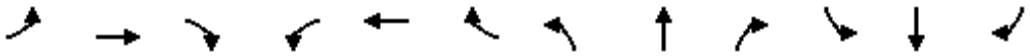
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	130	150	120	40	120	210	1090	120	150	860	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.89		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1690		1770	1627		1770	4991		3433	3489	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1690		1770	1627		1770	4991		3433	3489	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	141	163	130	43	130	228	1185	130	163	935	76
RTOR Reduction (vph)	0	29	0	0	74	0	0	8	0	0	3	0
Lane Group Flow (vph)	76	275	0	130	99	0	228	1307	0	163	1008	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.2	28.2		14.5	14.5		22.8	70.2		18.0	65.4	
Effective Green, g (s)	29.1	29.1		15.4	15.4		23.2	71.1		18.4	66.3	
Actuated g/C Ratio	0.19	0.19		0.10	0.10		0.15	0.47		0.12	0.44	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		2.0	3.9	
Lane Grp Cap (vph)	343	327		181	167		273	2365		421	1542	
v/s Ratio Prot	0.04	c0.16		c0.07	0.06		c0.13	0.26		0.05	c0.29	
v/s Ratio Perm												
v/c Ratio	0.22	0.84		0.72	0.60		0.84	0.55		0.39	0.65	
Uniform Delay, d1	50.9	58.2		65.2	64.3		61.5	28.1		60.6	32.8	
Progression Factor	1.00	1.00		1.00	1.00		1.03	0.50		0.76	0.82	
Incremental Delay, d2	0.3	17.4		10.7	3.8		16.7	0.8		0.2	2.0	
Delay (s)	51.2	75.6		75.9	68.1		79.9	14.9		46.0	29.0	
Level of Service	D	E		E	E		E	B		D	C	
Approach Delay (s)		70.8			71.5			24.5			31.3	
Approach LOS		E			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		

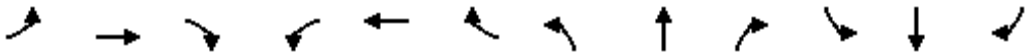
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	60	30	70	150	30	140	50	1200	70	120	1040	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.94		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1706		1770	1633		1770	5022		3433	3491	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1706		1770	1633		1770	5022		3433	3491	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	33	76	163	33	152	54	1304	76	130	1130	87
RTOR Reduction (vph)	0	22	0	0	115	0	0	3	0	0	3	0
Lane Group Flow (vph)	0	152	0	163	70	0	54	1377	0	130	1214	0
Confl. Peds. (#/hr)			6	6			7		18	18		7
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		19.9		17.6	17.6		7.1	79.0		14.4	86.3	
Effective Green, g (s)		19.9		17.6	17.6		7.1	79.0		14.4	86.3	
Actuated g/C Ratio		0.13		0.12	0.12		0.05	0.53		0.10	0.58	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		226		207	191		83	2644		329	2008	
v/s Ratio Prot		c0.09		c0.09	0.04		0.03	c0.27		0.04	c0.35	
v/s Ratio Perm												
v/c Ratio		0.67		0.79	0.37		0.65	0.52		0.40	0.60	
Uniform Delay, d1		62.0		64.4	61.1		70.2	23.2		63.7	20.7	
Progression Factor		1.00		1.00	1.00		1.05	1.05		0.64	0.36	
Incremental Delay, d2		6.1		16.5	0.4		12.7	0.7		0.2	1.1	
Delay (s)		68.1		80.9	61.5		86.1	25.1		41.2	8.5	
Level of Service		E		F	E		F	C		D	A	
Approach Delay (s)		68.1			70.6			27.4			11.7	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	20	70	30	110	170	140	1110	30	40	1100	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		5.8	4.0	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.99		1.00	1.00	1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1562		1842	1583	1770	5055		1770	4963	
Flt Permitted		0.48	1.00		0.91	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		903	1562		1696	1583	1770	5055		1770	4963	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	76	33	120	185	152	1207	33	43	1196	130
RTOR Reduction (vph)	0	0	67	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	0	65	9	0	153	185	152	1239	0	43	1319	0
Confl. Peds. (#/hr)			1	1			19		19	19		19
Turn Type	Perm	NA	Perm	Perm	NA	Free	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		Free						
Actuated Green, G (s)		18.5	18.5		18.5	150.0	31.5	110.2		7.1	85.8	
Effective Green, g (s)		18.5	18.5		17.6	150.0	31.5	110.2		7.1	85.8	
Actuated g/C Ratio		0.12	0.12		0.12	1.00	0.21	0.73		0.05	0.57	
Clearance Time (s)		4.9	4.9		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.9		2.0	3.9	
Lane Grp Cap (vph)		111	192		198	1583	371	3713		83	2838	
v/s Ratio Prot							c0.09	0.25		0.02	c0.27	
v/s Ratio Perm		0.07	0.01		c0.09	0.12						
v/c Ratio		0.59	0.05		0.77	0.12	0.41	0.33		0.52	0.46	
Uniform Delay, d1		62.1	58.0		64.3	0.0	51.2	7.0		69.8	18.7	
Progression Factor		1.24	2.55		1.00	1.00	0.81	0.68		0.96	1.34	
Incremental Delay, d2		4.5	0.0		15.6	0.2	0.1	0.1		1.8	0.4	
Delay (s)		81.8	147.7		79.8	0.2	41.5	4.9		68.9	25.5	
Level of Service		F	F		E	A	D	A		E	C	
Approach Delay (s)		117.3			36.2			8.9			26.9	
Approach LOS		F			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Volume (vph)	360	1630	510	100	1880	600	100	350	390	100	220	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	5.9	5.9	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.94	1.00	1.00	1.00	1.00	0.81	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (prot)	3433	4569		1362	5085	1487	1611	1681	1610	1640	1289	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (perm)	3433	4569		1362	5085	1487	1611	1681	1610	1640	1289	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	391	1772	554	109	2043	652	109	380	424	109	239	217
RTOR Reduction (vph)	0	0	0	30	0	14	69	0	0	0	155	0
Lane Group Flow (vph)	391	2337	0	68	2043	638	40	243	332	338	84	217
Confl. Peds. (#/hr)	29		31			29		10			63	63
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	16.0	82.9		82.9	63.1	96.5	55.1	33.4	33.4	33.4	33.4	19.6
Effective Green, g (s)	17.4	85.0		82.9	65.0	92.7	55.1	33.4	33.4	33.4	33.4	19.6
Actuated g/C Ratio	0.12	0.57		0.55	0.43	0.62	0.37	0.22	0.22	0.22	0.22	0.13
Clearance Time (s)	4.0	6.1		6.1	5.9	4.0	5.9	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	2.8		2.8	3.2	3.0	4.1	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	398	2589		752	2203	918	591	374	358	365	287	231
v/s Ratio Prot	c0.11	c0.51			0.40	0.15		0.14	c0.21	0.21		c0.12
v/s Ratio Perm				0.05		0.28	0.02				0.07	
v/c Ratio	0.98	0.90		0.09	0.93	0.70	0.07	0.65	0.93	0.93	0.29	0.94
Uniform Delay, d1	66.1	28.8		15.8	40.3	19.2	30.8	53.0	57.1	57.1	48.5	64.6
Progression Factor	1.00	1.00		1.00	1.22	1.78	1.00	0.86	0.86	0.86	0.95	1.00
Incremental Delay, d2	40.2	5.7		0.2	6.9	1.9	0.1	3.5	27.7	27.1	0.5	42.1
Delay (s)	106.4	34.5		16.0	56.1	35.9	30.9	48.9	77.0	76.4	46.7	106.8
Level of Service	F	C		B	E	D	C	D	E	E	D	F
Approach Delay (s)		43.8			51.2					64.6		95.6
Approach LOS		D			D					E		F

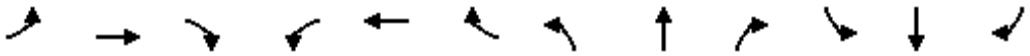
Intersection Summary			
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	NWR	NWR2
Lane Configurations		
Volume (vph)	330	50
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	359	54
RTOR Reduction (vph)	83	0
Lane Group Flow (vph)	330	0
Confl. Peds. (#/hr)		31
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	19.6	
Effective Green, g (s)	19.6	
Actuated g/C Ratio	0.13	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	364	
v/s Ratio Prot	0.12	
v/s Ratio Perm		
v/c Ratio	0.91	
Uniform Delay, d1	64.3	
Progression Factor	1.00	
Incremental Delay, d2	25.4	
Delay (s)	89.7	
Level of Service	F	
Approach Delay (s)		
Approach LOS		

Intersection Summary



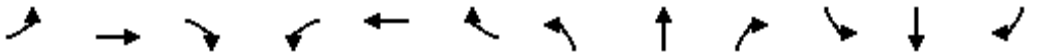
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	120	300	100	200	50	70	70	120	50	40	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.92			0.98			0.94			0.95	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		1698			1801			1724			1742	
Flt Permitted		0.89			0.71			0.89			0.84	
Satd. Flow (perm)		1523			1295			1550			1488	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	130	326	109	217	54	76	76	130	54	43	54
RTOR Reduction (vph)	0	109	0	0	12	0	0	40	0	0	26	0
Lane Group Flow (vph)	0	434	0	0	368	0	0	242	0	0	125	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		19.4			19.4			22.1			22.6	
Effective Green, g (s)		19.4			19.4			22.1			22.6	
Actuated g/C Ratio		0.38			0.38			0.44			0.45	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		585			497			678			665	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.28			c0.16			0.08	
v/c Ratio		0.74			0.74			0.36			0.19	
Uniform Delay, d1		13.4			13.4			9.5			8.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		5.1			5.7			1.5			0.1	
Delay (s)		18.4			19.1			10.9			8.6	
Level of Service		B			B			B			A	
Approach Delay (s)		18.4			19.1			10.9			8.6	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	50.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Volume (vph)	290	1290	830	50	50	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5042		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5042		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	1402	902	54	54	489
RTOR Reduction (vph)	0	0	3	0	0	441
Lane Group Flow (vph)	315	1402	953	0	54	48
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.6	100.2	69.6		11.8	11.8
Effective Green, g (s)	26.6	100.2	69.6		11.8	11.8
Actuated g/C Ratio	0.22	0.84	0.58		0.10	0.10
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	392	4245	2924		174	155
v/s Ratio Prot	c0.18	c0.28	0.19		c0.03	
v/s Ratio Perm						0.03
v/c Ratio	0.80	0.33	0.33		0.31	0.31
Uniform Delay, d1	44.2	2.3	13.0		50.3	50.3
Progression Factor	1.00	1.00	0.61		1.00	1.00
Incremental Delay, d2	11.3	0.2	0.2		1.0	1.1
Delay (s)	55.5	2.5	8.1		51.3	51.5
Level of Service	E	A	A		D	D
Approach Delay (s)		12.2	8.1		51.4	
Approach LOS		B	A		D	

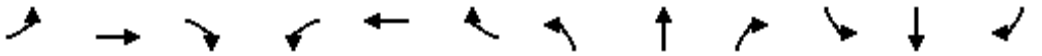
Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	0	140	120	190	150	0	0	0	0	70	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.93						0.92	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1740						1721	
Flt Permitted	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1770		1583	1770	1740						1721	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	152	130	207	163	0	0	0	0	76	98
RTOR Reduction (vph)	0	0	133	86	42	0	0	0	0	0	75	0
Lane Group Flow (vph)	109	0	19	44	328	0	0	0	0	0	99	0
Turn Type	Prot		Perm	Split	NA						NA	
Protected Phases	2!			8	8						6!	
Permitted Phases			4									
Actuated Green, G (s)	8.5		4.9	12.9	12.9						8.5	
Effective Green, g (s)	8.5		4.9	12.9	12.9						8.5	
Actuated g/C Ratio	0.22		0.13	0.34	0.34						0.22	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	392		202	596	586						381	
v/s Ratio Prot	c0.06			0.02	c0.19						0.06	
v/s Ratio Perm			c0.01									
v/c Ratio	0.28		0.10	0.07	0.56						0.26	
Uniform Delay, d1	12.4		14.7	8.6	10.4						12.3	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.4		0.2	0.1	1.2						0.4	
Delay (s)	12.7		15.0	8.7	11.6						12.7	
Level of Service	B		B	A	B						B	
Approach Delay (s)		14.0			10.8			0.0			12.7	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	38.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

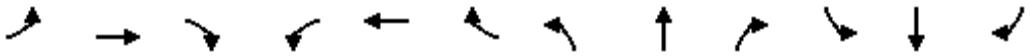
! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1990	40	150	2380	0	0	0	0	570	200	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.98	0.99	1.00
Frt		1.00		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		5070		1770	6408					1656	1725	1559
Flt Permitted		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (perm)		5070		1770	6408					1656	1725	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2163	43	163	2587	0	0	0	0	620	217	109
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	0	33
Lane Group Flow (vph)	0	2204	0	163	2587	0	0	0	0	477	360	76
Confl. Peds. (#/hr)				13						14		3
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		72.9		17.5	95.1					45.1	45.1	45.1
Effective Green, g (s)		74.1		17.9	96.0					46.0	46.0	46.0
Actuated g/C Ratio		0.49		0.12	0.64					0.31	0.31	0.31
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2504		211	4101					507	529	478
v/s Ratio Prot		c0.43		c0.09	0.40							
v/s Ratio Perm										c0.29	0.21	0.05
v/c Ratio		0.88		0.77	0.63					0.94	0.68	0.16
Uniform Delay, d1		34.0		64.1	16.3					50.7	45.6	37.9
Progression Factor		1.14		1.47	0.08					1.00	1.00	1.00
Incremental Delay, d2		2.4		5.6	0.3					25.6	2.9	0.1
Delay (s)		40.9		99.5	1.6					76.3	48.4	38.0
Level of Service		D		F	A					E	D	D
Approach Delay (s)		40.9			7.4			0.0			61.3	
Approach LOS		D			A			A			E	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

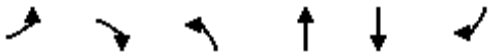
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	790	210	180	390	0	180	0	300	190	220	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3323		1770	3539		1770		1556	1770	1848	
Flt Permitted		1.00		0.10	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3323		195	3539		1770		1556	1770	1848	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	859	228	196	424	0	196	0	326	207	239	11
RTOR Reduction (vph)	0	26	0	0	0	0	0	0	200	0	2	0
Lane Group Flow (vph)	0	1061	0	196	424	0	196	0	126	207	248	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		33.9		45.9	45.9		12.9		33.9	17.0	17.0	
Effective Green, g (s)		34.8		46.3	46.8		13.3		34.8	17.9	17.9	
Actuated g/C Ratio		0.39		0.51	0.52		0.15		0.39	0.20	0.20	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1284		240	1840		261		601	352	367	
v/s Ratio Prot		0.32		c0.07	0.12		c0.11			0.12	c0.13	
v/s Ratio Perm				c0.35					0.08			
v/c Ratio		0.83		0.82	0.23		0.75		0.21	0.59	0.68	
Uniform Delay, d1		24.9		17.6	11.8		36.8		18.4	32.7	33.4	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		6.2		18.0	0.3		11.5		0.8	2.5	4.9	
Delay (s)		31.1		35.6	12.1		48.3		19.2	35.2	38.3	
Level of Service		C		D	B		D		B	D	D	
Approach Delay (s)		31.1			19.5			30.1			36.9	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

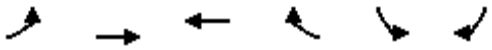
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	230	450	450	890	430	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.97	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1668		1770	5085	4915	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1668		1770	5085	4915	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	489	489	967	467	109
RTOR Reduction (vph)	59	0	0	0	32	0
Lane Group Flow (vph)	680	0	489	967	544	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	49.0		35.6	63.0	23.4	
Effective Green, g (s)	49.0		35.2	63.0	22.5	
Actuated g/C Ratio	0.41		0.29	0.52	0.19	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	681		519	2669	921	
v/s Ratio Prot	c0.41		c0.28	0.19	c0.11	
v/s Ratio Perm						
v/c Ratio	1.00		0.94	0.36	0.59	
Uniform Delay, d1	35.5		41.4	16.7	44.5	
Progression Factor	1.00		1.04	1.20	1.00	
Incremental Delay, d2	34.0		25.1	0.4	2.8	
Delay (s)	69.5		68.1	20.4	47.3	
Level of Service	E		E	C	D	
Approach Delay (s)	69.5			36.4	47.3	
Approach LOS	E			D	D	

Intersection Summary			
HCM 2000 Control Delay	47.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		

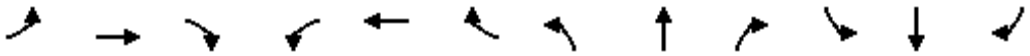
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	70	90	170	80	70	130
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	98	185	87	76	141
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1226	738			
pX, platoon unblocked						
vC, conflicting volume	272				478	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				478	228
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				85	83
cM capacity (veh/h)	1292				514	811

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	76	98	272	217
Volume Left	76	0	0	76
Volume Right	0	0	87	141
cSH	1292	1700	1700	674
Volume to Capacity	0.06	0.06	0.16	0.32
Queue Length 95th (ft)	5	0	0	35
Control Delay (s)	8.0	0.0	0.0	12.9
Lane LOS	A			B
Approach Delay (s)	3.5		0.0	12.9
Approach LOS				B

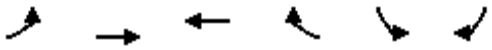
Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	200	2350	10	0	2480	560	50	100	160	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frpb, ped/bikes	1.00	1.00			1.00	0.96		0.98				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.92				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5081			5085	1519		3186				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5081			5085	1519		3186				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	2554	11	0	2696	609	54	109	174	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	140	0	3	0	0	0	0
Lane Group Flow (vph)	217	2565	0	0	2696	469	0	334	0	0	0	0
Confl. Peds. (#/hr)	15		2			15	1		20			
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	19.8	107.2			83.0	83.0		33.0				
Effective Green, g (s)	20.2	108.1			83.9	83.9		33.9				
Actuated g/C Ratio	0.13	0.72			0.56	0.56		0.23				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	238	3661			2844	849		720				
v/s Ratio Prot	c0.12	0.50			c0.53			c0.10				
v/s Ratio Perm						0.31						
v/c Ratio	0.91	0.70			0.95	0.55		0.46				
Uniform Delay, d1	64.0	11.8			31.0	21.1		50.2				
Progression Factor	0.78	0.45			1.00	1.00		1.00				
Incremental Delay, d2	19.7	0.5			8.5	2.6		0.2				
Delay (s)	69.4	5.9			39.5	23.7		50.4				
Level of Service	E	A			D	C		D				
Approach Delay (s)		10.8			36.6			50.4			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	26.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	130	1150	570	100	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	1250	620	109	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		345	945			
pX, platoon unblocked	0.95				0.77	0.95
vC, conflicting volume	728				1582	364
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	613				864	230
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	85				100	100
cM capacity (veh/h)	916				190	735

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	141	625	625	413	315
Volume Left	141	0	0	0	0
Volume Right	0	0	0	0	109
cSH	916	1700	1700	1700	1700
Volume to Capacity	0.15	0.37	0.37	0.24	0.19
Queue Length 95th (ft)	14	0	0	0	0
Control Delay (s)	9.6	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	1.0			0.0	
Approach LOS					

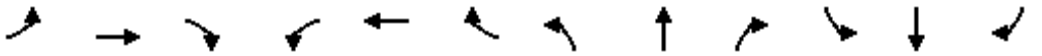
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	130	0	0	590	360	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	0	0	641	391	304

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	141	641	391	304
Volume Left (vph)	141	0	391	0
Volume Right (vph)	0	641	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.9	4.7	6.2	5.7
Degree Utilization, x	0.27	0.84	0.67	0.48
Capacity (veh/h)	499	751	565	623
Control Delay (s)	12.4	27.5	19.7	12.6
Approach Delay (s)	12.4	27.5	16.6	
Approach LOS	B	D	C	

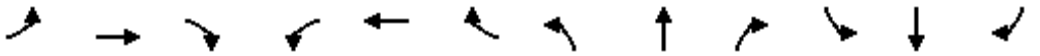
Intersection Summary			
Delay	20.9		
Level of Service	C		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	440	50	150	20	20	30	50	120	10	20	200	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	478	54	163	22	22	33	54	130	11	22	217	207

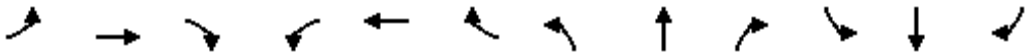
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	505	190	76	196	239	207
Volume Left (vph)	478	0	22	54	22	0
Volume Right (vph)	0	163	33	11	0	207
Hadj (s)	0.51	-0.57	-0.17	0.06	0.08	-0.67
Departure Headway (s)	7.2	6.1	7.7	7.5	7.3	6.6
Degree Utilization, x	1.0	0.32	0.16	0.41	0.49	0.38
Capacity (veh/h)	491	575	440	467	482	537
Control Delay (s)	69.4	10.8	12.1	15.6	15.9	12.3
Approach Delay (s)	53.4		12.1	15.6	14.2	
Approach LOS	F		B	C	B	

Intersection Summary				
Delay	33.6			
Level of Service	D			
Intersection Capacity Utilization	62.8%	ICU Level of Service		B
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	700	280	430	480	0	0	0	0	330	470	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	761	304	467	522	0	0	0	0	359	511	1152
RTOR Reduction (vph)	0	0	203	0	0	0	0	0	0	0	0	87
Lane Group Flow (vph)	0	761	101	467	522	0	0	0	0	359	511	1065
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.7	26.7	15.0	46.1					64.1	64.1	64.1
Effective Green, g (s)		27.6	27.6	15.4	47.0					65.0	65.0	65.0
Actuated g/C Ratio		0.23	0.23	0.13	0.39					0.54	0.54	0.54
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		813	364	440	1386					872	1836	857
v/s Ratio Prot		c0.22		c0.14	0.15							
v/s Ratio Perm			0.06							0.22	0.15	c0.67
v/c Ratio		0.94	0.28	1.06	0.38					0.41	0.28	1.24
Uniform Delay, d1		45.3	38.0	52.3	26.0					16.2	14.8	27.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		19.4	1.9	60.1	0.8					0.1	0.0	119.0
Delay (s)		64.7	39.9	112.4	26.8					16.3	14.9	146.5
Level of Service		E	D	F	C					B	B	F
Approach Delay (s)		57.6			67.2			0.0			90.1	
Approach LOS		E			E			A			F	

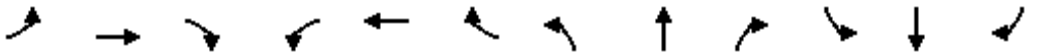
Intersection Summary			
HCM 2000 Control Delay	76.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	40	50	0	0	0	0	0	0	1660	20
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	43	54	0	0	0	0	0	0	1804	22
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1815	1815	612	645	1826	0	1826			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1815	1815	612	645	1826	0	1826			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	90	83	100	100	100			100		
cM capacity (veh/h)	49	77	436	322	76	1084	331			1622		

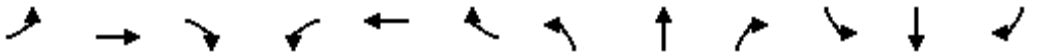
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	43	54	722	722	383
Volume Left	0	54	0	0	0
Volume Right	43	0	0	0	22
cSH	436	322	1700	1700	1700
Volume to Capacity	0.10	0.17	0.42	0.42	0.23
Queue Length 95th (ft)	8	15	0	0	0
Control Delay (s)	14.2	18.5	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	14.2	18.5	0.0		
Approach LOS	B	C			

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	51.0%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	420	240	100	150	0	0	0	0	380	840	480
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.95	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3470					1770	4808	
Flt Permitted		1.00	1.00		0.64					0.95	1.00	
Satd. Flow (perm)		1863	1583		2255					1770	4808	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	457	261	109	163	0	0	0	0	413	913	522
RTOR Reduction (vph)	0	0	40	0	0	0	0	0	0	0	159	0
Lane Group Flow (vph)	0	457	221	0	272	0	0	0	0	413	1276	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		25.3	25.3		25.3					26.7	26.7	
Effective Green, g (s)		28.0	28.0		28.0					29.0	29.0	
Actuated g/C Ratio		0.43	0.43		0.43					0.45	0.45	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		802	681		971					789	2145	
v/s Ratio Prot		c0.25									c0.27	
v/s Ratio Perm			0.14		0.12					0.23		
v/c Ratio		0.57	0.32		0.28					0.52	0.59	
Uniform Delay, d1		14.0	12.2		12.0					13.0	13.6	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		2.9	1.3		0.7					2.5	1.2	
Delay (s)		16.9	13.5		12.7					15.5	14.8	
Level of Service		B	B		B					B	B	
Approach Delay (s)		15.7			12.7			0.0			14.9	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

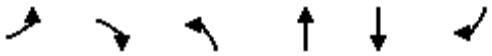


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1090	340	60	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3413		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3413		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1185	370	65	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	1526	0	65	761	0	0	0	0	0	1989	665
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		31.5		3.4	37.6						40.4	40.4
Effective Green, g (s)		29.7		3.8	37.5						39.5	41.8
Actuated g/C Ratio		0.33		0.04	0.42						0.44	0.46
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1126		74	1474						2068	632
v/s Ratio Prot		c0.45		c0.04	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		1.35		0.88	0.52						1.08dl	1.05
Uniform Delay, d1		30.1		42.9	19.5						24.5	24.1
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		165.6		62.7	1.3						12.0	50.3
Delay (s)		195.7		105.6	20.8						36.5	74.4
Level of Service		F		F	C						D	E
Approach Delay (s)		195.7			27.5			0.0			46.6	
Approach LOS		F			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	89.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



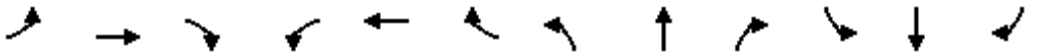
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	310	1270	1700	1270	1150	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2787	3433	5085	5085	1566
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2787	3433	5085	5085	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	337	1380	1848	1380	1250	141
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	337	1380	1848	1380	1250	137
Confl. Peds. (#/hr)			3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	23.0	88.0	65.0	99.0	30.0	53.0
Effective Green, g (s)	23.0	88.0	65.0	99.0	30.0	53.0
Actuated g/C Ratio	0.18	0.68	0.50	0.76	0.23	0.41
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	1972	1716	3872	1173	686
v/s Ratio Prot	c0.19	0.35	c0.54	0.27	c0.25	0.04
v/s Ratio Perm		0.15				0.05
v/c Ratio	1.08	0.70	1.08	0.36	1.07	0.20
Uniform Delay, d1	53.5	12.9	32.5	5.1	50.0	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	72.8	1.1	45.7	0.3	45.7	0.1
Delay (s)	126.3	14.0	78.2	5.3	95.7	25.0
Level of Service	F	B	E	A	F	C
Approach Delay (s)	36.0			47.1	88.5	
Approach LOS	D			D	F	

Intersection Summary			
HCM 2000 Control Delay	53.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Volume (vph)	240	520	0	0	900	640	40	0	120	250	30	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.91	0.91	
Frt	1.00	1.00			1.00	0.85		0.90		1.00	0.87	
Flt Protected	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	3539			3539	1583		1653		1610	2933	
Flt Permitted	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	3539			3539	1583		1653		1610	2933	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	565	0	0	978	696	43	0	130	272	33	457
RTOR Reduction (vph)	0	0	0	0	0	427	0	111	0	0	399	0
Lane Group Flow (vph)	261	565	0	0	978	269	0	62	0	245	118	0
Turn Type	Prot	NA			NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6						
Actuated Green, G (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Effective Green, g (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Actuated g/C Ratio	0.12	0.56			0.39	0.39		0.14		0.13	0.13	
Clearance Time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5		2.0		2.0	2.0	
Lane Grp Cap (vph)	214	1994			1366	611		238		204	372	
v/s Ratio Prot	c0.15	0.16			c0.28			c0.04		c0.15	0.04	
v/s Ratio Perm						0.17						
v/c Ratio	1.22	0.28			0.72	0.44		0.26		1.20	0.32	
Uniform Delay, d1	38.4	9.9			22.7	19.8		33.2		38.1	34.7	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	133.4	0.4			3.2	2.3		0.2		127.8	0.2	
Delay (s)	171.8	10.3			26.0	22.1		33.4		165.9	34.8	
Level of Service	F	B			C	C		C		F	C	
Approach Delay (s)		61.3			24.4			33.4			77.0	
Approach LOS		E			C			C			E	

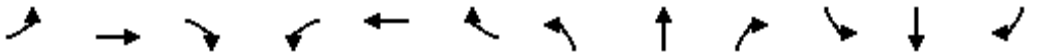
Intersection Summary			
HCM 2000 Control Delay	45.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	87.3	Sum of lost time (s)	19.3
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	410	70	600	670	0	0	0	0	350	40	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3453		1770	1863					1681	1701	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3453		1770	1863					1681	1701	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	446	76	652	728	0	0	0	0	380	43	402
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	0	71
Lane Group Flow (vph)	0	504	0	652	728	0	0	0	0	201	222	331
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Split	NA					Split	NA	custom
Protected Phases		7		8	8					6	6	6
Permitted Phases												7
Actuated Green, G (s)		14.2		29.7	29.7					10.7	10.7	24.9
Effective Green, g (s)		14.2		30.0	30.0					12.9	12.9	29.3
Actuated g/C Ratio		0.21		0.44	0.44					0.19	0.19	0.43
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		712		771	812					315	318	715
v/s Ratio Prot		c0.15		0.37	c0.39					0.12	c0.13	0.09
v/s Ratio Perm												0.12
v/c Ratio		0.71		0.85	0.90					0.64	0.70	0.46
Uniform Delay, d1		25.4		17.3	18.0					25.8	26.1	14.1
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2		8.2	12.2					4.2	6.5	0.5
Delay (s)		28.6		25.5	30.2					30.0	32.7	14.6
Level of Service		C		C	C					C	C	B
Approach Delay (s)		28.6			28.0			0.0			23.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	68.8	Sum of lost time (s)	11.7
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

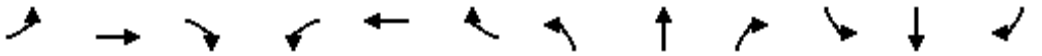
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	150	30	360	40	230	30	1530	260	250	510	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1624		1770	4974		1770	5051	
Flt Permitted	0.43	1.00		0.55	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	805	1809		1020	1624		1770	4974		1770	5051	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	391	43	250	33	1663	283	272	554	22
RTOR Reduction (vph)	0	6	0	0	162	0	0	20	0	0	3	0
Lane Group Flow (vph)	43	190	0	391	131	0	33	1927	0	272	573	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.1	43.1		42.4	42.4		3.6	46.1		19.0	60.8	
Effective Green, g (s)	43.1	43.1		42.8	42.8		3.6	47.5		16.8	62.9	
Actuated g/C Ratio	0.35	0.35		0.35	0.35		0.03	0.39		0.14	0.52	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	285	641		359	571		52	1942		244	2612	
v/s Ratio Prot		0.11			0.08		0.02	c0.39		c0.15	0.11	
v/s Ratio Perm	0.05			c0.38								
v/c Ratio	0.15	0.30		1.09	0.23		0.63	0.99		1.11	0.22	
Uniform Delay, d1	26.8	28.3		39.4	27.8		58.3	36.9		52.4	16.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		73.5	0.2		17.1	18.6		91.9	0.2	
Delay (s)	26.9	28.4		112.9	28.0		75.4	55.5		144.3	16.2	
Level of Service	C	C		F	C		E	E		F	B	
Approach Delay (s)		28.1			76.5			55.8			57.3	
Approach LOS		C			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	58.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

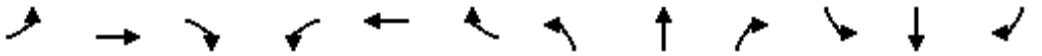
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	620	1070	300	250	950	160	450	1040	230	130	610	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3423		1770	3454		1770	4934		1770	5085	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3423		1770	3454		1770	4934		1770	5085	1569
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	1163	326	272	1033	174	489	1130	250	141	663	272
RTOR Reduction (vph)	0	17	0	0	9	0	0	24	0	0	0	50
Lane Group Flow (vph)	674	1472	0	272	1198	0	489	1356	0	141	663	222
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	38.6	58.2		22.2	41.2		28.6	42.1		8.6	22.0	60.6
Effective Green, g (s)	39.0	59.4		22.6	43.0		29.0	43.0		9.0	23.0	61.4
Actuated g/C Ratio	0.26	0.40		0.15	0.29		0.19	0.29		0.06	0.15	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	460	1355		266	990		342	1414		106	779	642
v/s Ratio Prot	c0.38	0.43		0.15	c0.35		c0.28	c0.27		0.08	0.13	0.09
v/s Ratio Perm												0.05
v/c Ratio	1.47	1.09		1.02	1.21		1.43	0.96		1.33	0.85	0.35
Uniform Delay, d1	55.5	45.3		63.7	53.5		60.5	52.6		70.5	61.8	30.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	221.0	51.5		61.1	103.9		209.6	16.0		199.5	11.3	0.1
Delay (s)	276.5	96.8		124.8	157.4		270.1	68.6		270.0	73.1	30.6
Level of Service	F	F		F	F		F	E		F	E	C
Approach Delay (s)		152.8			151.4			121.4			88.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	133.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	119.0%	ICU Level of Service	H
Analysis Period (min)	15		

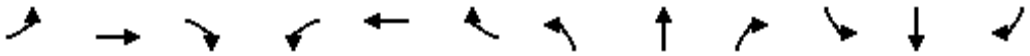
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	790	200	220	350	90	250	240	630	70	110	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.71	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	859	217	239	380	98	272	261	685	76	120	76
RTOR Reduction (vph)	0	0	119	0	0	63	0	0	63	0	0	58
Lane Group Flow (vph)	174	859	98	239	380	35	272	261	622	76	120	18
Confl. Peds. (#/hr)			27	27		170	23		15	15		23
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.0	33.2	41.1	10.1	32.3	32.3	7.9	24.0	34.1	6.6	22.7	22.7
Effective Green, g (s)	11.4	34.1	41.9	10.5	33.2	33.2	8.3	23.4	31.9	7.0	22.2	22.2
Actuated g/C Ratio	0.12	0.37	0.45	0.11	0.36	0.36	0.09	0.25	0.34	0.08	0.24	0.24
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	218	1304	1227	389	1270	405	308	471	536	133	1220	368
v/s Ratio Prot	0.10	c0.24	0.01	0.07	0.11		c0.08	0.14	c0.11	0.04	0.02	
v/s Ratio Perm			0.03			0.03			0.29			0.01
v/c Ratio	0.80	0.66	0.08	0.61	0.30	0.09	0.88	0.55	1.16	0.57	0.10	0.05
Uniform Delay, d1	39.4	24.3	14.4	39.1	21.3	19.6	41.6	30.0	30.3	41.3	27.4	27.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.0	2.6	0.0	2.0	0.6	0.4	23.8	2.1	91.5	3.6	0.1	0.1
Delay (s)	56.5	27.0	14.4	41.1	21.9	20.0	65.4	32.1	121.8	44.9	27.4	27.1
Level of Service	E	C	B	D	C	C	E	C	F	D	C	C
Approach Delay (s)		28.9			28.0			90.0			32.2	
Approach LOS		C			C			F			C	

Intersection Summary			
HCM 2000 Control Delay	50.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	92.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	580	300	70	20	170	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.94			0.95			0.93	
Flt Protected		0.97			1.00			0.99			0.99	
Satd. Flow (prot)		1784			1731			1722			1698	
Flt Permitted		0.62			0.92			0.86			0.79	
Satd. Flow (perm)		1136			1599			1495			1365	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	185	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	3	0	0	16	0	0	19	0	0	32	0
Lane Group Flow (vph)	0	1029	0	0	354	0	0	308	0	0	55	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		79.2			79.2			21.0			21.0	
Effective Green, g (s)		80.1			80.1			21.9			21.9	
Actuated g/C Ratio		0.73			0.73			0.20			0.20	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		827			1164			297			271	
v/s Ratio Prot												
v/s Ratio Perm		c0.91			0.22			c0.21			0.04	
v/c Ratio		1.24			0.30			1.04			0.20	
Uniform Delay, d1		15.0			5.2			44.0			36.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		120.2			0.7			62.0			0.1	
Delay (s)		135.2			5.9			106.0			36.9	
Level of Service		F			A			F			D	
Approach Delay (s)		135.2			5.9			106.0			36.9	
Approach LOS		F			A			F			D	

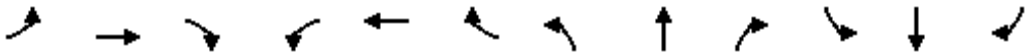
Intersection Summary			
HCM 2000 Control Delay	98.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1050	440	220	490	170	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4706		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4706		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1141	478	239	533	185	283
RTOR Reduction (vph)	83	0	0	0	0	222
Lane Group Flow (vph)	1536	0	239	533	185	61
Confl. Peds. (#/hr)		53	53		46	81
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	30.0		12.2	46.6	14.5	14.5
Effective Green, g (s)	31.9		12.6	46.6	15.4	15.4
Actuated g/C Ratio	0.45		0.18	0.66	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2117		314	2326	384	343
v/s Ratio Prot	c0.33		c0.14	0.15	c0.10	0.04
v/s Ratio Perm						
v/c Ratio	0.73		0.76	0.23	0.48	0.18
Uniform Delay, d1	15.9		27.7	4.9	24.3	22.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	2.2		9.4	0.2	0.3	0.1
Delay (s)	18.1		37.1	5.1	24.6	22.7
Level of Service	B		D	A	C	C
Approach Delay (s)	18.1			15.0	23.5	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	70.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

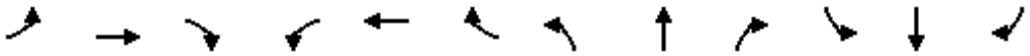
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	20	20	30	20	60	40	140	40	90	190	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	33	22	65	43	152	43	98	207	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	65	120	239	370
Volume Left (vph)	22	33	43	98
Volume Right (vph)	22	65	43	65
Hadj (s)	-0.10	-0.24	-0.04	-0.02
Departure Headway (s)	5.5	5.2	4.8	4.7
Degree Utilization, x	0.10	0.17	0.32	0.48
Capacity (veh/h)	572	610	708	736
Control Delay (s)	9.1	9.3	10.1	12.0
Approach Delay (s)	9.1	9.3	10.1	12.0
Approach LOS	A	A	B	B

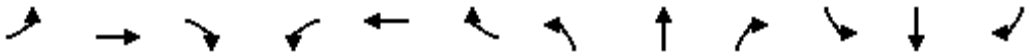
Intersection Summary			
Delay	10.8		
Level of Service	B		
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	40	20	20	30	40	20	30	120	30	40	130	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	22	33	43	22	33	130	33	43	141	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	87	98	196	261
Volume Left (vph)	43	33	33	43
Volume Right (vph)	22	22	33	76
Hadj (s)	-0.02	-0.03	-0.03	-0.11
Departure Headway (s)	5.1	5.1	4.7	4.5
Degree Utilization, x	0.12	0.14	0.25	0.33
Capacity (veh/h)	634	640	732	757
Control Delay (s)	8.8	8.9	9.2	9.7
Approach Delay (s)	8.8	8.9	9.2	9.7
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.3			
Level of Service	A			
Intersection Capacity Utilization	34.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	70	30	30	20	200	400	10	160	20
Future Volume (vph)	20	20	20	70	30	30	20	200	400	10	160	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	76	33	33	22	217	435	11	174	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	142	239	435	207
Volume Left (vph)	22	76	22	0	11
Volume Right (vph)	22	33	0	435	22
Hadj (s)	-0.10	0.00	0.08	-0.67	-0.02
Departure Headway (s)	6.0	5.9	5.5	4.7	5.3
Degree Utilization, x	0.11	0.23	0.36	0.57	0.31
Capacity (veh/h)	533	557	644	747	640
Control Delay (s)	9.7	10.6	10.3	12.6	10.7
Approach Delay (s)	9.7	10.6	11.8		10.7
Approach LOS	A	B	B		B

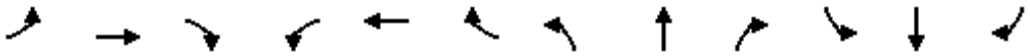
Intersection Summary				
Delay	11.3			
Level of Service	B			
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	40	40	60	50	50	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	43	65	54	54	120

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	87	120	174
Volume Left (vph)	0	65	54
Volume Right (vph)	43	0	120
Hadj (s)	-0.27	0.14	-0.32
Departure Headway (s)	4.2	4.5	4.1
Degree Utilization, x	0.10	0.15	0.20
Capacity (veh/h)	825	757	846
Control Delay (s)	7.6	8.3	8.0
Approach Delay (s)	7.6	8.3	8.0
Approach LOS	A	A	A

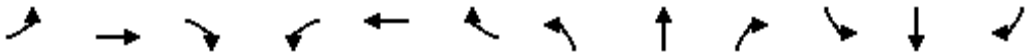
Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	30	30	30	50	30	20	80	160	140	20	70	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	33	33	54	33	22	87	174	152	22	76	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	98	109	413	120
Volume Left (vph)	33	54	87	22
Volume Right (vph)	33	22	152	22
Hadj (s)	-0.10	0.01	-0.14	-0.04
Departure Headway (s)	5.2	5.3	4.5	4.9
Degree Utilization, x	0.14	0.16	0.51	0.16
Capacity (veh/h)	612	605	777	677
Control Delay (s)	9.1	9.3	12.1	8.9
Approach Delay (s)	9.1	9.3	12.1	8.9
Approach LOS	A	A	B	A

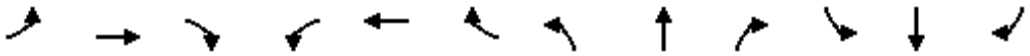
Intersection Summary			
Delay	10.8		
Level of Service	B		
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	280	40	110	20	60	50	120	290	20	20	70	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.95		1.00	0.99		1.00	0.90	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1738			1742		1765	1841		1764	1641	
Flt Permitted		0.75			0.92		0.58	1.00		0.49	1.00	
Satd. Flow (perm)		1353			1607		1087	1841		910	1641	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	43	120	22	65	54	130	315	22	22	76	174
RTOR Reduction (vph)	0	25	0	0	32	0	0	3	0	0	98	0
Lane Group Flow (vph)	0	442	0	0	109	0	130	334	0	22	152	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		21.2			21.2		22.5	22.5		22.5	22.5	
Effective Green, g (s)		21.2			21.2		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.41			0.41		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		554			658		473	801		396	714	
v/s Ratio Prot								c0.18			0.09	
v/s Ratio Perm		c0.33			0.07		0.12			0.02		
v/c Ratio		0.80			0.17		0.27	0.42		0.06	0.21	
Uniform Delay, d1		13.4			9.7		9.4	10.1		8.5	9.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		7.4			0.0		1.4	1.6		0.3	0.7	
Delay (s)		20.7			9.7		10.8	11.7		8.7	9.8	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		20.7			9.7			11.4			9.7	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	51.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

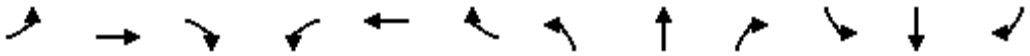
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	1040	200	290	580	20	110	20	220	30	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	0.99			0.92			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1765	4927		1769	3517			1662			1745	
Flt Permitted	0.40	1.00		0.15	1.00			0.88			0.76	
Satd. Flow (perm)	751	4927		282	3517			1480			1347	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1130	217	315	630	22	120	22	239	33	22	22
RTOR Reduction (vph)	0	36	0	0	3	0	0	100	0	0	16	0
Lane Group Flow (vph)	76	1311	0	315	649	0	0	281	0	0	61	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	24.6	21.9		36.3	29.2			15.0			15.0	
Effective Green, g (s)	25.4	22.9		36.7	30.1			15.9			15.9	
Actuated g/C Ratio	0.42	0.37		0.60	0.49			0.26			0.26	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	363	1846		420	1732			385			350	
v/s Ratio Prot	0.01	0.27		c0.13	0.18							
v/s Ratio Perm	0.08			c0.32				c0.19			0.05	
v/c Ratio	0.21	0.71		0.75	0.37			0.73			0.17	
Uniform Delay, d1	10.9	16.3		10.7	9.6			20.6			17.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	2.3		6.6	0.6			6.0			0.1	
Delay (s)	11.0	18.6		17.2	10.3			26.7			17.6	
Level of Service	B	B		B	B			C			B	
Approach Delay (s)		18.2			12.5			26.7			17.6	
Approach LOS		B			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	61.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

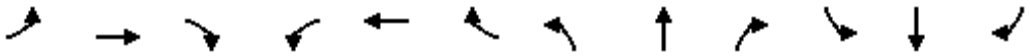
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	22	33	11	22	22	22	120	33	43	174	98

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	174	54	174	315
Volume Left (vph)	120	11	22	43
Volume Right (vph)	33	22	33	98
Hadj (s)	0.06	-0.17	-0.05	-0.12
Departure Headway (s)	5.2	5.2	4.9	4.6
Degree Utilization, x	0.25	0.08	0.23	0.40
Capacity (veh/h)	631	609	693	740
Control Delay (s)	10.0	8.6	9.3	10.7
Approach Delay (s)	10.0	8.6	9.3	10.7
Approach LOS	A	A	A	B

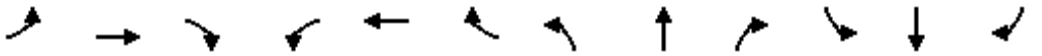
Intersection Summary			
Delay	10.0		
Level of Service	B		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	40	20	60	10	20	20	40	80	20	20	140	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	65	11	22	22	43	87	22	22	152	54

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	130	54	152	228
Volume Left (vph)	43	11	43	22
Volume Right (vph)	65	22	22	54
Hadj (s)	-0.20	-0.17	0.01	-0.09
Departure Headway (s)	4.7	4.8	4.6	4.4
Degree Utilization, x	0.17	0.07	0.20	0.28
Capacity (veh/h)	709	676	737	768
Control Delay (s)	8.6	8.2	8.7	9.2
Approach Delay (s)	8.6	8.2	8.7	9.2
Approach LOS	A	A	A	A

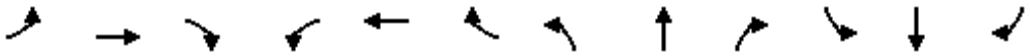
Intersection Summary				
Delay	8.8			
Level of Service	A			
Intersection Capacity Utilization	35.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	560	670	60	30	580	150	0	0	30	220	160	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3487		1770	3418				1611	1681	1736	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3487		1770	3418				1611	1681	1736	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	609	728	65	33	630	163	0	0	33	239	174	337
RTOR Reduction (vph)	0	7	0	0	25	0	0	0	0	0	0	244
Lane Group Flow (vph)	609	786	0	33	768	0	0	0	33	127	286	93
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	13.5	36.5		2.0	25.0				71.4	18.3	18.3	18.3
Effective Green, g (s)	13.9	37.4		2.4	25.9				71.4	19.6	19.6	19.6
Actuated g/C Ratio	0.19	0.52		0.03	0.36				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	668	1826		59	1239				1611	461	476	428
v/s Ratio Prot	c0.18	0.23		0.02	c0.22					0.08	c0.16	
v/s Ratio Perm									0.02			0.06
v/c Ratio	0.91	0.43		0.56	0.62				0.02	0.28	0.60	0.22
Uniform Delay, d1	28.1	10.5		34.0	18.7				0.0	20.3	22.5	20.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	16.5	0.7		6.4	2.3				0.0	0.5	2.7	0.4
Delay (s)	44.6	11.2		40.4	21.0				0.0	20.9	25.2	20.4
Level of Service	D	B		D	C				A	C	C	C
Approach Delay (s)		25.7			21.8			0.0			22.3	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.6%	ICU Level of Service	B
Analysis Period (min)	15		

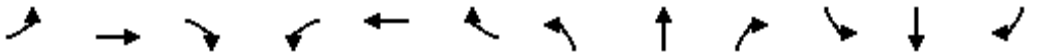
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	1450	120	70	1010	60	120	110	140	40	90	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3400		1671	3405		1646	1575			1704	
Flt Permitted	0.95	1.00		0.95	1.00		0.49	1.00			0.44	
Satd. Flow (perm)	1678	3400		1671	3405		852	1575			764	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	1576	130	76	1098	65	130	120	152	43	98	22
RTOR Reduction (vph)	0	3	0	0	3	0	0	34	0	0	4	0
Lane Group Flow (vph)	87	1703	0	76	1160	0	130	238	0	0	159	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	12.9	94.7		10.0	91.8		26.1	26.1			26.1	
Effective Green, g (s)	13.3	95.6		10.4	92.7		27.0	27.0			27.0	
Actuated g/C Ratio	0.09	0.66		0.07	0.64		0.19	0.19			0.19	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	153	2241		119	2176		158	293			142	
v/s Ratio Prot	c0.05	c0.50		0.05	0.34			0.15				
v/s Ratio Perm							0.15				c0.21	
v/c Ratio	0.57	0.76		0.64	0.53		0.82	0.81			1.12	
Uniform Delay, d1	63.1	16.9		65.5	14.3		56.7	56.6			59.0	
Progression Factor	1.00	1.00		1.01	0.78		1.00	1.00			1.00	
Incremental Delay, d2	2.9	2.5		3.2	0.4		26.8	14.8			111.1	
Delay (s)	66.0	19.3		69.4	11.5		83.5	71.4			170.1	
Level of Service	E	B		E	B		F	E			F	
Approach Delay (s)		21.6			15.1			75.3			170.1	
Approach LOS		C			B			E			F	

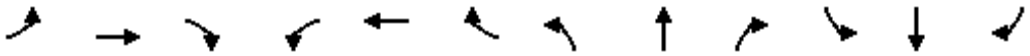
Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



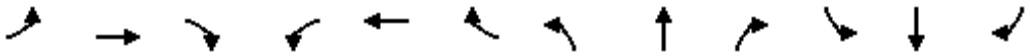
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	440	1400	150	210	840	220	90	420	230	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3468		1770	3380		1770	3539	1526	1770	3180	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3468		1770	3380		1770	3539	1526	1770	3180	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	1522	163	228	913	239	98	457	250	337	239	174
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	62	0	89	0
Lane Group Flow (vph)	478	1679	0	228	1136	0	98	457	188	337	324	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	31.6	59.1		15.6	42.6		11.9	25.8	41.4	25.8	39.8	
Effective Green, g (s)	32.0	60.0		16.0	44.0		12.3	26.8	42.2	26.2	40.7	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.08	0.18	0.29	0.18	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	390	1435		195	1025		150	654	444	319	892	
v/s Ratio Prot	c0.27	c0.48		0.13	0.34		0.06	c0.13	0.05	c0.19	0.10	
v/s Ratio Perm									0.08			
v/c Ratio	1.23	1.17		1.17	1.11		0.65	0.70	0.42	1.06	0.36	
Uniform Delay, d1	56.5	42.5		64.5	50.5		64.3	55.3	41.6	59.4	41.8	
Progression Factor	1.07	0.96		1.10	0.93		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	118.5	82.8		113.0	61.0		7.5	3.5	0.2	66.0	0.2	
Delay (s)	179.1	123.6		183.7	107.9		71.8	58.8	41.8	125.4	42.0	
Level of Service	F	F		F	F		E	E	D	F	D	
Approach Delay (s)		135.8			120.4			55.1			79.5	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	110.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	10	1920	100	160	1270	50	100	20	220	50	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5038		1770	3517			1788	1553		1742	
Flt Permitted	0.95	1.00		0.95	1.00			0.67	1.00		0.63	
Satd. Flow (perm)	1770	5038		1770	3517			1248	1553		1126	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	2087	109	174	1380	54	109	22	239	54	22	22
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	202	0	8	0
Lane Group Flow (vph)	11	2193	0	174	1432	0	0	131	37	0	90	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	2.0	90.1		18.6	106.7			21.7	21.7		21.7	
Effective Green, g (s)	2.4	91.4		19.0	108.0			22.6	22.6		22.6	
Actuated g/C Ratio	0.02	0.63		0.13	0.74			0.16	0.16		0.16	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	29	3175		231	2619			194	242		175	
v/s Ratio Prot	0.01	c0.44		c0.10	0.41							
v/s Ratio Perm								c0.10	0.02		0.08	
v/c Ratio	0.38	0.69		0.75	0.55			0.68	0.15		0.52	
Uniform Delay, d1	70.6	17.5		60.7	8.0			57.7	52.9		56.2	
Progression Factor	0.85	1.21		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.3	0.1		11.6	0.8			7.1	0.1		1.1	
Delay (s)	60.5	21.4		72.4	8.8			64.8	53.0		57.3	
Level of Service	E	C		E	A			E	D		E	
Approach Delay (s)		21.6			15.7			57.2			57.3	
Approach LOS		C			B			E			E	

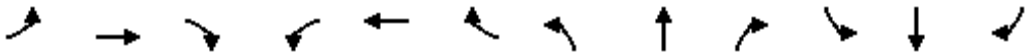
Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	380	2040	0	0	0	0	0	350	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.95	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5038						4778	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5038						4778	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	413	2217	0	0	0	0	0	380	207
RTOR Reduction (vph)	0	0	0	0	13	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2617	0	0	0	0	0	587	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3532						1003	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.52							
v/c Ratio					0.74						0.59	
Uniform Delay, d1					8.4						32.0	
Progression Factor					1.00						0.91	
Incremental Delay, d2					1.4						0.1	
Delay (s)					9.8						29.1	
Level of Service					A						C	
Approach Delay (s)		0.0			9.8			0.0			29.1	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

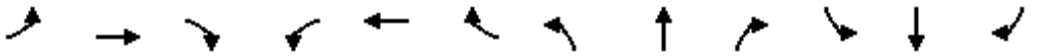
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1630	150	0	0	0	0	0	0	320	440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5010									4939	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5010									4939	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1772	163	0	0	0	0	0	0	348	478	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	16	0
Lane Group Flow (vph)	0	1924	0	0	0	0	0	0	0	0	810	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		58.6									22.4	
Effective Green, g (s)		58.6									23.4	
Actuated g/C Ratio		0.65									0.26	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3262									1284	
v/s Ratio Prot		c0.38										
v/s Ratio Perm											0.16	
v/c Ratio		0.59									0.63	
Uniform Delay, d1		8.9									29.5	
Progression Factor		0.40									0.78	
Incremental Delay, d2		0.5									0.9	
Delay (s)		4.0									24.0	
Level of Service		A									C	
Approach Delay (s)		4.0			0.0			0.0			24.0	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

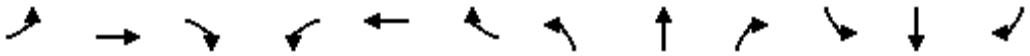
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	230	1260	120	150	1410	120	120	50	130	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3493		1770	3539	1557	1770	1863	1583	3433	1863	1563
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3493		1770	3539	1557	1770	1863	1583	3433	1863	1563
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1370	130	163	1533	130	130	54	141	87	87	228
RTOR Reduction (vph)	0	6	0	0	0	121	0	0	118	0	0	136
Lane Group Flow (vph)	250	1494	0	163	1533	9	130	54	23	87	87	92
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	7.0	40.8		9.0	42.9	5.7	7.0	12.2	12.2	5.7	11.8	11.8
Effective Green, g (s)	7.0	42.3		9.0	44.3	5.7	7.0	14.0	14.0	5.7	12.7	12.7
Actuated g/C Ratio	0.08	0.49		0.10	0.51	0.07	0.08	0.16	0.16	0.07	0.15	0.15
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	276	1698		183	1802	102	142	299	254	224	271	228
v/s Ratio Prot	0.07	0.43		c0.09	c0.43		c0.07	0.03		0.03	0.05	
v/s Ratio Perm						0.01			0.01			c0.06
v/c Ratio	0.91	0.88		0.89	0.85	0.08	0.92	0.18	0.09	0.39	0.32	0.40
Uniform Delay, d1	39.7	20.1		38.5	18.5	38.2	39.7	31.5	31.1	39.0	33.3	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	30.1	6.9		36.8	5.3	0.1	49.8	0.1	0.1	0.4	0.7	1.2
Delay (s)	69.8	26.9		75.3	23.8	38.3	89.5	31.6	31.1	39.4	34.0	34.9
Level of Service	E	C		E	C	D	F	C	C	D	C	C
Approach Delay (s)		33.1			29.4			54.6			35.7	
Approach LOS		C			C			D			D	

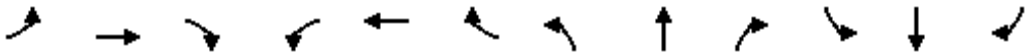
Intersection Summary			
HCM 2000 Control Delay	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	0	0	200	1800	210	340	570	0	0	350	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6262		1770	3539			3389	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6262		1770	3539			3389	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	211	1895	221	358	600	0	0	368	126
RTOR Reduction (vph)	0	0	0	0	15	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	0	0	0	2312	0	358	600	0	0	463	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					51.4		25.7	48.8			18.2	
Effective Green, g (s)					51.4		25.7	48.8			18.2	
Actuated g/C Ratio					0.47		0.23	0.44			0.17	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					2926		413	1570			560	
v/s Ratio Prot							c0.20	0.17			c0.14	
v/s Ratio Perm					0.37							
v/c Ratio					0.79		0.87	0.38			0.83	
Uniform Delay, d1					24.7		40.5	20.5			44.4	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					2.3		17.1	0.2			9.5	
Delay (s)					27.0		57.6	20.7			53.9	
Level of Service					C		E	C			D	
Approach Delay (s)		0.0			27.0			34.5			53.9	
Approach LOS		A			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	1200	90	0	0	0	0	800	420	140	330	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5062	1532					4775		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5062	1532					4775		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1304	98	0	0	0	0	870	457	152	359	0
RTOR Reduction (vph)	0	0	59	0	0	0	0	85	0	0	0	0
Lane Group Flow (vph)	0	1424	39	0	0	0	0	1242	0	152	359	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		35.1	35.1					25.1		15.6	45.1	
Effective Green, g (s)		36.0	36.0					25.1		16.0	45.1	
Actuated g/C Ratio		0.40	0.40					0.28		0.18	0.50	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2024	612					1331		314	2548	
v/s Ratio Prot								c0.26		c0.09	0.07	
v/s Ratio Perm		0.28	0.03									
v/c Ratio		0.70	0.06					0.93		0.48	0.14	
Uniform Delay, d1		22.5	16.6					31.6		33.3	12.1	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		2.1	0.2					13.1		5.3	0.1	
Delay (s)		24.6	16.8					44.8		38.5	12.2	
Level of Service		C	B					D		D	B	
Approach Delay (s)		24.1			0.0			44.8			20.0	
Approach LOS		C			A			D			C	

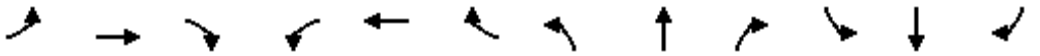
Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1420	750	490	1480	460	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1569	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1569	3433	3539	3433	1418
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1543	815	533	1609	500	283
RTOR Reduction (vph)	0	3	0	0	0	217
Lane Group Flow (vph)	1543	812	533	1609	500	66
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	40.6	60.1	15.8	61.6	19.5	19.5
Effective Green, g (s)	42.8	64.5	15.7	63.0	21.7	21.7
Actuated g/C Ratio	0.46	0.70	0.17	0.68	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1633	1159	581	2405	803	331
v/s Ratio Prot	c0.44	c0.16	c0.16	0.45	0.15	
v/s Ratio Perm		0.35				0.05
v/c Ratio	0.94	0.70	0.92	0.67	0.62	0.20
Uniform Delay, d1	23.8	8.4	37.9	8.7	31.8	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.5	1.6	19.1	1.5	1.1	0.1
Delay (s)	36.4	9.9	56.9	10.2	32.9	28.6
Level of Service	D	A	E	B	C	C
Approach Delay (s)	27.2			21.8	31.4	
Approach LOS	C			C	C	

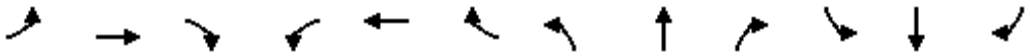
Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	92.7	Sum of lost time (s)	12.5
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1080	330	360	350	0	0	0	0	400	0	1190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1174	359	391	380	0	0	0	0	435	0	1293
RTOR Reduction (vph)	0	0	230	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1174	129	391	380	0	0	0	0	435	0	1293
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		25.9	25.9	13.4	43.5					21.9		75.0
Effective Green, g (s)		26.9	26.9	13.6	44.5					22.5		75.0
Actuated g/C Ratio		0.36	0.36	0.18	0.59					0.30		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1269	559	622	2099					531		1583
v/s Ratio Prot		0.33		0.11	0.11					0.25		
v/s Ratio Perm			0.08									c0.82
v/c Ratio		0.93	0.23	0.63	0.18					0.82		0.82
Uniform Delay, d1		23.1	16.8	28.4	6.9					24.4		0.0
Progression Factor		1.00	1.00	0.86	1.39					1.00		1.00
Incremental Delay, d2		12.7	1.0	0.8	0.1					9.1		4.8
Delay (s)		35.8	17.8	25.2	9.7					33.5		4.8
Level of Service		D	B	C	A					C		A
Approach Delay (s)		31.6			17.6			0.0			12.0	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

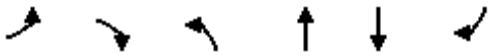
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	870	710	0	0	590	500	190	20	450	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (prot)	3433	3539			3272			1782	1583			
Flt Permitted	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (perm)	3433	3539			3272			1782	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	946	772	0	0	641	543	207	22	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	185	0	0	0	236	0	0	0
Lane Group Flow (vph)	946	772	0	0	999	0	0	229	253	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	20.8	54.5			29.5			10.4	10.4			
Effective Green, g (s)	21.0	55.0			30.0			11.0	11.0			
Actuated g/C Ratio	0.28	0.73			0.40			0.15	0.15			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	961	2595			1308			261	232			
v/s Ratio Prot	c0.28	0.22			c0.31			0.13				
v/s Ratio Perm									c0.16			
v/c Ratio	0.98	0.30			0.76			0.88	1.09			
Uniform Delay, d1	26.8	3.4			19.4			31.3	32.0			
Progression Factor	1.41	0.66			1.00			1.00	1.00			
Incremental Delay, d2	18.7	0.2			4.3			25.8	84.8			
Delay (s)	56.4	2.4			23.7			57.1	116.8			
Level of Service	E	A			C			E	F			
Approach Delay (s)		32.2			23.7			97.8			0.0	
Approach LOS		C			C			F			A	

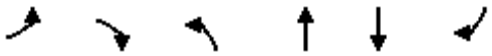
Intersection Summary			
HCM 2000 Control Delay	42.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	230	200	150	870	890	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1700		1770	3539	3450	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1700		1770	3539	3450	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	217	163	946	967	196
RTOR Reduction (vph)	26	0	0	0	11	0
Lane Group Flow (vph)	441	0	163	946	1152	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	37.9		16.0	83.1	62.6	
Effective Green, g (s)	37.9		16.0	83.1	62.6	
Actuated g/C Ratio	0.29		0.12	0.64	0.48	
Clearance Time (s)	4.5		4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	495		217	2262	1661	
v/s Ratio Prot	c0.26		c0.09	0.27	c0.33	
v/s Ratio Perm						
v/c Ratio	0.89		0.75	0.42	0.69	
Uniform Delay, d1	44.1		55.1	11.5	26.2	
Progression Factor	1.00		1.03	1.27	1.00	
Incremental Delay, d2	18.0		12.3	0.5	2.4	
Delay (s)	62.1		69.3	15.2	28.6	
Level of Service	E		E	B	C	
Approach Delay (s)	62.1			23.1	28.6	
Approach LOS	E			C	C	

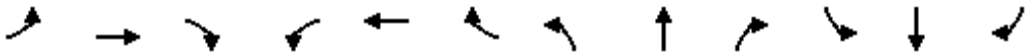
Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	380	0	0	210	160
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	413	0	0	228	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				897	1285	
pX, platoon unblocked						
vC, conflicting volume	315	201	402			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	201	402			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	49	100			
cM capacity (veh/h)	653	806	1153			

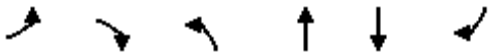
Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	413	152	250
Volume Left	0	0	0
Volume Right	413	0	174
cSH	806	1700	1700
Volume to Capacity	0.51	0.09	0.15
Queue Length 95th (ft)	74	0	0
Control Delay (s)	14.1	0.0	0.0
Lane LOS	B		
Approach Delay (s)	14.1	0.0	
Approach LOS	B		

Intersection Summary			
Average Delay	7.1		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		



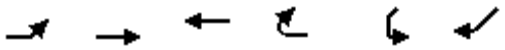
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	30	110	120	240	0	0	0	0	50	520	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.89			1.00						0.98	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1666			1832						3468	
Flt Permitted		1.00			0.84						1.00	
Satd. Flow (perm)		1666			1563						3468	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	33	120	130	261	0	0	0	0	54	565	76
RTOR Reduction (vph)	0	79	0	0	0	0	0	0	0	0	12	0
Lane Group Flow (vph)	0	74	0	0	391	0	0	0	0	0	683	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		17.5			17.5						25.3	
Effective Green, g (s)		17.5			17.5						25.3	
Actuated g/C Ratio		0.34			0.34						0.50	
Clearance Time (s)		4.0			4.0						4.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		573			538						1727	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.25						0.20	
v/c Ratio		0.13			0.73						0.40	
Uniform Delay, d1		11.4			14.6						8.0	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			4.9						0.7	
Delay (s)		11.5			19.4						8.6	
Level of Service		B			B						A	
Approach Delay (s)		11.5			19.4			0.0			8.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	50.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



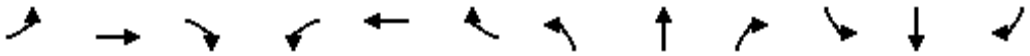
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	120	200	180	370	480	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.97	
Flt Protected	0.98			0.98	1.00	
Satd. Flow (prot)	1674			1833	1803	
Flt Permitted	0.98			0.56	1.00	
Satd. Flow (perm)	1674			1044	1803	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	217	196	402	522	163
RTOR Reduction (vph)	89	0	0	0	15	0
Lane Group Flow (vph)	258	0	0	598	670	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	13.9			47.0	47.0	
Effective Green, g (s)	13.9			47.0	47.0	
Actuated g/C Ratio	0.20			0.68	0.68	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	337			712	1229	
v/s Ratio Prot	c0.15				0.37	
v/s Ratio Perm				c0.57		
v/c Ratio	0.77			0.84	0.55	
Uniform Delay, d1	26.0			8.1	5.5	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	10.0			11.4	1.7	
Delay (s)	36.0			19.6	7.3	
Level of Service	D			B	A	
Approach Delay (s)	36.0			19.6	7.3	
Approach LOS	D			B	A	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	68.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



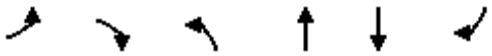
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Volume (vph)	60	1090	1200	40	160	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3522		1678	
Flt Permitted	0.13	1.00	1.00		0.98	
Satd. Flow (perm)	240	3539	3522		1678	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1185	1304	43	174	261
RTOR Reduction (vph)	0	0	4	0	27	0
Lane Group Flow (vph)	65	1185	1343	0	408	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)	31.0	31.0	31.0		22.2	
Effective Green, g (s)	31.0	31.0	31.0		22.2	
Actuated g/C Ratio	0.51	0.51	0.51		0.36	
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	121	1792	1784		608	
v/s Ratio Prot		0.33	c0.38		c0.24	
v/s Ratio Perm	0.27					
v/c Ratio	0.54	0.66	0.75		0.67	
Uniform Delay, d1	10.2	11.2	12.0		16.4	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.5	0.9	1.8		5.8	
Delay (s)	14.8	12.1	13.9		22.2	
Level of Service	B	B	B		C	
Approach Delay (s)		12.3	13.9		22.2	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	61.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



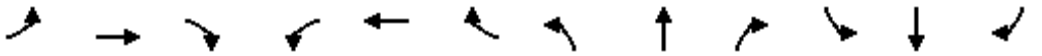
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	20	40	50	120	260	160	500	370	200	490	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.96			0.92		1.00	0.94		1.00	0.98	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1739			1701		1770	3313		1770	3473	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1739			1701		1770	3313		1770	3473	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	22	43	54	130	283	174	543	402	217	533	76
RTOR Reduction (vph)	0	18	0	0	61	0	0	146	0	0	12	0
Lane Group Flow (vph)	0	123	0	0	406	0	174	799	0	217	597	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		11.1			21.5		11.6	22.7		11.9	23.0	
Effective Green, g (s)		11.1			21.5		11.6	22.7		11.9	23.0	
Actuated g/C Ratio		0.13			0.25		0.14	0.27		0.14	0.27	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		226			429		240	882		247	937	
v/s Ratio Prot		c0.07			c0.24		0.10	c0.24		c0.12	0.17	
v/s Ratio Perm												
v/c Ratio		0.54			0.95		0.72	0.91		0.88	0.64	
Uniform Delay, d1		34.7			31.3		35.3	30.2		35.9	27.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.7			30.1		10.4	12.7		27.7	1.4	
Delay (s)		37.3			61.4		45.6	42.9		63.6	28.9	
Level of Service		D			E		D	D		E	C	
Approach Delay (s)		37.3			61.4			43.3			38.0	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	85.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



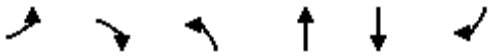
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	160	260	200	140	240	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.93	
Flt Protected	0.98			0.97	1.00	
Satd. Flow (prot)	1675			1810	1734	
Flt Permitted	0.98			0.49	1.00	
Satd. Flow (perm)	1675			921	1734	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	283	217	152	261	272
RTOR Reduction (vph)	94	0	0	0	54	0
Lane Group Flow (vph)	363	0	0	369	479	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	16.5			38.2	38.2	
Effective Green, g (s)	16.5			38.2	38.2	
Actuated g/C Ratio	0.26			0.61	0.61	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	440			561	1056	
v/s Ratio Prot	c0.22				0.28	
v/s Ratio Perm				c0.40		
v/c Ratio	0.83			0.66	0.45	
Uniform Delay, d1	21.7			8.0	6.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	12.0			5.9	1.4	
Delay (s)	33.7			13.9	8.0	
Level of Service	C			B	A	
Approach Delay (s)	33.7			13.9	8.0	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	62.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	200	100	80	100	80	100	2790	240	200	2170	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.93		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3362		1770	3304		1770	5025		1770	5068	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3362		1770	3304		1770	5025		1770	5068	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	217	109	87	109	87	109	3033	261	217	2359	54
RTOR Reduction (vph)	0	52	0	0	75	0	0	8	0	0	2	0
Lane Group Flow (vph)	109	274	0	87	121	0	109	3286	0	217	2411	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	7.0	16.0		7.0	16.0		8.0	67.0		14.0	73.0	
Effective Green, g (s)	7.0	16.0		7.0	16.0		8.0	67.0		14.0	73.0	
Actuated g/C Ratio	0.06	0.13		0.06	0.13		0.07	0.56		0.12	0.61	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	103	448		103	440		118	2805		206	3083	
v/s Ratio Prot	c0.06	c0.08		0.05	0.04		0.06	c0.65		c0.12	0.48	
v/s Ratio Perm												
v/c Ratio	1.06	0.61		0.84	0.27		0.92	1.17		1.05	0.78	
Uniform Delay, d1	56.5	49.1		56.0	46.8		55.7	26.5		53.0	17.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	105.3	6.1		43.6	1.5		59.2	81.3		77.5	2.1	
Delay (s)	161.8	55.2		99.5	48.3		114.8	107.8		130.5	19.6	
Level of Service	F	E		F	D		F	F		F	B	
Approach Delay (s)		81.9			64.1			108.0			28.8	
Approach LOS		F			E			F			C	

Intersection Summary			
HCM 2000 Control Delay	73.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

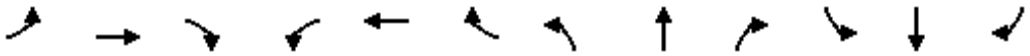


Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	100	0	370	490	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	402	533	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	109	0	402	533	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.06			0.15		
v/s Ratio Perm			c0.23			
v/c Ratio	0.15		0.57	0.38		
Uniform Delay, d1	7.7		9.3	8.5		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		3.3	0.8		
Delay (s)	8.1		12.6	9.2		
Level of Service	A		B	A		
Approach Delay (s)	8.1			10.7	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Peak Hour Intersection Calculation Worksheets - Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	50	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1573	3433	5085	1544	3433	1863	1564	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1573	3433	5085	1544	3433	1863	1564	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	162	0	0	92	0	0	47	0	17	0
Lane Group Flow (vph)	54	1239	273	174	1446	104	522	435	116	630	417	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.2	25.7	47.0	5.8	28.2	50.4	21.3	28.8	34.6	22.2	27.9	
Effective Green, g (s)	3.6	27.0	49.6	6.2	29.6	53.2	21.7	29.6	36.2	21.2	29.1	
Actuated g/C Ratio	0.04	0.27	0.50	0.06	0.30	0.53	0.22	0.30	0.36	0.21	0.29	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	63	1372	828	212	1505	846	744	551	622	727	515	
v/s Ratio Prot	0.03	0.24	0.07	c0.05	c0.28	0.03	0.15	0.23	0.01	c0.18	c0.24	
v/s Ratio Perm			0.10			0.04			0.06			
v/c Ratio	0.86	0.90	0.33	0.82	0.96	0.12	0.70	0.79	0.19	0.87	0.81	
Uniform Delay, d1	47.9	35.2	15.2	46.4	34.6	11.7	36.2	32.3	21.8	38.0	32.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	63.1	10.0	0.1	20.9	15.6	0.0	2.5	7.7	0.1	10.3	8.6	
Delay (s)	111.1	45.2	15.3	67.2	50.2	11.7	38.6	40.1	21.9	48.3	41.5	
Level of Service	F	D	B	E	D	B	D	D	C	D	D	
Approach Delay (s)		39.7			47.7			36.8			45.5	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

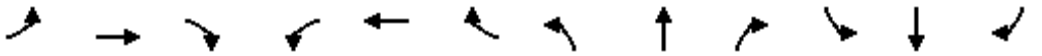
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	530	1180	370	0	0	660
Future Volume (vph)	530	1180	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	576	1283	402	0	0	717
RTOR Reduction (vph)	0	550	0	0	0	0
Lane Group Flow (vph)	576	733	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	9.7	9.7	12.2			12.2
Effective Green, g (s)	9.7	9.7	12.2			12.2
Actuated g/C Ratio	0.27	0.27	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	927	975	1202			1202
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.20				
v/c Ratio	0.62	0.75	0.33			0.60
Uniform Delay, d1	11.5	12.0	8.8			9.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.9	2.9	0.1			0.5
Delay (s)	12.4	14.9	8.9			10.3
Level of Service	B	B	A			B
Approach Delay (s)	14.2		8.9			10.3
Approach LOS	B		A			B

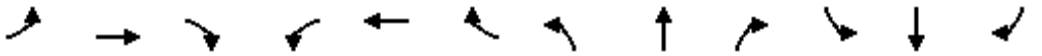
Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	35.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



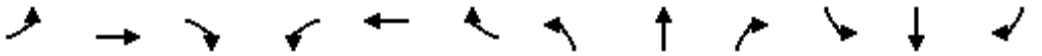
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	460	310	290	30	140	290	210	480	70	380	530	250
Future Volume (vph)	460	310	290	30	140	290	210	480	70	380	530	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1565	1770	3539	1571	3433	3465		3433	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1565	1770	3539	1571	3433	3465		3433	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	500	337	315	33	152	315	228	522	76	413	576	272
RTOR Reduction (vph)	0	0	78	0	0	46	0	8	0	0	0	134
Lane Group Flow (vph)	500	337	237	33	152	269	228	590	0	413	576	138
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	21.1	37.2	49.5	3.2	19.2	37.6	12.3	23.7		18.4	29.8	50.9
Effective Green, g (s)	22.0	38.1	51.3	4.2	20.2	37.6	13.2	24.6		19.3	30.7	50.9
Actuated g/C Ratio	0.22	0.38	0.51	0.04	0.20	0.37	0.13	0.25		0.19	0.31	0.51
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	753	707	800	74	712	588	451	849		660	1083	794
v/s Ratio Prot	c0.15	c0.18	0.04	0.02	0.04	0.08	0.07	c0.17		c0.12	0.16	0.04
v/s Ratio Perm			0.11			0.09						0.05
v/c Ratio	0.66	0.48	0.30	0.45	0.21	0.46	0.51	0.69		0.63	0.53	0.17
Uniform Delay, d1	35.8	23.6	14.1	46.9	33.4	23.6	40.5	34.4		37.2	28.8	13.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.2	0.2	0.2	4.2	0.6	0.6	0.9	2.5		1.9	1.1	0.1
Delay (s)	38.0	23.7	14.3	51.1	34.1	24.2	41.4	36.9		39.0	29.9	13.4
Level of Service	D	C	B	D	C	C	D	D		D	C	B
Approach Delay (s)		27.3			29.0			38.2			29.3	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1470	140	280	1850	270	90	320	190	230	280	180
Future Volume (vph)	230	1470	140	280	1850	270	90	320	190	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6305		3433	6408	1553	1770	3539	1543	3433	3539	1557
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6305		3433	6408	1553	1770	3539	1543	3433	3539	1557
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1598	152	304	2011	293	98	348	207	250	304	196
RTOR Reduction (vph)	0	17	0	0	0	130	0	0	100	0	0	85
Lane Group Flow (vph)	250	1733	0	304	2011	163	98	348	107	250	304	111
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	9.0	30.8		5.2	27.1	37.7	4.8	19.6	24.8	10.6	25.4	34.4
Effective Green, g (s)	9.4	31.9		5.6	28.1	37.7	5.2	20.5	26.6	11.0	26.3	36.2
Actuated g/C Ratio	0.11	0.38		0.07	0.33	0.44	0.06	0.24	0.31	0.13	0.31	0.43
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	379	2366		226	2118	688	108	853	546	444	1095	663
v/s Ratio Prot	0.07	c0.27		0.09	c0.31	0.03	c0.06	c0.10	0.01	c0.07	0.09	0.02
v/s Ratio Perm						0.08			0.06			0.05
v/c Ratio	0.66	0.73		1.35	0.95	0.24	0.91	0.41	0.20	0.56	0.28	0.17
Uniform Delay, d1	36.3	22.9		39.7	27.8	14.7	39.7	27.1	21.4	34.7	22.2	15.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	2.0		181.8	10.8	0.1	56.7	0.1	0.1	1.0	0.1	0.0
Delay (s)	39.4	24.9		221.5	38.6	14.8	96.4	27.3	21.4	35.7	22.2	15.1
Level of Service	D	C		F	D	B	F	C	C	D	C	B
Approach Delay (s)		26.7			57.2			35.8			24.9	
Approach LOS		C			E			D			C	

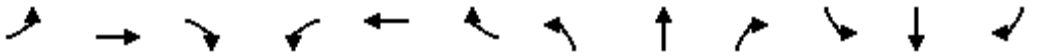
Intersection Summary			
HCM 2000 Control Delay	40.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	340	180	540	520	0	0	0	0	250	320	350
Future Volume (vph)	0	340	180	540	520	0	0	0	0	250	320	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3358	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3358	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	196	587	565	0	0	0	0	272	348	380
RTOR Reduction (vph)	0	0	105	0	0	0	0	0	0	0	0	288
Lane Group Flow (vph)	0	370	91	587	565	0	0	0	0	190	430	92
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		31.2	31.2	16.1	51.7					18.5	18.5	18.5
Effective Green, g (s)		32.1	32.1	16.5	52.6					19.4	19.4	19.4
Actuated g/C Ratio		0.40	0.40	0.21	0.66					0.24	0.24	0.24
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1420	635	708	2326					390	814	675
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.06							0.12	0.13	0.03
v/c Ratio		0.26	0.14	0.83	0.24					0.49	0.53	0.14
Uniform Delay, d1		16.0	15.2	30.4	5.6					26.0	26.3	23.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.4	0.5	7.6	0.2					0.4	0.3	0.0
Delay (s)		16.5	15.7	38.0	5.8					26.4	26.6	23.8
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		16.2			22.2			0.0			25.5	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

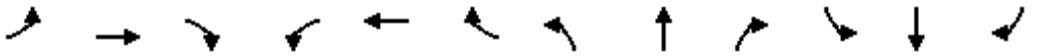


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	660	80	40	500	0	0	0	0	540	340	510
Future Volume (vph)	0	660	80	40	500	0	0	0	0	540	340	510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		5003		1770	3539						4663	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		5003		1770	3539						4663	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	717	87	43	543	0	0	0	0	587	370	554
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	0	0	0	114
Lane Group Flow (vph)	0	782	0	43	543	0	0	0	0	0	957	440
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.1		2.4	27.2						25.8	25.8
Effective Green, g (s)		20.3		2.8	27.1						24.9	27.2
Actuated g/C Ratio		0.31		0.04	0.42						0.38	0.42
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1562		76	1475						1786	569
v/s Ratio Prot		c0.16		0.02	c0.15							
v/s Ratio Perm											0.21	c0.32
v/c Ratio		0.50		0.57	0.37						0.91dl	0.77
Uniform Delay, d1		18.2		30.5	13.1						15.6	16.2
Progression Factor		1.00		1.35	0.83						1.00	1.00
Incremental Delay, d2		1.1		5.2	0.7						0.2	5.9
Delay (s)		19.4		46.4	11.4						15.7	22.2
Level of Service		B		D	B						B	C
Approach Delay (s)		19.4			14.0			0.0			18.1	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

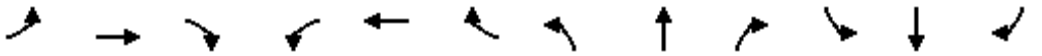
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



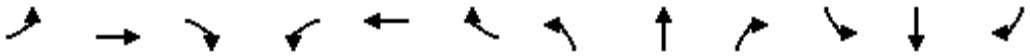
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	400	110	170	40	1290	160	140	730	130
Future Volume (vph)	20	30	30	400	110	170	40	1290	160	140	730	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1765	1693		1770	5001		3433	4954	
Flt Permitted	0.47	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	876	1710		1327	1693		1770	5001		3433	4954	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	435	120	185	43	1402	174	152	793	141
RTOR Reduction (vph)	0	21	0	0	80	0	0	20	0	0	30	0
Lane Group Flow (vph)	22	45	0	435	225	0	43	1556	0	152	904	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	27.4	27.4		26.7	26.7		3.4	26.7		4.5	27.6	
Effective Green, g (s)	27.4	27.4		27.1	27.1		3.4	28.1		5.0	29.7	
Actuated g/C Ratio	0.38	0.38		0.37	0.37		0.05	0.39		0.07	0.41	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	331	646		496	632		83	1938		236	2029	
v/s Ratio Prot		0.03			0.13		0.02	c0.31		c0.04	0.18	
v/s Ratio Perm	0.03			c0.33								
v/c Ratio	0.07	0.07		0.88	0.36		0.52	0.80		0.64	0.45	
Uniform Delay, d1	14.4	14.4		21.1	16.4		33.7	19.7		32.9	15.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		15.9	0.3		2.3	3.6		5.9	0.7	
Delay (s)	14.4	14.4		37.1	16.7		36.0	23.4		38.8	16.2	
Level of Service	B	B		D	B		D	C		D	B	
Approach Delay (s)		14.4			28.7			23.7			19.3	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	72.5	Sum of lost time (s)	12.3
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	660	570	160	140	720	150	300	680	100	80	670	220
Future Volume (vph)	660	570	160	140	720	150	300	680	100	80	670	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4918		1770	4941		3433	5085	1562	1770	5085	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4918		1770	4941		3433	5085	1562	1770	5085	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	717	620	174	152	783	163	326	739	109	87	728	239
RTOR Reduction (vph)	0	51	0	0	34	0	0	0	81	0	0	44
Lane Group Flow (vph)	717	743	0	152	912	0	326	739	28	87	728	195
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	20.5	33.7		11.9	24.5		9.6	24.5	24.5	5.7	20.5	41.0
Effective Green, g (s)	20.9	34.9		12.3	26.3		10.0	25.4	24.5	6.1	21.5	41.8
Actuated g/C Ratio	0.22	0.37		0.13	0.28		0.11	0.27	0.26	0.06	0.23	0.44
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	757	1812		229	1372		362	1363	404	114	1154	692
v/s Ratio Prot	c0.21	0.15		0.09	c0.18		c0.09	c0.15		0.05	c0.14	0.06
v/s Ratio Perm									0.02			0.06
v/c Ratio	0.95	0.41		0.66	0.66		0.90	0.54	0.07	0.76	0.63	0.28
Uniform Delay, d1	36.4	22.2		39.2	30.3		41.9	29.7	26.5	43.6	33.0	16.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.4	0.2		5.5	1.2		24.0	1.6	0.3	23.4	2.6	0.1
Delay (s)	56.8	22.4		44.7	31.4		65.9	31.2	26.8	67.0	35.6	17.0
Level of Service	E	C		D	C		E	C	C	E	D	B
Approach Delay (s)		38.7			33.3			40.4			34.0	
Approach LOS		D			C			D			C	

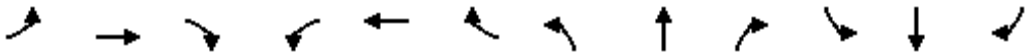
Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	94.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Future Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.91			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1787		1770	1695			1690			1728	
Flt Permitted	0.95	1.00		0.95	1.00			0.96			0.81	
Satd. Flow (perm)	1770	1787		1770	1695			1633			1412	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	228	54	196	272	22	22	33
RTOR Reduction (vph)	0	13	0	0	66	0	0	53	0	0	23	0
Lane Group Flow (vph)	152	313	0	22	314	0	0	469	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.5	36.4		1.5	26.0			22.4			22.4	
Effective Green, g (s)	11.9	37.3		2.4	26.9			23.3			23.3	
Actuated g/C Ratio	0.16	0.50		0.03	0.36			0.31			0.31	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	284	899		57	615			513			443	
v/s Ratio Prot	c0.09	0.17		0.01	c0.19							
v/s Ratio Perm								c0.29			0.04	
v/c Ratio	0.54	0.35		0.39	0.51			0.91			0.12	
Uniform Delay, d1	28.6	11.1		35.1	18.5			24.4			18.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.1		4.3	3.0			20.4			0.0	
Delay (s)	29.5	12.1		39.4	21.5			44.8			18.2	
Level of Service	C	B		D	C			D			B	
Approach Delay (s)		17.7			22.5			44.8			18.2	
Approach LOS		B			C			D			B	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	74.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

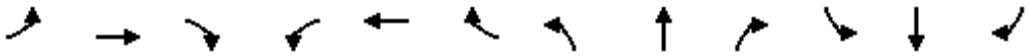
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	650	80	170	1240	70	60	130	100	260	380	250
Future Volume (vph)	180	650	80	170	1240	70	60	130	100	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4978		1770	5033		1770	3539	1555	3433	3278	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4978		1770	5033		1770	3539	1555	3433	3278	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	707	87	185	1348	76	65	141	109	283	413	272
RTOR Reduction (vph)	0	18	0	0	6	0	0	0	59	0	143	0
Lane Group Flow (vph)	196	776	0	185	1418	0	65	141	50	283	542	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	7.9	24.3		13.0	28.9		6.1	17.6	30.6	11.4	23.0	
Effective Green, g (s)	8.3	25.2		13.4	30.3		6.5	18.6	31.4	11.8	23.9	
Actuated g/C Ratio	0.10	0.30		0.16	0.36		0.08	0.22	0.37	0.14	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	335	1475		279	1794		135	774	574	476	921	
v/s Ratio Prot	0.06	0.16		c0.10	c0.28		c0.04	0.04	0.01	0.08	c0.17	
v/s Ratio Perm									0.02			
v/c Ratio	0.59	0.53		0.66	0.79		0.48	0.18	0.09	0.59	0.59	
Uniform Delay, d1	36.7	24.9		33.7	24.5		37.6	27.0	17.5	34.4	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.3		4.5	3.6		1.0	0.2	0.0	1.3	0.8	
Delay (s)	38.4	26.3		38.2	28.1		38.6	27.2	17.5	35.7	27.1	
Level of Service	D	C		D	C		D	C	B	D	C	
Approach Delay (s)		28.7			29.3			26.2			29.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1660	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1660	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	5085	1537	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	5085	1537	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1804	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	139	0	0	117	0	0	50	0	5	0
Lane Group Flow (vph)	98	1804	470	130	1261	274	500	380	146	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.3	41.6	57.2	5.7	38.9	54.2	15.6	29.9	35.6	15.3	27.8	
Effective Green, g (s)	8.7	42.9	59.8	6.1	40.3	57.0	16.0	30.7	37.2	14.3	29.0	
Actuated g/C Ratio	0.08	0.39	0.54	0.06	0.37	0.52	0.15	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	139	1983	852	190	1862	796	499	519	527	446	480	
v/s Ratio Prot	c0.06	c0.35	0.08	0.04	0.25	0.05	c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.22			0.13			0.08			
v/c Ratio	0.71	0.91	0.55	0.68	0.68	0.34	1.00	0.73	0.28	0.73	0.67	
Uniform Delay, d1	49.4	31.7	16.4	51.0	29.4	15.5	47.0	35.9	26.6	46.0	36.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	7.7	0.4	7.9	2.0	0.1	40.8	5.6	0.1	5.3	2.7	
Delay (s)	61.8	39.4	16.8	58.9	31.4	15.6	87.8	41.5	26.7	51.3	38.9	
Level of Service	E	D	B	E	C	B	F	D	C	D	D	
Approach Delay (s)		34.8			29.9			60.3			45.1	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

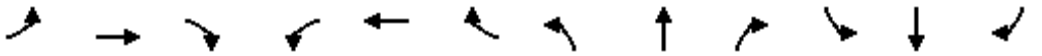
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	810	1770	920	0	0	880
Future Volume (vph)	810	1770	920	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	880	1924	1000	0	0	957
RTOR Reduction (vph)	0	14	0	0	0	0
Lane Group Flow (vph)	880	1910	1000	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	47.3	47.3	26.3			26.3
Effective Green, g (s)	47.3	47.3	26.3			26.3
Actuated g/C Ratio	0.54	0.54	0.30			0.30
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1853	1949	1062			1062
v/s Ratio Prot	0.26		c0.28			0.27
v/s Ratio Perm		c0.53				
v/c Ratio	0.47	0.98	0.94			0.90
Uniform Delay, d1	12.5	19.7	29.9			29.4
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	15.6	15.4			10.3
Delay (s)	12.5	35.3	45.3			39.7
Level of Service	B	D	D			D
Approach Delay (s)	28.2		45.3			39.7
Approach LOS	C		D			D

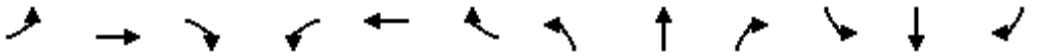
Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	87.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



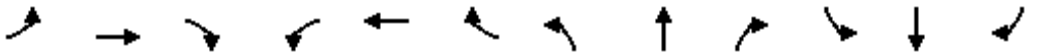
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	390	340	330	60	520	670	450	550	120	410	720	400
Future Volume (vph)	390	340	330	60	520	670	450	550	120	410	720	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1567	1770	3539	1567	3433	3444		3433	3539	1563
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1567	1770	3539	1567	3433	3444		3433	3539	1563
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	424	370	359	65	565	728	489	598	130	446	783	435
RTOR Reduction (vph)	0	0	54	0	0	57	0	16	0	0	0	62
Lane Group Flow (vph)	424	370	305	65	565	671	489	712	0	446	783	373
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	15.1	38.8	58.0	6.4	30.1	55.5	19.2	29.7		25.4	35.9	51.0
Effective Green, g (s)	16.0	39.7	59.8	7.4	31.1	55.5	20.1	30.6		26.3	36.8	51.0
Actuated g/C Ratio	0.13	0.33	0.50	0.06	0.26	0.46	0.17	0.26		0.22	0.31	0.42
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	457	616	833	109	917	788	575	878		752	1085	664
v/s Ratio Prot	c0.12	0.20	0.06	0.04	0.16	c0.18	0.14	c0.21		0.13	0.22	0.07
v/s Ratio Perm			0.13			0.25						0.17
v/c Ratio	0.93	0.60	0.37	0.60	0.62	0.85	0.85	0.81		0.59	0.72	0.56
Uniform Delay, d1	51.4	33.5	18.5	54.8	39.2	28.6	48.5	42.0		42.0	37.0	26.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	24.6	4.3	0.3	20.2	3.1	9.8	11.6	5.7		2.1	3.2	0.7
Delay (s)	76.1	37.8	18.8	75.1	42.3	38.4	60.1	47.7		44.2	40.2	26.7
Level of Service	E	D	B	E	D	D	E	D		D	D	C
Approach Delay (s)		46.0			41.8			52.7			37.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	43.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1880	160	450	1500	350	180	610	370	350	520	290
Future Volume (vph)	380	1880	160	450	1500	350	180	610	370	350	520	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.94	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6281		3433	6408	1483	1770	3539	1527	3433	3539	1524
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6281		3433	6408	1483	1770	3539	1527	3433	3539	1524
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2043	174	489	1630	380	196	663	402	380	565	315
RTOR Reduction (vph)	0	10	0	0	0	49	0	0	61	0	0	60
Lane Group Flow (vph)	413	2207	0	489	1630	331	196	663	341	380	565	255
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	18.4	44.5		17.8	44.0	59.3	14.6	28.6	46.4	15.3	29.3	47.7
Effective Green, g (s)	18.8	45.6		18.2	45.0	59.3	15.0	29.5	48.2	15.7	30.2	49.5
Actuated g/C Ratio	0.15	0.36		0.15	0.36	0.47	0.12	0.24	0.39	0.13	0.24	0.40
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	516	2291		499	2306	703	212	835	631	431	855	603
v/s Ratio Prot	0.12	c0.35		c0.14	0.25	0.06	c0.11	c0.19	0.08	c0.11	0.16	0.07
v/s Ratio Perm						0.17			0.14			0.10
v/c Ratio	0.80	0.96		0.98	0.71	0.47	0.92	0.79	0.54	0.88	0.66	0.42
Uniform Delay, d1	51.3	38.9		53.2	34.3	22.2	54.4	44.9	29.8	53.7	42.8	27.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.2	12.0		34.5	1.1	0.2	40.6	4.9	0.5	18.2	1.5	0.2
Delay (s)	59.5	50.8		87.8	35.4	22.4	95.0	49.8	30.3	71.9	44.3	27.6
Level of Service	E	D		F	D	C	F	D	C	E	D	C
Approach Delay (s)		52.2			43.7			50.6			48.4	
Approach LOS		D			D			D			D	

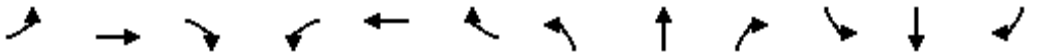
Intersection Summary			
HCM 2000 Control Delay	48.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	700	280	430	480	0	0	0	0	330	470	1060
Future Volume (vph)	0	700	280	430	480	0	0	0	0	330	470	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	761	304	467	522	0	0	0	0	359	511	1152
RTOR Reduction (vph)	0	0	101	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	761	203	467	522	0	0	0	0	359	511	820
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		42.5	42.5	19.9	66.8					43.4	43.4	43.4
Effective Green, g (s)		43.4	43.4	20.3	67.7					44.3	44.3	44.3
Actuated g/C Ratio		0.36	0.36	0.17	0.56					0.37	0.37	0.37
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1279	572	580	1996					594	1251	1028
v/s Ratio Prot		c0.22		c0.14	0.15							
v/s Ratio Perm			0.13							0.22	0.15	c0.29
v/c Ratio		0.59	0.36	0.81	0.26					0.60	0.41	0.80
Uniform Delay, d1		31.2	28.1	47.9	13.4					30.7	28.1	33.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		2.0	1.7	7.6	0.3					1.2	0.1	4.1
Delay (s)		33.2	29.8	55.5	13.7					31.9	28.2	37.9
Level of Service		C	C	E	B					C	C	D
Approach Delay (s)		32.2			33.4			0.0			34.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

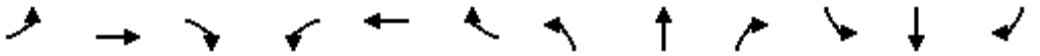


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1090	340	60	700	0	0	0	0	730	1100	660
Future Volume (vph)	0	1090	340	60	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		4904		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		4904		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1185	370	65	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	1523	0	65	761	0	0	0	0	0	1989	666
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		30.2		3.4	36.3						41.7	41.7
Effective Green, g (s)		28.4		3.8	36.2						40.8	43.1
Actuated g/C Ratio		0.32		0.04	0.40						0.45	0.48
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1547		74	1423						2136	652
v/s Ratio Prot		c0.31		c0.04	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		0.98		0.88	0.53						1.04dl	1.02
Uniform Delay, d1		30.6		42.9	20.5						23.3	23.4
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		19.5		62.7	1.4						7.9	41.0
Delay (s)		50.0		105.6	21.9						31.2	64.4
Level of Service		D		F	C						C	E
Approach Delay (s)		50.0			28.5			0.0			40.0	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

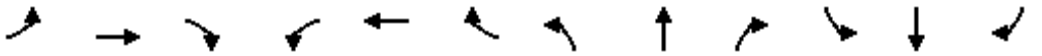
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



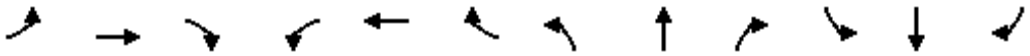
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	360	40	230	30	1530	260	250	510	20
Future Volume (vph)	40	150	30	360	40	230	30	1530	260	250	510	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1810		1759	1624		1770	4974		3433	5051	
Flt Permitted	0.46	1.00		0.57	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	848	1810		1062	1624		1770	4974		3433	5051	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	391	43	250	33	1663	283	272	554	22
RTOR Reduction (vph)	0	8	0	0	110	0	0	26	0	0	4	0
Lane Group Flow (vph)	43	188	0	391	183	0	33	1920	0	272	572	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	33.0	33.0		32.3	32.3		3.0	35.2		9.9	41.4	
Effective Green, g (s)	33.0	33.0		32.7	32.7		3.0	36.6		7.7	43.5	
Actuated g/C Ratio	0.36	0.36		0.36	0.36		0.03	0.40		0.08	0.48	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	305	652		379	580		58	1989		288	2401	
v/s Ratio Prot		0.10			0.11		0.02	c0.39		c0.08	0.11	
v/s Ratio Perm	0.05			c0.37								
v/c Ratio	0.14	0.29		1.03	0.32		0.57	0.97		0.94	0.24	
Uniform Delay, d1	19.7	20.9		29.4	21.3		43.6	26.8		41.7	14.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		54.6	0.3		7.4	13.5		37.8	0.2	
Delay (s)	19.8	21.0		84.0	21.6		51.0	40.3		79.4	14.4	
Level of Service	B	C		F	C		D	D		E	B	
Approach Delay (s)		20.7			57.3			40.5			35.3	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	41.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	91.5	Sum of lost time (s)	14.5
Intersection Capacity Utilization	91.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



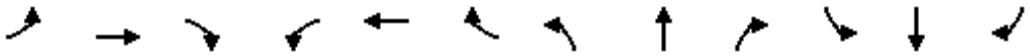
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	1070	300	250	950	160	450	1040	230	130	610	250
Future Volume (vph)	620	1070	300	250	950	160	450	1040	230	130	610	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4918		1770	4964		3433	5085	1562	1770	5085	1566
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4918		1770	4964		3433	5085	1562	1770	5085	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	1163	326	272	1033	174	489	1130	250	141	663	272
RTOR Reduction (vph)	0	51	0	0	24	0	0	0	188	0	0	49
Lane Group Flow (vph)	674	1438	0	272	1183	0	489	1130	62	141	663	223
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	16.6	31.6		15.9	30.3		12.6	24.7	24.7	8.2	20.2	36.8
Effective Green, g (s)	17.0	32.8		16.3	32.1		13.0	25.6	24.7	8.6	21.2	37.6
Actuated g/C Ratio	0.17	0.33		0.16	0.32		0.13	0.26	0.25	0.09	0.21	0.38
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	587	1624		290	1604		449	1310	388	153	1085	592
v/s Ratio Prot	c0.20	c0.29		0.15	0.24		c0.14	c0.22		0.08	0.13	0.06
v/s Ratio Perm									0.04			0.08
v/c Ratio	1.15	0.89		0.94	0.74		1.09	0.86	0.16	0.92	0.61	0.38
Uniform Delay, d1	41.1	31.5		41.0	29.9		43.1	35.2	29.2	45.0	35.3	22.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	85.3	6.3		35.9	1.7		68.7	7.7	0.9	49.3	2.6	0.1
Delay (s)	126.4	37.8		76.9	31.6		111.8	42.8	30.1	94.4	37.9	22.5
Level of Service	F	D		E	C		F	D	C	F	D	C
Approach Delay (s)		65.4			39.9			59.2			41.4	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	54.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	99.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	170	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	170	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.6	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.93			0.95			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1800		1770	1714			1724			1696	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.84	
Satd. Flow (perm)	1770	1800		1770	1714			1537			1436	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	185	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	8	0	0	33	0	0	24	0	0	33	0
Lane Group Flow (vph)	630	394	0	22	315	0	0	303	0	0	54	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	32.6	54.3		1.5	23.2			18.8			18.8	
Effective Green, g (s)	33.0	55.2		2.4	24.1			19.7			19.7	
Actuated g/C Ratio	0.37	0.62		0.03	0.27			0.22			0.22	
Clearance Time (s)	4.0	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	3.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	660	1123		48	467			342			320	
v/s Ratio Prot	c0.36	0.22		0.01	c0.18							
v/s Ratio Perm								c0.20			0.04	
v/c Ratio	0.95	0.35		0.46	0.67			0.89			0.17	
Uniform Delay, d1	27.0	8.0		42.4	28.6			33.3			27.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	24.2	0.9		6.8	7.6			22.3			0.1	
Delay (s)	51.1	8.8		49.2	36.2			55.6			27.8	
Level of Service	D	A		D	D			E			C	
Approach Delay (s)		34.7			37.0			55.6			27.8	
Approach LOS		C			D			E			C	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	11.6
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

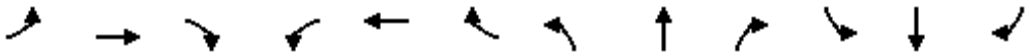


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	1400	150	210	840	220	90	420	230	310	220	160
Future Volume (vph)	440	1400	150	210	840	220	90	420	230	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.97	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4988		1770	4872		1770	3539	1539	3433	3210	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4988		1770	4872		1770	3539	1539	3433	3210	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	1522	163	228	913	239	98	457	250	337	239	174
RTOR Reduction (vph)	0	12	0	0	43	0	0	0	47	0	126	0
Lane Group Flow (vph)	478	1673	0	228	1109	0	98	457	203	337	287	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	17.0	34.5		15.1	32.1		8.5	24.0	39.1	12.7	28.3	
Effective Green, g (s)	17.4	35.4		15.5	33.5		8.9	25.0	39.9	13.1	29.2	
Actuated g/C Ratio	0.17	0.34		0.15	0.32		0.08	0.24	0.38	0.12	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	568	1681		261	1554		150	842	584	428	892	
v/s Ratio Prot	c0.14	c0.34		0.13	0.23		c0.06	c0.13	0.05	c0.10	0.09	
v/s Ratio Perm									0.08			
v/c Ratio	0.84	1.00		0.87	0.71		0.65	0.54	0.35	0.79	0.32	
Uniform Delay, d1	42.5	34.7		43.8	31.5		46.6	35.0	23.3	44.6	30.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.5	20.9		25.3	2.8		7.5	0.9	0.1	8.6	0.2	
Delay (s)	52.9	55.6		69.1	34.3		54.1	35.9	23.4	53.2	30.2	
Level of Service	D	E		E	C		D	D	C	D	C	
Approach Delay (s)		55.0			40.1			34.2			40.5	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	45.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

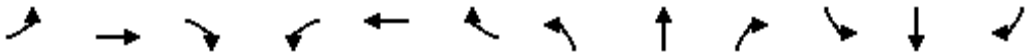
Peak Hour Intersection Calculation Worksheets - Partial Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	50	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1573	3433	3539	1544	3433	1863	1564	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1573	3433	3539	1544	3433	1863	1564	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	162	0	0	92	0	0	47	0	17	0
Lane Group Flow (vph)	54	1239	273	174	1446	104	522	435	116	630	417	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.2	25.7	47.0	5.8	28.2	50.4	21.3	28.8	34.6	22.2	27.9	
Effective Green, g (s)	3.6	27.0	49.6	6.2	29.6	53.2	21.7	29.6	36.2	21.2	29.1	
Actuated g/C Ratio	0.04	0.27	0.50	0.06	0.30	0.53	0.22	0.30	0.36	0.21	0.29	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	63	1372	828	212	1047	846	744	551	622	727	515	
v/s Ratio Prot	0.03	0.24	0.07	c0.05	c0.41	0.03	0.15	0.23	0.01	c0.18	c0.24	
v/s Ratio Perm			0.10			0.04			0.06			
v/c Ratio	0.86	0.90	0.33	0.82	1.38	0.12	0.70	0.79	0.19	0.87	0.81	
Uniform Delay, d1	47.9	35.2	15.2	46.4	35.2	11.7	36.2	32.3	21.8	38.0	32.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	63.1	10.0	0.1	20.9	177.5	0.0	2.5	7.7	0.1	10.3	8.6	
Delay (s)	111.1	45.2	15.3	67.2	212.7	11.7	38.6	40.1	21.9	48.3	41.5	
Level of Service	F	D	B	E	F	B	D	D	C	D	D	
Approach Delay (s)		39.7			177.1			36.8			45.5	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	83.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1660	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1660	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	3539	1537	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	3539	1537	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1804	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	139	0	0	117	0	0	50	0	5	0
Lane Group Flow (vph)	98	1804	470	130	1261	274	500	380	146	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.3	41.6	57.2	5.7	38.9	54.2	15.6	29.9	35.6	15.3	27.8	
Effective Green, g (s)	8.7	42.9	59.8	6.1	40.3	57.0	16.0	30.7	37.2	14.3	29.0	
Actuated g/C Ratio	0.08	0.39	0.54	0.06	0.37	0.52	0.15	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	139	1983	852	190	1296	796	499	519	527	446	480	
v/s Ratio Prot	c0.06	c0.35	0.08	0.04	c0.36	0.05	c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.22			0.13			0.08			
v/c Ratio	0.71	0.91	0.55	0.68	0.97	0.34	1.00	0.73	0.28	0.73	0.67	
Uniform Delay, d1	49.4	31.7	16.4	51.0	34.3	15.5	47.0	35.9	26.6	46.0	36.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	7.7	0.4	7.9	19.3	0.1	40.8	5.6	0.1	5.3	2.7	
Delay (s)	61.8	39.4	16.8	58.9	53.6	15.6	87.8	41.5	26.7	51.3	38.9	
Level of Service	E	D	B	E	D	B	F	D	C	D	D	
Approach Delay (s)		34.8			45.7			60.3			45.1	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix J
VMT Analysis Worksheet – Adopted Plan

2035a - Adopted GP - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	3,087	-	3,087	4,336,442
CHULA VISTA TOTAL	5,601,350	7,698	-	7,698	5,593,652
CORONADO TOTAL	466,994	1,344	-	1,344	465,650
DEL MAR TOTAL	101,376	60	-	60	101,316
EL CAJON TOTAL	2,442,502	3,987	-	3,987	2,438,515
ENCINITAS TOTAL	2,556,112	3,788	-	3,788	2,552,324
ESCONDIDO TOTAL	3,482,331	1,991	-	1,991	3,480,340
External TOTAL	526,485	428	-	428	526,057
IMPERIAL BEACH TOTAL	131,328	26	-	26	131,302
LA MESA TOTAL	2,089,142	6,352	-	6,352	2,082,790
LEMON GROVE TOTAL	959,602	1,726	-	1,726	957,876
NATIONAL CITY TOTAL	1,962,160	6,474	-	6,474	1,955,686
OCEANSIDE TOTAL	4,088,716	1,017	-	1,017	4,087,699
POWAY TOTAL	1,304,035	615	-	615	1,303,420
SAN DIEGO TOTAL	47,221,594	277,444	18,009	259,435	46,944,150
SAN MARCOS TOTAL	2,642,965	296	-	296	2,642,669
SANTEE TOTAL	1,347,654	846	-	846	1,346,808
SOLANA BEACH TOTAL	715,186	1,390	-	1,390	713,796
Unincorporated TOTAL	24,605,963	12,944	-	12,944	24,593,019
VISTA TOTAL	1,899,984	104	-	104	1,899,880
REGIONWIDE TOTAL	108,485,008	331,617	18,009	313,608	108,153,391

2035a - Adopted GP - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	13,654	-	13,654	4,325,875
CHULA VISTA TOTAL	5,601,350	32,436	-	32,436	5,568,914
CORONADO TOTAL	466,994	6,103	-	6,103	460,891
DEL MAR TOTAL	101,376	232	-	232	101,144
EL CAJON TOTAL	2,442,502	15,077	-	15,077	2,427,425
ENCINITAS TOTAL	2,556,112	16,034	-	16,034	2,540,078
ESCONDIDO TOTAL	3,482,331	8,349	-	8,349	3,473,982
External TOTAL	526,485	2,332	-	2,332	524,153
IMPERIAL BEACH TOTAL	131,328	293	-	293	131,035
LA MESA TOTAL	2,089,142	23,565	-	23,565	2,065,577
LEMON GROVE TOTAL	959,602	7,337	-	7,337	952,265
NATIONAL CITY TOTAL	1,962,160	27,348	-	27,348	1,934,812
OCEANSIDE TOTAL	4,088,716	5,026	-	5,026	4,083,690
POWAY TOTAL	1,304,035	2,464	-	2,464	1,301,571
SAN DIEGO TOTAL	47,221,594	1,228,648	204,475	1,024,173	45,992,946
SAN MARCOS TOTAL	2,642,965	1,173	-	1,173	2,641,792
SANTEE TOTAL	1,347,654	3,470	-	3,470	1,344,184
SOLANA BEACH TOTAL	715,186	5,763	-	5,763	709,423
Unincorporated TOTAL	24,605,963	59,614	-	59,614	24,546,349
VISTA TOTAL	1,899,984	657	-	657	1,899,327
REGIONWIDE TOTAL	108,485,008	832,025 2,291,600	204,475	1,255,100	107,025,433

Midway-Pacific Highway & Old Town Mobility Element Updates

Transportation Impact Study

Midway-Pacific Highway: Alternative 1 Without Sports Area
Old Town: Alternative 2

Draft Report

December 2017

Prepared for:

The City of SAN DIEGO

Prepared by:

CHEN RYAN
3900 Fifth Avenue, Suite 210
San Diego, CA 92103

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1.0 Introduction

1.1 Purpose of the Report

This Transportation Impact Study (TIS) serves to identify and document potential traffic impacts related to the buildout of the Preferred Plan alternative of the Midway-Pacific Highway and Old Town Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway impacts. This technical report also provides vehicle miles traveled (VMT) for the Existing conditions and buildout of the Community Plan Updates and compares these to the projected 2035 VMT per person and average trip length for the entire Region.

Figure 1-1 displays the project study area for both the Midway-Pacific Highway Corridor and Old Town communities. This report identifies significant traffic impacts and potential mitigation measures associated with the implementation of the Preferred Plan for the Midway-Pacific Highway and Old Town Community Plan Updates and is intended to support the Environmental Impact Report (EIR).

Study Scenarios

Two (2) scenarios were evaluated for this Mobility Element Update transportation impact study, including:

- Existing Conditions – utilized to establish the existing base line traffic operations within the project study area.
- Preferred Plan – represents the preferred land use plan and proposed roadway network. Improvements resulting in the preferred plan roadway network were developed in collaboration between community members, City staff, and the project consultant team. Initially, the mobility issues and needs identified in the Existing Conditions Report were compared to the mobility issues and needs identified in other on-going or recent planning efforts. The Preferred Plan was modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the Preferred Plan Community Plan land uses and adopted Year 2035 land uses outside of the study communities for regional growth.

1.2 Report Organization

Following this introductory chapter, the report is organized into the following chapters:

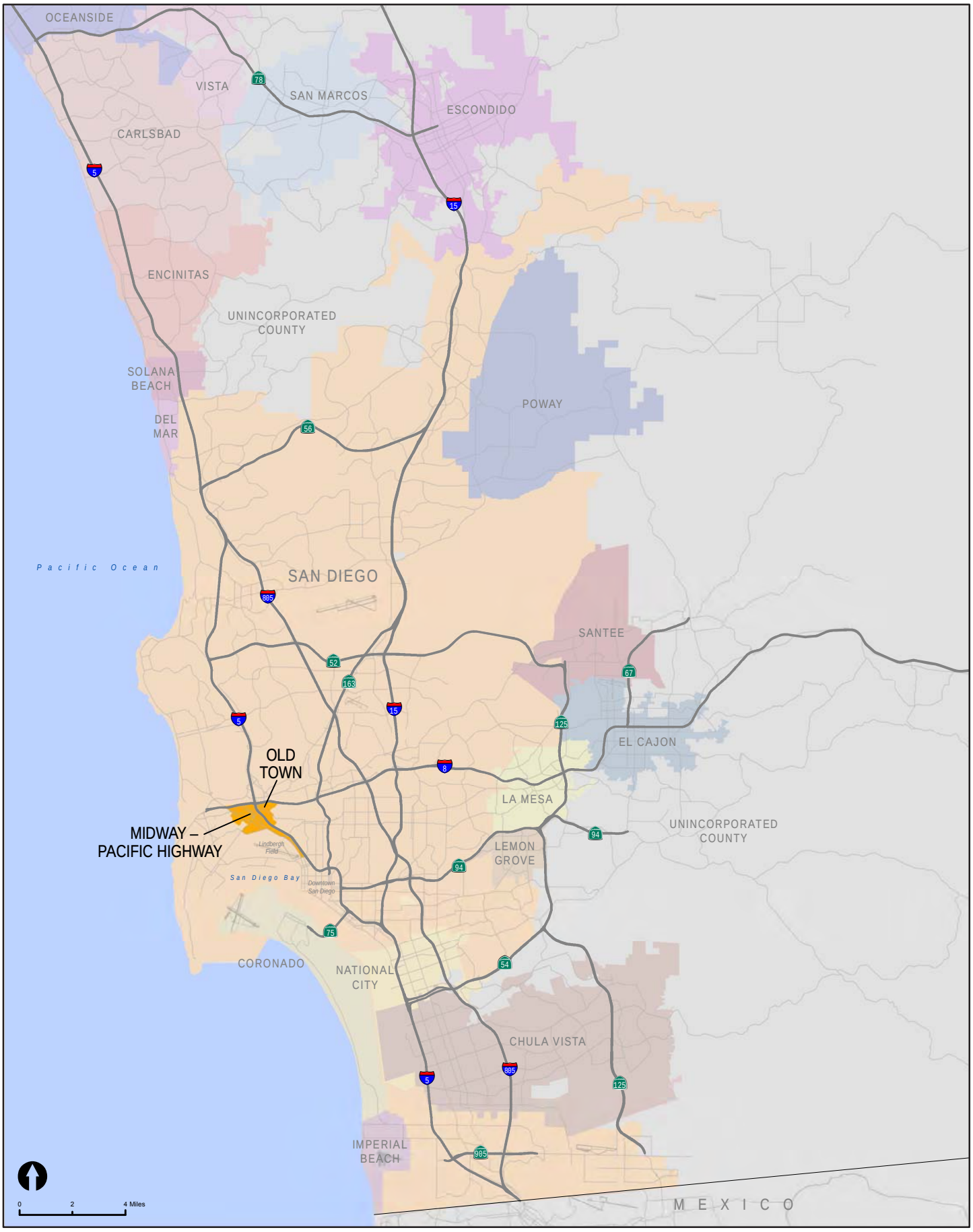
2.0 *Analysis Methodology* – This chapter describes the methodologies and standards utilized to analyze roadway, intersection, and freeway segment and freeway ramp meter traffic conditions.

3.0 *Existing Conditions* - This chapter describes the existing traffic network within the study area and provides analysis results for existing traffic conditions.

4.0 *Preferred Plan* – This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to the Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters were evaluated. Mitigation measures for significant impacts identified, if feasible.

5.0 *Adopted Plan* – This chapter is included for informational purposes and includes a description and high-level analysis of the currently adopted plan for both the Midway-Pacific Highway Corridor and Old Town communities. No impact analyses were conducted for this scenario.

6.0 *Summary* – This chapter summarizes the analysis and impact findings outlined in chapters three through five.



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Figure 1-1
Midway-Pacific Highway and Old Town within the Region

2.0 Analysis Methodology

This chapter describes the various methodologies utilized to analyze the mobility network within the Midway-Pacific Highway and Old Town communities. Analysis of the vehicular systems – roadways, intersections and freeways – were prepared for this study in accordance with the *City of San Diego Traffic Impact Study Guidelines,* SANTEC/ITE Guidelines, and the enhanced California Environmental Quality Act (CEQA) project review process.

2.1 Selection of the Study Area

This section describes the process used to identify roadway segments and intersections for analysis.

2.1.1 Roadway Segments

Roadway segments were evaluated if one or more of the following circumstances applied:

- The roadway segment is an existing or planned circulation element roadway as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The roadway segment provides freeway access to/from the Midway-Pacific Highway or Old Town communities.
- The roadway segment is located outside of either study community; however, it may influence or impact the flow of transportation within either of the communities.

2.1.2 Intersections

Intersections were evaluated if one or more of the following circumstances applied:

- The intersection is comprised of a circulation element roadway intersecting with another circulation element roadway. This includes existing and future/planned circulation element roadways as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The intersection is at a freeway ramp interchange located within the Midway-Pacific Highway or Old Town communities or is a major gateway to either community.
- The intersection is a major intersection located outside of either community, however, it may influence or impact the flow of transportation within the communities.
- The intersection meets criteria used in previous studies, whereby both streets meet one of the following:
    - 4 lanes or greater
    - 3 lanes and carries over 15,000 ADT
    - 2 lanes and carries over 10,000 ADT
- Intersections at freeway access ramps.
- Significant intersections where travel time analysis is performed.

A total of 59 intersections were identified based on the criteria listed above, which include 11 intersections located outside the study communities. These intersections were added to the study area because of their proximity to the communities, and the likelihood that changes within the communities could directly affect traffic in/out of the communities. Figure 2-1 displays the location of the 59 study intersections and roadway segments.

2.2 Level of Service Definition

Vehicular level of service (LOS) is a quantitative measure that represents quality of service for the driver. These conditions are generally described in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents the best operating conditions from a driver's perspective, while LOS F represents the worst. Table 2-1 describes generalized definitions of auto LOS A through F.

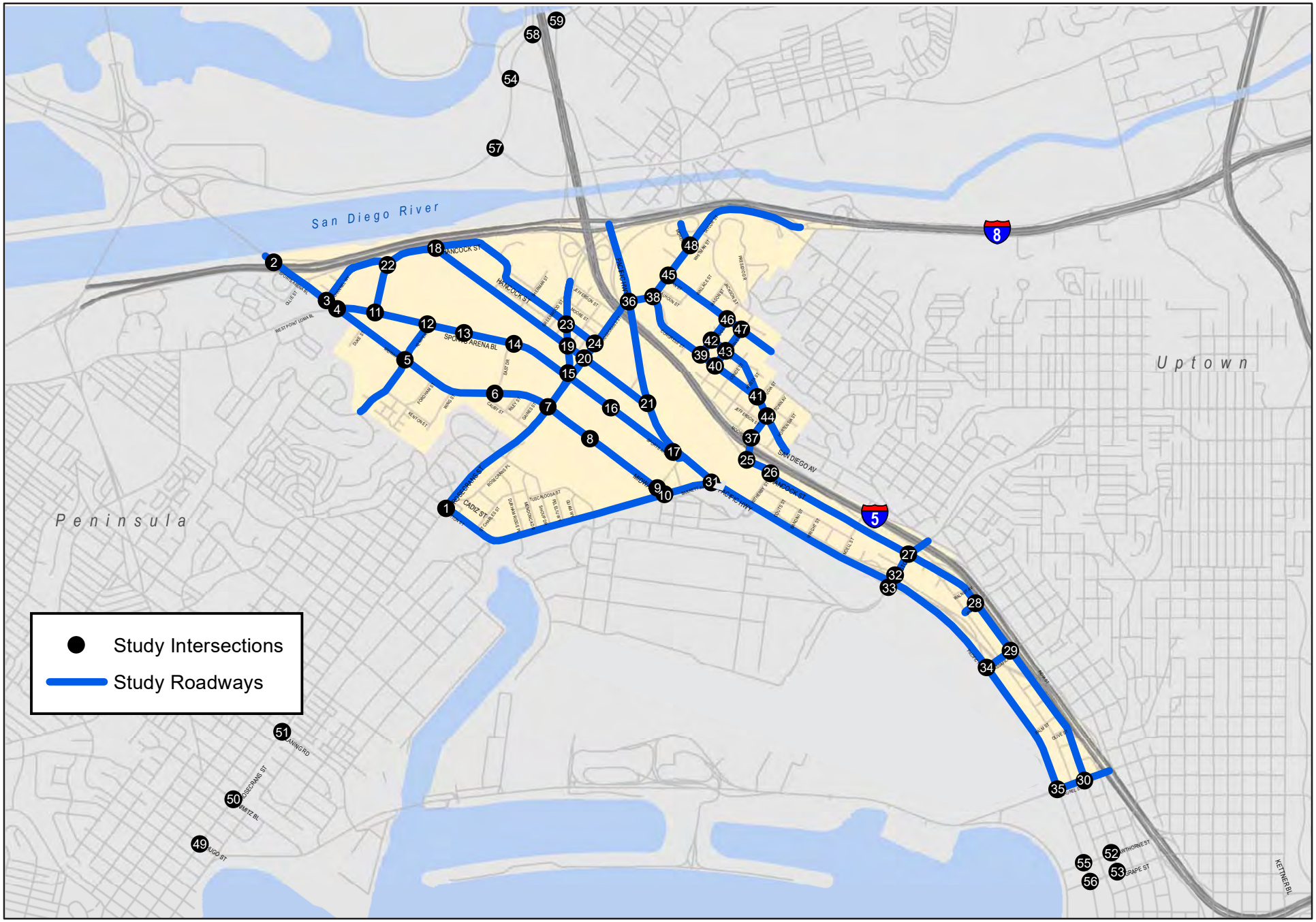
Table 2-1 Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual (2010)

2.2.1 Roadway Segment Level of Service Standards and Thresholds

Roadway segment level of service standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment level of service is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted Average Daily Traffic (ADT) volumes. Table 2-2 presents the roadway segment capacity and LOS standards utilized to analyze roadways in this report.



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Figure 2-1
Project Study Area

Table 2-2 City of San Diego Roadway Segment Daily Capacity and Level of Service Standards

Roadway Functional Classification	Lanes	Level of Service				
		A	B	C	D	E
Freeway	8	60,000	84,000	120,000	140,000	150,000
Freeway	6	45,000	63,000	90,000	110,000	120,000
Freeway	4	30,000	42,000	60,000	70,000	80,000
Expressway	6	30,000	42,000	60,000	70,000	80,000
Prime Arterial	8	35,000	50,000	70,000	75,000	80,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
Major Arterial	7	22,500	31,500	45,000	50,000	55,000
Major Arterial	6	20,000	28,000	40,000	45,000	50,000
Major Arterial	5	17,500	24,500	35,000	40,000	45,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Major Arterial	3	11,250	15,750	22,500	26,250	30,000
Major Arterial	2	7,500	10,500	15,000	17,500	20,000
Major Arterial (one-way)	3	12,500	16,500	22,500	25,000	27,500
Major Arterial (one-way)	2	10,000	13,000	17,500	20,000	22,500
Collector (w/ two-way left turn lane)	4	10,000	14,000	20,000	25,000	30,000
Collector (w/ two-way left turn lane)	3	7,500	10,500	15,000	18,750	22,500
Collector (w/ two-way left turn lane)	2	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	4	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	3	4,000	5,000	7,500	10,000	11,000
Collector (w/o two-way left turn lane)	2	2,500	3,500	5,000	6,500	8,000
Collector (w/o two-way left turn lane) – no fronting property	2	4,000	5,500	7,500	9,000	10,000
Collector (one-way)	3	11,000	14,000	19,000	22,500	26,000
Collector (one-way)	2	7,500	9,500	12,500	15,000	17,500
Collector (one-way)	1	2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2	-	-	2,200	-	-

Source: City of San Diego Traffic Impact Study Manual (1998);
Updated with input from City of San Diego Planning Department Mobility Staff (2017)

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. LOS D is considered acceptable for Mobility Element roadway segments in the City of San Diego. Often, a roadway segment that is analyzed to be LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized (or intersection analysis, if arterial analysis is not applicable) to provide a more accurate indication of LOS.

2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Based on existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all study area.
- Peak Hour Factor: Based on existing peak hour counts.
- Existing Conditions Signal Timing: Based on existing signal timing plans (as of November 2012).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in *2000 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209*. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (sec/veh).

The *2000 HCM* methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections, based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The level of service criteria used for this technique is described in Table 2-3. The computerized analysis of intersection operations was performed utilizing the *Synchro 9.0 (2000 HCM methodology)* traffic analysis software (by Trafficware, 2011).

Table 2-3 Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board Special Report 209 (2000)

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections, were analyzed using the *2000 HCM* unsignalized intersection analysis methodology. The Synchro 8.0 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or

measured average control delay of all movements. Table 2-4 summarizes the level of service criteria for unsignalized intersections.

Table 2-4 Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: Highway Capacity Manual (2000)

The City of San Diego considers LOS D or better during the AM and PM peak hours to be acceptable intersection LOS.

2.2.3 Freeway/State Highway Level of Service Standards and Thresholds

Freeway LOS analysis is based upon procedures developed by Caltrans District 11. The procedure for calculating freeway LOS involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour ("K"), directional ("D") and truck ("T") factors to Average Daily Traffic (ADT) volumes. The base capacities were assumed to be 2,350 passenger-cars per hour per main lane (pc/h/ln) and 1,410 pc/h/ln for auxiliary lanes. A 0.95 peak-hour factor (PHF) is utilized for this analysis.

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in Table 2-5. The corresponding level of service represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour. LOS D or better is used in this study as the threshold for acceptable freeway operations based upon Caltrans and the SANDAG Regional Growth Management Strategy (RGMS) requirements.

2.2.4 Ramp Metering Analysis

Ramp metering is a means of controlling the volume of traffic entering the freeway with the goal of improving freeway main lane traffic operations and flow. Freeway ramp meter analyses estimate peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location.

Meter rates, which represent the number of vehicles permitted through the signal, onto the ramp and freeway, were obtained from Caltrans for use in the analysis. Ramp metering analyses to calculate delays at study area freeway ramps were conducted following the procedures outlined in the *City of San Diego Traffic Impact Study Manual (1998)*.

Table 2-5 Caltrans District 11 Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways and conventional highways			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for conventional highways			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
Used for freeways and expressways			
"F0"	1.01–1.25	Considerable (0-1 hour delay)	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe (1-2 hour delay)	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe (2-3 hour delay)	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe (3+ hours of delay)	Gridlock.

Source: SANTEC/ITE Guidelines for TIS in the San Diego Region.

2.2.5 Determination of Significant Impacts

This section outlines the thresholds for determining significant project-related impacts to roadways, intersections, and freeways in the City of San Diego. Generally, a significant impact is identified when the addition of project traffic results in a level of service dropping from LOS D or better to substandard LOS E or F. Table 2-6 summarizes the significant impact thresholds for facilities operating at a substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the (V/C) ratio.

Table 2-6 City of San Diego Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering*
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E	0.01	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Source: CEQA Significance Determination Thresholds, City of San Diego Development Services Department (2007)

Note:
* For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

3.0 Existing Conditions

This section describes study area intersections, roadways and freeway segments, as well as existing peak hour intersection traffic volumes, and daily roadway and freeway traffic volumes. A Vehicle Miles Traveled (VMT) comparison is also presented. Level of service analysis results for all study area facilities under Existing Conditions are presented separately below.

3.1 Vehicle Miles Traveled

The VMT generated within the communities were estimated using the SANDAG Series 12 Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to/from and within the community. Table 3-1 displays the total VMT generated within the Midway-Pacific Highway and Old Town communities and the average trip length under both the Base Year conditions. VMT calculations for the Midway-Pacific Highway and Old Town communities are included as Appendix A.

As shown, the Midway-Pacific Highway community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.5 miles vs. 5.2 miles; VMT of 156 miles vs. 27 miles, respectively).

The Old Town community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.6 miles vs. 5.2 miles; VMT of 182 miles vs. 27 miles, respectively).

Table 3-1 Vehicle Miles Traveled (VMT) Comparison Existing Conditions

Measure	Midway-Pacific Highway	Old Town	San Diego Region
	Base Year	Base Year	Base Year
Total VMT (miles)	730,121	151,300	85,182,063
Total # of Auto Trips	294,796	57,898	16,458,692
Average Trip Length[1] (miles)	2.5	2.6	5.2
Population	4,670	830	3,130,717
Daily VMT by Population (miles)	156	182	27

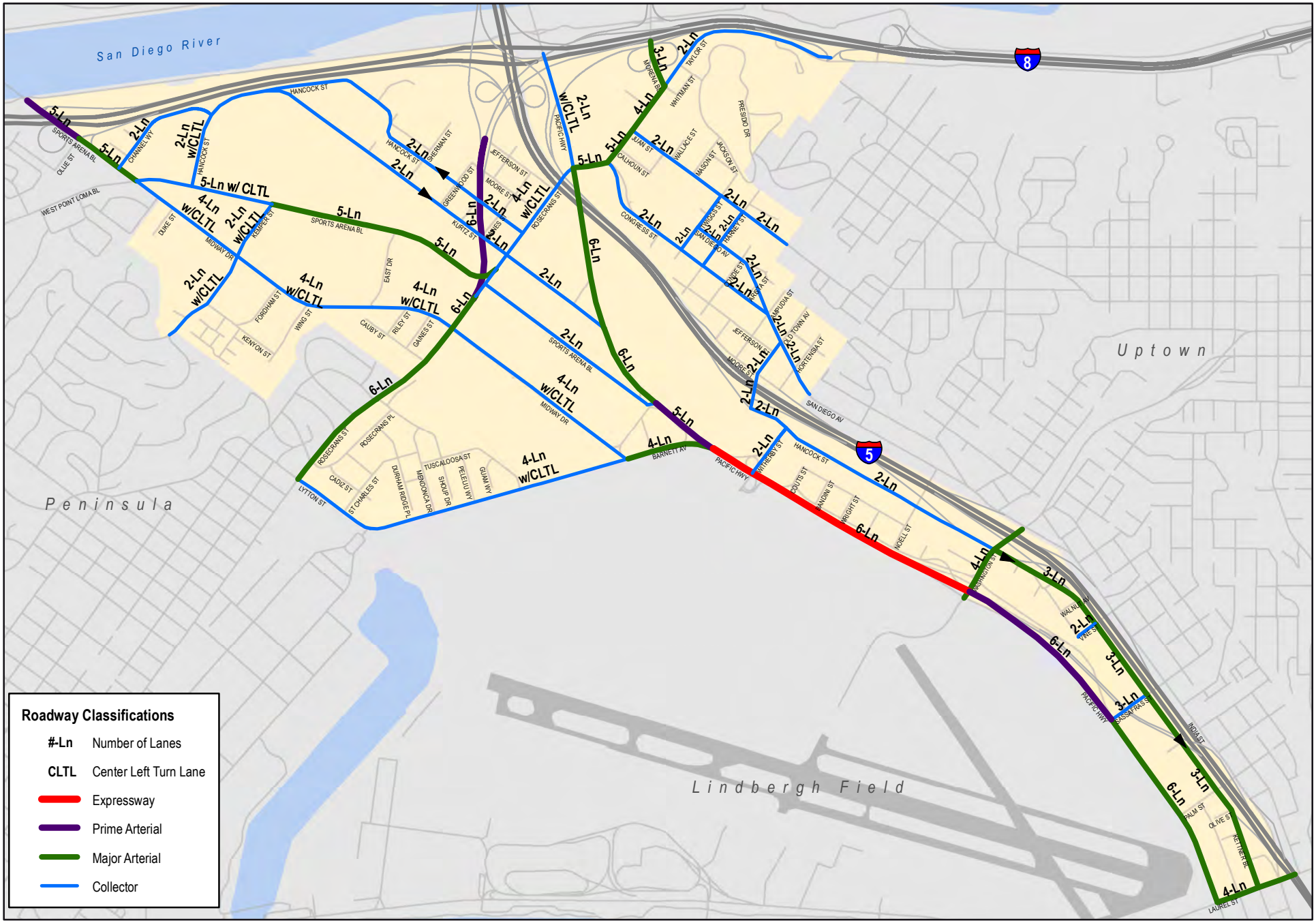
Source: SANDAG (2017); Chen Ryan Associates (2017)

Note:

[1]Average trip length is estimated by dividing the total VMT by the total # of auto trips.

3.2 Roadway Segment Analysis

Chapter 2 documents the selection of study area roadway segments and study intersections. The roadway network is comprised of regional facilities such as I-5 and I-8, as well as numerous arterials and local streets. Roadways outside the boundary of the Midway-Pacific Highway and Old Town communities were included in this assessment due to their location within the sphere of influence and will be required for the environmental studies. Figure 3-1 displays the functional classification for study area roadway segments. Table 3-2 provides a description of the study area roadway segments.



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Figure 3-1
Existing Roadway Classifications

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
North-South									
Midway/Pacific Highway Corridor									
Lytton St / Barnett Ave	Rosecrans St	Midway Dr	4-Lane Collector w/ CLTL	Commercial & Military Use	None	40	Yes	Class II	76'/86'
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76
	Kemper St	East Dr	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76'
	East Dr	Rosecrans St	4-Lane Collector w/ CLTL	Commercial	Parallel (NE Side)	35	Yes	None	60'/80'
	Rosecrans St	Barnett Ave	4-Lane Collector w/ CLTL	Commercial & Industrial	None	35	Yes	None	56'/72'
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	None	None	35	Yes	Class III	72'/84
	I-8 EB Ramps	W. Point Loma Blvd/ Sports Arena Blvd	6-Lane Major Arterial	Commercial & Multi-Family Residential	Parallel (SW Side)	35	Yes	Class III	76'/88'
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector w/ CLTL	Commercial & Multi-Family Residential	Parallel (Both)	35	Yes	None	96'/106'
	Kemper St	East Dr	5-Lane Major Arterial	Commercial & Private Recreation	Parallel (SW Side)	35	Yes	None	96'/106'
	East Dr	Rosecrans St	5-Lane Major Arterial	Commercial	None	35	Yes	None	82'/92'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	35	Intermittent	None	52'/82'
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	Commercial & Industrial	Parallel (Both)	30	Yes	None	40'/48'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	30	Gutter Only	None	48'/48'
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector w/ CLTL	Industrial	Parallel (Both)	30	Only on south side	None	62'/78'
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	Industrial	Parallel (Both)	30	Yes	None	40'/50'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Hancock St	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	Industrial	None	30	Yes	None	40'/50'
	Old Town Ave	Witherby St	2-Lane Collector	Industrial	None	30	Curb Only	None	44'/44'
	Witherby St	Washington St	2-Lane Collector	Industrial	Parallel (North) Diagonal (south)	30	Yes	None	60'/70'
Kettner Blvd	Washington St	Vine St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	None	40	Sidewalk on SW Side	None	42'/58'
	Vine St	Sassafras St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Sidewalk on SW Side	None	52'/58'
	Sassafras St	Laurel St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Yes	None	52'/68'
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector w/ CLTL	Transportation Related Utilities	Parallel (Both)	45	Yes	Class II	86'/108'
	Taylor St	Kurtz St	6-Lane Major Arterial	Institutional & Industrial	None	45	Yes	Class II	88'/110'
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	Industrial	None	45	Yes	Class II	88'/110'
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	Commercial & Industrial	None	45	Sidewalk on NE Side	Class III	92'/110'
	Barnett Ave	Washington St	Expressway	Commercial & Industrial	None	55	None	Class II	118'/118'
	Washington St	Sassafras St	6-Lane Prime Arterial	Commercial & Industrial	None	45	None	Class III	42' SB / 46' NB
	Sassafras St	Laurel St	6-Lane Major Arterial	Commercial & Industrial	None	45	Yes	Class III	98'/110'
Old Town									
Congress St	Taylor St	Twiggs St	2-Lane Collector	Commercial & Transit Station	Parallel (Both)	25	Yes	Class III	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	Class III	36'/48'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Congress St	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	Commercial, Single Family Residential & School	Parallel (Both)	25	Yes	Class III	36'/48'
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	52'/70'
	Harney St	Ampudia St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	40'/52'
	Ampudia St	Old Town Ave	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	Class III	42'/54'
	Old Town Ave	Hortensia St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	Class III	40'/56'
Juan St	Taylor St	Twiggs St	2-Lane Collector	Institutional, Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Harney St	San Juan Rd	2-Lane Collector	Commercial & Park	Parallel (Both)	30	Yes	None	36'/48'
Morena Boulevard	I-8 EB Ramps	Taylor Street	3-Lane Major	Commercial	None	Not Posted	Yes	None	56'/68'
East-West									
Midway/Pacific Highway Corridor									
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	None	40'/50'
Kemper St	Kenyon St	Midway Dr	2-Lane Collector w/ CLTL	Commercial & Industrial	Parallel (NW Side)	25	NW side only	None	62'/76'
	Midway Dr	Sports Arena Blvd	2-Lane Collector w/ CLTL	Commercial	Parallel (Both)	25	Yes	None	50'/60'
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	Commercial	None	35	Yes	None	106'/120'
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	Commercial, Multi-Family Residential & Industrial	None	35	Yes	None	106'/120'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	Commercial	None	35	Yes	None	106'/120'
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector w/ CLTL	Commercial & Institutional	Parallel (Both)	35	NW side only	None	82'/100'
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	Commercial & Industrial	None	40	Yes	Class III	92'/108'
Washington St	Frontage Rd	Pacific Hwy	4-Lane Major Arterial	None	None	25	Yes	None	62'/70'
	Pacific Hwy	Hancock St	4-Lane Major Arterial	Commercial	Parallel (SE Side)	25	Yes	None	60'/74'
Vine St	California St	Kettner Blvd	2-Lane Collector	Industrial	Diagonal (SE Side)	25	Yes	None	50'/78'
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	Institutional	None	25	Yes	None	52'/74'
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	Commercial	None	25	Yes	Class III	54'/70'
Old Town									
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	Transit Station	None	35	Yes	None	94'/118'
	Congress St	Juan St	5-Lane Major Arterial	Institutional	None	35	Yes	None	80'/98'
	Juan St	Morena Blvd	4-Lane Major Arterial	Commercial & Park	None	35	Yes	None	80'/100'
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	Commercial & Park	None	35	Curb Only	Class II	42'/42'
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	30'/42'
	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (Both)	25	Yes	None	30'/50'
Harney St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	None	30/42'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Harney St	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (SE Side)	25	Yes	None	30'/46'
Old Town Ave	Hancock St	Moore St	2-Lane Collector	None	None	25	SE Side Only	None	28'/36'
	Moore St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	38'/48'

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Figure 3-2 displays existing average daily traffic volumes for the study roadway segments, along with the current LOS. Table 3-3 displays existing roadway segment ADT and LOS for the Midway-Pacific Highway and Old Town San Diego communities. Appendix B contains the average daily traffic counts utilized in this report.

It should be noted that the existing conditions report was completed in November 2012; therefore, the traffic counts conducted to evaluate Existing conditions were collected in year 2012 as well. To ensure the counts used to evaluate existing conditions are still relevant to current conditions, a sampling of the 2012 counts were validated with recently conducted counts (collected in 2015 and 2016). Through the validation process limited growth was observed in the traffic volumes between year 2012 and year 2015/2016 conditions. Therefore, the counts used to evaluate existing conditions would still be considered valid.

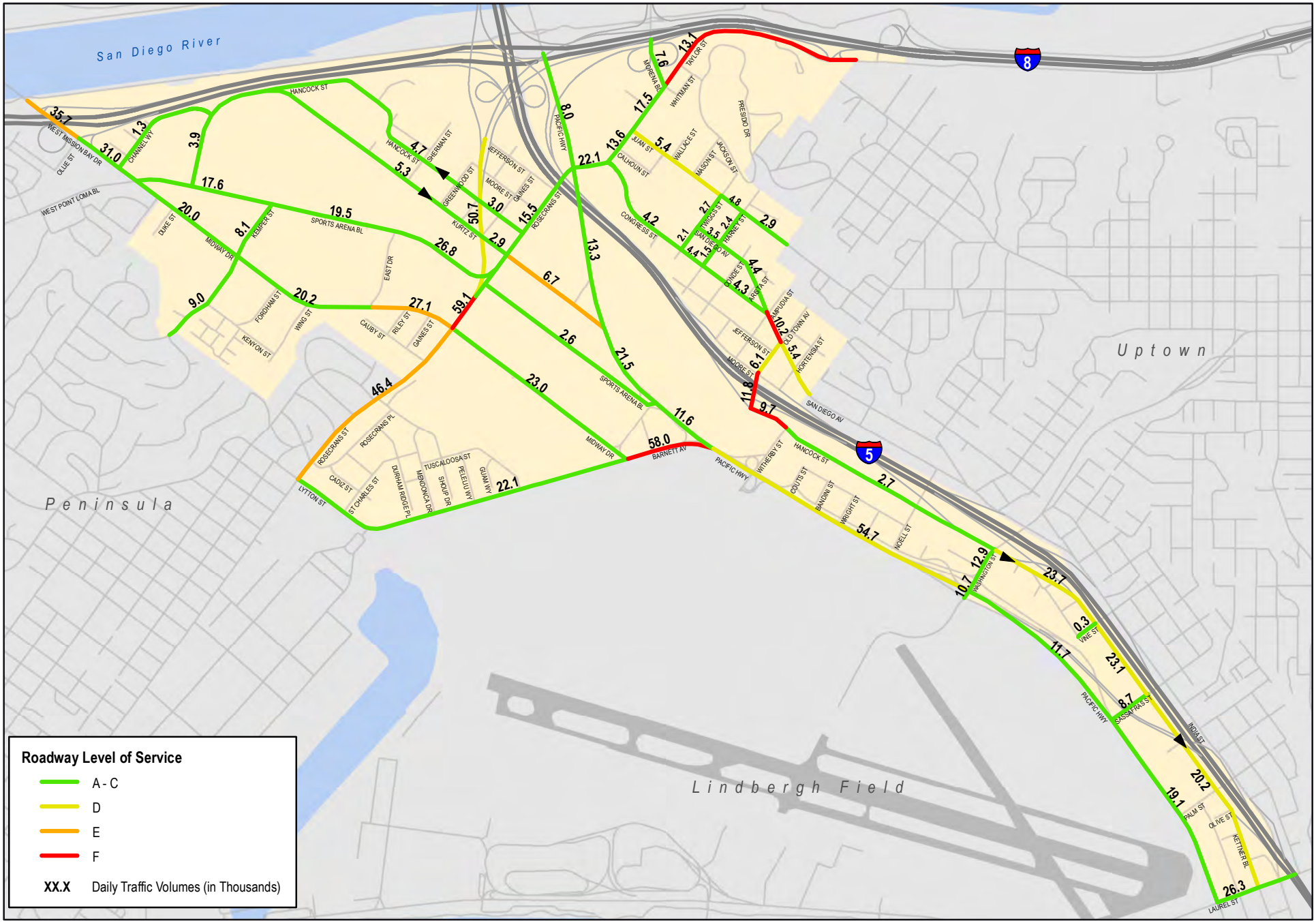
As shown in Table 3-2, the following nine (9) roadway segments operate at LOS E or F under Existing Conditions:

Midway/Pacific Highway Corridor

- Midway Drive, between East Drive and Rosecrans Street (LOS E)
- Kurtz Street, between Rosecrans Street and Pacific Highway (LOS E)
- Hancock Street, between Old Town Avenue and Witherby Street (LOS F)
- Rosecrans Street between Lytton Street and Midway Drive (LOS E)
- Rosecrans Street, between Midway Drive and Sports Arena Boulevard (LOS F)
- Barnett Avenue, between Midway Drive and Pacific Highway (LOS F)

Old Town

- San Diego Avenue, between Ampudia Street and Old Town Avenue (LOS F)
- Taylor Street, between Morena Blvd and I-8 EB Ramps (LOS F)
- Old Town Avenue, Hancock Street to Moore Street (LOS F)



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Figure 3-2
Existing Roadway Segment Traffic Volumes and Level of Service

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
North-South							
Midway/Pacific Highway Corridor							
Lytton Street/ Barnett Avenue	Rosecrans St	Midway Dr	4-Lane Collector (CLTL)	30,000	22,070	0.74	D
Midway Dr	W. Point Loma Blvd/Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	19,960	0.67	C
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,240	0.67	D
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	27,600	0.92	**E**
	Rosecrans St	Barnett Ave	4-Lane Collector (CLTL)	30,000	23,000	0.77	D
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	50,000	35,670	0.71	C
	I-8 EB Ramps	W. Point Loma Blvd/Sports Arena Blvd	6-Lane Major Arterial	50,000	31,010	0.62	C
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector (CLTL)	37,500	17,600	0.47	B
	Kemper St	East Dr	5-Lane Major Arterial	45,000	19,520	0.43	B
	East Dr	Rosecrans St	5-Lane Major Arterial	45,000	26,800	0.6	C
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	2,600	0.33	B
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	5,340	0.31	A
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	6,690	0.84	**E**
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	3,930	0.26	A
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	17,500	4,710	0.27	A
	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	17,500	2,990	0.17	A
	Old Town Ave	Witherby St	2-Lane Collector	8,000	9,680	1.21	**F**
	Witherby St	Washington St	2-Lane Collector	8,000	2,740	0.34	B
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	23,720	0.86	D
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	23,080	0.84	D
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	20,150	0.73	C
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	7,460	0.50	C
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	13,300	0.27	A
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	21,470	0.43	B
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	50,000	11,600	0.23	A
	Barnett Ave	Washington St	Expressway	80,000	54,690	0.68	C
	Washington St	Sassafras St	6-Lane Prime Arterial	60,000	11,650	0.19	A

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Pacific Hwy	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	19,160	0.38	B
Old Town							
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	4,230	0.53	C
	Twiggs St	Harney St	2-Lane Collector	8,000	4,380	0.55	C
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	4,280	0.54	C
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	3,540	0.44	C
	Conde St	Arista Ave	2-Lane Collector	8,000	4,350	0.54	C
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	10,160	1.27	**F**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	5,400	0.68	D
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	5,430	0.68	D
	Twiggs St	Harney St	2-Lane Collector	8,000	4,810	0.60	C
	Harney St	San Juan Rd	2-Lane Collector	8,000	4,230	0.53	C
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	7,585	.25	A
East-West							
Midway/Pacific Highway Corridor							
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	8,000	1,280	0.16	A
Kemper St	Kenyon St	Midway Dr	2-Lane Collector (CLTL)	15,000	9,010	0.60	C
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,120	0.54	C
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	50,700	0.85	D
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	50,000	46,400	0.93	**E**
	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	50,000	59,100	1.18	**F**
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector (CLTL)	30,000	15,500	0.52	C
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	40,000	57,954	1.45	**F**
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	10,680	0.27	A
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	12,870	0.32	A
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	250	0.03	A
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	8,700	0.79	D
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	26,290	0.66	C
Old Town							
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	22,100	0.55	C
	Congress St	Juan St	5-Lane Major Arterial	45,000	13,560	0.30	A
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	17,530	0.44	B
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	13,140	1.64	**F**
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,080	0.26	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,670	0.33	B

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,520	0.19	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,350	0.29	A
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	11,750	1.47	**F**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,120	0.77	D

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

3.3 Intersection Analysis

As described in Chapter 2, a total of fifty-nine (59) study intersections were analyzed as part of the Existing Conditions assessment, including thirty-five (35) intersections located within Midway-Pacific Highway, thirteen (13) intersections located within Old Town, and eleven (11) intersections in adjacent communities.

Figure 3-3 displays current intersection geometries, while Figure 3-4 shows existing AM and PM peak period turning movements. The study area intersection traffic counts are provided in Appendix D.

Table 3-4 displays the existing AM and PM peak hour LOS analysis results for the key study area intersections. LOS analyses were conducted using the methodologies described in Chapter 2.0. Intersection LOS calculation worksheets for Existing Conditions are provided in Appendix E. As shown, the following four (4) study intersections currently operate at LOS E or F:

Midway-Pacific Highway

- Lytton Street & Rosecrans Street (LOS E – AM peak hour)
- West Mission Bay Drive & I-8 WB Off-Ramp (LOS E – PM peak hour)

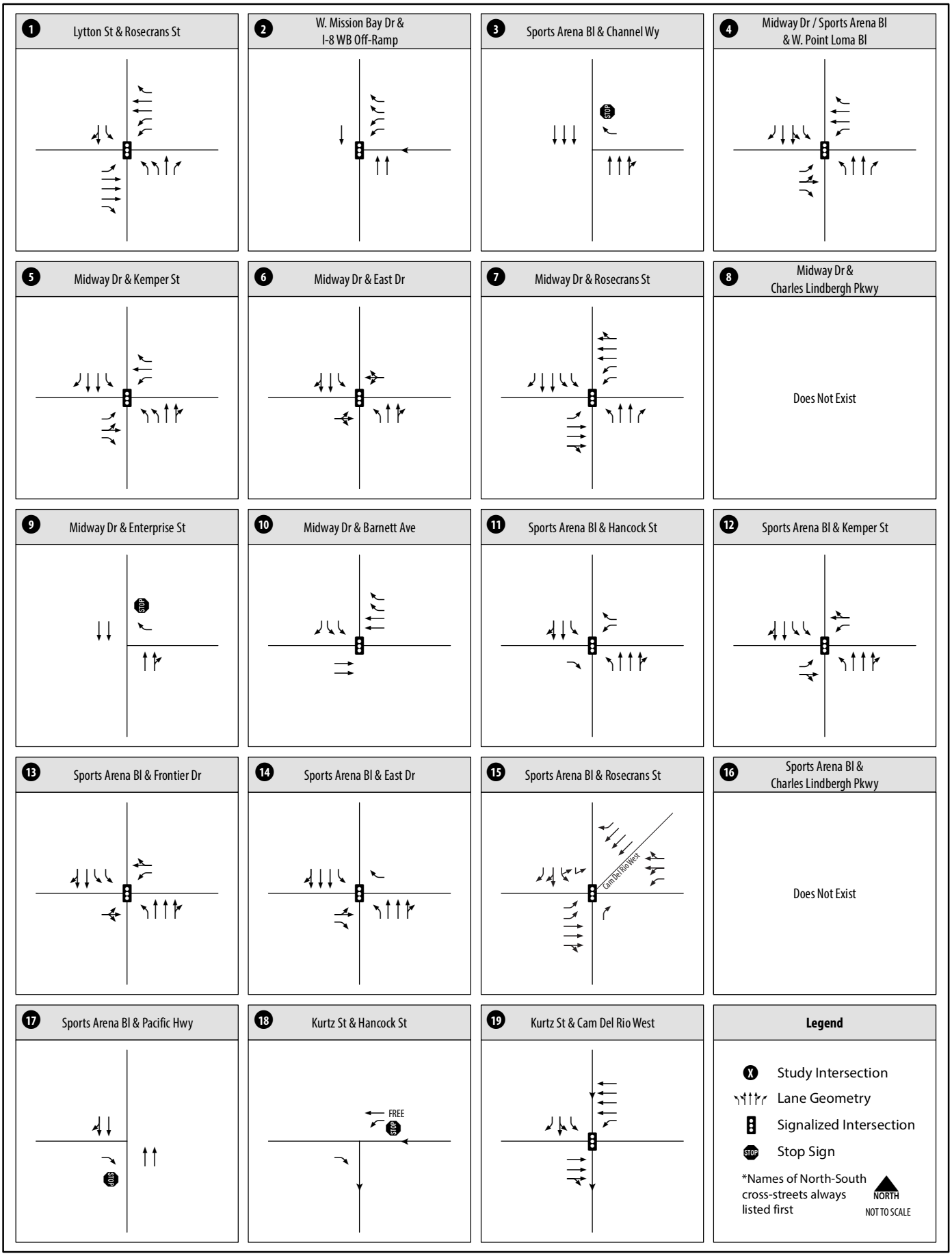
Old Town

- Pacific Highway & Taylor Street (LOS E – AM peak hour)

Intersections Outside of Study Communities

- Lowell Street/Nimitz Boulevard & Rosecrans Street (LOS E – PM peak hour)

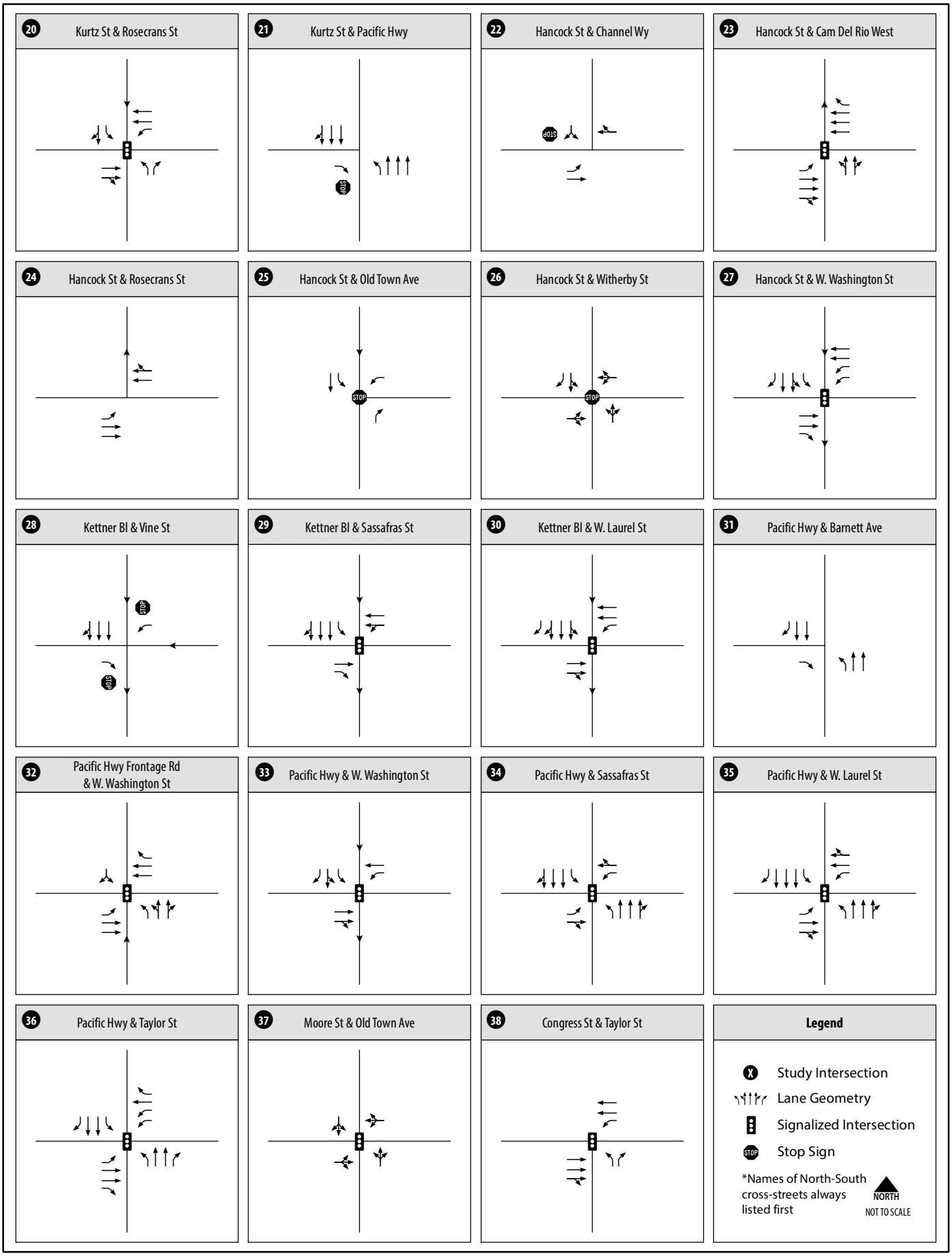
Figure 3-5 graphically displays the existing AM and PM peak hour intersection LOS results.



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Figure 3-3
Existing Intersection Geometrics (Intersections 1-19)



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Figure 3-3
Existing Intersection Geometrics (Intersections 20-38)

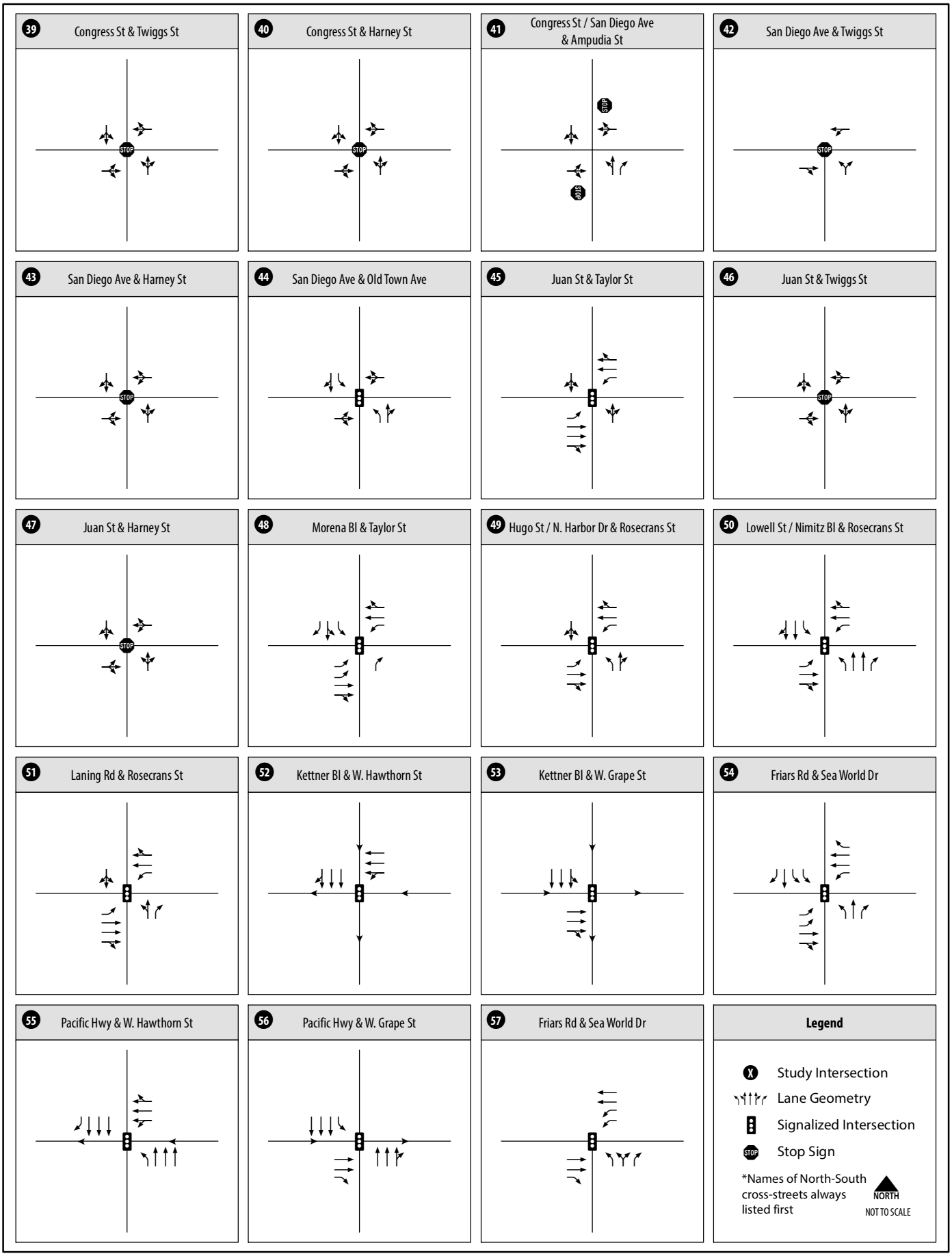
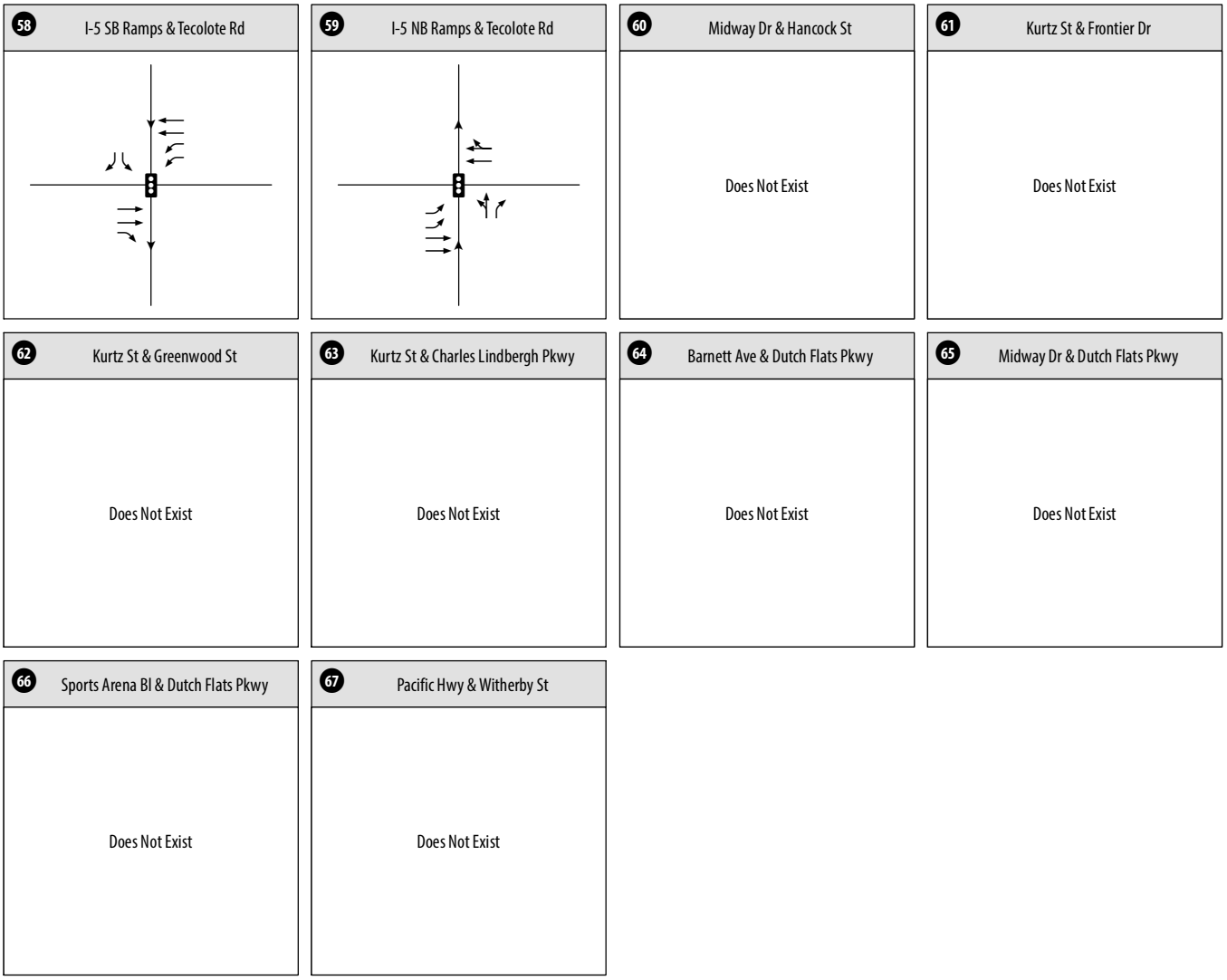


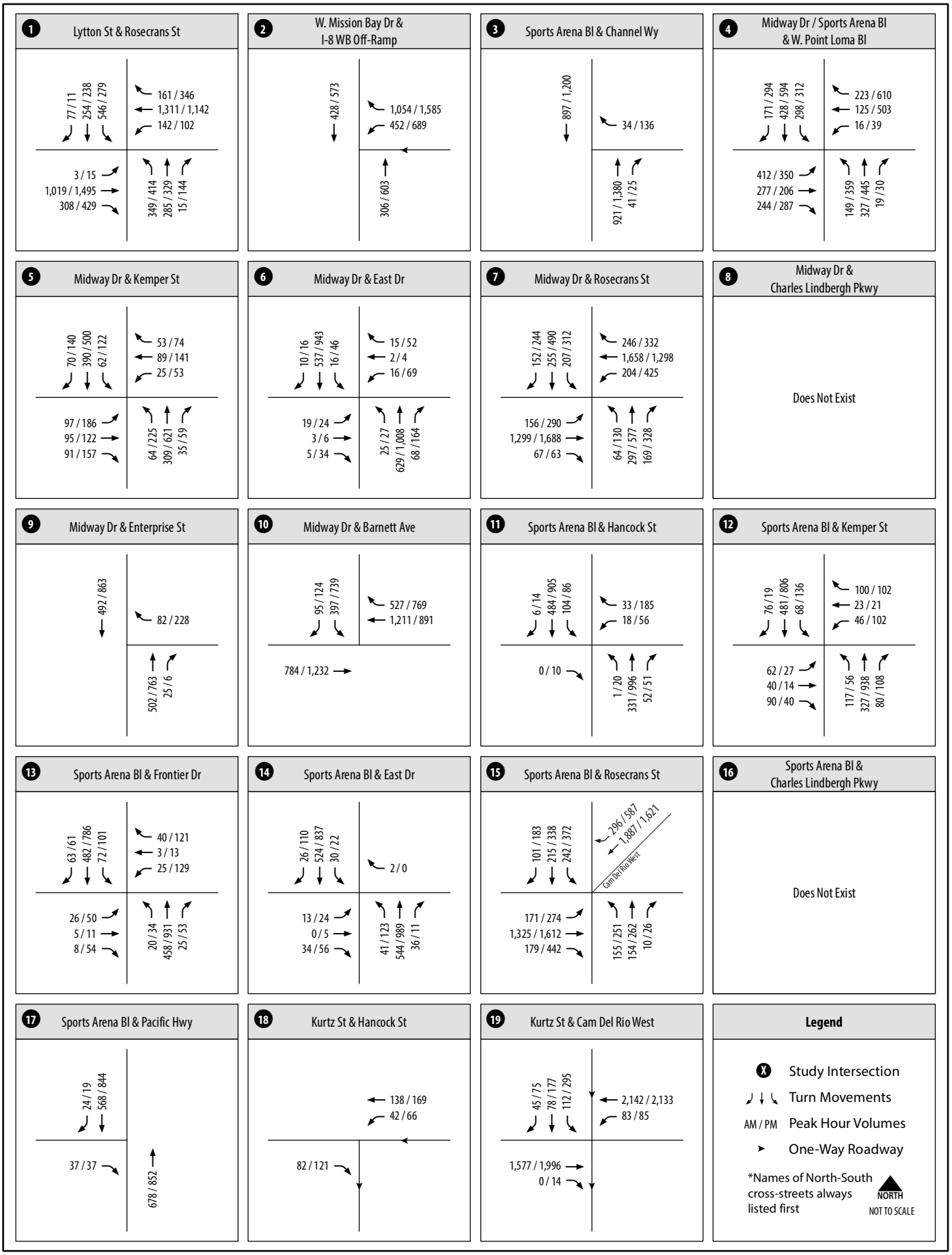
Figure 3-3
Existing Intersection Geometrics (Intersections 39-57)



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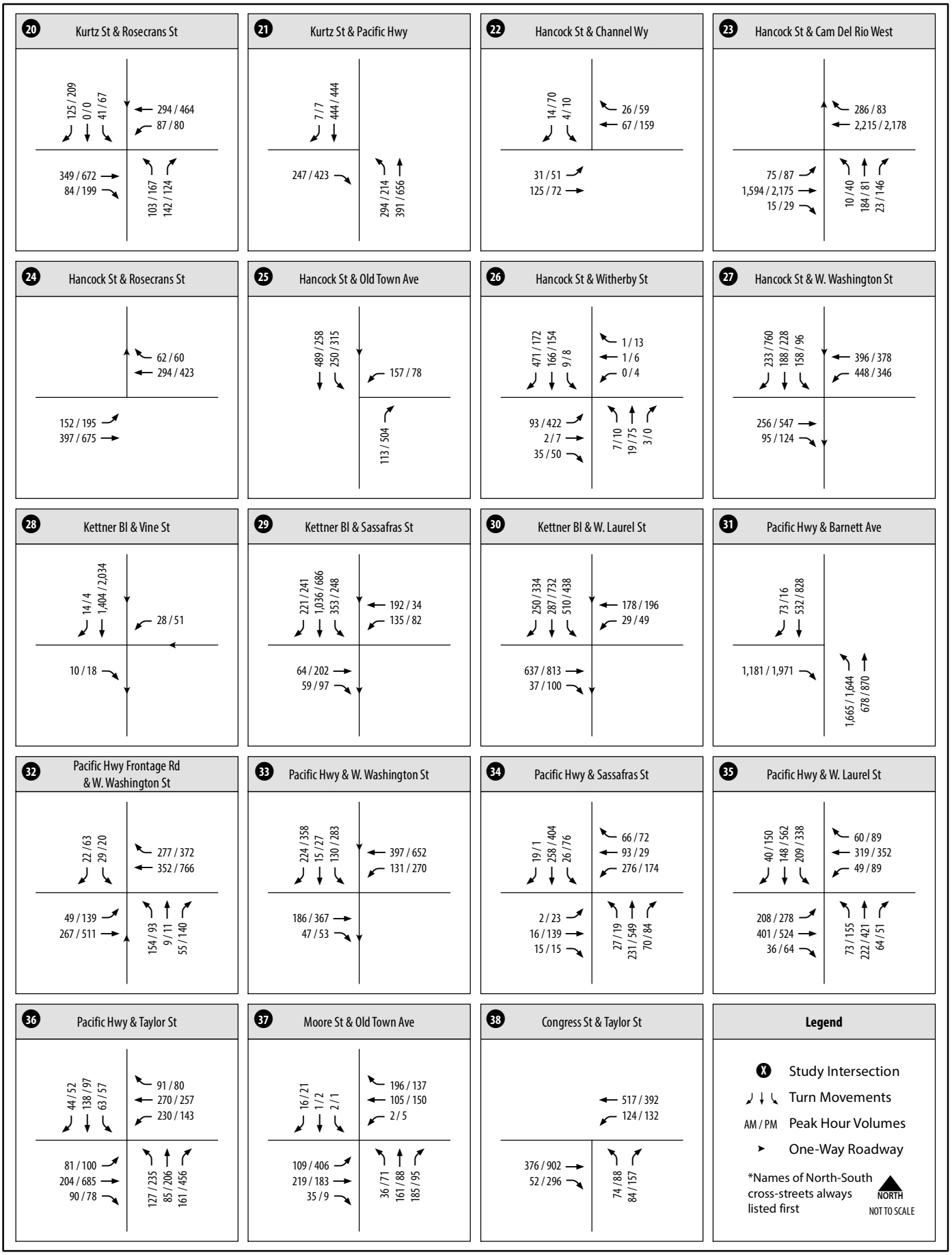
Figure 3-3
Existing Intersection Geometrics (Intersections 58-67)



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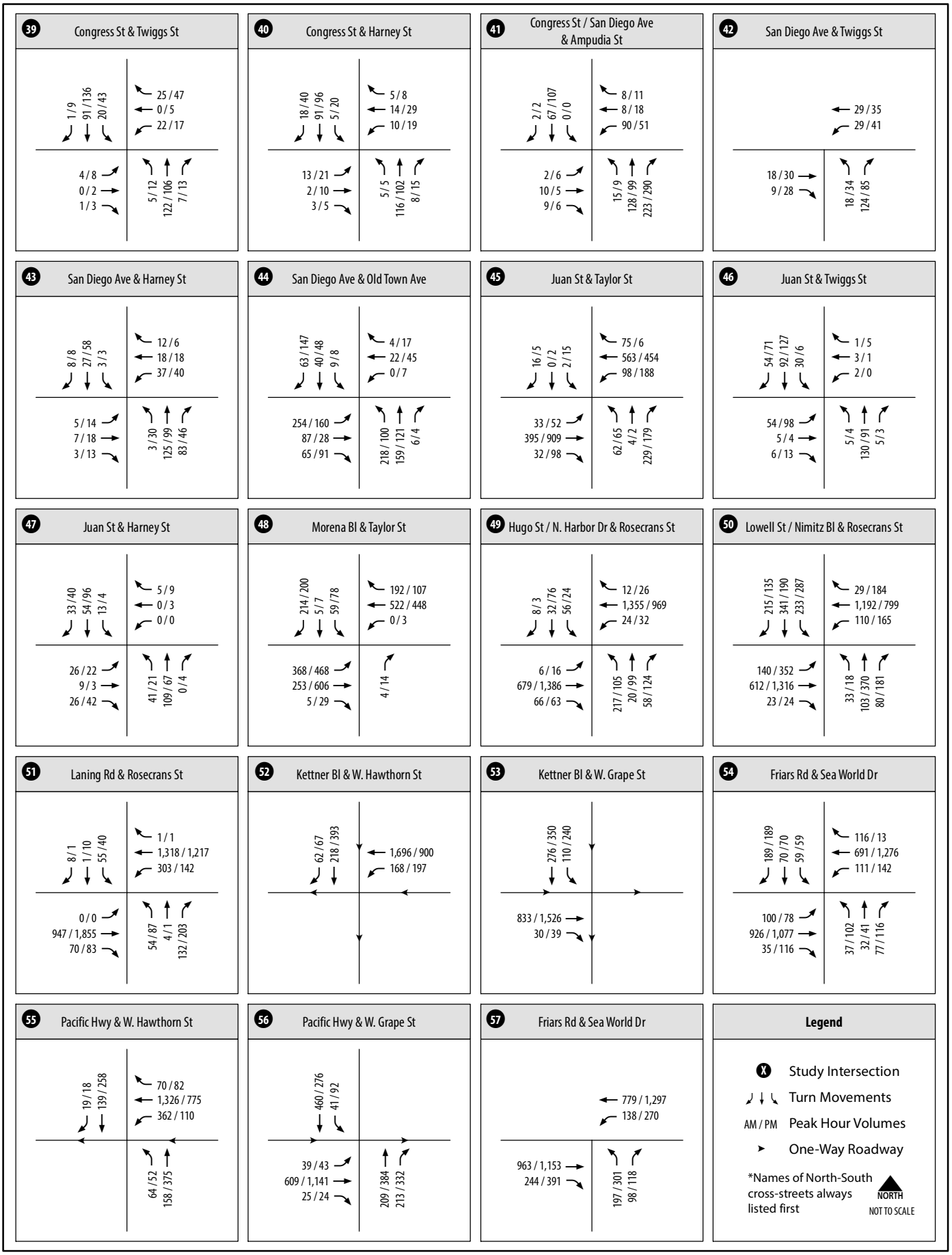
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 1-19)



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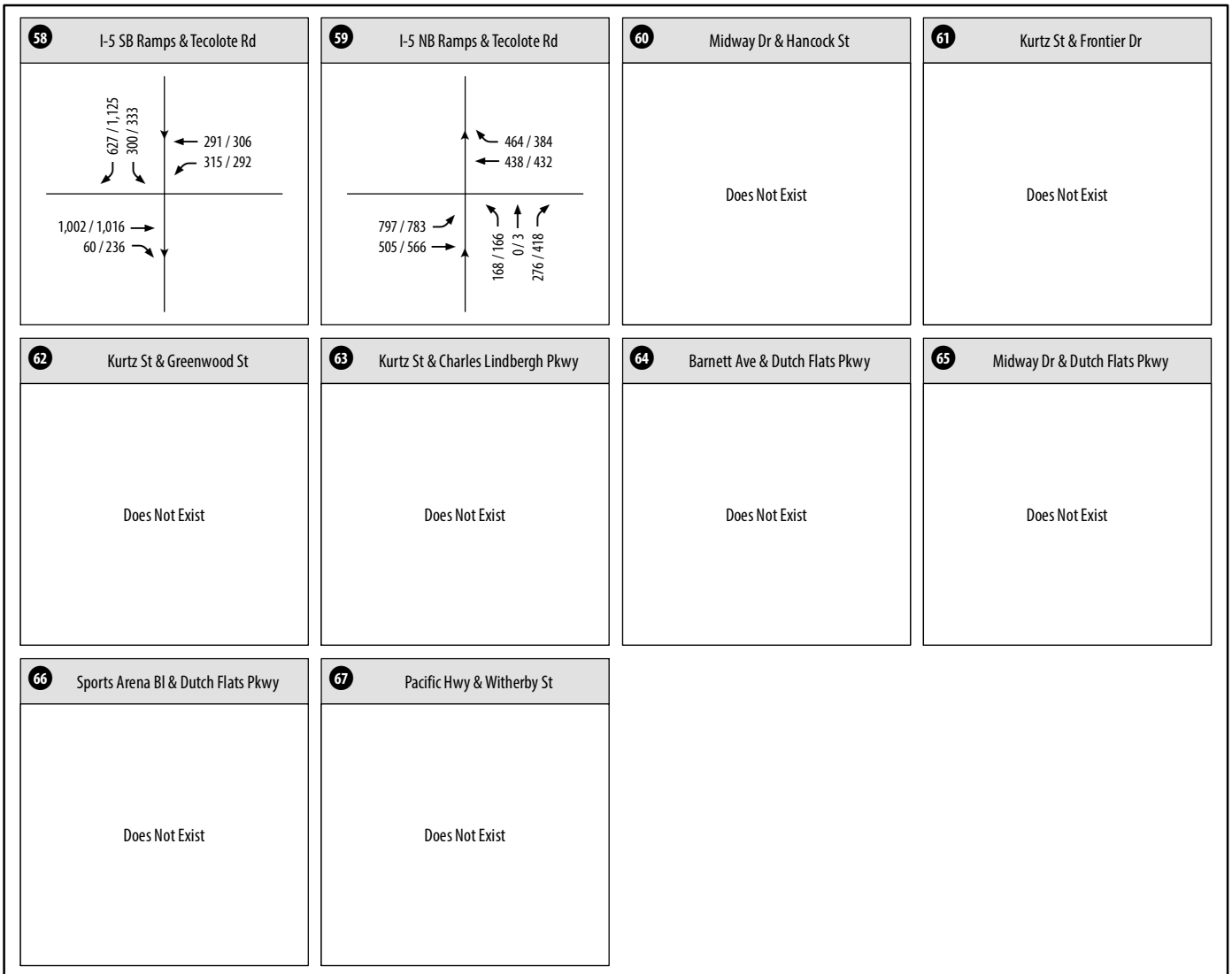
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 20-38)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movement (Intersections 39-57)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 58-67)

Table 3-4 Existing AM/PM Peak Hour Level of Service

No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
Midway-Pacific Highway						
1	Lytton St and Rosecrans St	Signal	**65.4**	**E**	44.5	D
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	14.8	B	**59.5**	**E**
3	Sports Arena Blvd and Channel Way	OWSC	11.2	B	14.7	B
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	36.6	D	47.2	D
5	Midway Dr and Kemper St	Signal	22.7	C	37.3	D
6	Midway Dr and East Dr	Signal	4.8	A	13.0	B
7	Midway Dr and Rosecrans St	Signal	34.9	C	49.1	D
8	Midway Dr and Unknown Future Connector 1	Unknown	*Does Not Exist*			
9	Midway Dr and Enterprise St	OWSC	11.0	B	18.1	C
10	Midway Dr and Barnett Ave	Signal	13.8	B	19.8	B
11	Sports Arena Blvd and Hancock St	Signal	10.0	A	13.1	B
12	Sports Arena Blvd and Kemper St	Signal	18.8	B	17.5	B
13	Sports Arena Blvd and Sports Arena Driveway	Signal	17.1	B	24.8	C
14	Sports Arena Blvd and East Dr	Signal	26.0	C	11.9	B
15	Sports Arena Blvd and Rosecrans St	Signal	35.7	D	43.2	D
16	Sports Arena Blvd and Unknown Future Connector 1	Unknown	*Does Not Exist*			
17	Sports Arena Blvd and Pacific Hwy	OWSC	10.6	B	12.0	B
18	Kurtz St and Hancock St	OWSC	*No Control Delay*			
19	Kurtz St and Camino Del Rio West	Signal	9.4	A	20.2	C
20	Kurtz St and Rosecrans St	Signal	20.0	B	31.7	C
21	Kurtz St and Pacific Hwy	OWSC	11.2	B	13.7	B
22	Hancock St and Channel Wy	OWSC	9.3	A	10.5	B
23	Hancock St and Camino Del Rio West	Signal	24.3	C	20.3	C
24	Hancock St and Rosecrans St	Unsignalized	*No Conflicting Movements*			
25	Hancock St and Old Town Ave	AWSC	16.9	C	14.6	B
26	Hancock St and Witherby St	AWSC	16.0	C	23.5	C
27	Hancock St and Washington St	Signal	22.8	C	25.9	C
28	Kettner Blvd and Vine St	TWSC	14.3	B	23.2	C
29	Kettner Blvd and Sassafras St	Signal	12.0	B	11.9	B
30	Kettner Blvd and West Laurel St	Signal	20.0	B	29.7	C
31	Pacific Hwy and Barnett Ave	Grade Separated	*No Control Delay*			
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	19.4	B	36.0	D
33	Pacific Hwy and Washington St @ Pacific St	Signal	18.7	B	31.2	C
34	Pacific Hwy and Sassafras St	Signal	14.4	B	27.3	C
35	Pacific Hwy and West Laurel St	Signal	48.4	D	42.9	D
Old Town						
36	Pacific Hwy and Taylor St	Signal	**64.6**	**E**	33.5	C
37	Moore St and Old Town Ave	Signal	16.4	B	16.4	B

Table 3-4 Existing AM/PM Peak Hour Level of Service

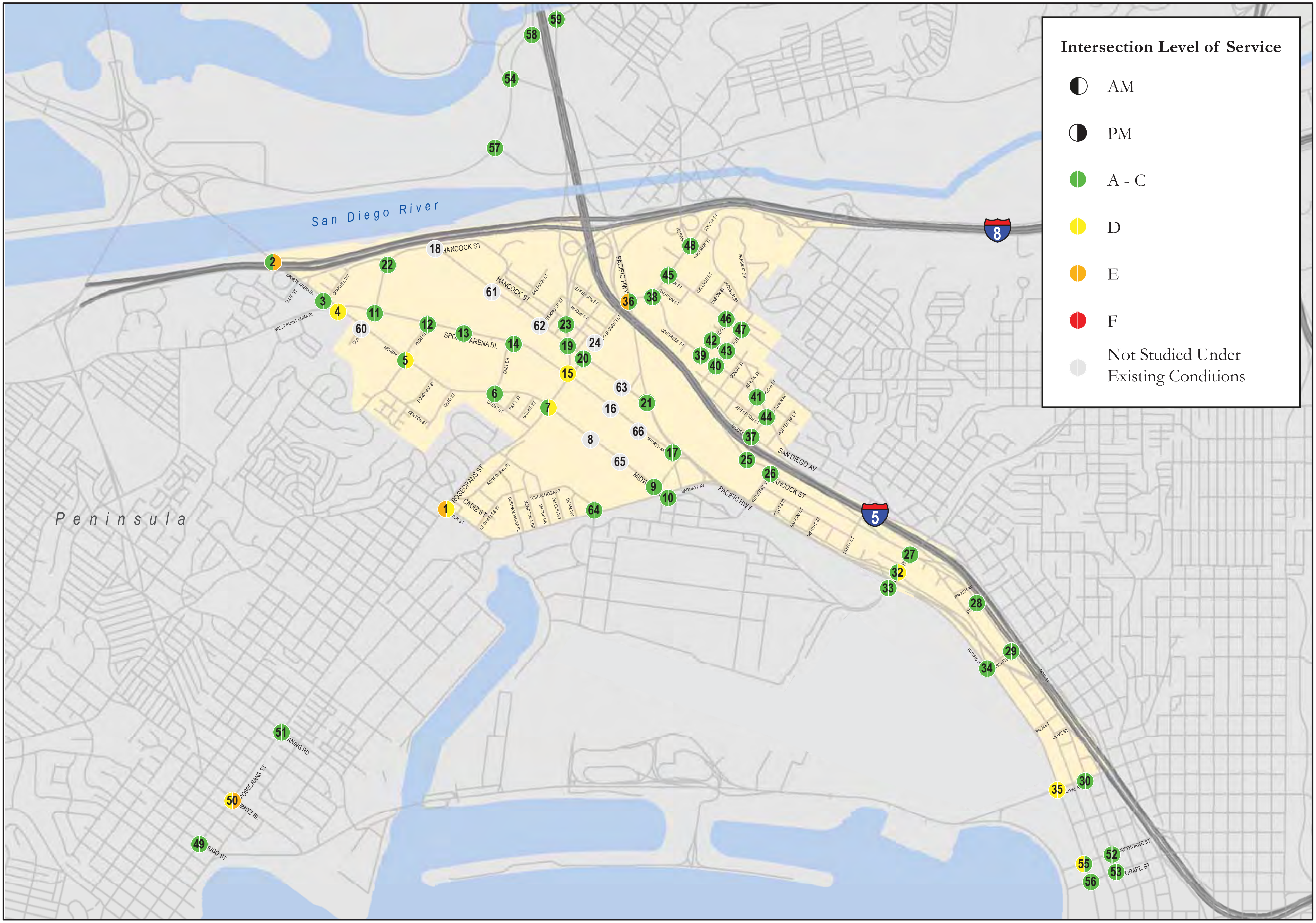
No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
38	Congress St and Taylor St	Signal	19.9	B	21.7	C
39	Congress St and Twiggs St	AWSC	8.1	A	8.6	A
40	Congress St and Harney St	AWSC	8.1	A	8.3	A
41	Congress St and San Diego Ave/Ampudia St	TWSC	12.3	B	11.5	B
42	San Diego Ave and Twiggs St	AWSC	7.9	A	8.0	A
43	San Diego Ave and Harney St	AWSC	8.2	A	8.2	A
44	San Diego Ave and Old Town Ave	Signal	18.4	B	11.6	B
45	Juan St and Taylor St	Signal	10.4	B	10.7	B
46	Juan St and Twiggs St	AWSC	8.8	A	8.5	A
47	Juan St and Harney St	AWSC	8.3	A	7.9	A
48	Morena Blvd and Taylor St	Signal	22.4	C	16.4	B
Intersections Outside of Study Communities						
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	14.7	B	20.7	C
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	41.2	D	**63.3**	**E**
51	Laning Rd and Rosecrans St	Signal	15.5	B	12.9	B
52	Kettner Blvd and West Hawthorn St	Signal	11.1	B	15.0	B
53	Kettner Blvd and West Grape St	Signal	7.4	A	8.7	A
54	Pacific Hwy and Sea World Dr	Signal	19.9	B	25.6	C
55	Pacific Hwy and West Hawthorn St	Signal	35.4	D	20.2	C
56	Pacific Hwy and West Grape St	Signal	16.8	B	24.2	C
57	Friars Rd and Sea World Dr	Signal	11.5	B	13.8	B
58	I-5 SB Ramps and Sea World Dr	Signal	15.5	B	16.3	B
59	I-5 NB Ramps and Sea World Dr	Signal	21.4	C	28.4	C

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Notes:

Bold letter indicates substandard LOS.

1 Signal = Traffic Signal; OWSC = One-Way Stop-Control; 3WSC = Three-Way Stop-Control; AWSC = All-Way Stop-Control;



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Figure 3-5
Existing AM/PM Peak Hour Intersection LOS Results

3.4 Freeway Segment Analysis

Two regional corridors run adjacent to the Midway-Pacific Highway and Old Town communities, providing regional access to and from the communities.

Interstate 5 (I-5) is a north-south freeway that traverses the United States from the Mexican to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the major metropolitan areas of San Diego, Los Angeles, Sacramento and the eastern portion of the San Francisco Bay Area. I-5 bisects the two study communities and can be accessed via the following roadway interchanges:

Midway-Pacific Highway

- Camino Del Rio West (NB on & SB off only)
- Pacific Highway (SB on & NB off only)
- Washington Street
- Palm Street (SB on only)
- Sassafras Street (NB & SB off only)

Old Town

- Old Town Avenue

Interstate 8 (I-8) is an east-west freeway that extends from the western coast of San Diego to central Arizona. I-8 runs just north of the study communities, with access provided via the following roadway interchanges:

Midway-Pacific Highway

- West Mission Bay Drive (EB & WB off only)
- Camino Del Rio West (EB on & WB off only)

Old Town

- Taylor Street

Table 3-5 displays freeway segment LOS analysis results for key freeway segments in the vicinity of the Midway-Pacific Highway and Old Town communities. Caltrans freeway volume worksheets are provided in Appendix F.

As shown, all key freeway segments are currently operating at LOS D or better with the exception of the following three (3) segments:

- I-5 NB, between Sea World Drive and I-8 (LOS E: PM Peak Period)
- I-5 SB, between I-8 and Old Town Avenue (LOS E: PM Peak Period)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: PM Peak Period)

Table 3-5 Existing Freeway Segment Level of Service Results

							AM					PM				
Freeway	Segment	ADT	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Peak Hr Vol	V/C	LOS	Peak Hr %	Split	Peak Hr Vol	V/C	LOS
I-8	Beginning of Freeway to Sports Arena Blvd	46,500	1.2%	EB	2M + 0A	4,700	6.3%	60%	1,900	0.40	A	8.5%	72%	3,200	0.68	C
				WB	2M + 0A	4,700		40%	1,300	0.28	A		28%	1,300	0.28	A
	Sports Arena Blvd to I-5	102,000	2.8%	EB	3M + 1A	8,450	6.4%	60%	4,400	0.52	B	7.8%	63%	5,600	0.66	C
				WB	3M + 1A	8,450		40%	2,900	0.34	A		37%	3,400	0.40	A
	I-5 to Morena Blvd	132,000	2.8%	EB	4M + 1A	10,800	6.4%	41%	3,900	0.36	A	7.2%	51%	5,500	0.51	B
				WB	5M + 0A	11,750		59%	5,500	0.47	B		49%	5,200	0.44	B
	Morena Blvd to Hotel Circle	191,000	2.8%	EB	4M + 1A	10,800	6.5%	47%	6,500	0.60	B	8.2%	55%	9,700	0.90	D
				WB	5M + 0A	11,750		53%	7,400	0.63	C		45%	8,000	0.68	C
I-5	Clairemont Dr to Sea World Dr	220,000	4.5%	NB	5M + 0A	11,750	6.4%	61%	10,000	0.85	D	8.3%	51%	10,700	0.91	D
				SB	5M + 0A	11,750		39%	6,200	0.53	B		49%	10,300	0.88	D
	Sea World Dr to I-8	199,000	4.5%	NB	4M + 1A	10,800	6.4%	62%	9,000	0.83	D	8.4%	52%	10,000	0.93	**E**
				SB	4M + 2A	12,200		38%	5,400	0.44	B		48%	9,200	0.75	C
	I-8 to Old Town Ave	199,000	4.1%	NB	4M + 1A	10,800	6.9%	49%	7,700	0.71	C	8.2%	39%	7,300	0.68	C
				SB	5M + 0A	11,750		51%	7,900	0.67	C		61%	11,400	0.97	**E**
	Old Town Ave to Washington St	192,000	4.1%	NB	4M + 0A	9,400	6.9%	49%	7,500	0.80	D	8.0%	51%	9,000	0.96	**E**
				SB	5M + 0A	11,750		51%	7,700	0.66	C		49%	8,600	0.73	C
	Washington St to Pacific Highway	142,000	4.1%	NB	4M + 0A	9,400	6.9%	54%	6,000	0.64	C	8.1%	36%	4,800	0.51	B
				SB	4M + 0A	9,400		46%	5,200	0.55	B		64%	8,400	0.89	D
	Pacific Highway to Laurel Street	147,000	4.1%	NB	4M + 1A	10,800	6.7%	58%	6,600	0.61	B	7.0%	49%	5,800	0.54	B
				SB	4M + 1A	10,800		42%	4,700	0.44	B		51%	6,100	0.56	B
	Laurel Street to Hawthorne Street	183,000	4.1%	NB	4M + 1A	10,800	6.7%	57%	8,100	0.75	C	7.3%	46%	7,100	0.66	C
				SB	4M + 1A	10,800		43%	6,000	0.56	B		54%	8,200	0.76	C

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (2016)

3.5 Freeway Ramp Metering Analysis

Table 3-6 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 3-6 Existing Freeway Ramp Meter Analysis

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Volume	Excess Demand	Delay (Minutes)	Queue (Feet)
I-8 EB / Sports Arena Boulevard	PM	2	1	490	913	423	51.8	12,267
I-5 SB / Sea World Drive	AM	1	1	318	375	57	10.8	1,653
	PM	1	1	318	528	210	39.6	6,090
I-5 NB / Sea World Drive	AM	2	0	1,118	1,261	143	7.7	4,147
	PM	2	0	1,320	1,170	0	0.0	0
I-5 SB / Old Town Avenue	PM	1	0	352	360	8	1.4	232
I-5 NB / Old Town Avenue	AM	2	0	670	466	0	0.0	0
	PM	2	0	636	631	0	0.0	0

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

As shown in Table 3-6, the following ramp meters within the study communities experience delays in excess of 15 minutes:

- I-8 EB / Sports Arena Boulevard (PM Peak) – 51.8 minute delay and 12,267 feet of queue
- I-5 SB / Sea World Drive (PM Peak) – 39.6 minute delay and 6,090 feet of queue

4.0 Preferred Plan

This chapter assess the potential traffic impacts of the Preferred Plan by comparing Preferred Plan conditions to Existing Conditions. Evaluations are provided for vehicle miles traveled (VMT), roadway segment and intersection peak hour operations, and freeway segment and ramp meter operations.

The Preferred Plan forecast traffic volumes were developed utilizing the SANDAG Series 12 Preferred Plan Future Year 2035. The modeling methodology and assumptions are provided in Chapter 5 of the Midway-Pacific Highway and Old Town Community Plan Update Mobility Report. Final SANDAG Series 12 Forecast Model Results for Year 2035, including manual adjustments, are provided in Appendix F.

4.1 Vehicle Miles Traveled

The vehicle miles traveled (VMT) within the communities were estimated using the SANDAG Series 12 Preferred Plan Future Year 2035 and Base Year models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to, from, and within the communities. Table 4-1A and Table 4-1B display the total VMT generated and average trip length within the Midway-Pacific Highway and Old Town communities, respectively, under both Preferred Plan and Base Year conditions. The results for the San Diego region are also presented in the tables for comparison purposes. VMT calculations are provided as Appendix G.

Table 4-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	769,800	39,679	5.4%	85,182,063	108,821,629	23,639,566	27.8%
Total # of Auto Trips	294,796	288,243	-6,553	-2.2%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.8%	5.2	5.4	0.2	3.7%
Population	4,670	12,505	7,835	167.8%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	62	-95	-60.6%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:
1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Preferred Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.8%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-64.2%).

Table 4-1B Vehicle Miles Traveled Comparison – Old Town Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,482	20,182	13.3%	85,182,063	108,821,629	23,639,566	27.8%
Total # of Auto Trips	57,898	59,412	1,514	2.6%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	10.5%	5.2	5.4	0.2	3.7%
Population	830	1,280	450	54.2%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	182	134	-48	-26.5%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region. With the implementation of the Preferred Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 10.5%. However, the anticipated population increase within the community results in an overall decrease in the daily VMT by population (-26.5%).

4.2 Roadway Segment Analysis

The majority of roadways within the Midway-Pacific Highway and Old Town communities will remain unchanged from existing conditions, however, the Preferred Plan includes roadway improvements and new roadway segments intended to accommodate anticipated future traffic demands. Table 4-2 identifies the proposed roadway segment modifications, including new roadways, in the Midway-Pacific Highway community.

Due to the historic nature of the Old Town community, the Preferred Plan does not propose any roadway widenings or other roadway capacity improvements. However, San Diego Avenue, between Twiggs Street and Conde Street, has a large curb-to-curb width (50 feet) for a standard two-lane collector roadway (typically 40 feet wide). Therefore, in order to better utilize the curb-to-curb right-of-way, it is recommended that the parallel parking on the east side of the roadway be converted to angled parking. The recommended improvement will not affect the capacity of the roadway and will increase the already constrained parking capacity within the Old Town community.

Table 4-2 Summary of Roadway Improvements

Roadway	Segment	Existing Configuration	Recommended Classification
Segment Modifications			
Lytton St / Barnett Ave	Rosecrans St and Midway Dr	4-Lane Collector W/ CLTL	4-Lane Major Arterial
W. Mission Bay Dr	I-8 WB Ramps and I-8 EB Ramps	5-Lane Prime Arterial	6-Lane Prime Arterial
Sports Arena Blvd	I-8 EB Ramps and Rosecrans St	5-Lane Major Arterial	6-Lane Major Arterial
Sports Arena Blvd	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Kurtz St	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Rosecrans St	Lytton St and Sports Arena Blvd	6-Lane Major Arterial	6-Lane Prime Arterial
Rosecrans St	Sports Arena Blvd and Taylor St	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Hancock St	Kurtz St and Rosecrans Street	2-Lane Collector (One-Way)	3-Lane Major (One-Way)
Hancock St	Old Town Ave and Witherby St	2-Lane Collector	4-Lane Collector
Barnett Ave	Midway Dr and Pacific Hwy	4-Lane Major Arterial	6-Lane Prime Arterial
Midway Drive	Rosecrans St and Barnett Avenue	4-Lane Collector W/CLTL	4-Lane Major Arterial
New Roadways			
Kemper St	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Frontier Dr	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Greenwood St	Kurtz St and Sports Arena Blvd	Does Not Exist	2-Lane Collector
Charles Lindbergh Pkwy	Kurtz St and Midway Dr	Does Not Exist	2-Lane Collector W/ CLTL
Dutch Flats Pkwy	Sports Arena Blvd and Barnett Ave	Does Not Exist	2-Lane Collector W/ CLTL

Source: Chen Ryan Associates (June 2016)

Table 4-3 displays the level of service analysis results for the study area roadway segments under both the Preferred Plan and Existing Conditions within the Midway-Pacific Highway and Old Town communities. The proposed roadway classifications and forecast ADT and LOS under buildout of the Preferred Plan are shown in Figure 4-1 and Figure 4-2.

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
North-South														
Midway Pacific Highway														
Lytton Street/ Barnett Ave	Rosecrans St	Midway Dr	4-Lane Major Arterial	40,000	23,800	0.60	C	4-Lane Collector (CLTL)	30,000	22,070	0.74	D	-0.14	No
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	24,100	0.80	D	4-Lane Collector (CLTL)	30,000	19,960	0.67	C	0.13	No
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,300	0.68	D	4-Lane Collector (CLTL)	30,000	20,240	0.67	D	0.01	No
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	27,000	0.90	**E**	4-Lane Collector (CLTL)	30,000	27,600	0.92	**E**	-0.02	No
	Rosecrans St	Barnett Ave	4-Lane Major Arterial	40,000	28,400	0.71	C	4-Lane Collector (CLTL)	30,000	23,000	0.77	D	-0.06	No
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	6-Lane Prime Arterial	60,000	46,800	0.78	C	5-Lane Prime Arterial	50,000	35,670	0.71	C	0.07	No
	I-8 EB Ramps	W. Point Loma Blvd	6-Lane Major Arterial	50,000	40,800	0.82	D	6-Lane Major Arterial	50,000	31,010	0.62	C	0.20	No
	W. Point Loma Blvd/Midway Dr	Kemper St	6-Lane Major Arterial	50,000	20,300	0.41	B	5-Lane Collector (CLTL)	37,500	17,600	0.47	B	-0.06	No
	Kemper St	East Dr	6-Lane Major Arterial	50,000	25,900	0.52	B	5-Lane Major Arterial	45,000	19,520	0.43	B	0.09	No
	East Dr	Rosecrans St	6-Lane Major Arterial	50,000	20,000	0.40	B	5-Lane Major Arterial	45,000	26,800	0.60	C	-0.20	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	9,800	0.65	C	2-Lane Collector	8,000	2,600	0.33	B	0.32	No
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	10,800	0.62	D	2-Lane Collector (One-Way)	17,500	5,340	0.31	A	0.31	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	6,800	0.45	B	2-Lane Collector	8,000	6,690	0.84	**E**	-0.39	No

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Hancock St	Sports Arena Blvd	Kurtz St	4-Lane Collector	15,000	400	0.03	A	2-Lane Collector (CLTL)	15,000	3,930	0.26	A	-0.23	No
	Kurtz St	Camino Del Rio West	3-Lane Major (One-Way)	27,500	11,700	0.43	A	2-Lane Collector (One-Way)	17,500	4,710	0.27	A	0.16	No
	Camino Del Rio West	Rosecrans St	3-Lane Major (One-Way)	27,500	6,500	0.24	A	2-Lane Collector (One-Way)	17,500	2,990	0.17	A	0.07	No
	Old Town Ave	Witherby St	4-Lane Collector	15,000	10,600	0.71	D	2-Lane Collector	8,000	9,680	1.21	**F**	-0.50	No
	Witherby St	Washington St	2-Lane Collector	8,000	4,600	0.58	C	2-Lane Collector	8,000	2,740	0.34	B	0.24	No
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	33,400	1.21	**F**	3-Lane Major (One-Way)	27,500	23,720	0.86	D	0.35	**Yes**
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	33,000	1.20	**F**	3-Lane Major (One-Way)	27,500	23,080	0.84	D	0.36	**Yes**
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	29,700	1.08	**F**	3-Lane Major (One-Way)	27,500	20,150	0.73	C	0.35	**Yes**
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	10,600	0.71	D	2-Lane Collector (CLTL)	15,000	7,460	0.50	C	0.21	No
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	19,000	0.38	A	6-Lane Major Arterial	50,000	13,300	0.27	A	0.11	No
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	23,600	0.47	B	6-Lane Major Arterial	50,000	21,470	0.43	B	0.04	No
	Sports Arena Blvd	Barnett Ave	5-Lane Major Arterial	45,000	17,700	0.39	B	5-Lane Prime Arterial	50,000	11,600	0.23	A	0.16	No
	Barnett Ave	Washington St	Expressway	80,000	50,400	0.63	C	Expressway	80,000	54,690	0.68	C	-0.05	No
	Washington St	Sassafras St	6-Lane Major Arterial	50,000	17,500	0.35	A	6-Lane Prime Arterial	60,000	11,650	0.19	A	0.16	No
	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	27,400	0.55	B	6-Lane Major Arterial	50,000	19,160	0.38	B	0.17	No
Old Town														
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,100	0.89	**E**	2-Lane Collector	8,000	4,230	0.53	C	0.36	**Yes**

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	**From**	**To**	**Roadway Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Functional Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Δ V/C**	**SI?**
Congress St	Twiggs St	Harney St	2-Lane Collector	8,000	6,300	0.79	D	2-Lane Collector	8,000	4,380	0.55	C	0.24	No
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	6,000	0.75	D	2-Lane Collector	8,000	4,280	0.54	C	0.21	No
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	4,800	0.60	C	2-Lane Collector	8,000	3,540	0.44	C	0.16	No
	Conde St	Arista Ave	2-Lane Collector	8,000	4,600	0.58	C	2-Lane Collector	8,000	4,350	0.54	C	0.04	No
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	12,100	1.51	**F**	2-Lane Collector	8,000	10,160	1.27	**F**	0.24	**Yes**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	6,600	0.83	**E**	2-Lane Collector	8,000	5,400	0.68	D	0.15	**Yes**
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	6,900	0.86	**E**	2-Lane Collector	8,000	5,430	0.68	D	0.18	**Yes**
	Twiggs St	Harney St	2-Lane Collector	8,000	6,500	0.81	**E**	2-Lane Collector	8,000	4,810	0.60	C	0.21	**Yes**
	Harney St	San Juan Rd	2-Lane Collector	8,000	3,800	0.48	C	2-Lane Collector	8,000	2,930	0.37	B	0.11	No
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	21,400	0.71	C	3-lane Major Arterial	30,000	7,585	0.25	A	0.46	No
East-West														
Midway Pacific Highway														
Channel Wy	W. Mission Bay Dr	Hancock St	4-Lane Collector	15,000	6,200	0.41	B	2-Lane Collector	8,000	1,280	0.16	A	0.25	No
Kemper St	Kenyon St	Midway Dr	4-Lane Collector	15,000	9,700	0.65	C	2-Lane Collector (CLTL)	15,000	9,010	0.60	C	0.05	No
	Midway Dr	Sports Arena Blvd	4-Lane Collector	15,000	8,700	0.58	C	2-Lane Collector (CLTL)	15,000	8,120	0.54	C	0.04	No
	Sports Arena Blvd	Hancock St	2-Lane Collector (CLTL)	15,000	8,600	0.57	C	*Does Not Exist*						No
Frontier Dr	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	10,000	0.67	D	*Does Not Exist*						No
Greenwood St	Sports Arena Blvd	Kurtz St	2-Lane Collector	8,000	6,500	0.81	D	*Does Not Exist*						No
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	65,300	1.09	**F**	6-Lane Prime Arterial	60,000	50,700	0.85	D	0.24	**Yes**
Rosecrans St	Lytton St	Midway Dr	6-Lane Prime Arterial	60,000	53,600	0.89	D	6-Lane Major Arterial	50,000	46,400	0.93	**E**	-0.04	No

Table 4-3 Roadway Segment Level of Service Results

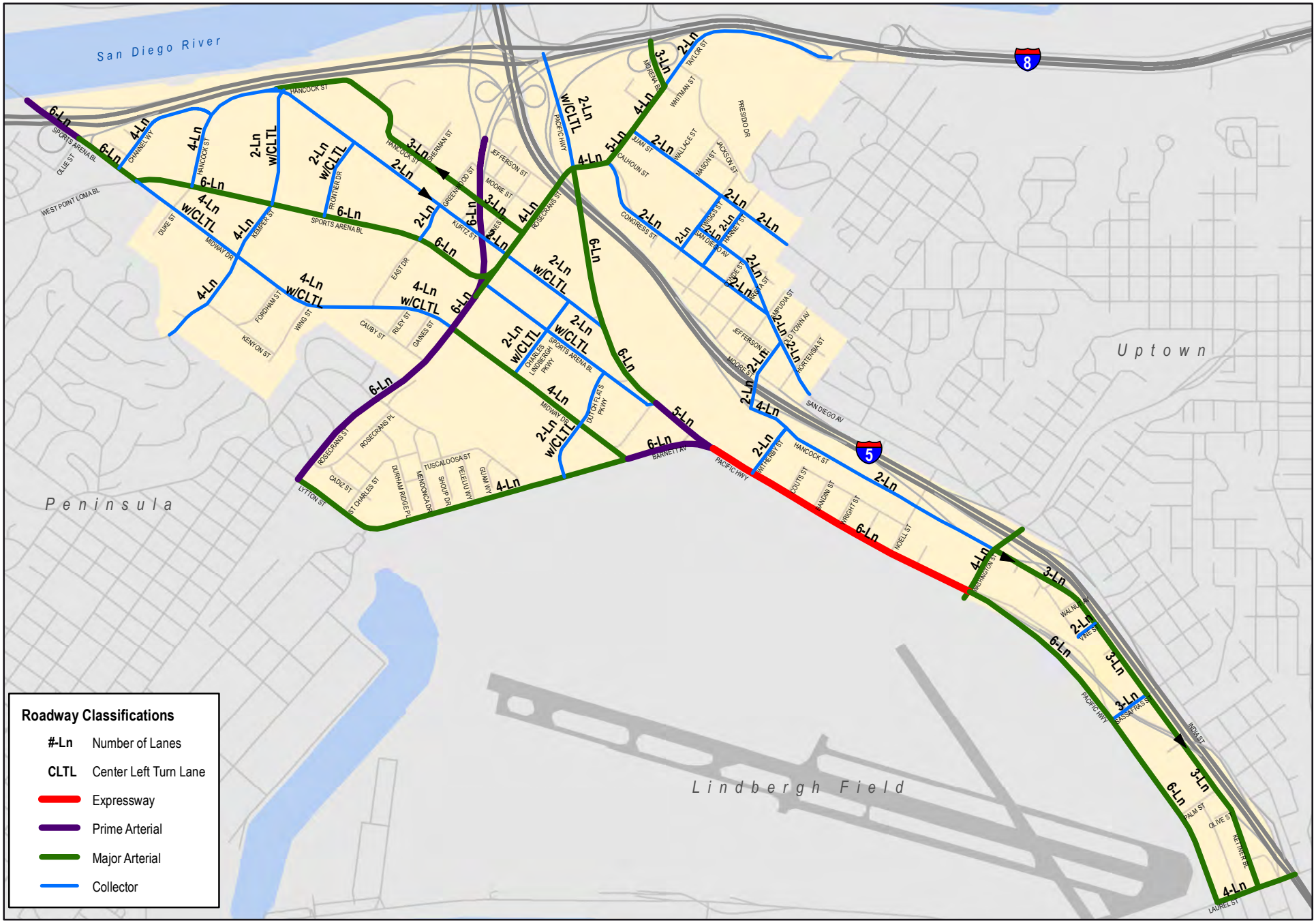
			Preferred Plan Conditions					Existing Conditions						
Roadway	**From**	**To**	**Roadway Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Functional Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Δ V/C**	**SI?**
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Prime Arterial	60,000	57,000	0.95	**E**	6-Lane Major Arterial	50,000	59,100	1.18	**F**	-0.23	No
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Major Arterial	40,000	21,100	0.53	C	4-Lane Collector (CLTL)	30,000	15,500	0.52	C	0.01	No
Charles Lindbergh Pkwy	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	5,400	0.36	B	*Does Not Exist*						No
	Sports Arena Blvd	Kurtz Street	2-Lane Collector (CLTL)	15,000	7,800	0.52	C	*Does Not Exist*						No
Dutch Flats Pkwy	Barnett Avenue	Midway Dr	2-Lane Collector (CLTL)	15,000	12,500	0.83	D	*Does Not Exist*						No
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,600	0.57	C	*Does Not Exist*						No
Barnett Ave	Midway Dr	Pacific Hwy	6-Lane Prime Arterial	60,000	50,800	0.85	D	4-Lane Major Arterial	40,000	57,954	1.45	**F**	-0.60	No
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	15,800	0.40	B	4-Lane Major Arterial	40,000	10,680	0.27	A	0.13	No
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	22,100	0.55	C	4-Lane Major Arterial	40,000	12,870	0.32	A	0.23	No
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	1,200	0.15	A	2-Lane Collector	8,000	250	0.03	A	0.12	No
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	21,000	1.91	**F**	3-Lane Collector	11,000	8,700	0.79	D	1.12	**Yes**
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	30,700	0.77	D	4-Lane Major Arterial	40,000	26,290	0.66	C	0.11	No
Old Town														
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	29,600	0.74	C	4-Lane Major Arterial	40,000	22,100	0.55	C	0.19	No
	Congress St	Juan St	5-Lane Major Arterial	45,000	20,700	0.46	B	5-Lane Major Arterial	45,000	13,560	0.30	A	0.16	No
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	25,200	0.63	C	4-Lane Major Arterial	40,000	17,530	0.44	B	0.19	No
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	15,200	1.90	**F**	2-Lane Collector	8,000	13,140	1.64	**F**	0.26	**Yes**

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,600	0.33	B	2-Lane Collector	8,000	2,080	0.26	A	0.07	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,500	0.44	C	2-Lane Collector	8,000	2,670	0.33	B	0.11	No
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,700	0.21	A	2-Lane Collector	8,000	1,520	0.19	A	0.02	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,200	0.40	B	2-Lane Collector	8,000	2,350	0.29	A	0.11	No
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	12,300	1.54	**F**	2-Lane Collector	8,000	11,750	1.47	**F**	0.07	**Yes**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,800	0.85	**E**	2-Lane Collector	8,000	6,120	0.77	D	0.08	**Yes**

Source: Chen Ryan Associates (May 2017)

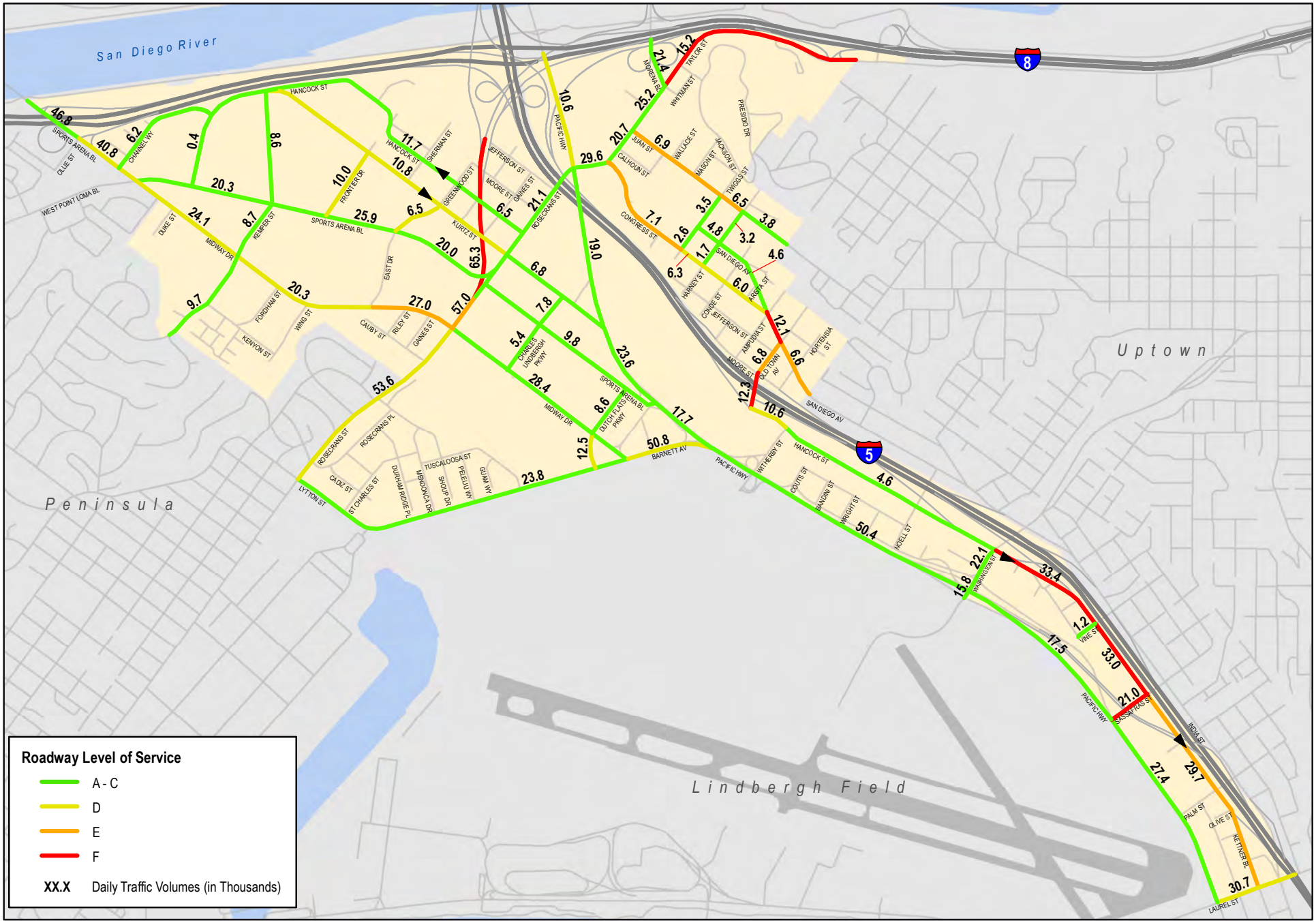
Note:
Bold letter indicates LOS E or F



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Figure 4-1
Roadway Classifications -
Preferred Plan Conditions



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Figure 4-2
Daily Roadway Segment Traffic Volumes and LOS - Preferred Plan Conditions

Based on the criteria documented in Chapter 2, the following roadway segments will have a significant impact under buildout of the Preferred Plan:

Midway-Pacific Highway Community

- Kettner Boulevard, between Washington Street and Vine Street (LOS F, ΔVC 0.35)
- Kettner Boulevard, between Vine Street and Sassafras Street (LOS F, ΔVC 0.36)
- Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F, ΔVC 0.35)
- Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F, ΔVC 0.24)
- Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F, ΔVC 1.12)

Old Town Community

- Congress Street between Taylor Street and Twiggs Street (LOS E, ΔVC 0.36)
- San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F, ΔVC 0.24)
- San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E, ΔVC 0.15)
- Juan Street, between Taylor Street and Twiggs Street (LOS E, ΔVC 0.18)
- Juan Street, between Twiggs Street and Harney Street (LOS E, ΔVC 0.21)
- Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F, ΔVC 0.26)
- Old Town Avenue, between Hancock Street and Moore Street (LOS F, ΔVC 0.07)
- Old Town Avenue, between Moore Street and San Diego Avenue (LOS E, ΔVC 0.08)

4.3 Intersection Analysis

AM and PM peak hour intersection LOS analyses were conducted under Preferred Plan and Existing Conditions. The following intersection improvements were assumed under buildout of the Preferred Plan:

Rosecrans Street / Sports Arena Boulevard / Camino Del Rio West:

- Remove the southbound free right-turn movement from Camino Del Rio West onto Sports Arena Boulevard and replace it with an exclusive right-turn lane.
- Allow southbound movements to continue on Sports Arena Boulevard through the intersection. It should be noted that you would still not be able to access the southern leg of Sports Arena Boulevard from westbound Rosecrans Street or southwest bound Camino del Rio West.

Sports Arena Boulevard / Pacific Highway:

- Move intersection approximately 500 feet to the north.
- Re-align Sports Arena Boulevard to create a right-angle with Pacific Highway.
- Signalize the intersection.
- Provide an exclusive eastbound left-turn lane from Sports Arena Boulevard onto Pacific Highway.
- Provide an exclusive northbound left-turn lane from Pacific Highway onto Sports Arena Boulevard.

Sports Arena Boulevard / West Point Loma Boulevard / Midway Drive

- Remove the westbound free right-turn movement from Sports Arena Boulevard onto Sports Arena Boulevard. The right-of-way will be used to extend the curb and create a curb bulb-out to reduce the pedestrian crossing distance. Right-turn movements will be permitted from the outside through lane.
- Square up and control the northbound free right-turn movement from Midway Drive onto Sports Arena Boulevard with the intersection.

West Washington Street / Pacific Highway

- Further analyze operations at this intersection to determine if additional improvements would be beneficial.

Congress Street / San Diego Avenue / Ampudia Street:

- Convert intersection to all-way stop control
- Implement bulb-outs on all legs of the intersection
- Widen the sidewalks along the north side of San Diego Avenue

Seven new intersections are recommended for the Midway-Pacific Highway community. Additionally, the roadway network was evaluated to identify intersection locations, both existing and new intersections, that would benefit from the implementation of a roundabout or signalization. A summary of recommended intersection improvements are displayed in Table 4-4. It is not known at this time if the implementation of roundabout will be feasible at any or all intersections. A roundabout feasibility analysis will need to be performed once the new intersections and roadways are designed. Therefore, to be conservative the analysis assumed that all new intersections would be signalized, unless otherwise noted. However, it is recommended that a roundabout be implemented in lieu of a signal at all new intersections, where feasible.

With the exception of the intersection of Congress Street / San Diego Avenue / Ampudia Street, no other operational intersection improvements were identified for the Old Town community. Traffic signal warrants were conducted at the intersections where signalization is recommended. Figure 4C-103 (CA) of the California Manual on Uniform Traffic Control Devices (MUTCD) 2012 Edition was utilized for the signal warrant. All intersections where signalization is recommended met the warrants, with the exception of the intersection of Sports Arena Boulevard / Charles Lindbergh Parkway and Kurtz Street / Greenwood Street based on Preferred Plan traffic projections. It is recommended that these locations are monitored and signal warrants are evaluated in the future. Signal warrant worksheets are provided in Appendix H of the Mobility Report.

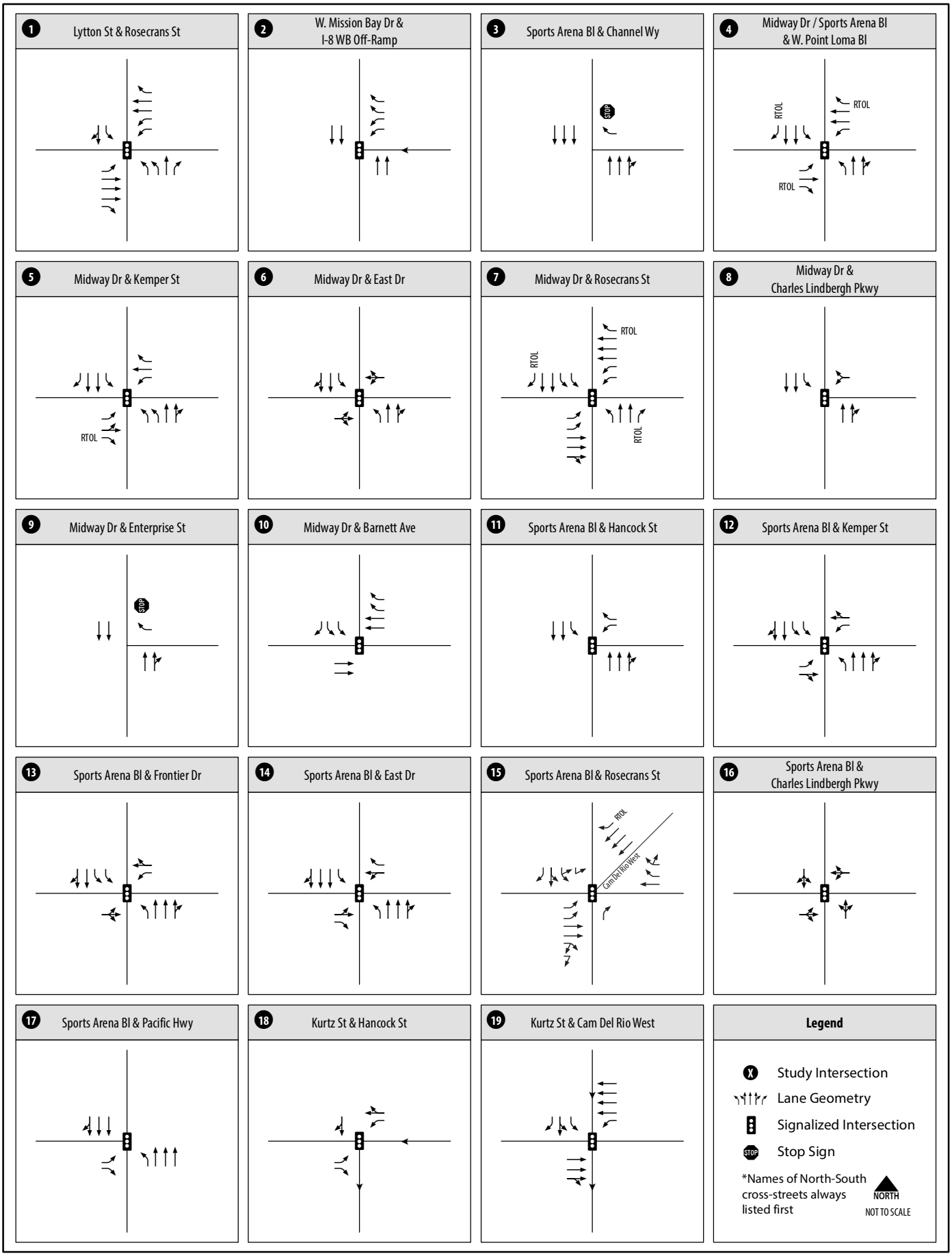
Table 4-4 Summary of Intersection Improvements

No.	Intersection	Improvement	Control
8	Midway Drive / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
12	Kemper Street / Sports Arena Boulevard	Add north leg	Signalized
13	Sports Arena Boulevard / Frontier Drive	Add north leg	Signalized
14	Sports Arena Boulevard / Greenwood Street	Add north leg	Signalized
16	Sports Arena Boulevard / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
17	Sports Arena Boulevard / Pacific Highway	Relocate intersection and signalize	Signalized
18	Kurtz Street / Hancock Street	Add south leg and signalize	Signalized
21	Kurtz Street / Pacific Highway	Signalize	Signalized
61	Kurtz Street / Frontier Drive	New intersection	Roundabout/SSSC
62	Kurtz Street / Greenwood Street	Add south leg and signalize	Signalized
63	Kurtz Street / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
64	Barnett Avenue / Dutch Flats Parkway	New intersection	Roundabout/Signalized
65	Midway Drive / Dutch Flats Parkway	New intersection	Roundabout/Signalized
66	Sports Arena Boulevard / Dutch Flats Parkway	New intersection	Roundabout/Signalized
N/A	Hancock Street / Greenwood Street	Signalize	Signalized

Source: Chen Ryan Associates (June 2016)

The proposed intersection geometrics and forecast AM/PM peak hour turning movement volumes under Preferred Plan buildout conditions are provided in Figure 4-3 and Figure 4-4, respectively.

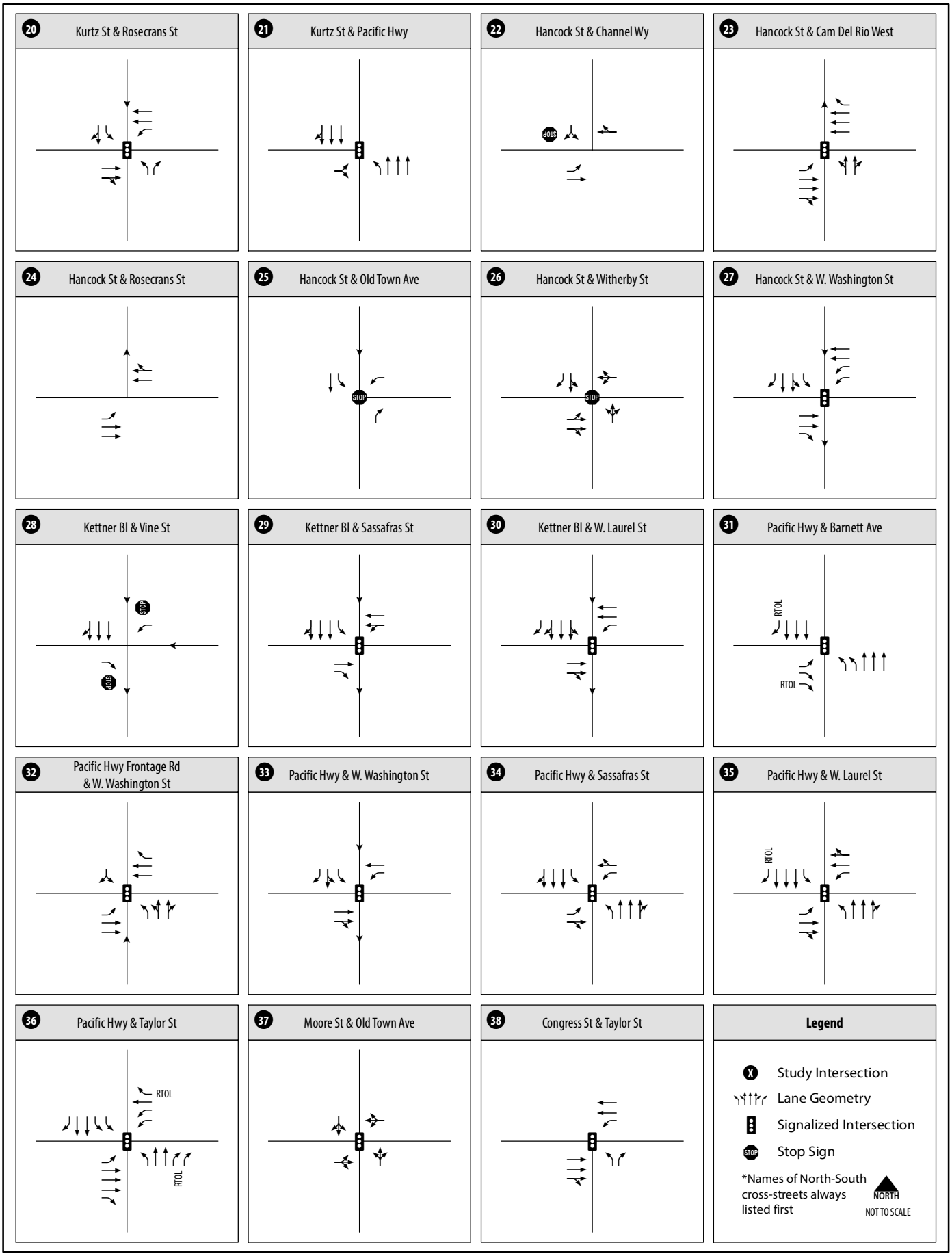
Table 4-5 displays intersection level of service and average vehicle delay results for study area intersections under Preferred Plan and Existing Conditions. Level of service calculation worksheets are provided in Appendix I.



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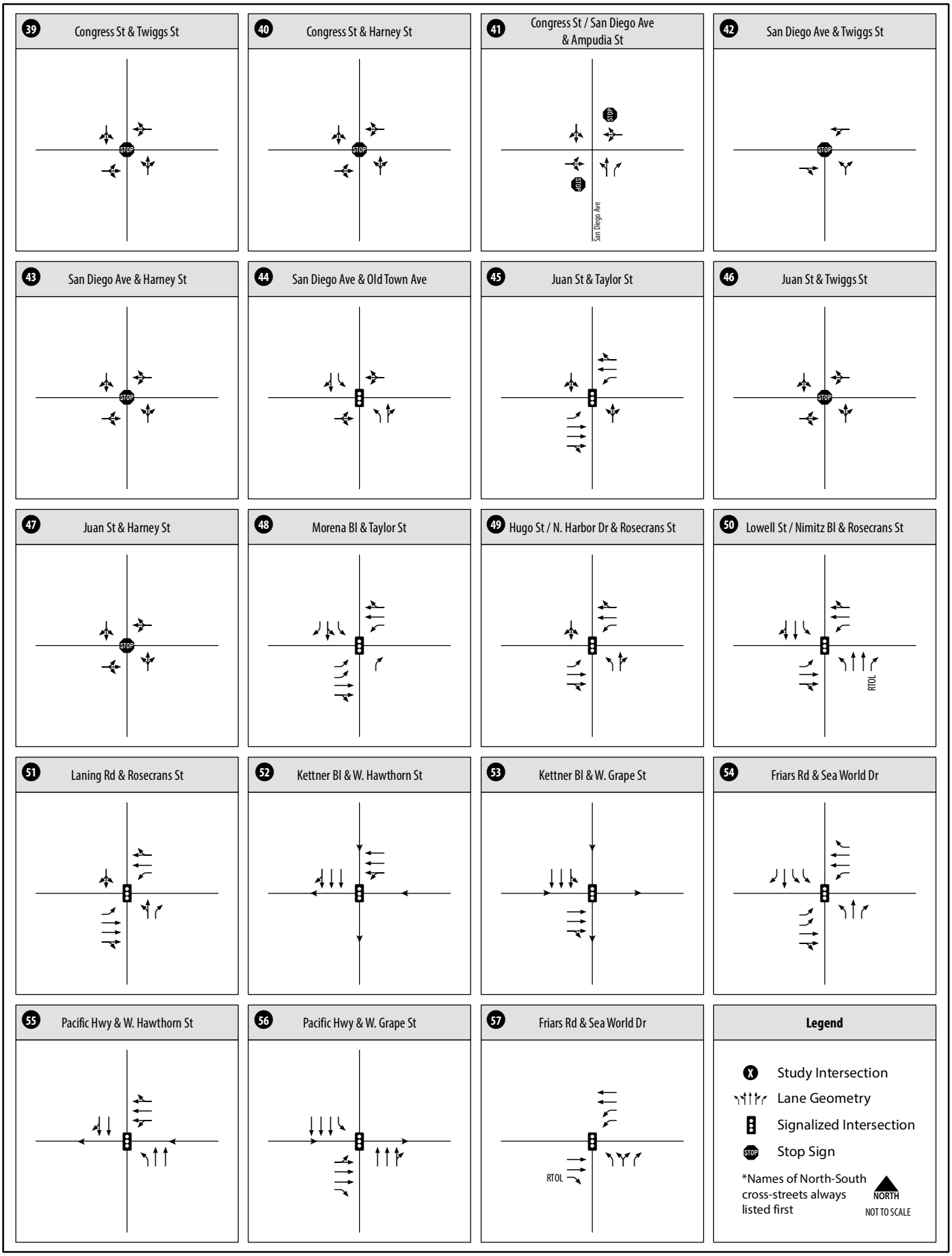
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 1-19)



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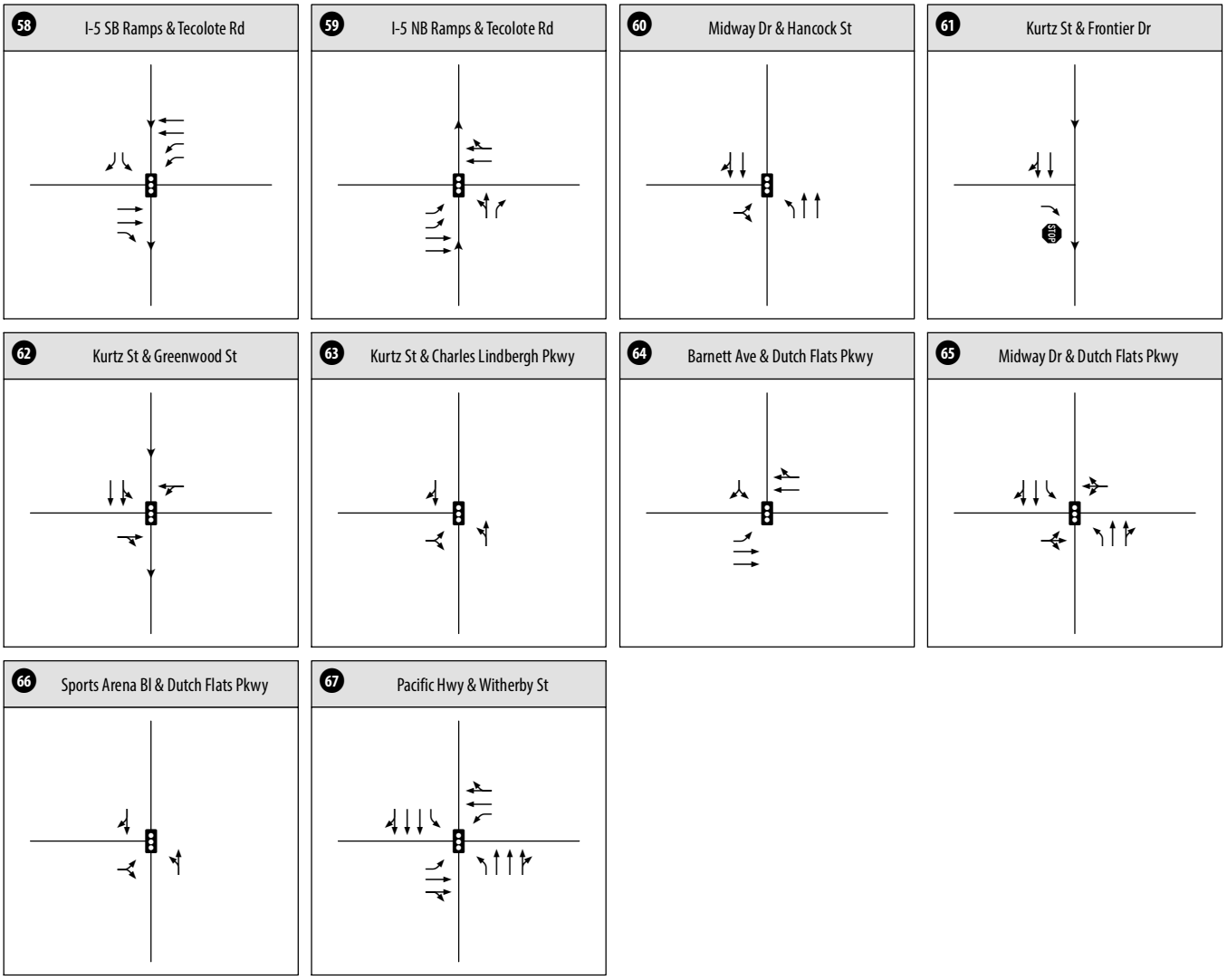
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 20-38)



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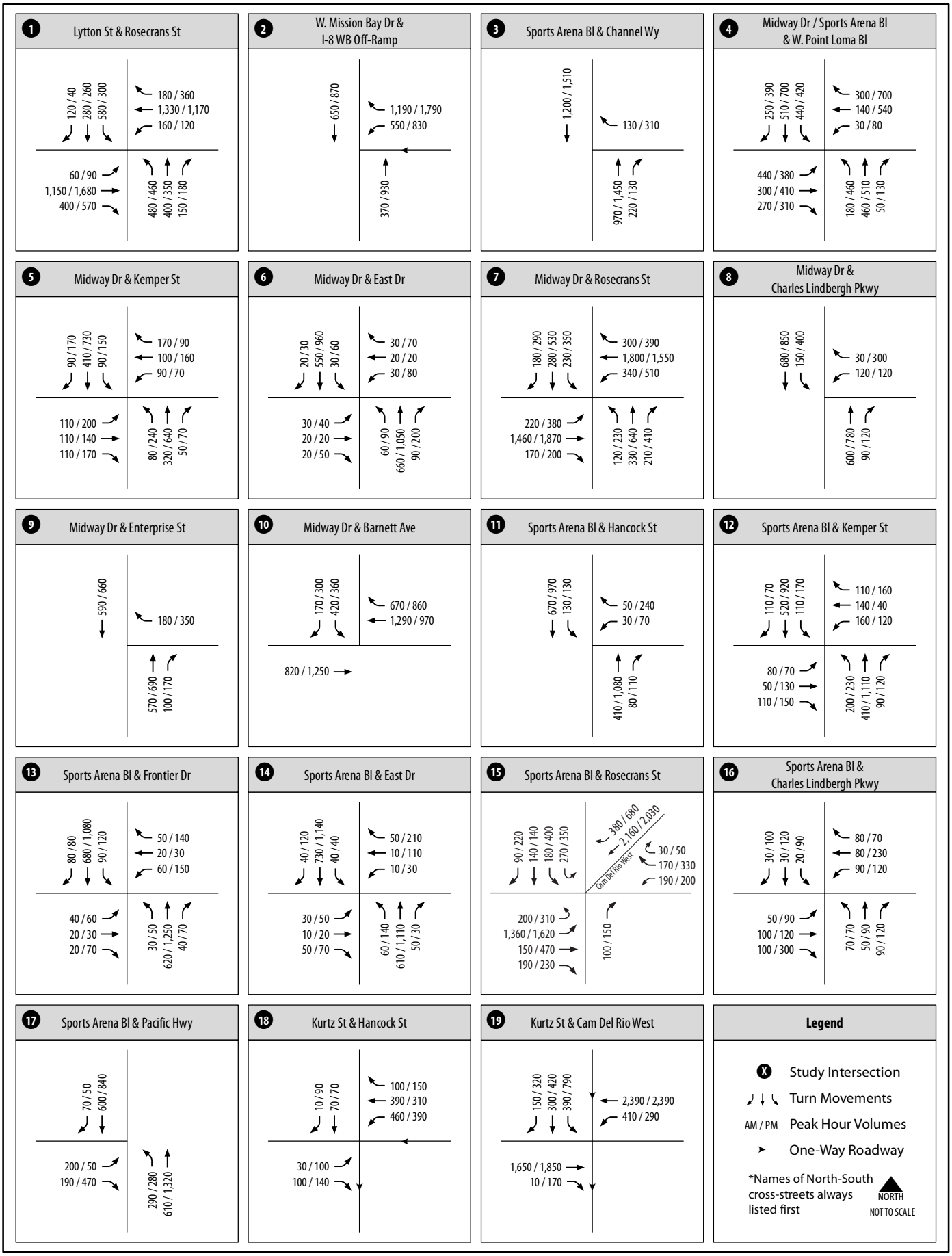
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 39-57)



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Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 58-67)

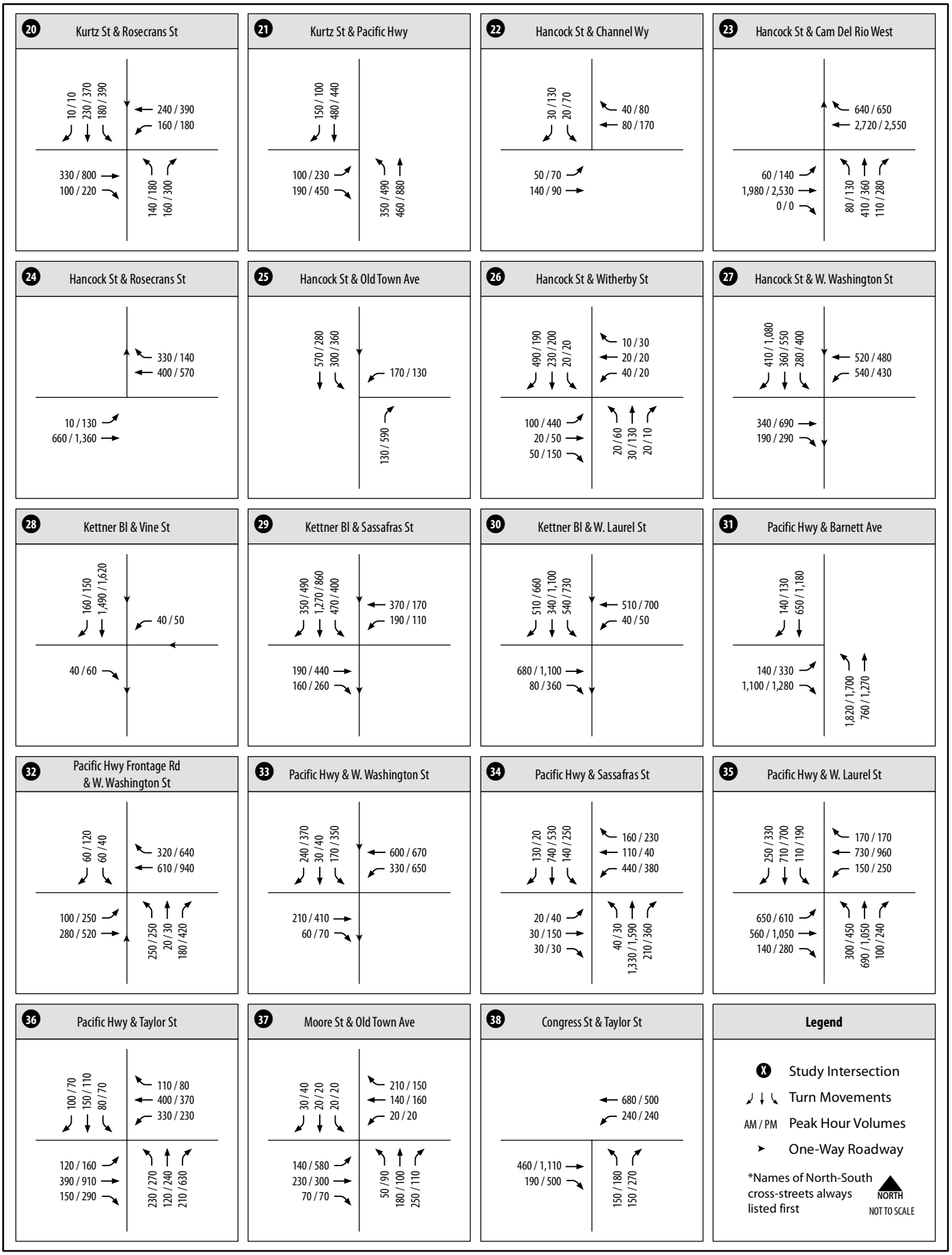


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 1-19)

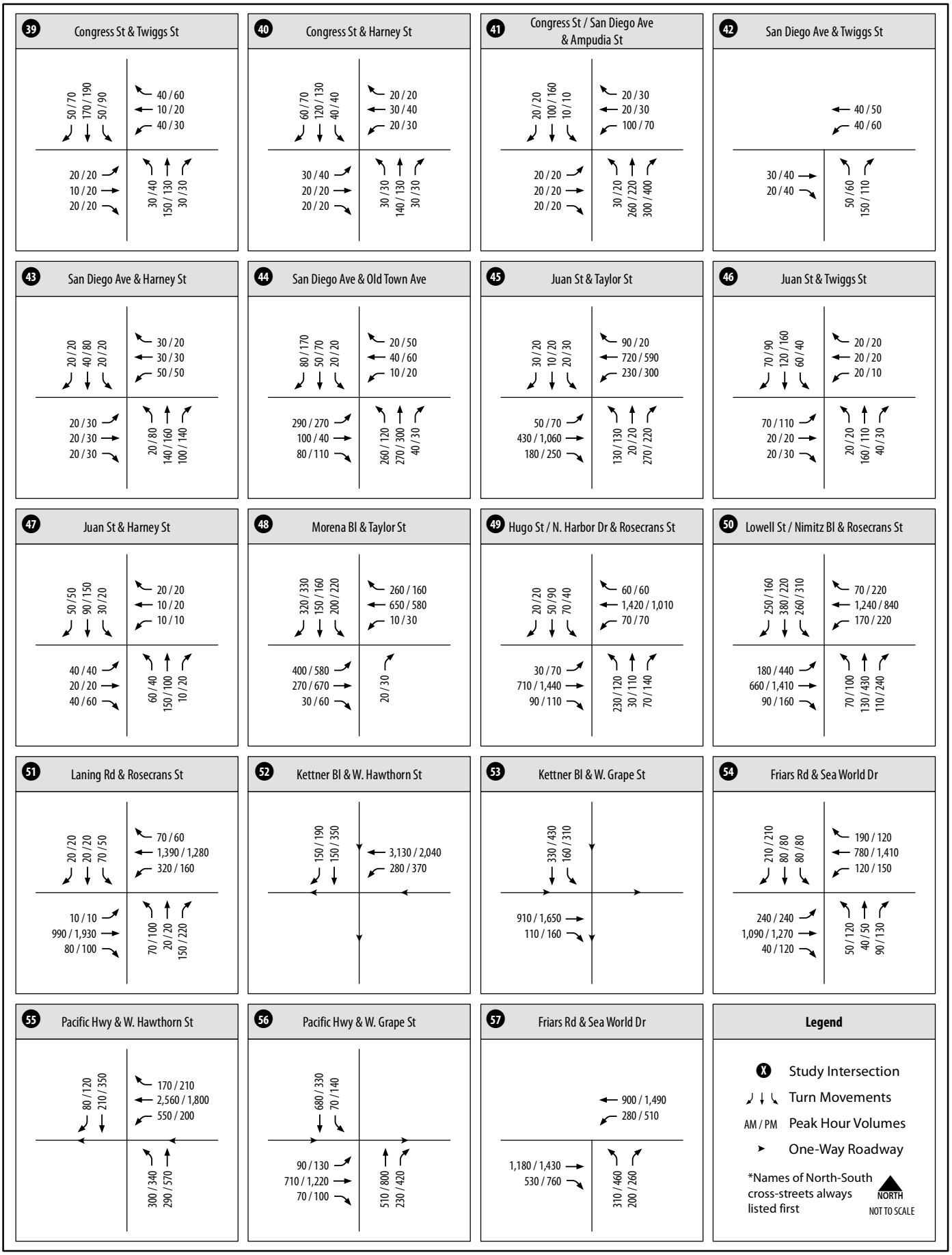


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 20-38)



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Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 39-57)

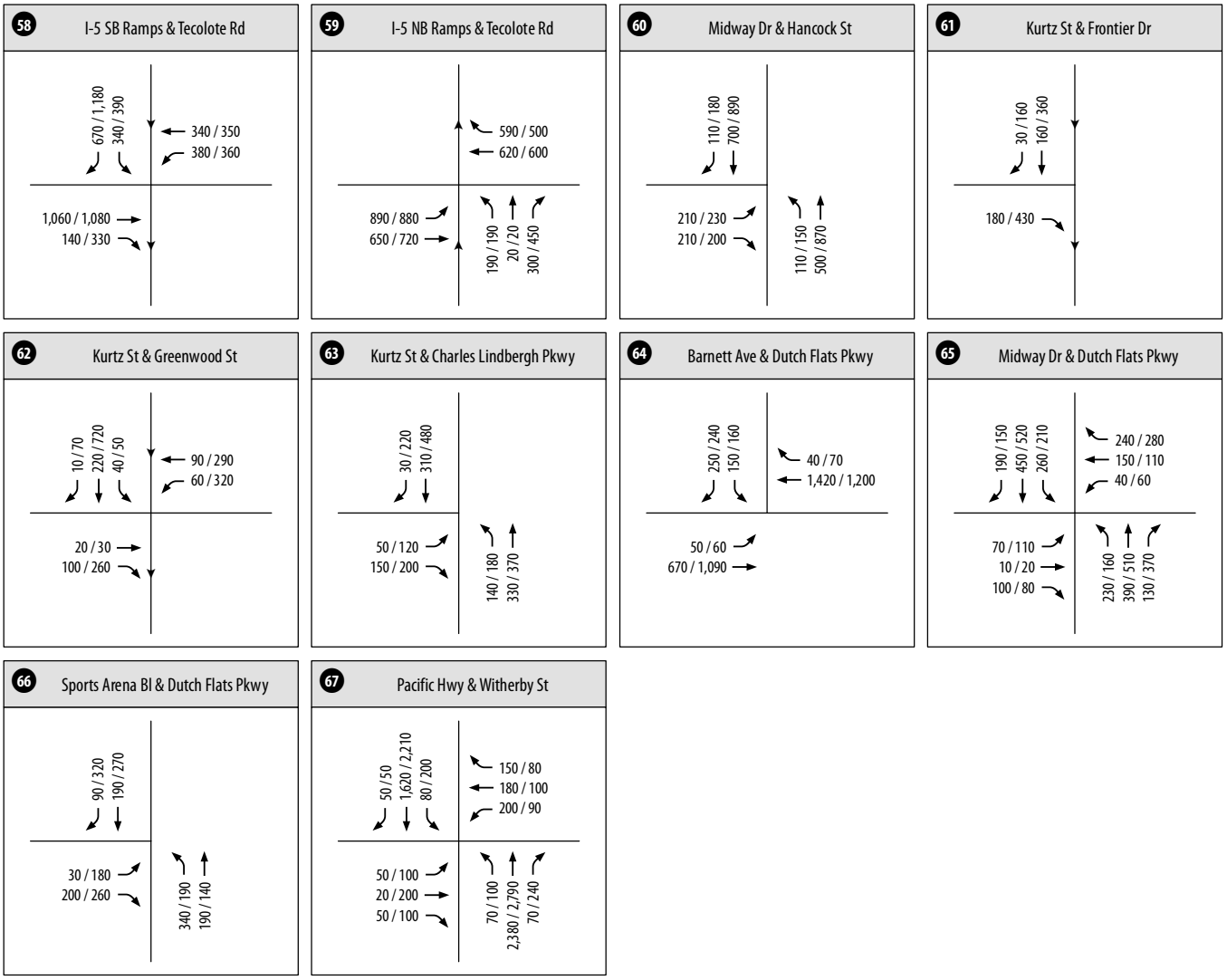


Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 58-67)

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Midway-Pacific Highway													
1	Lytton St and Rosecrans St	Signal	98.5	**F**	55.2	**E**	65.4	**E**	44.5	D	33.1	10.7	**Yes**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	15.7	B	71.7	**E**	14.8	B	59.5	**E**	0.9	12.2	**Yes**
3	Sports Arena Blvd and Channel Way	SSSC[2]	12.1	B	33.8	D	11.2	B	14.7	B	0.9	19.1	No
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	47.0	D	71.9	**E**	36.6	D	47.2	D	10.4	24.7	**Yes**
5	Midway Dr and Kemper St	Signal	30.6	C	37.6	D	22.7	C	37.3	D	7.9	0.3	No
6	Midway Dr and East Dr	Signal	5.6	A	16.0	B	4.8	A	13.0	B	0.8	3.0	No
7	Midway Dr and Rosecrans St	Signal	36.2	D	66.7	**E**	34.9	C	49.1	D	1.3	17.6	**Yes**
8	Midway Dr and Charles Lindbergh Pkwy	Signal	9.5	A	20.5	C	*Intersection does not currently exist*						No
9	Midway Dr and Enterprise St	SSSC[2]	12.2	B	32.9	D	11.0	B	18.1	C	1.2	14.8	No
10	Midway Dr and Barnett Ave	Signal	13.8	B	12.3	B	13.8	B	19.8	B	0.0	-7.5	No
11	Sports Arena Blvd and Hancock St	Signal	13.4	B	16.1	B	10.0	A	13.1	B	3.4	3.0	No
12	Sports Arena Blvd and Kemper St	Signal	36.9	D	41.5	D	18.8	B	17.5	B	18.1	24.0	No
13	Sports Arena Blvd and Sports Arena Driveway	Signal	16.1	B	23.4	C	17.1	B	24.8	C	-1.0	-1.4	No
14	Sports Arena Blvd and East Dr	Signal	9.5	A	24.3	C	26.0	C	11.9	B	-16.5	12.4	No
15	Sports Arena Blvd and Rosecrans St	Signal	34.9	C	50.6	D	35.7	D	43.2	D	-0.8	7.4	No
16	Sports Arena Blvd and Charles Lindbergh Pkwy	Signal	13.4	B	15.0	B	*Intersection does not currently exist*						No
17	Sports Arena Blvd and Pacific Hwy	Signal	26.7	C	16.8	B	10.6	B	12.0	B	16.1	4.8	No
18	Kurtz St and Hancock St	Signal	11.2	B	11.1	B	*Intersection does not currently exist*						No
19	Kurtz St and Camino Del Rio West	Signal	25.3	C	31.9	C	9.4	A	20.2	C	15.9	11.7	No
20	Kurtz St and Rosecrans St	Signal	26.4	C	29.5	C	20.0	B	31.7	C	6.4	-2.2	No
21	Kurtz St and Pacific Hwy	Signal	26.8	C	45.9	D	11.2	B	13.7	B	15.6	32.2	No
22	Hancock St and Channel Wy	SSSC[2]	9.9	A	12.3	B	9.3	A	10.5	B	0.6	1.8	No
23	Hancock St and Camino Del Rio West	Signal	35.7	D	32.7	C	24.3	C	20.3	C	11.4	12.4	No
24	Hancock St and Rosecrans St	*No Conflicting Movements*											

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
25	Hancock St and Old Town Ave	AWSC[3]	23.5	C	22.9	C	16.9	C	14.6	B	6.6	8.3	No
26	Hancock St and Witherby St	AWSC[3]	12.7	B	29.5	D	16.0	C	23.5	C	-3.3	6.0	No
27	Hancock St and Washington St	Signal	22.4	C	76.8	**E**	22.8	C	25.9	C	-0.4	50.9	**Yes**
28	Kettner Blvd and Vine St	SSSC[2]	15.6	C	17.9	C	14.3	B	23.2	C	1.3	-5.3	No
29	Kettner Blvd and Sassafras St	Signal	14.2	B	15.1	B	12.0	B	11.9	B	2.2	3.2	No
30	Kettner Blvd and West Laurel St	Signal	18.5	B	77.7	**E**	20.0	B	29.7	C	-1.5	48.0	**Yes**
31	Pacific Hwy and Barnett Ave	*No Conflicting Movements*											
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	19.9	B	38.7	D	19.4	B	36.0	D	0.5	2.7	No
33	Pacific Hwy and Washington St	Signal	19.1	B	33.7	C	18.7	B	31.2	C	0.4	2.5	No
34	Pacific Hwy and Sassafras St	Signal	28.2	C	67.3	**E**	14.4	B	27.3	C	13.8	40.0	**Yes**
35	Pacific Hwy and West Laurel St	Signal	83.5	**F**	144.7	**F**	48.4	D	42.9	D	35.1	101.8	**Yes**
Old Town													
36	Pacific Hwy and Taylor St	Signal	29.6	C	43.4	D	64.6	**E**	33.5	C	-35.0	9.9	No
37	Moore St and Old Town Ave	Signal	19.2	B	118.4	**F**	16.4	B	16.4	B	2.8	102.0	**Yes**
38	Congress St and Taylor St	Signal	13.5	B	18.6	B	19.9	B	21.7	C	-6.4	-3.1	No
39	Congress St and Twiggs St	AWSC[3]	9.2	A	11.9	B	8.1	A	8.6	A	1.1	3.3	No
40	Congress St and Harney St	AWSC[3]	8.7	A	9.7	A	8.1	A	8.3	A	0.6	1.4	No
41	Congress St and San Diego Ave/Ampudia St	AWSC[3]	10.4	B	11.3	B	12.3	B	11.5	B	-1.1	-0.2	No
42	San Diego Ave and Twiggs St	AWSC[3]	7.8	A	7.8	A	7.9	A	8.0	A	-0.1	-0.2	No
43	San Diego Ave and Harney St	AWSC[3]	8.4	A	8.4	A	8.2	A	8.2	A	0.2	0.2	No
44	San Diego Ave and Old Town Ave	Signal	17.7	B	16.2	B	18.4	B	11.6	B	-0.7	4.6	No
45	Juan St and Taylor St	Signal	13.3	B	18.6	B	10.4	B	10.7	B	2.9	7.9	No
46	Juan St and Twiggs St	AWSC[3]	9.0	A	10.1	B	8.8	A	8.5	A	0.2	1.6	No
47	Juan St and Harney St	AWSC[3]	8.6	A	8.8	A	8.3	A	7.9	A	0.3	0.9	No
48	Morena Blvd and Taylor St	Signal	21.9	C	20.2	C	22.4	C	16.4	B	-0.5	3.8	No

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Intersections Outside of Study Communities													
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	28.1	C	32.6	C	14.7	B	20.7	C	13.4	11.9	No
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	58.9	**E**	118.0	**F**	41.2	D	63.3	**E**	17.7	54.7	**Yes**
51	Laning Rd and Rosecrans St	Signal	23.0	C	20.5	C	15.5	B	12.9	B	7.5	7.6	No
52	Kettner Blvd and West Hawthorn St	Signal	38.7	D	16.5	B	11.1	B	15.0	B	27.6	1.5	No
53	Kettner Blvd and West Grape St	Signal	10.3	B	14.8	B	7.4	A	8.7	A	2.9	6.1	No
54	Pacific Hwy and Sea World Dr	Signal	23.3	C	37.3	D	19.9	B	25.6	C	3.4	11.7	No
55	Pacific Hwy and West Hawthorn St	Signal	35.5	D	37.1	D	35.4	D	20.2	C	0.1	16.9	No
56	Pacific Hwy and West Grape St	Signal	17.8	B	31.7	C	16.8	B	24.2	C	1.0	7.5	No
57	Friars Rd and Sea World Dr	Signal	15.1	B	27.4	C	11.5	B	13.8	B	3.6	13.6	No
58	I-5 SB Ramps and Sea World Dr	Signal	17.8	B	18.7	B	15.5	B	16.3	B	2.3	2.4	No
59	I-5 NB Ramps and Sea World Dr	Signal	29.6	C	38.3	D	21.4	C	28.4	C	8.2	9.9	No
New Intersections (Midway-Pacific Highway Community)													
60	Midway Dr & Duke Street / Hancock St	Signal	27.1	C	32.1	C	*Intersection does not currently exist*						No
61	Kurtz St & Frontier Dr	SSSC[2]	9.9	A	14.1	B	*Intersection does not currently exist*						No
62	Kurtz St & Greenwood St	Signal	11.9	B	12.4	B	*Intersection does not currently exist*						No
63	Kurtz St & Charles Lindbergh Pkwy	Signal	8.3	A	17.9	B	*Intersection does not currently exist*						No
64	Barnett Ave & Dutch Flats Pkwy	Signal	24.6	C	14.4	B	*Intersection does not currently exist*						No
65	Midway Dr & Dutch Flats Pkwy	Signal	32.2	C	44.6	D	*Intersection does not currently exist*						No
66	Dutch Flats Pkwy & Sports Arena Bl	Signal	10.8	B	18.3	B	*Intersection does not currently exist*						No

Source: Chen Ryan Associates (May 2017)

Note:
Bold letter indicates LOS E or F.
[1] Significant Impact
[2] Single Side Stop Controlled
[3] All Way Stop Controlled

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following intersections:

Midway-Pacific Highway Community

1. Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)
2. Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)
4. Midway Drive / West Point Loma Drive and Sports Arena Boulevard (LOS E: PM Peak Hour)
7. Midway Drive and Rosecrans Street (LOS E: PM Peak Hour)
27. Hancock Street and Washington Street (LOS E: PM Peak Hour)
30. Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)
34. Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)
35. Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)

Old Town Community

37. Moore Street and Old Town Street (LOS F: PM Peak Hour)

Outside of the Community

50. Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)

It is important to note that three of the ten intersections listed above currently experience LOS E or F during the AM and/or PM peak period under existing conditions. Additionally, two intersections experiencing LOS E or F under existing conditions will be improved to a satisfactory LOS through implementation of the Preferred Plan.

4.4 Freeway Segment Analysis

Neither the Revenue Constrained Alternative of SANDAG's *San Diego Forward Plan* (October 2015) nor the Preferred Plan recommend freeway improvements within the project study area.

Table 4-6A and Table 4-6B display freeway segment analysis results within the project study area for the AM and PM peak hours, respectively.

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following freeway segments:

- I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour)
- I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours)
- I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour)
- I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour)
- I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)
- I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour)
- I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour)

Table 4-6A Freeway Segment Level of Service Comparison (AM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (AM)				Existing Conditions (AM)				Δ in V/C (AM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	6.30%	60%	60,400	2,600	0.55	B	46,500	1,900	0.40	A	0.15	No
			WB	2M + 0A	4,700		40%		1,700	0.36	A		1,300	0.28	A	0.08	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	6.40%	60%	121,800	5,300	0.63	C	102,000	4,400	0.52	B	0.11	No
			WB	3M + 1A	8,450		40%		3,500	0.41	B		2,900	0.34	A	0.07	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	6.40%	41%	181,800	5,400	0.50	B	132,000	3,900	0.36	A	0.14	No
			WB	5M + 0A	11,750		59%		7,600	0.65	C		5,500	0.47	B	0.18	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	6.50%	47%	215,400	7,300	0.68	C	191,000	6,500	0.60	B	0.08	No
			WB	5M + 0A	11,750		53%		8,300	0.71	C		7,400	0.63	C	0.08	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	6.40%	61%	240,800	10,900	0.93	**E**	220,000	10,000	0.85	D	0.08	**Yes**
			SB	5M + 0A	11,750		39%		6,900	0.59	B		6,200	0.53	B	0.06	No
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	6.40%	62%	230,400	10,400	0.96	**E**	199,000	9,000	0.83	D	0.13	**Yes**
			SB	4M + 2A	12,200		38%		6,300	0.52	B		5,400	0.44	B	0.08	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	6.90%	49%	242,000	9,400	0.87	D	199,000	7,700	0.71	C	0.16	No
			SB	5M + 0A	11,750		51%		9,600	0.82	D		7,900	0.67	C	0.15	No
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	6.90%	49%	227,200	8,900	0.95	**E**	192,000	7,500	0.80	D	0.15	**Yes**
			SB	5M + 0A	11,750		51%		9,100	0.77	C		7,700	0.66	C	0.11	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	6.90%	54%	172,500	7,300	0.78	C	142,000	6,000	0.64	C	0.14	No
			SB	4M + 0A	9,400		46%		6,300	0.67	C		5,200	0.55	B	0.12	No
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	6.70%	58%	217,000	9,800	0.91	D	147,000	6,600	0.61	B	0.30	No
			SB	4M + 1A	10,800		42%		7,000	0.65	C		4,700	0.44	B	0.21	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	6.70%	57%	219,000	9,800	0.91	D	183,000	8,100	0.75	C	0.16	No
			SB	4M + 1A	10,800		43%		7,300	0.68	C		6,000	0.56	B	0.12	No

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

Table 4-6B Freeway Segment Level of Service Comparison (PM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (PM)				Existing Conditions (PM)				Δ in V/C (PM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.20%	EB	2M + 0A	4,700	8.50%	72%	60,400	3,100	0.66	C	46,500	3,200	0.68	C	-0.02	No
			WB	2M + 0A	4,700		28%		2,700	0.57	B		1,300	0.28	A	0.29	No
	Sports Arena Blvd to I-5	2.80%	EB	3M + 1A	8,450	7.80%	63%	121,800	5,500	0.65	C	102,000	5,600	0.66	C	-0.01	No
			WB	3M + 1A	8,450		37%		5,200	0.62	B		3,400	0.4	A	0.22	No
	I-5 to Morena Blvd	2.80%	EB	4M + 1A	10,800	7.20%	51%	181,800	6,600	0.61	B	132,000	5,500	0.51	B	0.10	No
			WB	5M + 0A	11,750		49%		8,000	0.68	C		5,200	0.44	B	0.24	No
	Morena Blvd to Hotel Circle	2.80%	EB	4M + 1A	10,800	8.20%	55%	215,400	10,900	1.01	**F**	191,000	9,700	0.9	D	0.11	**Yes**
			WB	5M + 0A	11,750		45%		9,000	0.77	C		8,000	0.68	C	0.09	No
I-5	Clairemont Dr to Sea World Dr	4.50%	NB	5M + 0A	11,750	8.30%	51%	240,800	11,700	1.00	**E**	220,000	10,700	0.91	D	0.09	**Yes**
			SB	5M + 0A	11,750		49%		11,200	0.95	**E**		10,300	0.88	D	0.07	**Yes**
	Sea World Dr to I-8	4.50%	NB	4M + 1A	10,800	8.40%	52%	230,400	11,600	1.07	**F**	199,000	10,000	0.93	**E**	0.14	**Yes**
			SB	4M + 2A	12,200		48%		10,700	0.88	D		9,200	0.75	C	0.13	No
	I-8 to Old Town Ave	4.10%	NB	4M + 1A	10,800	8.20%	39%	242,000	8,900	0.82	D	199,000	7,300	0.68	C	0.14	No
			SB	5M + 0A	11,750		61%		13,800	1.17	**F**		11,400	0.97	**E**	0.20	**Yes**
	Old Town Ave to Washington St	4.10%	NB	4M + 0A	9,400	8.00%	51%	227,200	10,600	1.13	**F**	192,000	9,000	0.96	**E**	0.17	**Yes**
			SB	5M + 0A	11,750		49%		10,200	0.87	D		8,600	0.73	C	0.14	No
	Washington St to Pacific Highway	4.10%	NB	4M + 0A	9,400	8.10%	36%	172,500	5,800	0.62	B	142,000	4,800	0.51	B	0.11	No
			SB	4M + 0A	9,400		64%		10,200	1.09	**F**		8,400	0.89	D	0.20	**Yes**
	Pacific Highway to Laurel Street	4.10%	NB	4M + 1A	10,800	7.00%	49%	217,000	8,200	0.76	C	147,000	5,800	0.54	B	0.22	No
			SB	4M + 1A	10,800		51%		9,300	0.86	D		6,100	0.56	B	0.30	No
	Laurel Street to Hawthorne Street	4.10%	NB	4M + 1A	10,800	7.30%	46%	219,000	8,000	0.74	C	183,000	7,100	0.66	C	0.08	No
			SB	4M + 1A	10,800		54%		10,500	0.97	**E**		8,200	0.76	C	0.21	**Yes**

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

4.5 Ramp Meter Analysis

Table 4-7 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 4-7 Freeway Ramp Meter Analysis Comparison

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Preferred Plan Volume	Preferred Plan Excess Demand	Preferred Plan Delay (Minutes)	Preferred Plan Queue (Feet)	Existing Delay (Minutes)	Δ In Delay
I-8 EB / Sports Arena Boulevard	PM	2	1	641	930	289	27.1	8,381	25.5	1.6
I-5 SB / Sea World Drive	AM	1	1	444	530	86	11.6	2,494	0	11.6
	PM	1	1	444	670	226	30.5	6,554	11.4	19.1
I-5 NB / Sea World Drive	AM	2	0	1,555	1,530	0	0.0	0	0	0.0
	PM	2	0	1,656	1,250	0	0.0	0	0	0.0
I-5 SB / Old Town Avenue	PM	1	0	461	410	0	0.0	0	0	0.0
I-5 NB / Old Town Avenue	AM	2	0	905	370	0	0.0	0	0	0.0
	PM	2	0	888	690	0	0.0	0	0	0.0

Source: Chen Ryan Associates, Inc. (May 2017)

Based on the significance criteria outlined in Section 2.2.5, implementation of the preferred Plan would result in a significant impact to the I-5 SB / Sea World Dive ramp during the PM peak hour.

4.6 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted through implementation of the Preferred Plan.

4.6.1 Roadway Mitigation Measures

Midway-Pacific Highway Community

Kettner Boulevard, between Washington Street and Vine Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Kettner Boulevard, between Vine Street and Sassafras Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not enough be right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing*

features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.

Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F) – Improving this roadway from a 6-Lane Prime Arterial to a 6-Lane Expressway would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *This improvement would require grade separating all intersections along this segment of the roadway which is not consistent with the General Plan & Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F) - Widening the roadway from a 3-Lane Collector to a 4-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way available along this segment of Sassafras Street to accommodate a fourth travel lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Old Town Community

Congress Street between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Congress Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 26 regular parking spaces and 13 loading/taxi parking spaces would need to be removed in order to accommodate this mitigation measure. Finally, this mitigation measure would be in conflict with the Community Plan, which proposed balancing all travel modes through an enhanced active transportation environment. Therefore, this improvement project is not identified in the Old Town IFS.*

San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 5 regular parking*

spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.

San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 9 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 48 regular parking spaces and 4 loading parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Twiggs Street and Harney Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 11 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F) - Widening the roadway from a 2-Lane Collector to a 4-Lane Major Arterial would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Taylor Street to accommodate two additional through lanes and a center median while maintaining a Class II bicycle facility. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Hancock Street and Moore Street (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the*

Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane while maintaining right-of-way for the proposed Class II bicycle lanes. Therefore, this improvement project is not identified in the Old Town IFS.

Old Town Avenue, between Moore Street and San Diego Avenue (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 18 regular parking spaces and 1 loading parking space would need to be removed in order to accommodate this mitigation measure. Finally, a Class II bicycle facility is proposed along this segment. Therefore, this improvement project is not identified in the Old Town IFS.*

4.6.2 Intersection Mitigation Measures

<u>Midway-Pacific Highway Community</u>

1. *Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)* – The westbound through movement, as well as the southbound left-turn and through movements are projected to be over capacity, under implementation of the Preferred Plan. Implementing the following improvements would allow the intersection to operate at LOS D or better during both peak hours.

    - Add a second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street
    - Add an additional westbound through movement lane on Rosecrans Street (three total)
    - Implement right-turn overlap (RTOL) phases at all legs of the intersection

    The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is currently not enough right-of-way on Rosecrans Street to accommodate a third westbound through lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: If the second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street and RTOL phases at all legs are implemented (feasible improvements) the overall intersection delay would be reduced to the following:

    AM: LOS E
    PM: LOS D

    Implementation of this improvement will partially mitigate the traffic related impact at the intersection. *This improvement project is identified in the Midway Pacific Highway IFS.*

2. *Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)* – The westbound right-turn movement, from I-8 WB to northbound West Mission Bay Drive, is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan.

Providing a third exclusive westbound right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The Preferred Plan is consistent with the CIP Project #S00871: W. Mission Bay Drive Bridge Over San Diego River, which was reviewed by City and Caltrans staff. Further mitigations, beyond what is recommended as part of this CIP project would be inconsistent with Community Plan Policies and Goals for multimodal facilities*. *Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

4. *Midway Drive / West Point Loma Drive and Sports Arena Boulevard (LOS E: PM Peak Hour)* – All four left-turn movements at this intersection are projected to be over capacity during the PM peak hour. Providing dual-left turn lanes on Midway Drive in the northbound direction, on Sports Arena Drive in the southbound direction, and on West Point Loma Boulevard in the eastbound direction would improve intersection operations to LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way within the intersection to accommodate any of the additional left-turn lanes considering the proposed multi-use urban trails along Midway Drive and Sports Arena Boulevard, and in-road bicycle facilities. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

   Partial Mitigation: None recommended.

7. *Midway Drive and Rosecrans Street* (LOS E: PM Peak Hour) – Rosecrans Street is projected to operate at LOS E during the PM peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches of Rosecrans Street to include a fourth through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen Rosecrans Street to eight lanes through the intersection considering the proposed multi-use urban path improvements. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

   Partial Mitigation: None recommended, limited to no right-of-way is anticipated to be available with proposed Multi-Use Urban Path improvements.

27. *Hancock Street and Washington Street (LOS E: PM Peak Hour)* – The southbound Hancock Street to westbound Washington Street right-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Restriping the southbound approach to include a second southbound right-turn lane would allow the intersection to operate at LOS C during the PM Peak Hour. This improvement is feasible but may require additional engineering study. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *This improvement would require the removal of on-street parking, which is heavily utilized by the businesses and restaurants in this area. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

   Partial Mitigation: None recommended.

30. *Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)* – The eastbound through movement on Laurel Street is projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Widening the eastbound Laurel Street approach of the intersection to include a third through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the eastbound Laurel Street approach to three lanes. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

34. *Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)* – The southbound Pacific Highway to eastbound Sassafras Street left-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Adding a second southbound left-turn lane would allow the intersection to operate at LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the southbound approach of Pacific Hwy to include a second left-turn lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

35. *Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)* – Laurel Street is projected to be over capacity during both peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches to include a second eastbound left-turn lane and a third through lane in each direction along Laurel Street, as well as widening the northbound approach of Pacific Highway to include a second northbound left-turn lane and exclusive right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Laurel Street to widen to three lanes in each direction. Also, there is not enough right-of-way on northbound Pacific Highway with the improvements of the cycle track, multi-use urban path*. Therefore, *this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

<u>Old Town Community</u>

37. *Moore Street and Old Town Avenue (LOS F: PM Peak Hour)* – The eastbound and westbound approaches along Old Town Avenue are projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Implementation of the following improvements would allow the intersection to operate at LOS D during the PM peak hour.

    - Implement exclusive eastbound and westbound left-turn lanes on the Old Town Avenue approaches of the intersection.
    - Convert the eastbound/westbound signal phasing from permitted to protected phasing.

    The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The eastbound approach on the Old Town Avenue bridge*

is not wide enough to accommodate an eastbound left-turn lane. Therefore, this improvement project is not identified in the Old Town IFS.

Partial Mitigation: None recommended.

Outside of the Community

50. *Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour*) – Both the eastbound Rosecrans Street through movement, and the eastbound Rosecrans Street to northbound Nimitz Boulevard left-turn movement are anticipated to be over capacity for both peak hours, under implementation of Preferred Plan. Widening the Rosecrans Street eastbound and westbound approaches of the intersection to include a third through lane, and providing an additional eastbound left-turn lane from Rosecrans Street to Nimitz Boulevard would improve the intersection operations to LOS D or better during both the AM and PM peak hours.

    The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Rosecrans Street to widen to six lanes. Therefore, this improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

    Partial Mitigation: None recommended.

Table 4-8 provides a comparison of Preferred Plan operations at the impacted intersections, with and without mitigation measures.

Table 4-8 Impacted Intersection Level of Service with Mitigation Measures

No.	Intersection	Control (Preferred Plan)	Mitigated Conditions				Preferred Plan			
			AM		PM		AM		PM	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
Midway-Pacific Highway										
1	Lytton St and Rosecrans St	Signal	43.6	D	39.5	D	95.1	**F**	55.2	**E**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	12.7	B	35.8	D	15.7	B	71.7	**E**
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	27.5	C	44.6	D	47.0	D	71.9	**E**
7	Midway Dr and Rosecrans St	Signal	44.5	D	51.2	D	36.2	D	66.7	**E**
27	Hancock St and Washington St	Signal	22.2	C	25.1	C	22.4	C	76.8	**E**
30	Kettner Blvd and West Laurel St	Signal	17.5	B	44.5	D	18.5	B	77.7	**E**
34	Pacific Hwy and Sassafras St	Signal	23.4	C	48.2	D	28.2	C	67.3	**E**
35	Pacific Hwy and West Laurel St	Signal	36.2	D	49.7	D	83.5	**F**	144.7	**F**
Old Town										
37	Moore St and Old Town Ave	Signal	26.4	C	41.9	D	19.2	B	118.4	**F**

Table 4-8 Impacted Intersection Level of Service with Mitigation Measures

No.	Intersection	Control (Preferred Plan)	Mitigated Conditions				Preferred Plan			
			AM		PM		AM		PM	
			Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS
Intersections Outside of Study Communities										
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	28.8	C	44.0	D	58.9	E	118.2	**F**

Source: Chen Ryan Associates (October 2017)

Notes:
Bold letter indicates LOS E or F.

4.6.3 Freeway Segment Mitigation Measures

I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies operational improvements along this segment. These improvements are anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvements and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would

be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

4.6.4 Ramp Meter Mitigation Measures

I-5 SB / Sea World Drive Ramp (PM Peak Hour) – Ramp meter delays would decrease to less than 15 minutes if the ramp flow rate is increased from 444 cars per hour to 555 cars per hour. Increased ramp

meter flow rates can be achieved by either reducing the ramp meter cycle length or providing additional travel lanes on the ramp.

The identified significant traffic related impact to this ramp would be fully mitigated with the implementation of this improvement. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

5.0 Adopted Community Plan (No Project)

This chapter provides a comparison of the buildout of the currently Adopted Community plan or the No Project scenario analysis results to the Existing Conditions. As stated, the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan was adopted in 1991, and the Old Town San Diego Community Plan was adopted in 1987. Since the land uses and roadway network proposed by the Preferred Plan (or an alternative) would supersede the Adopted Community Plan, only a trip generation and VMT generation comparison was conducted for the Adopted Community Plan (No Project) scenario.

5.1 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Future Year 2035 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway Pacific Highway Corridor and communities, including trips to/from and within the community. Table 5-1A and Table 5-1B displays the total VMT generated within the Midway-Pacific Highway Corridor and Old Town communities, respectively, as well as the average trip length under Base Year, and Adopted Plan conditions. VMT calculations for the both communities are provided in Appendix J.

Table 5-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	832,025	101,904	14.0%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	294,796	311,502	16,706	5.7%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.8%	5.2	5.4	0.2	3.7%
Population	4,672	11,775	7,103	152.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	71	-86	-54.8%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Adopted Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.8%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-54.8%).

Table 5-1B Vehicle Miles Traveled Comparison – Old Town – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,581	20,281	13.4%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	57,989	58,192	203	0.4%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	13.0%	5.2	5.4	0.2	3.7%
Population	834	985	151	18.1%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	174	-7	-4.0%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region). With the implementation of the Adopted Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 13.0%. However, with the population increase anticipated within the community, the daily VMT by population is anticipated to decrease (-4.0%).

Appendix A
VMT Analysis Worksheets – Base Year

2008 Base Year - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	2,357	-	2,357	3,333,368
CHULA VISTA TOTAL	3,951,266	7,048	-	7,048	3,944,218
CORONADO TOTAL	431,361	1,275	-	1,275	430,086
DEL MAR TOTAL	96,012	45	-	45	95,967
EL CAJON TOTAL	2,176,865	3,091	-	3,091	2,173,774
ENCINITAS TOTAL	2,065,242	2,987	-	2,987	2,062,255
ESCONDIDO TOTAL	2,793,535	1,506	-	1,506	2,792,029
External TOTAL	347,454	352	-	352	347,102
IMPERIAL BEACH TOTAL	119,764	49	-	49	119,715
LA MESA TOTAL	1,822,392	4,950	-	4,950	1,817,442
LEMON GROVE TOTAL	831,075	1,644	-	1,644	829,431
NATIONAL CITY TOTAL	1,647,424	6,346	-	6,346	1,641,078
OCEANSIDE TOTAL	3,208,748	779	-	779	3,207,969
POWAY TOTAL	1,105,609	492	-	492	1,105,117
OLD TOWN	38,613,579	241,420	16,727	224,693	38,372,159
SAN MARCOS TOTAL	2,020,740	250	-	250	2,020,490
SANTEE TOTAL	860,205	606	-	606	859,599
SOLANA BEACH TOTAL	567,653	1,106	-	1,106	566,547
Unincorporated TOTAL	17,458,561	9,472	-	9,472	17,449,089
VISTA TOTAL	1,728,853	99	-	99	1,728,754
REGIONWIDE TOTAL	85,182,063	151,301 437,175	16,727	269,147	84,896,189

2008 Base Year - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	10,481	-	10,481	3,325,244
CHULA VISTA TOTAL	3,951,266	30,546	-	30,546	3,920,720
CORONADO TOTAL	431,361	6,218	-	6,218	425,143
DEL MAR TOTAL	96,012	206	-	206	95,806
EL CAJON TOTAL	2,176,865	12,696	-	12,696	2,164,169
ENCINITAS TOTAL	2,065,242	12,892	-	12,892	2,052,350
ESCONDIDO TOTAL	2,793,535	6,670	-	6,670	2,786,865
External TOTAL	347,454	1,979	-	1,979	345,475
IMPERIAL BEACH TOTAL	119,764	392	-	392	119,372
LA MESA TOTAL	1,822,392	19,612	-	19,612	1,802,780
LEMON GROVE TOTAL	831,075	7,624	-	7,624	823,451
NATIONAL CITY TOTAL	1,647,424	27,517	-	27,517	1,619,907
OCEANSIDE TOTAL	3,208,748	3,821	-	3,821	3,204,927
POWAY TOTAL	1,105,609	2,103	-	2,103	1,103,506
SAN DIEGO TOTAL	38,613,579	1,087,144	176,404	910,740	37,526,435
SAN MARCOS TOTAL	2,020,740	1,069	-	1,069	2,019,671
SANTEE TOTAL	860,205	2,581	-	2,581	857,624
SOLANA BEACH TOTAL	567,653	4,696	-	4,696	562,957
Unincorporated TOTAL	17,458,561	44,980	-	44,980	17,413,581
VISTA TOTAL	1,728,853	612	-	612	1,728,241
		730,121.50			
REGIONWIDE TOTAL	85,182,063	2,013,961	176,404	1,107,435	83,898,224
	66.7%	(670,292)			

Appendix B
Daily Roadway Traffic Counts

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-094

Location: Lytton St. btwn. Rosecrans St. & Midway Dr.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	11		8					12:00	222		148				
00:15	10		5					12:15	172		138				
00:30	12		5					12:30	163		160				
00:45	7	40	8	26			66	12:45	163	720	151	597			1317
01:00	3		4					13:00	149		147				
01:15	3		5					13:15	173		160				
01:30	3		6					13:30	170		151				
01:45	9	18	6	21			39	13:45	154	646	161	619			1265
02:00	5		4					14:00	154		171				
02:15	2		5					14:15	170		216				
02:30	4		4					14:30	191		219				
02:45	5	16	2	15			31	14:45	228	743	201	807			1550
03:00	4		2					15:00	223		185				
03:15	4		6					15:15	219		212				
03:30	3		2					15:30	236		226				
03:45	12	23	4	14			37	15:45	250	928	262	885			1813
04:00	14		6					16:00	243		275				
04:15	11		6					16:15	217		322				
04:30	14		13					16:30	268		247				
04:45	24	63	12	37			100	16:45	256	984	268	1112			2096
05:00	42		26					17:00	261		243				
05:15	60		24					17:15	235		219				
05:30	93		35					17:30	192		157				
05:45	104	299	47	132			431	17:45	209	897	154	773			1670
06:00	129		56					18:00	202		134				
06:15	179		82					18:15	185		167				
06:30	223		100					18:30	160		121				
06:45	213	744	124	362			1106	18:45	120	667	106	528			1195
07:00	316		159					19:00	135		103				
07:15	286		197					19:15	129		87				
07:30	194		218					19:30	78		79				
07:45	270	1066	201	775			1841	19:45	110	452	69	338			790
08:00	239		200					20:00	85		77				
08:15	247		235					20:15	97		77				
08:30	225		205					20:30	98		72				
08:45	191	902	177	817			1719	20:45	111	391	81	307			698
09:00	176		156					21:00	69		52				
09:15	127		128					21:15	67		63				
09:30	127		117					21:30	61		45				
09:45	134	564	120	521			1085	21:45	63	260	41	201			461
10:00	133		92					22:00	52		50				
10:15	145		127					22:15	54		46				
10:30	159		143					22:30	40		44				
10:45	147	584	120	482			1066	22:45	38	184	28	168			352
11:00	153		123					23:00	30		23				
11:15	148		155					23:15	20		19				
11:30	179		126					23:30	23		21				
11:45	180	660	116	520			1180	23:45	11	84	14	77			161
Total Vol.		4979		3722			**8701**			6956		6412			**13368**

Daily Totals

NB	SB	EB	WB	Combined
11935	10134			**22069**

	AM			PM		
Split %	57.2%	42.8%	**39.4%**	52.0%	48.0%	**60.6%**
Peak Hour	07:00	07:30	**07:00**	16:30	16:00	**16:00**
Volume	1066	854	**1841**	1020	1112	**2096**
P.H.F.	0.84	0.91	**0.95**	0.95	0.86	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-086

Location: Mission Bay Dr. btwn. I-8 WB Off Ramp & I-8 EB On Ramp

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		78					12:00	130		376				
00:15	16		56					12:15	154		409				
00:30	12		54					12:30	139		403				
00:45	8	49	54	242			291	12:45	145	568	475	1663			2231
01:00	9		43					13:00	133		392				
01:15	12		40					13:15	144		423				
01:30	11		45					13:30	142		428				
01:45	10	42	47	175			217	13:45	167	586	456	1699			2285
02:00	2		44					14:00	152		410				
02:15	7		26					14:15	133		431				
02:30	5		36					14:30	126		472				
02:45	5	19	21	127			146	14:45	111	522	441	1754			2276
03:00	3		24					15:00	134		460				
03:15	1		16					15:15	138		494				
03:30	1		18					15:30	129		520				
03:45	6	11	19	77			88	15:45	126	527	506	1980			2507
04:00	7		16					16:00	133		530				
04:15	4		20					16:15	159		552				
04:30	5		22					16:30	125		568				
04:45	6	22	39	97			119	16:45	130	547	574	2224			2771
05:00	9		42					17:00	164		580				
05:15	8		57					17:15	161		643				
05:30	13		64					17:30	140		591				
05:45	18	48	159	322			370	17:45	131	596	621	2435			3031
06:00	22		125					18:00	124		601				
06:15	36		162					18:15	114		578				
06:30	45		222					18:30	141		488				
06:45	51	154	270	779			933	18:45	109	488	412	2079			2567
07:00	67		329					19:00	120		388				
07:15	68		420					19:15	109		390				
07:30	86		469					19:30	109		333				
07:45	100	321	505	1723			2044	19:45	104	442	336	1447			1889
08:00	76		440					20:00	105		334				
08:15	70		451					20:15	95		315				
08:30	98		478					20:30	95		275				
08:45	111	355	424	1793			2148	20:45	70	365	267	1191			1556
09:00	118		398					21:00	63		248				
09:15	118		390					21:15	68		196				
09:30	134		366					21:30	73		192				
09:45	163	533	374	1528			2061	21:45	60	264	198	834			1098
10:00	138		230					22:00	64		159				
10:15	118		332					22:15	51		135				
10:30	102		330					22:30	59		146				
10:45	131	489	346	1238			1727	22:45	58	232	126	566			798
11:00	114		357					23:00	24		135				
11:15	140		359					23:15	22		126				
11:30	123		383					23:30	21		87				
11:45	143	520	380	1479			1999	23:45	19	86	82	430			516
Total Vol.		2563		9580			**12143**			5223		18302			**23525**

Daily Totals

NB	SB	EB	WB	**Combined**
7786	27882			**35668**

	AM			**PM**		
Split %	21.1%	78.9%	**34.0%**	22.2%	77.8%	**66.0%**
Peak Hour	11:45	07:45	**07:45**	13:15	17:15	**17:00**
Volume	566	1874	**2218**	605	2456	**3031**
P.H.F.	0.92	0.93	**0.92**	0.91	0.95	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-088

Location: Midway Dr. btwn. Sports Arena Blvd. & Kemper St.

AM Period	NB	SB	EB		WB		
00:00			15		25		
00:15			17		26		
00:30			14		19		
00:45			12	58	8	78	136
01:00			11		16		
01:15			15		11		
01:30			9		17		
01:45			8	43	14	58	101
02:00			5		13		
02:15			6		6		
02:30			7		8		
02:45			6	24	5	32	56
03:00			3		5		
03:15			5		7		
03:30			6		4		
03:45			1	15	6	22	37
04:00			12		7		
04:15			11		8		
04:30			13		5		
04:45			19	55	11	31	86
05:00			13		17		
05:15			14		17		
05:30			28		24		
05:45			43	98	31	89	187
06:00			34		27		
06:15			43		37		
06:30			58		59		
06:45			71	206	90	213	419
07:00			82		78		
07:15			102		81		
07:30			117		100		
07:45			159	460	91	350	810
08:00			125		94		
08:15			166		113		
08:30			134		112		
08:45			143	568	137	456	1024
09:00			128		143		
09:15			133		133		
09:30			154		130		
09:45			147	562	154	560	1122
10:00			141		174		
10:15			152		152		
10:30			163		163		
10:45			139	595	139	628	1223
11:00			133		133		
11:15			135		154		
11:30			154		178		
11:45			147	569	152	617	1186
Total Vol.				3253		3134	**6387**

PM Period	NB	SB	EB		WB		
12:00			171		174		
12:15			159		166		
12:30			152		196		
12:45			158	640	182	718	1358
13:00			133		187		
13:15			139		169		
13:30			163		170		
13:45			150	585	174	700	1285
14:00			145		154		
14:15			147		165		
14:30			154		199		
14:45			155	601	185	703	1304
15:00			160		187		
15:15			155		198		
15:30			144		178		
15:45			180	639	199	762	1401
16:00			182		219		
16:15			169		193		
16:30			160		221		
16:45			180	691	204	837	1528
17:00			215		223		
17:15			209		244		
17:30			195		230		
17:45			220	839	210	907	1746
18:00			197		189		
18:15			170		216		
18:30			156		202		
18:45			181	704	186	793	1497
19:00			151		186		
19:15			154		150		
19:30			113		184		
19:45			116	534	140	660	1194
20:00			102		158		
20:15			122		131		
20:30			93		134		
20:45			81	398	131	554	952
21:00			76		103		
21:15			86		102		
21:30			62		82		
21:45			61	285	76	363	648
22:00			40		95		
22:15			36		54		
22:30			43		49		
22:45			34	153	49	247	400
23:00			32		54		
23:15			27		30		
23:30			33		40		
23:45			20	112	26	150	262
				6181		7394	**13575**

Daily Totals

NB	SB	EB	WB	Combined
		9434	10528	**19962**

	AM			PM		
Split %	50.9%	49.1%	**32.0%**	45.5%	54.5%	**68.0%**
Peak Hour	11:30	11:45	**11:45**	17:00	17:00	**17:00**
Volume	631	688	**1317**	839	907	**1746**
P.H.F.	0.92	0.88	**0.95**	0.95	0.93	**0.96**

Volumes for: STATION# on Tuesday, March 16, 2010 City: San Diego Project #: 10-4068-018
Location: Midway Dr between Kemper St & Fordham St File No. MC0214-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	16	169			24	211				
12:15	18	185			26	221				
12:30	17	191			17	210				
12:45	10	215	61	760	14	215	81	857	142	1617
1:00	6	179			14	208				
1:15	8	187			10	206				
1:30	13	171			13	172				
1:45	8	145	35	682	22	191	59	777	94	1459
2:00	7	166			14	175				
2:15	7	169			12	205				
2:30	12	177			13	177				
2:45	4	175	30	687	7	165	46	722	76	1409
3:00	16	180			7	197				
3:15	8	148			5	213				
3:30	10	170			5	203				
3:45	4	189	38	687	15	230	32	843	70	1530
4:00	7	186			9	224				
4:15	11	144			9	193				
4:30	5	174			4	181				
4:45	10	174	33	678	14	202	36	800	69	1478
5:00	8	179			16	235				
5:15	28	214			18	209				
5:30	41	166			29	230				
5:45	44	184	121	743	43	166	106	840	227	1583
6:00	30	203			29	182				
6:15	42	185			31	164				
6:30	59	190			39	198				
6:45	71	155	202	733	56	175	155	719	357	1452
7:00	76	150			65	192				
7:15	90	160			58	183				
7:30	110	158			69	164				
7:45	119	105	395	573	91	140	283	679	678	1252
8:00	129	147			86	125				
8:15	111	112			108	138				
8:30	102	113			102	124				
8:45	118	88	460	460	109	135	405	522	865	982
9:00	110	86			108	123				
9:15	129	92			123	81				
9:30	120	72			113	92				
9:45	135	50	494	300	148	80	492	376	986	676
10:00	111	46			142	69				
10:15	135	46			142	52				
10:30	163	47			138	60				
10:45	152	51	561	190	150	50	572	231	1133	421
11:00	152	37			192	45				
11:15	143	18			177	51				
11:30	182	24			190	28				
11:45	169	21	646	100	219	35	778	159	1424	259
Total	3076	6593	3076	6593	3045	7525	3045	7525	6121	14118
Combined Total	9669		9669		10570		10570		20239	
AM Peak	11:45 AM				11:45 AM					
Vol.	714				861					
P.H.F.	0.935				0.974					
PM Peak		12:30 PM				4:45 PM				
Vol.		772				876				
P.H.F.		0.898				0.932				
Percentage	31.8%	68.2%			28.8%	71.2%				

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
MIDWAY DR	[GAINES ST - RILEY ST]	03100 - 03150	1190	EAST	:	14600	6/27/1990	0985-90
				WEST	:	17700	7/20/1990	0986-90
				EAST	:	13800	6/17/1991	0917-91
				WEST	:	16900	6/17/1991	0918-91
				*TOTAL	:	30700		
				EAST	:	14300	6/9/1992	0498-92
				WEST	:	16900	6/9/1992	0499-92
				*TOTAL	:	31200		
				EAST	:	12100	6/2/1995	0663-95
				WEST	:	15100	6/2/1995	0664-95
				*TOTAL	:	27200		
				EAST	:	12600	6/22/1999	0479-99
				WEST	:	14900	6/22/1999	0479-99
				*TOTAL	:	27500		
				EAST	:	10960	6/18/2002	0629-02
				WEST	:	14250	6/25/2002	0630-02
				EAST	:	18590	6/13/2006	0068-06
				WEST	:	14360	6/13/2006	0068-06
				*TOTAL	:	32950		
				EAST	:	12720	8/12/2008	0313-08
				WEST	:	14410	8/12/2008	0313-08
				*TOTAL	:	27130		
				EAST	:	12860	6/16/2009	MC0396-0
				WEST	:	14745	6/16/2009	MC0396-0
				*TOTAL	:	27605		
MIDWAY DR	[KEMPER ST - DUKE ST]	03600 - 03800	1771	EAST	:	12200	6/18/1991	0855-91
				WEST	:	12900	6/18/1991	0856-91
				*TOTAL	:	25100		
				EAST	:	13000	5/26/1993	0418-93
				WEST	:	13300	5/26/1993	0419-93
				*TOTAL	:	26300		
				EAST	:	10800	5/13/1996	0487-96

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Midway Dr (STATION#1860/FILE#MC0443-10)	Project:	10-4169-031	11,737	11,246	0	0	22,983

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	17		24					12:00	237		211				
00:15	27		40					12:15	236		200				
00:30	23		20					12:30	267		215				
00:45	18	85	17	101			186	12:45	215	955	277	903			1858
01:00	9		21					13:00	246		225				
01:15	13		15					13:15	221		182				
01:30	18		11					13:30	225		188				
01:45	14	54	27	74			128	13:45	223	915	234	829			1744
02:00	17		20					14:00	192		203				
02:15	14		13					14:15	209		201				
02:30	6		14					14:30	183		212				
02:45	6	43	9	56			99	14:45	218	802	209	825			1627
03:00	5		3					15:00	211		199				
03:15	11		11					15:15	208		205				
03:30	16		7					15:30	213		207				
03:45	16	48	10	31			79	15:45	212	844	226	837			1681
04:00	17		12					16:00	240		230				
04:15	13		12					16:15	233		193				
04:30	18		13					16:30	247		234				
04:45	19	67	19	56			123	16:45	249	969	204	861			1830
05:00	16		29					17:00	254		209				
05:15	34		28					17:15	294		225				
05:30	38		47					17:30	264		185				
05:45	72	160	38	142			302	17:45	185	997	220	839			1836
06:00	49		58					18:00	175		205				
06:15	57		61					18:15	172		158				
06:30	80		79					18:30	148		175				
06:45	104	290	98	296			586	18:45	144	639	144	682			1321
07:00	97		100					19:00	142		175				
07:15	115		139					19:15	143		147				
07:30	143		124					19:30	127		140				
07:45	136	491	117	480			971	19:45	151	563	169	631			1194
08:00	144		128					20:00	92		127				
08:15	161		113					20:15	102		133				
08:30	129		97					20:30	67		127				
08:45	148	582	106	444			1026	20:45	76	337	120	507			844
09:00	150		107					21:00	79		121				
09:15	182		142					21:15	84		87				
09:30	179		163					21:30	58		99				
09:45	176	687	131	543			1230	21:45	55	276	77	384			660
10:00	159		127					22:00	54		76				
10:15	180		139					22:15	41		53				
10:30	184		148					22:30	35		40				
10:45	189	712	167	581			1293	22:45	31	161	48	217			378
11:00	205		182					23:00	29		41				
11:15	236		178					23:15	20		26				
11:30	265		201					23:30	34		39				
11:45	248	954	228	789			1743	23:45	23	106	32	138			244
Total Vol.	4173		3593				**7766**		7564		7653				**15217**

	NB	SB	EB	WB	Total
Daily Totals :	**11,737**	**11,246**	**0**	**0**	**22,983**

	AM			PM			
Split %	53.7%	46.3%	**33.8%**		49.7%	50.3%	**66.2%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	12:15	**16:30**
Volume	988	854	**1842**	**Volume**	1061	917	**1916**
P.H.F.	0.925	0.936	**0.955**	**P.H.F.**	0.902	0.828	**0.923**
7 - 9 Vol.	1073	924	**1997**	**4 - 6 Vol.**	1966	1700	**3666**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	584	508	**1066**	**Volume**	1061	872	**1916**
P.H.F.	0.907	0.914	**0.973**	**P.H.F.**	0.902	0.932	**0.923**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-087

Location: Mission Bay Dr. btwn. I-8 EB On Ramp & Sports Arena Blvd.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	29		33					12:00	269		213				
00:15	37		32					12:15	297		241				
00:30	25		31					12:30	289		248				
00:45	27	118	14	110			228	12:45	298	1153	252	954			2107
01:00	23		31					13:00	273		249				
01:15	27		22					13:15	314		230				
01:30	21		27					13:30	298		230				
01:45	18	89	23	103			192	13:45	298	1183	253	962			2145
02:00	22		16					14:00	303		239				
02:15	19		12					14:15	295		219				
02:30	20		19					14:30	274		205				
02:45	13	74	8	55			129	14:45	284	1156	224	887			2043
03:00	9		18					15:00	252		235				
03:15	7		9					15:15	296		260				
03:30	18		8					15:30	270		240				
03:45	22	56	11	46			102	15:45	265	1083	262	997			2080
04:00	15		11					16:00	312		251				
04:15	18		12					16:15	306		285				
04:30	16		11					16:30	296		276				
04:45	23	72	25	59			131	16:45	279	1193	257	1069			2262
05:00	28		23					17:00	360		274				
05:15	31		33					17:15	292		320				
05:30	40		25					17:30	288		289				
05:45	64	163	79	160			323	17:45	282	1222	303	1186			2408
06:00	81		60					18:00	276		298				
06:15	95		77					18:15	257		274				
06:30	132		90					18:30	252		228				
06:45	136	444	121	348			792	18:45	263	1048	225	1025			2073
07:00	177		157					19:00	260		215				
07:15	202		183					19:15	212		192				
07:30	233		192					19:30	229		180				
07:45	250	862	246	778			1640	19:45	209	910	170	757			1667
08:00	204		209					20:00	217		153				
08:15	205		199					20:15	197		153				
08:30	208		209					20:30	187		144				
08:45	240	857	200	817			1674	20:45	158	759	136	586			1345
09:00	218		232					21:00	163		140				
09:15	225		213					21:15	136		110				
09:30	262		203					21:30	165		96				
09:45	249	954	235	883			1837	21:45	140	604	98	444			1048
10:00	219		228					22:00	129		71				
10:15	241		244					22:15	111		65				
10:30	222		214					22:30	104		71				
10:45	230	912	230	916			1828	22:45	99	443	64	271			714
11:00	217		233					23:00	67		69				
11:15	214		241					23:15	67		59				
11:30	215		225					23:30	55		42				
11:45	228	874	236	935			1809	23:45	30	219	44	214			433
Total Vol.		5475		5210			**10685**			10973		9352			**20325**

Daily Totals

NB	SB	EB	WB	Combined
16448	14562			**31010**

	AM			PM		
Split %	51.2%	48.8%	**34.5%**	54.0%	46.0%	**65.5%**
Peak Hour	11:45	11:45	**11:45**	16:15	17:15	**17:00**
Volume	1083	938	**2021**	1241	1210	**2408**
P.H.F.	0.91	0.95	**0.94**	0.86	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-090

Location: Sports Arena Blvd. btwn. Midway Dr. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		21			12:00			144		148		
00:15			14		21			12:15			135		137		
00:30			6		16			12:30			163		142		
00:45			5	33	14	72	105	12:45			141	583	141	568	1151
01:00			7		10			13:00			148		167		
01:15			4		7			13:15			137		161		
01:30			4		1			13:30			156		158		
01:45			3	18	9	27	45	13:45			152	593	155	641	1234
02:00			6		9			14:00			150		152		
02:15			5		7			14:15			139		140		
02:30			2		3			14:30			140		133		
02:45			2	15	3	22	37	14:45			147	576	139	564	1140
03:00			7		5			15:00			133		146		
03:15			6		7			15:15			139		180		
03:30			6		4			15:30			163		158		
03:45			6	25	5	21	46	15:45			152	587	166	650	1237
04:00			4		6			16:00			162		169		
04:15			4		4			16:15			142		171		
04:30			6		8			16:30			171		215		
04:45			8	22	8	26	48	16:45			143	618	166	721	1339
05:00			10		7			17:00			155		213		
05:15			12		5			17:15			164		220		
05:30			25		17			17:30			155		194		
05:45			32	79	12	41	120	17:45			173	647	168	795	1442
06:00			32		20			18:00			159		197		
06:15			42		22			18:15			156		175		
06:30			62		32			18:30			178		155		
06:45			71	207	51	125	332	18:45			140	633	150	677	1310
07:00			78		62			19:00			134		152		
07:15			109		61			19:15			153		152		
07:30			115		57			19:30			119		137		
07:45			135	437	57	237	674	19:45			116	522	156	597	1119
08:00			140		65			20:00			117		123		
08:15			139		80			20:15			105		133		
08:30			122		96			20:30			82		120		
08:45			145	546	91	332	878	20:45			74	378	115	491	869
09:00			124		79			21:00			78		103		
09:15			139		109			21:15			55		104		
09:30			133		122			21:30			36		90		
09:45			154	550	126	436	986	21:45			40	209	83	380	589
10:00			147		139			22:00			29		84		
10:15			141		133			22:15			27		59		
10:30			152		130			22:30			30		68		
10:45			133	573	128	530	1103	22:45			19	105	51	262	367
11:00			130		124			23:00			14		143		
11:15			128		147			23:15			20		55		
11:30			124		152			23:30			24		26		
11:45			147	529	163	586	1115	23:45			14	72	17	241	313
Total Vol.				3034		2455	**5489**					5523		6587	**12110**

Daily Totals

NB	SB	EB	WB	Combined
		8557	9042	**17599**

	AM			PM		
Split %	55.3%	44.7%	**31.2%**	45.6%	54.4%	**68.8%**
Peak Hour	09:45	11:15	**11:45**	17:45	16:30	**16:30**
Volume	594	610	**1179**	666	814	**1447**
P.H.F.	0.96	0.94	**0.95**	0.94	0.93	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-091

Location: Sports Arena Blvd. btwn. Kemper St. & East Dr.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			26		15			12:00			122		130		
00:15			14		15			12:15			131		133		
00:30			11		15			12:30			128		139		
00:45			10	61	13	58	119	12:45			133	514	143	545	1059
01:00			5		12			13:00			130		141		
01:15			5		5			13:15			163		147		
01:30			4		3			13:30			139		154		
01:45			8	22	8	28	50	13:45			155	587	166	608	1195
02:00			9		4			14:00			154		196		
02:15			5		3			14:15			174		185		
02:30			1		3			14:30			155		174		
02:45			1	16	0	10	26	14:45			156	639	187	742	1381
03:00			4		3			15:00			166		188		
03:15			0		9			15:15			198		174		
03:30			6		9			15:30			187		154		
03:45			10	20	8	29	49	15:45			174	725	165	681	1406
04:00			12		6			16:00			188		166		
04:15			5		3			16:15			204		158		
04:30			10		10			16:30			218		162		
04:45			9	36	12	31	67	16:45			213	823	165	651	1474
05:00			14		5			17:00			237		185		
05:15			14		6			17:15			246		200		
05:30			20		29			17:30			216		166		
05:45			31	79	39	79	158	17:45			231	930	179	730	1660
06:00			27		32			18:00			222		178		
06:15			30		37			18:15			244		188		
06:30			68		48			18:30			224		171		
06:45			62	187	67	184	371	18:45			206	896	166	703	1599
07:00			78		76			19:00			213		162		
07:15			101		53			19:15			194		129		
07:30			129		77			19:30			191		115		
07:45			117	425	72	278	703	19:45			185	783	101	507	1290
08:00			126		103			20:00			163		97		
08:15			124		83			20:15			159		110		
08:30			132		93			20:30			140		88		
08:45			135	517	98	377	894	20:45			148	610	70	365	975
09:00			148		86			21:00			121		73		
09:15			147		117			21:15			131		61		
09:30			127		122			21:30			135		62		
09:45			128	550	121	446	996	21:45			112	499	51	247	746
10:00			114		120			22:00			103		56		
10:15			128		122			22:15			73		44		
10:30			133		147			22:30			103		45		
10:45			130	505	124	513	1018	22:45			110	389	48	193	582
11:00			128		128			23:00			253		80		
11:15			124		133			23:15			102		36		
11:30			141		139			23:30			55		29		
11:45			143	536	163	563	1099	23:45			29	439	22	167	606
Total Vol.				2954		2596	**5550**					7834		6139	**13973**

Daily Totals

NB	SB	EB	WB	Combined
		10788	8735	**19523**

	AM			PM		
Split %	53.2%	46.8%	**28.4%**	56.1%	43.9%	**71.6%**
Peak Hour	08:30	11:15	**11:30**	17:00	14:00	**17:00**
Volume	562	565	**1102**	930	742	**1660**
P.H.F.	0.95	0.87	**0.90**	0.95	0.95	**0.93**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
SPORTS ARENA BL	[ROSECRANS ST - EAST DR]	03100 - 03300	1211	EAST	:	14780	6/15/2005	0296-05
				WEST	:	14640	6/15/2005	0296-05
				*TOTAL	:	29420		
				EAST	:	13620	7/29/2008	0315-08
				WEST	:	13160	7/29/2008	0315-08
				*TOTAL	:	26780		
SPORTS ARENA BL	[KEMPER ST - HANCOCK ST]	03600 - 03800	1210	EAST	:	11200	6/25/1990	0976-90
				WEST	:	10300	6/25/1990	0977-90
				*TOTAL	:	21500		
				EAST	:	9400	6/18/1991	0853-91
				WEST	:	7900	6/18/1991	0854-91
				*TOTAL	:	17300		
				EAST	:	8400	9/15/1994	0672-94
				WEST	:	8600	9/15/1994	0673-94
				*TOTAL	:	17000		
				EAST	:	9600	6/17/1997	0370-97
				WEST	:	9500	6/17/1997	0371-97
				*TOTAL	:	19100		
				EAST	:	9780	6/9/2005	0292-05
				WEST	:	9590	6/9/2005	0292-05
				*TOTAL	:	19370		
				EAST	:	8105	6/15/2010	MC0511-1
				WEST	:	8655	6/15/2010	MC0511-1
				*TOTAL	:	16760		
				EAST	:	7475	1/11/2011	MC1210-1
				WEST	:	8145	1/11/2011	MC1210-1
				*TOTAL	:	15620		
SPORTS ARENA BL	[HANCOCK ST - W PT LOMA BL]	03800 - 03900	1213	EAST	:	10000	6/25/1990	1001-90
				WEST	:	11200	6/25/1990	1002-90
				*TOTAL	:	21200		
				EAST	:	10600	6/26/1991	0952-91
				WEST	:	16300	6/26/1991	0953-91

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-092

Location: Sports Arena Blvd. btwn. Rosecrans St. & Enterprise St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			44		24		
00:15			2		2			12:15			33		28		
00:30			0		0			12:30			36		24		
00:45			0	2	4	7	9	12:45			37	150	21	97	247
01:00			0		3			13:00			31		28		
01:15			2		0			13:15			31		24		
01:30			0		0			13:30			30		26		
01:45			1	3	1	4	7	13:45			36	128	22	100	228
02:00			0		4			14:00			30		20		
02:15			0		0			14:15			29		24		
02:30			2		2			14:30			20		21		
02:45			0	2	8	14	16	14:45			30	109	14	79	188
03:00			2		1			15:00			17		19		
03:15			0		1			15:15			20		22		
03:30			1		3			15:30			18		20		
03:45			3	6	3	8	14	15:45			19	74	28	89	163
04:00			0		2			16:00			25		24		
04:15			0		4			16:15			33		32		
04:30			2		0			16:30			31		39		
04:45			0	2	2	8	10	16:45			18	107	35	130	237
05:00			2		2			17:00			14		54		
05:15			0		2			17:15			9		74		
05:30			1		8			17:30			15		45		
05:45			4	7	4	16	23	17:45			21	59	50	223	282
06:00			5		5			18:00			14		21		
06:15			2		3			18:15			26		28		
06:30			3		1			18:30			13		21		
06:45			6	16	1	10	26	18:45			16	69	14	84	153
07:00			10		11			19:00			9		16		
07:15			13		10			19:15			11		13		
07:30			15		14			19:30			15		11		
07:45			15	53	8	43	96	19:45			8	43	10	50	93
08:00			13		11			20:00			6		8		
08:15			12		10			20:15			7		7		
08:30			9		14			20:30			6		5		
08:45			18	52	19	54	106	20:45			10	29	3	23	52
09:00			30		13			21:00			2		2		
09:15			15		18			21:15			3		1		
09:30			19		11			21:30			9		4		
09:45			22	86	10	52	138	21:45			4	18	1	8	26
10:00			31		14			22:00			3		5		
10:15			22		42			22:15			3		2		
10:30			22		32			22:30			11		1		
10:45			31	106	28	116	222	22:45			0	17	4	12	29
11:00			28		24			23:00			7		1		
11:15			29		25			23:15			2		5		
11:30			32		24			23:30			3		2		
11:45			33	122	16	89	211	23:45			2	14	3	11	25
Total Vol.				457		421	**878**					817		906	**1723**

Daily Totals

NB	SB	EB	WB	Combined
		1274	1327	**2601**

	AM			PM		
Split %	52.1%	47.9%	**33.8%**	47.4%	52.6%	**66.2%**
Peak Hour	11:45	10:15	**11:45**	12:00	17:00	**17:00**
Volume	146	126	**238**	150	223	**282**
P.H.F.	0.83	0.75	**0.88**	0.85	0.75	**0.85**

Volumes for: Thursday, August 19, 2010 City: San Diego Project #: 10-4243-049

Location: Kurtz St (STATION#1873/FILE#MC0742-10) between Riley St & Greenwood St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		14				12:00		130			
00:15		8				12:15		127			
00:30		15				12:30		107			
00:45		11	48		48	12:45		105	469		469
01:00		9				13:00		110			
01:15		4				13:15		91			
01:30		4				13:30		104			
01:45		6	23		23	13:45		94	399		399
02:00		5				14:00		83			
02:15		6				14:15		100			
02:30		4				14:30		89			
02:45		2	17		17	14:45		90	362		362
03:00		5				15:00		109			
03:15		5				15:15		110			
03:30		8				15:30		117			
03:45		5	23		23	15:45		115	451		451
04:00		13				16:00		145			
04:15		22				16:15		116			
04:30		15				16:30		128			
04:45		12	62		62	16:45		121	510		510
05:00		12				17:00		154			
05:15		9				17:15		113			
05:30		14				17:30		105			
05:45		18	53		53	17:45		97	469		469
06:00		23				18:00		93			
06:15		21				18:15		71			
06:30		34				18:30		53			
06:45		28	106		106	18:45		47	264		264
07:00		39				19:00		43			
07:15		45				19:15		38			
07:30		66				19:30		45			
07:45		57	207		207	19:45		27	153		153
08:00		61				20:00		30			
08:15		68				20:15		42			
08:30		60				20:30		30			
08:45		69	258		258	20:45		21	123		123
09:00		57				21:00		21			
09:15		73				21:15		25			
09:30		86				21:30		27			
09:45		77	293		293	21:45		26	99		99
10:00		92				22:00		18			
10:15		89				22:15		19			
10:30		116				22:30		18			
10:45		98	395		395	22:45		15	70		70
11:00		105				23:00		18			
11:15		102				23:15		16			
11:30		103				23:30		12			
11:45		116	426		426	23:45		10	56		56
Total Vol.			1911		**1911**			3425			**3425**

Daily Totals

NB	SB	EB	WB	Combined
	5336			**5336**

	AM		PM	
Split %	100.0%	**35.8%**	100.0%	**64.2%**
Peak Hour	11:45	**11:45**	16:15	**16:15**
Volume	480	**480**	519	**519**
P.H.F.	0.92	**0.92**	0.84	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-084

Location: Kurtz St. btwn. Rosecrans St. & Pacific Highway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		8					12:00	82		48				
00:15	8		1					12:15	54		71				
00:30	6		2					12:30	68		59				
00:45	7	23	1	12			35	12:45	58	262	88	266			528
01:00	3		9					13:00	73		68				
01:15	3		1					13:15	38		88				
01:30	2		4					13:30	54		81				
01:45	5	13	5	19			32	13:45	50	215	91	328			543
02:00	2		4					14:00	53		73				
02:15	4		2					14:15	42		80				
02:30	5		1					14:30	49		67				
02:45	7	18	4	11			29	14:45	51	195	79	299			494
03:00	7		1					15:00	56		78				
03:15	10		6					15:15	49		63				
03:30	7		2					15:30	65		55				
03:45	6	30	2	11			41	15:45	65	235	50	246			481
04:00	2		5					16:00	60		54				
04:15	11		4					16:15	61		41				
04:30	3		7					16:30	53		45				
04:45	18	34	3	19			53	16:45	58	232	65	205			437
05:00	9		8					17:00	67		51				
05:15	18		4					17:15	66		38				
05:30	23		3					17:30	49		46				
05:45	36	86	5	20			106	17:45	52	234	46	181			415
06:00	41		3					18:00	44		35				
06:15	58		19					18:15	41		54				
06:30	52		22					18:30	47		34				
06:45	72	223	24	68			291	18:45	28	160	69	192			352
07:00	50		24					19:00	30		66				
07:15	62		29					19:15	16		37				
07:30	58		33					19:30	31		45				
07:45	71	241	30	116			357	19:45	27	104	44	192			296
08:00	59		54					20:00	25		42				
08:15	59		41					20:15	27		28				
08:30	59		45					20:30	23		48				
08:45	62	239	55	195			434	20:45	19	94	23	141			235
09:00	47		42					21:00	12		33				
09:15	57		24					21:15	9		25				
09:30	48		29					21:30	12		24				
09:45	49	201	33	128			329	21:45	16	49	22	104			153
10:00	54		47					22:00	11		24				
10:15	56		37					22:15	8		20				
10:30	54		60					22:30	7		22				
10:45	64	228	31	175			403	22:45	11	37	13	79			116
11:00	63		58					23:00	8		8				
11:15	65		45					23:15	8		5				
11:30	54		65					23:30	4		6				
11:45	72	254	65	233			487	23:45	5	25	3	22			47
Total Vol.		1590		1007			**2597**			1842		2255			**4097**

Daily Totals

NB	SB	EB	WB	Combined
3432	3262			**6694**

	AM			PM		
Split %	61.2%	38.8%	**38.8%**	45.0%	55.0%	**61.2%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:15	**12:45**
Volume	276	249	**519**	262	333	**548**
P.H.F.	0.84	0.88	**0.95**	0.80	0.91	**0.94**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-001

Location: Hancock St(STATION#1878/FILE#MC0592-10) between Channel Wy & Sports Arena Blvd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	60		36				
00:15	5		3					12:15	53		44				
00:30	3		2					12:30	66		41				
00:45	0	11	1	12			23	12:45	41	220	42	163			383
01:00	0		2					13:00	33		51				
01:15	1		1					13:15	43		42				
01:30	1		1					13:30	42		33				
01:45	1	3	1	5			8	13:45	46	164	30	156			320
02:00	3		1					14:00	49		42				
02:15	0		2					14:15	56		34				
02:30	1		0					14:30	42		40				
02:45	1	5	2	5			10	14:45	42	189	37	153			342
03:00	2		3					15:00	46		40				
03:15	2		0					15:15	54		32				
03:30	1		2					15:30	51		24				
03:45	3	8	1	6			14	15:45	41	192	26	122			314
04:00	1		1					16:00	56		29				
04:15	1		4					16:15	38		19				
04:30	2		2					16:30	47		23				
04:45	2	6	8	15			21	16:45	60	201	23	94			295
05:00	3		6					17:00	51		21				
05:15	2		2					17:15	48		17				
05:30	3		2					17:30	48		23				
05:45	4	12	16	26			38	17:45	28	175	21	82			257
06:00	6		10					18:00	30		18				
06:15	7		14					18:15	39		19				
06:30	6		21					18:30	25		18				
06:45	11	30	24	69			99	18:45	24	118	14	69			187
07:00	20		27					19:00	25		21				
07:15	17		23					19:15	16		15				
07:30	21		24					19:30	11		19				
07:45	18	76	37	111			187	19:45	17	69	14	69			138
08:00	20		50					20:00	14		10				
08:15	21		36					20:15	14		9				
08:30	18		28					20:30	12		13				
08:45	21	80	35	149			229	20:45	7	47	13	45			92
09:00	29		41					21:00	11		9				
09:15	29		29					21:15	9		4				
09:30	23		27					21:30	9		9				
09:45	30	111	24	121			232	21:45	6	35	12	34			69
10:00	43		35					22:00	8		13				
10:15	39		40					22:15	6		10				
10:30	30		25					22:30	6		7				
10:45	41	153	31	131			284	22:45	4	24	3	33			57
11:00	47		28					23:00	1		2				
11:15	40		33					23:15	8		2				
11:30	38		32					23:30	4		5				
11:45	51	176	31	124			300	23:45	2	15	2	11			26
Total Vol.		671		774			**1445**			1449		1031			**2480**

Daily Totals

NB	SB	EB	WB	Combined
2120	1805			**3925**

	AM			PM		
Split %	46.4%	53.6%	**36.8%**	58.4%	41.6%	**63.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:00**
Volume	230	152	**382**	220	178	**383**
P.H.F.	0.87	0.86	**0.89**	0.93	0.87	**0.89**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-076

Location: Hancock St. btwn. Greenwood St. & Riley St. (one way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	12					12:00	72				
00:15	12					12:15	105				
00:30	5					12:30	83				
00:45	9	38			38	12:45	106	366			366
01:00	7					13:00	93				
01:15	9					13:15	89				
01:30	11					13:30	80				
01:45	9	36			36	13:45	80	342			342
02:00	10					14:00	69				
02:15	19					14:15	75				
02:30	17					14:30	77				
02:45	11	57			57	14:45	67	288			288
03:00	9					15:00	82				
03:15	10					15:15	90				
03:30	8					15:30	76				
03:45	25	52			52	15:45	91	339			339
04:00	4					16:00	67				
04:15	16					16:15	72				
04:30	7					16:30	67				
04:45	22	49			49	16:45	42	248			248
05:00	20					17:00	58				
05:15	21					17:15	54				
05:30	31					17:30	52				
05:45	54	126			126	17:45	47	211			211
06:00	42					18:00	41				
06:15	55					18:15	44				
06:30	50					18:30	35				
06:45	79	226			226	18:45	52	172			172
07:00	89					19:00	24				
07:15	88					19:15	21				
07:30	69					19:30	21				
07:45	108	354			354	19:45	32	98			98
08:00	119					20:00	33				
08:15	101					20:15	32				
08:30	105					20:30	19				
08:45	97	422			422	20:45	26	110			110
09:00	96					21:00	28				
09:15	81					21:15	17				
09:30	62					21:30	18				
09:45	92	331			331	21:45	25	88			88
10:00	98					22:00	19				
10:15	81					22:15	13				
10:30	74					22:30	20				
10:45	78	331			331	22:45	17	69			69
11:00	70					23:00	18				
11:15	72					23:15	27				
11:30	85					23:30	9				
11:45	68	295			295	23:45	9	63			63
Total Vol.		2317			**2317**		2394				**2394**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
	4711				**4711**

	AM		PM	
Split %	100.0%	**49.2%**	100.0%	**50.8%**
Peak Hour	07:45	**07:45**	12:15	**12:15**
Volume	433	**433**	387	**387**
P.H.F.	0.91	**0.91**	0.91	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-077

Location: Hancock St. btwn. Gaines St. & Rosecrans St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	4					12:00	57				
00:15	8					12:15	69				
00:30	3					12:30	64				
00:45	6	21			21	12:45	69	259			259
01:00	3					13:00	49				
01:15	4					13:15	66				
01:30	5					13:30	42				
01:45	3	15			15	13:45	60	217			217
02:00	3					14:00	47				
02:15	6					14:15	52				
02:30	7					14:30	62				
02:45	5	21			21	14:45	67	228			228
03:00	5					15:00	73				
03:15	6					15:15	78				
03:30	1					15:30	63				
03:45	8	20			20	15:45	66	280			280
04:00	4					16:00	62				
04:15	9					16:15	76				
04:30	3					16:30	78				
04:45	12	28			28	16:45	71	287			287
05:00	6					17:00	70				
05:15	12					17:15	64				
05:30	17					17:30	41				
05:45	24	59			59	17:45	48	223			223
06:00	14					18:00	64				
06:15	22					18:15	38				
06:30	27					18:30	34				
06:45	33	96			96	18:45	33	169			169
07:00	32					19:00	25				
07:15	40					19:15	20				
07:30	45					19:30	24				
07:45	38	155			155	19:45	26	95			95
08:00	65					20:00	21				
08:15	42					20:15	15				
08:30	7					20:30	20				
08:45	0	114			114	20:45	16	72			72
09:00	0					21:00	20				
09:15	5					21:15	14				
09:30	30					21:30	19				
09:45	43	78			78	21:45	9	62			62
10:00	55					22:00	11				
10:15	54					22:15	13				
10:30	42					22:30	11				
10:45	53	204			204	22:45	6	41			41
11:00	39					23:00	5				
11:15	51					23:15	13				
11:30	64					23:30	5				
11:45	59	213			213	23:45	8	31			31
Total Vol.		1024			**1024**		1964				**1964**

Daily Totals

NB	SB	EB	WB	**Combined**
2988				**2988**

	AM		PM	
Split %	100.0%	**34.3%**	100.0%	**65.7%**
Peak Hour	11:30	**11:30**	16:15	**16:15**
Volume	249	**249**	295	**295**
P.H.F.	0.90	**0.90**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Hancock St (STATION#2603/FILE#MC0428-10)	Project:	10-4169-016	0	0	5,774	3,903	9,677

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			7	9		12:00			81	65	
00:15			5	9		12:15			88	68	
00:30			6	3		12:30			94	66	
00:45			3 21	7 28	49	12:45			90 353	54 253	606
01:00			5	6		13:00			66	68	
01:15			1	7		13:15			101	71	
01:30			3	2		13:30			85	67	
01:45			4 13	1 16	29	13:45			88 340	57 263	603
02:00			2	0		14:00			60	73	
02:15			0	6		14:15			65	92	
02:30			4	1		14:30			70	53	
02:45			3 9	0 7	16	14:45			75 270	73 291	561
03:00			4	2		15:00			65	72	
03:15			2	3		15:15			70	92	
03:30			6	2		15:30			74	94	
03:45			6 18	1 8	26	15:45			77 286	95 353	639
04:00			9	2		16:00			97	154	
04:15			14	2		16:15			92	114	
04:30			18	3		16:30			88	112	
04:45			26 67	3 10	77	16:45			88 365	92 472	837
05:00			36	4		17:00			97	106	
05:15			44	4		17:15			113	74	
05:30			71	6		17:30			111	80	
05:45			80 231	7 21	252	17:45			69 390	68 328	718
06:00			113	9		18:00			68	83	
06:15			148	12		18:15			58	70	
06:30			168	15		18:30			48	85	
06:45			198 627	15 51	678	18:45			60 234	58 296	530
07:00			151	25		19:00			48	46	
07:15			168	33		19:15			46	35	
07:30			165	37		19:30			43	48	
07:45			153 637	30 125	762	19:45			27 164	53 182	346
08:00			110	38		20:00			45	57	
08:15			86	36		20:15			30	53	
08:30			97	32		20:30			47	40	
08:45			90 383	39 145	528	20:45			30 152	67 217	369
09:00			90	39		21:00			32	39	
09:15			85	41		21:15			28	26	
09:30			80	45		21:30			19	27	
09:45			92 347	34 159	506	21:45			20 99	44 136	235
10:00			70	49		22:00			18	24	
10:15			71	45		22:15			14	12	
10:30			81	52		22:30			14	11	
10:45			81 303	63 209	512	22:45			9 55	7 54	109
11:00			100	68		23:00			11	7	
11:15			89	62		23:15			13	6	
11:30			99	57		23:30			9	2	
11:45			80 368	71 258	626	23:45			9 42	6 21	63
Total Vol.			3024	1037	**4061**				2750	2866	**5616**

	NB	SB	EB	WB	Total
Daily Totals :	0	0	5,774	3,903	9,677

	AM			PM		
Split %	74.5%	25.5%	**42.0%**	49.0%	51.0%	**58.0%**
AM				**PM**		
Peak Hr.	06:30	11:45	**06:45**	**Peak Hr.**	16:45	15:45	**16:00**
Volume	685	270	**792**	**Volume**	409	475	**837**
P.H.F.	0.865	0.951	**0.930**	**P.H.F.**	0.905	0.771	**0.834**
7 - 9 Vol.	1020	270	**1290**	**4 - 6 Vol.**	755	800	**1555**
Peak Hr.	07:00	08:00	**07:00**	**Peak Hr.**	16:45	16:00	**16:00**
Volume	637	145	**762**	**Volume**	409	472	**837**
P.H.F.	0.948	0.929	**0.943**	**P.H.F.**	0.905	0.766	**0.834**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-078

Location: Hancock St. btwn. Witherby St. & Noell St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		2					12:00	19		31				
00:15	1		2					12:15	17		42				
00:30	0		2					12:30	20		34				
00:45	0	3	1	7			10	12:45	16	72	26	133			205
01:00	1		1					13:00	22		29				
01:15	0		0					13:15	18		38				
01:30	2		0					13:30	12		42				
01:45	0	3	4	5			8	13:45	20	72	38	147			219
02:00	1		1					14:00	19		33				
02:15	0		0					14:15	17		32				
02:30	0		1					14:30	10		36				
02:45	0	1	1	3			4	14:45	11	57	29	130			187
03:00	0		1					15:00	19		47				
03:15	2		1					15:15	18		22				
03:30	2		1					15:30	8		42				
03:45	1	5	7	10			15	15:45	16	61	44	155			216
04:00	1		6					16:00	29		28				
04:15	2		1					16:15	25		20				
04:30	2		0					16:30	19		27				
04:45	0	5	3	10			15	16:45	14	87	39	114			201
05:00	1		6					17:00	18		54				
05:15	2		1					17:15	15		34				
05:30	5		6					17:30	19		24				
05:45	4	12	15	28			40	17:45	12	64	29	141			205
06:00	4		21					18:00	21		21				
06:15	1		18					18:15	45		23				
06:30	4		20					18:30	11		23				
06:45	5	14	25	84			98	18:45	11	88	18	85			173
07:00	11		23					19:00	7		21				
07:15	12		23					19:15	10		22				
07:30	5		46					19:30	11		18				
07:45	14	42	23	115			157	19:45	6	34	17	78			112
08:00	18		17					20:00	17		6				
08:15	7		31					20:15	9		9				
08:30	7		45					20:30	3		10				
08:45	11	43	20	113			156	20:45	7	36	4	29			65
09:00	9		49					21:00	6		6				
09:15	13		23					21:15	4		4				
09:30	10		38					21:30	13		10				
09:45	19	51	33	143			194	21:45	7	30	4	24			54
10:00	18		27					22:00	4		8				
10:15	17		33					22:15	4		5				
10:30	27		20					22:30	7		1				
10:45	21	83	19	99			182	22:45	1	16	1	15			31
11:00	18		28					23:00	1		2				
11:15	18		23					23:15	2		1				
11:30	20		34					23:30	0		4				
11:45	11	67	31	116			183	23:45	0	3	2	9			12
Total Vol.		329		733			**1062**			620		1060			**1680**

Daily Totals

NB	SB	EB	WB	Combined
949	1793			**2742**

	AM			PM		
Split %	31.0%	69.0%	**38.7%**	36.9%	63.1%	**61.3%**
Peak Hour	10:30	08:15	**11:30**	17:30	15:00	**13:15**
Volume	84	145	**205**	97	155	**220**
P.H.F.	0.78	0.74	**0.87**	0.54	0.82	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-079

Location: Kettner Blvd. btwn. Washington St. & Vine St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		55				12:00		380			
00:15		43				12:15		381			
00:30		28				12:30		400			
00:45		37	163		163	12:45		316	1477		1477
01:00		20				13:00		342			
01:15		19				13:15		341			
01:30		10				13:30		306			
01:45		14	63		63	13:45		303	1292		1292
02:00		18				14:00		326			
02:15		9				14:15		319			
02:30		6				14:30		304			
02:45		8	41		41	14:45		316	1265		1265
03:00		10				15:00		310			
03:15		10				15:15		281			
03:30		32				15:30		325			
03:45		22	74		74	15:45		306	1222		1222
04:00		63				16:00		333			
04:15		75				16:15		470			
04:30		141				16:30		470			
04:45		232	511		511	16:45		409	1682		1682
05:00		238				17:00		460			
05:15		298				17:15		439			
05:30		239				17:30		356			
05:45		279	1054		1054	17:45		356	1611		1611
06:00		233				18:00		348			
06:15		231				18:15		335			
06:30		255				18:30		299			
06:45		265	984		984	18:45		331	1313		1313
07:00		251				19:00		280			
07:15		284				19:15		271			
07:30		309				19:30		268			
07:45		360	1204		1204	19:45		279	1098		1098
08:00		367				20:00		253			
08:15		355				20:15		267			
08:30		378				20:30		244			
08:45		382	1482		1482	20:45		239	1003		1003
09:00		356				21:00		216			
09:15		381				21:15		221			
09:30		360				21:30		180			
09:45		407	1504		1504	21:45		179	796		796
10:00		344				22:00		148			
10:15		350				22:15		156			
10:30		353				22:30		147			
10:45		375	1422		1422	22:45		119	570		570
11:00		370				23:00		119			
11:15		396				23:15		77			
11:30		400				23:30		69			
11:45		379	1545		1545	23:45		81	346		346
Total Vol.			10047		**10047**				13675		**13675**

Daily Totals

NB	SB	EB	WB	Combined
	23722			**23722**

	AM		PM	
Split %	100.0%	**42.4%**	100.0%	**57.6%**
Peak Hour	11:15	**11:15**	16:15	**16:15**
Volume	1555	**1555**	1809	**1809**
P.H.F.	0.97	**0.97**	0.96	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-080

Location: Kettner Blvd. btwn. Vine St. & Sassafras St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		53				12:00		373			
00:15		47				12:15		377			
00:30		27				12:30		403			
00:45		36	163		163	12:45		382	1535		1535
01:00		23				13:00		349			
01:15		20				13:15		341			
01:30		11				13:30		305			
01:45		15	69		69	13:45		305	1300		1300
02:00		20				14:00		343			
02:15		10				14:15		324			
02:30		6				14:30		312			
02:45		9	45		45	14:45		317	1296		1296
03:00		10				15:00		300			
03:15		9				15:15		283			
03:30		28				15:30		318			
03:45		17	64		64	15:45		297	1198		1198
04:00		54				16:00		328			
04:15		68				16:15		463			
04:30		126				16:30		469			
04:45		216	464		464	16:45		399	1659		1659
05:00		213				17:00		450			
05:15		273				17:15		428			
05:30		207				17:30		353			
05:45		242	935		935	17:45		376	1607		1607
06:00		212				18:00		342			
06:15		215				18:15		329			
06:30		234				18:30		280			
06:45		239	900		900	18:45		320	1271		1271
07:00		238				19:00		266			
07:15		249				19:15		254			
07:30		292				19:30		250			
07:45		343	1122		1122	19:45		270	1040		1040
08:00		351				20:00		249			
08:15		333				20:15		273			
08:30		342				20:30		238			
08:45		364	1390		1390	20:45		231	991		991
09:00		342				21:00		211			
09:15		362				21:15		200			
09:30		357				21:30		192			
09:45		381	1442		1442	21:45		191	794		794
10:00		349				22:00		147			
10:15		339				22:15		154			
10:30		349				22:30		138			
10:45		369	1406		1406	22:45		124	563		563
11:00		366				23:00		114			
11:15		371				23:15		75			
11:30		402				23:30		64			
11:45		348	1487		1487	23:45		81	334		334
Total Vol.			9487		**9487**				13588		**13588**

Daily Totals

NB	SB	EB	WB	Combined
	23075			**23075**

	AM		PM	
Split %	100.0%	**41.1%**	100.0%	**58.9%**
Peak Hour	10:45	**10:45**	16:15	**16:15**
Volume	1508	**1508**	1781	**1781**
P.H.F.	0.94	**0.94**	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-081

Location: Kettner Blvd. btwn. Redwood St. & Palm St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		42				12:00		280			
00:15		32				12:15		337			
00:30		30				12:30		275			
00:45		23	127		127	12:45		310	1202		1202
01:00		17				13:00		291			
01:15		12				13:15		269			
01:30		11				13:30		276			
01:45		16	56		56	13:45		280	1116		1116
02:00		9				14:00		264			
02:15		8				14:15		276			
02:30		7				14:30		267			
02:45		9	33		33	14:45		264	1071		1071
03:00		9				15:00		247			
03:15		27				15:15		275			
03:30		20				15:30		272			
03:45		53	109		109	15:45		294	1088		1088
04:00		72				16:00		414			
04:15		100				16:15		397			
04:30		168				16:30		354			
04:45		177	517		517	16:45		410	1575		1575
05:00		222				17:00		383			
05:15		190				17:15		326			
05:30		214				17:30		290			
05:45		195	821		821	17:45		304	1303		1303
06:00		182				18:00		302			
06:15		230				18:15		240			
06:30		232				18:30		272			
06:45		209	853		853	18:45		235	1049		1049
07:00		232				19:00		239			
07:15		257				19:15		214			
07:30		317				19:30		222			
07:45		317	1123		1123	19:45		200	875		875
08:00		335				20:00		212			
08:15		304				20:15		208			
08:30		326				20:30		194			
08:45		316	1281		1281	20:45		187	801		801
09:00		297				21:00		177			
09:15		314				21:15		164			
09:30		357				21:30		144			
09:45		306	1274		1274	21:45		132	617		617
10:00		302				22:00		155			
10:15		281				22:15		133			
10:30		329				22:30		122			
10:45		317	1229		1229	22:45		106	516		516
11:00		331				23:00		57			
11:15		320				23:15		57			
11:30		311				23:30		69			
11:45		318	1280		1280	23:45		47	230		230
Total Vol.			8703		**8703**				11443		**11443**

Daily Totals

NB	SB	EB	WB	Combined
	20146			**20146**

	AM		PM	
Split %	100.0%	**43.2%**	100.0%	**56.8%**
Peak Hour	10:30	**10:30**	16:00	**16:00**
Volume	1297	**1297**	1575	**1575**
P.H.F.	0.98	**0.98**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just N/o Taylor St	Project:	10-4143-036	4,318	3,139	0	0	7,457

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		6					12:00	88		58				
00:15	11		3					12:15	58		67				
00:30	7		3					12:30	68		69				
00:45	5	32	1	13			45	12:45	84	298	57	251			549
01:00	5		3					13:00	50		43				
01:15	1		2					13:15	70		52				
01:30	2		3					13:30	69		32				
01:45	4	12	1	9			21	13:45	74	263	65	192			455
02:00	3		1					14:00	75		41				
02:15	6		3					14:15	62		55				
02:30	4		0					14:30	61		44				
02:45	1	14	1	5			19	14:45	69	267	50	190			457
03:00	3		0					15:00	75		43				
03:15	2		1					15:15	66		71				
03:30	3		3					15:30	70		59				
03:45	8	16	5	9			25	15:45	96	307	61	234			541
04:00	2		7					16:00	136		52				
04:15	3		4					16:15	154		60				
04:30	10		5					16:30	129		49				
04:45	7	22	11	27			49	16:45	139	558	42	203			761
05:00	10		5					17:00	103		66				
05:15	9		12					17:15	110		69				
05:30	15		20					17:30	120		65				
05:45	24	58	19	56			114	17:45	87	420	64	264			684
06:00	28		19					18:00	63		67				
06:15	22		32					18:15	46		40				
06:30	31		47					18:30	45		43				
06:45	46	127	53	151			278	18:45	30	184	30	180			364
07:00	41		53					19:00	33		28				
07:15	31		47					19:15	33		23				
07:30	51		64					19:30	44		21				
07:45	50	173	63	227			400	19:45	32	142	17	89			231
08:00	38		61					20:00	31		18				
08:15	48		44					20:15	23		12				
08:30	44		50					20:30	33		16				
08:45	44	174	52	207			381	20:45	26	113	8	54			167
09:00	46		61					21:00	34		15				
09:15	60		53					21:15	33		8				
09:30	64		62					21:30	31		8				
09:45	56	226	59	235			461	21:45	33	131	8	39			170
10:00	59		59					22:00	38		8				
10:15	59		58					22:15	40		11				
10:30	79		52					22:30	20		9				
10:45	81	278	40	209			487	22:45	25	123	11	39			162
11:00	58		54					23:00	30		8				
11:15	79		55					23:15	13		6				
11:30	86		77					23:30	14		4				
11:45	73	296	49	235			531	23:45	27	84	3	21			105
Total Vol.		1428		1383			**2811**			2890		1756			**4646**

	NB	SB	EB	WB	Total
Daily Totals :	**4,318**	**3,139**	**0**	**0**	**7,457**

	AM			PM			
Split %	50.8%	49.2%	**37.7%**	62.2%	37.8%		**62.3%**
AM				**PM**			
Peak Hr.	11:15	11:30	**11:15**	**Peak Hr.**	16:00	17:15	**16:00**
Volume	326	251	**565**	**Volume**	558	265	**761**
P.H.F.	0.926	0.815	**0.867**	**P.H.F.**	0.906	0.960	**0.889**
7 - 9 Vol.	347	434	**781**	**4 - 6 Vol.**	978	467	**1445**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:00	17:00	**16:00**
Volume	187	235	**419**	**Volume**	558	264	**761**
P.H.F.	0.917	0.918	**0.911**	**P.H.F.**	0.906	0.957	**0.889**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just S/o Taylor St	Project: 10-4143-037	8,122	5,199	0	0	13,321

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		3					12:00	120		82				
00:15	11		2					12:15	111		80				
00:30	11		5					12:30	103		82				
00:45	10	38	8	18			56	12:45	105	439	93	337			776
01:00	4		5					13:00	101		91				
01:15	3		5					13:15	96		86				
01:30	4		2					13:30	108		84				
01:45	2	13	2	14			27	13:45	121	426	85	346			772
02:00	4		4					14:00	108		84				
02:15	7		0					14:15	133		73				
02:30	3		1					14:30	150		84				
02:45	0	14	5	10			24	14:45	170	561	82	323			884
03:00	4		2					15:00	188		85				
03:15	4		2					15:15	194		81				
03:30	6		4					15:30	251		112				
03:45	12	26	6	14			40	15:45	224	857	90	368			1225
04:00	4		8					16:00	284		90				
04:15	1		6					16:15	263		88				
04:30	7		13					16:30	288		97				
04:45	9	21	26	53			74	16:45	289	1124	83	358			1482
05:00	23		19					17:00	283		82				
05:15	20		26					17:15	322		83				
05:30	34		34					17:30	242		75				
05:45	44	121	86	165			286	17:45	175	1022	82	322			1344
06:00	33		66					18:00	151		72				
06:15	53		109					18:15	113		58				
06:30	77		111					18:30	94		53				
06:45	70	233	115	401			634	18:45	80	438	57	240			678
07:00	91		121					19:00	83		44				
07:15	89		133					19:15	62		40				
07:30	86		120					19:30	54		42				
07:45	85	351	115	489			840	19:45	52	251	33	159			410
08:00	87		95					20:00	61		31				
08:15	95		82					20:15	50		38				
08:30	93		83					20:30	40		28				
08:45	96	371	95	355			726	20:45	39	190	28	125			315
09:00	92		77					21:00	28		26				
09:15	89		72					21:15	39		16				
09:30	104		82					21:30	33		17				
09:45	91	376	57	288			664	21:45	31	131	18	77			208
10:00	94		59					22:00	30		11				
10:15	101		68					22:15	37		16				
10:30	99		80					22:30	23		19				
10:45	110	404	91	298			702	22:45	24	114	16	62			176
11:00	113		71					23:00	25		14				
11:15	148		82					23:15	19		8				
11:30	138		84					23:30	11		13				
11:45	132	531	100	337			868	23:45	15	70	5	40			110
Total Vol.		2499		2442			**4941**			5623		2757			**8380**

	NB	SB	EB	WB	Total
Daily Totals :	8,122	5,199	0	0	13,321

	AM			PM			
Split %	50.6%	49.4%	**37.1%**		67.1%	32.9%	**62.9%**
AM				**PM**			
Peak Hr.	11:15	06:45	**11:15**	**Peak Hr.**	16:30	15:30	**16:30**
Volume	538	489	**886**	**Volume**	1182	380	**1527**
P.H.F.	0.909	0.919	**0.955**	**P.H.F.**	0.918	0.848	**0.943**
7 - 9 Vol.	722	844	**1566**	**4 - 6 Vol.**	2146	680	**2826**
Peak Hr.	08:00	07:00	**07:00**	**Peak Hr.**	16:30	16:00	**16:30**
Volume	371	489	**840**	**Volume**	1182	358	**1527**
P.H.F.	0.966	0.919	**0.946**	**P.H.F.**	0.918	0.923	**0.943**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-045

Location: Pacific Hy (STATION#2653/FILE#MC1190-10) between Sports Arena Blvd & Kurtz St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	12		12					12:00	164		209				
00:15	7		9					12:15	168		221				
00:30	10		9					12:30	157		269				
00:45	7	36	13	43			79	12:45	157	646	247	946			1592
01:00	12		22					13:00	181		246				
01:15	14		10					13:15	168		233				
01:30	4		10					13:30	173		215				
01:45	6	36	10	52			88	13:45	146	668	211	905			1573
02:00	5		7					14:00	154		209				
02:15	13		4					14:15	155		209				
02:30	6		0					14:30	159		215				
02:45	10	34	6	17			51	14:45	165	633	224	857			1490
03:00	6		9					15:00	174		204				
03:15	13		2					15:15	194		231				
03:30	9		16					15:30	224		256				
03:45	11	39	7	34			73	15:45	196	788	243	934			1722
04:00	9		12					16:00	218		253				
04:15	20		27					16:15	194		252				
04:30	15		28					16:30	227		296				
04:45	33	77	27	94			171	16:45	232	871	287	1088			1959
05:00	17		36					17:00	223		268				
05:15	35		41					17:15	274		233				
05:30	51		64					17:30	256		204				
05:45	86	189	91	232			421	17:45	195	948	195	900			1848
06:00	56		90					18:00	139		191				
06:15	77		98					18:15	112		153				
06:30	90		126					18:30	91		156				
06:45	145	368	151	465			833	18:45	91	433	146	646			1079
07:00	130		128					19:00	77		127				
07:15	141		146					19:15	62		99				
07:30	150		178					19:30	57		98				
07:45	162	583	193	645			1228	19:45	55	251	92	416			667
08:00	183		188					20:00	62		83				
08:15	180		192					20:15	43		69				
08:30	163		144					20:30	52		74				
08:45	148	674	156	680			1354	20:45	47	204	68	294			498
09:00	145		127					21:00	50		77				
09:15	149		145					21:15	33		71				
09:30	138		143					21:30	50		72				
09:45	165	597	156	571			1168	21:45	39	172	60	280			452
10:00	141		150					22:00	28		43				
10:15	135		169					22:15	40		60				
10:30	158		133					22:30	30		44				
10:45	137	571	169	621			1192	22:45	24	122	38	185			307
11:00	173		166					23:00	28		28				
11:15	190		175					23:15	23		22				
11:30	152		204					23:30	17		47				
11:45	149	664	212	757			1421	23:45	18	86	20	117			203
Total Vol.		3868		4211			**8079**			5822		7568			**13390**

Daily Totals

NB	SB	EB	WB	Combined
9690	11779			**21469**

	AM			PM		
Split %	47.9%	52.1%	**37.6%**	43.5%	56.5%	**62.4%**
Peak Hour	07:45	11:45	**11:45**	16:45	16:15	**16:30**
Volume	688	911	**1549**	985	1103	**2040**
P.H.F.	0.94	0.85	**0.91**	0.92	0.93	**0.98**

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-001
Location: Pacific Hwy between Barnett Ave & Enterprise St File No. MC0305-10

Start	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	0			16	195				
12:15	0	0			12	204				
12:30	0	0			15	196				
12:45	0	0			16	189	59	784		
1:00	0	0			9	198				
1:15	0	0			7	175				
1:30	0	0			8	195				
1:45	0	0			6	177	30	745		
2:00	0	0			12	212				
2:15	0	0			5	200				
2:30	0	0			3	282				
2:45	0	0			5	219	25	913		
3:00	0	0			8	260				
3:15	0	0			6	206				
3:30	0	0			4	278				
3:45	0	0			8	253	26	997		
4:00	0	0			13	300				
4:15	0	0			19	259				
4:30	0	0			28	343				
4:45	0	0			15	308	75	1210		
5:00	0	0			20	290				
5:15	0	0			27	236				
5:30	0	0			38	207				
5:45	0	0			33	196	118	929		
6:00	0	0			45	209				
6:15	0	0			35	173				
6:30	0	0			53	176				
6:45	0	0			66	190	199	748		
7:00	0	0			85	167				
7:15	0	0			92	167				
7:30	0	0			97	149				
7:45	0	0			102	165	376	648		
8:00	0	0			98	136				
8:15	0	0			108	152				
8:30	0	0			105	135				
8:45	0	0			101	122	412	545		
9:00	0	0			107	160				
9:15	0	0			110	124				
9:30	0	0			124	132	0			
9:45	0	0			132	114	473	530		
10:00	0	0			139	95				
10:15	0	0			146	89				
10:30	0	0			139	79				
10:45	0	0			160	74	584	337		
11:00	0	0			167	49				
11:15	0	0			165	34				
11:30	0	0			191	58				
11:45	0	0			147	28	670	169		
Total	0	0	0	0	3047	8555	3047	8555	0	0
Combined Total	0		0		11602		11602		0	
AM Peak					11:45 AM					
Vol.					742					
P.H.F.					0.909					
PM Peak						4:00 PM				
Vol.						1210				
P.H.F.						0.882				
Percentage					26.3%	73.7%				

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-073

Location: Pacific Highway btwn. Barnett Ave. & Washington St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	40		69					12:00	471		401				
00:15	35		43					12:15	456		459				
00:30	44		31					12:30	424		443				
00:45	22	141	36	179			320	12:45	417	1768	470	1773			3541
01:00	19		33					13:00	382		438				
01:15	21		33					13:15	391		482				
01:30	15		20					13:30	431		426				
01:45	17	72	18	104			176	13:45	378	1582	478	1824			3406
02:00	22		22					14:00	369		459				
02:15	16		17					14:15	379		493				
02:30	14		19					14:30	398		524				
02:45	30	82	15	73			155	14:45	439	1585	525	2001			3586
03:00	22		19					15:00	445		582				
03:15	31		14					15:15	440		555				
03:30	30		25					15:30	449		709				
03:45	56	139	25	83			222	15:45	482	1816	721	2567			4383
04:00	46		30					16:00	459		775				
04:15	100		87					16:15	431		699				
04:30	108		104					16:30	434		748				
04:45	158	412	133	354			766	16:45	464	1788	649	2871			4659
05:00	208		139					17:00	443		697				
05:15	322		166					17:15	479		583				
05:30	289		185					17:30	425		560				
05:45	355	1174	210	700			1874	17:45	407	1754	534	2374			4128
06:00	347		228					18:00	335		488				
06:15	420		221					18:15	310		404				
06:30	494		185					18:30	301		387				
06:45	543	1804	215	849			2653	18:45	282	1228	339	1618			2846
07:00	607		242					19:00	221		353				
07:15	573		260					19:15	201		308				
07:30	546		319					19:30	205		288				
07:45	613	2339	302	1123			3462	19:45	190	817	262	1211			2028
08:00	592		308					20:00	160		249				
08:15	550		353					20:15	169		244				
08:30	496		411					20:30	165		243				
08:45	476	2114	304	1376			3490	20:45	126	620	224	960			1580
09:00	404		322					21:00	121		204				
09:15	375		296					21:15	112		198				
09:30	335		312					21:30	124		186				
09:45	417	1531	304	1234			2765	21:45	126	483	154	742			1225
10:00	355		304					22:00	109		146				
10:15	380		358					22:15	104		142				
10:30	346		343					22:30	113		112				
10:45	380	1461	326	1331			2792	22:45	101	427	87	487			914
11:00	360		354					23:00	62		80				
11:15	398		369					23:15	79		66				
11:30	412		400					23:30	53		94				
11:45	454	1624	408	1531			3155	23:45	63	257	62	302			559
Total Vol.		12893		8937			**21830**			14125		18730			**32855**

Daily Totals

NB	SB	EB	WB	Combined
27018	27667			**54685**

	AM			PM		
Split %	59.1%	40.9%	**39.9%**	43.0%	57.0%	**60.1%**
Peak Hour	07:00	11:45	**07:45**	15:15	15:45	**15:45**
Volume	2339	1711	**3625**	1830	2943	**4749**
P.H.F.	0.95	0.93	**0.99**	0.95	0.95	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-074

Location: Pacific Highway btwn. Washington St. & Sassafras St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	14		6					12:00	145		67				
00:15	12		6					12:15	148		92				
00:30	15		2					12:30	147		88				
00:45	10	51	5	19			70	12:45	139	579	75	322			901
01:00	7		7					13:00	130		90				
01:15	9		2					13:15	120		92				
01:30	6		5					13:30	115		80				
01:45	8	30	2	16			46	13:45	133	498	91	353			851
02:00	5		2					14:00	124		77				
02:15	3		1					14:15	116		72				
02:30	4		6					14:30	130		102				
02:45	2	14	3	12			26	14:45	143	513	94	345			858
03:00	6		5					15:00	117		83				
03:15	7		2					15:15	114		98				
03:30	1		2					15:30	109		65				
03:45	7	21	5	14			35	15:45	146	486	95	341			827
04:00	6		2					16:00	117		102				
04:15	11		8					16:15	131		87				
04:30	10		13					16:30	130		96				
04:45	14	41	16	39			80	16:45	116	494	81	366			860
05:00	18		14					17:00	128		118				
05:15	22		21					17:15	175		94				
05:30	20		28					17:30	134		95				
05:45	24	84	16	79			163	17:45	125	562	80	387			949
06:00	27		16					18:00	110		97				
06:15	33		15					18:15	87		73				
06:30	59		31					18:30	97		64				
06:45	58	177	37	99			276	18:45	73	367	54	288			655
07:00	56		32					19:00	81		50				
07:15	55		36					19:15	88		55				
07:30	89		67					19:30	82		61				
07:45	91	291	56	191			482	19:45	66	317	67	233			550
08:00	82		40					20:00	59		50				
08:15	84		66					20:15	62		43				
08:30	89		66					20:30	79		47				
08:45	100	355	49	221			576	20:45	46	246	47	187			433
09:00	112		71					21:00	41		50				
09:15	79		60					21:15	52		29				
09:30	103		75					21:30	54		29				
09:45	119	413	73	279			692	21:45	45	192	28	136			328
10:00	108		53					22:00	49		29				
10:15	120		81					22:15	53		21				
10:30	100		62					22:30	45		12				
10:45	126	454	74	270			724	22:45	46	193	12	74			267
11:00	117		73					23:00	32		13				
11:15	136		83					23:15	25		9				
11:30	137		79					23:30	24		12				
11:45	150	540	83	318			858	23:45	13	94	10	44			138
Total Vol.		2471		1557			**4028**			4541		3076			**7617**

Daily Totals

NB	SB	EB	WB	Combined
7012	4633			**11645**

	AM			PM		
Split %	61.3%	38.7%	**34.6%**	59.6%	40.4%	**65.4%**
Peak Hour	11:45	11:45	**11:45**	12:00	16:30	**17:00**
Volume	590	330	**920**	579	389	**949**
P.H.F.	0.98	0.90	**0.96**	0.98	0.82	**0.88**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-044

Location: Pacific Hy (STATION#2657/FILE#MC1189-10) between Palm St & Sassafras St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	38		24					12:00	169		184				
00:15	17		20					12:15	154		151				
00:30	31		22					12:30	168		189				
00:45	26	112	31	97			209	12:45	150	641	178	702			1343
01:00	38		22					13:00	157		165				
01:15	26		20					13:15	170		172				
01:30	17		9					13:30	182		181				
01:45	8	89	8	59			148	13:45	149	658	178	696			1354
02:00	11		8					14:00	171		133				
02:15	6		3					14:15	154		140				
02:30	7		5					14:30	168		165				
02:45	4	28	3	19			47	14:45	165	658	152	590			1248
03:00	2		7					15:00	151		123				
03:15	1		1					15:15	170		153				
03:30	3		8					15:30	149		137				
03:45	7	13	16	32			45	15:45	192	662	142	555			1217
04:00	14		18					16:00	154		173				
04:15	15		33					16:15	156		172				
04:30	19		49					16:30	168		174				
04:45	30	78	71	171			249	16:45	159	637	222	741			1378
05:00	28		79					17:00	167		235				
05:15	30		83					17:15	199		199				
05:30	51		76					17:30	178		194				
05:45	51	160	75	313			473	17:45	141	685	191	819			1504
06:00	55		79					18:00	139		172				
06:15	50		91					18:15	115		147				
06:30	63		105					18:30	92		139				
06:45	63	231	121	396			627	18:45	110	456	121	579			1035
07:00	67		117					19:00	107		129				
07:15	80		131					19:15	92		104				
07:30	93		146					19:30	63		94				
07:45	112	352	151	545			897	19:45	78	340	85	412			752
08:00	116		143					20:00	84		102				
08:15	121		168					20:15	77		73				
08:30	105		144					20:30	73		96				
08:45	124	466	138	593			1059	20:45	91	325	74	345			670
09:00	102		114					21:00	84		76				
09:15	157		158					21:15	90		75				
09:30	119		149					21:30	93		76				
09:45	142	520	131	552			1072	21:45	85	352	64	291			643
10:00	117		134					22:00	94		62				
10:15	155		156					22:15	84		62				
10:30	161		133					22:30	53		51				
10:45	144	577	139	562			1139	22:45	53	284	28	203			487
11:00	164		153					23:00	52		26				
11:15	148		166					23:15	46		23				
11:30	149		196					23:30	37		16				
11:45	155	616	189	704			1320	23:45	31	166	9	74			240
Total Vol.		3242		4043			**7285**			5864		6007			**11871**

Daily Totals

	NB	SB	EB	WB	Combined
	9106	10050			**19156**

	AM			PM		
Split %	44.5%	55.5%	**38.0%**	49.4%	50.6%	**62.0%**
Peak Hour	11:45	11:15	**11:45**	16:45	16:45	**16:45**
Volume	646	735	**1359**	703	850	**1553**
P.H.F.	0.96	0.94	**0.95**	0.91	0.90	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-069

Location: Congress St. btwn. Taylor St. & Twiggs St.

AM Period	NB		SB		EB	WB	PM Period	NB		SB		EB	WB	
00:00	6		4				12:00	45		34				
00:15	4		5				12:15	32		23				
00:30	2		3				12:30	28		24				
00:45	5	17	2	14		31	12:45	37	142	31	112			254
01:00	2		6				13:00	37		38				
01:15	1		2				13:15	32		37				
01:30	2		0				13:30	40		27				
01:45	1	6	1	9		15	13:45	37	146	47	149			295
02:00	2		1				14:00	32		38				
02:15	0		0				14:15	38		40				
02:30	1		4				14:30	33		42				
02:45	1	4	1	6		10	14:45	44	147	44	164			311
03:00	2		0				15:00	37		43				
03:15	0		1				15:15	41		47				
03:30	1		2				15:30	34		40				
03:45	1	4	1	4		8	15:45	34	146	37	167			313
04:00	3		2				16:00	44		40				
04:15	2		1				16:15	35		26				
04:30	3		5				16:30	41		32				
04:45	2	10	1	9		19	16:45	32	152	36	134			286
05:00	3		0				17:00	57		27				
05:15	6		4				17:15	52		34				
05:30	4		4				17:30	47		40				
05:45	11	24	3	11		35	17:45	40	196	40	141			337
06:00	11		4				18:00	36		39				
06:15	5		12				18:15	34		55				
06:30	7		6				18:30	50		46				
06:45	11	34	14	36		70	18:45	37	157	63	203			360
07:00	16		20				19:00	28		58				
07:15	16		14				19:15	31		36				
07:30	27		20				19:30	35		27				
07:45	19	78	29	83		161	19:45	24	118	26	147			265
08:00	26		15				20:00	41		24				
08:15	17		20				20:15	39		19				
08:30	21		13				20:30	49		28				
08:45	25	89	43	91		180	20:45	38	167	16	87			254
09:00	26		31				21:00	39		18				
09:15	30		17				21:15	49		20				
09:30	27		37				21:30	39		11				
09:45	18	101	34	119		220	21:45	21	148	13	62			210
10:00	21		36				22:00	15		17				
10:15	24		25				22:15	16		11				
10:30	23		33				22:30	18		7				
10:45	19	87	29	123		210	22:45	11	60	6	41			101
11:00	25		32				23:00	10		7				
11:15	29		28				23:15	9		4				
11:30	20		37				23:30	11		6				
11:45	28	102	25	122		224	23:45	7	37	6	23			60
Total Vol.		556		627		**1183**			1616		1430			**3046**

Daily Totals

NB	SB	EB	WB	Combined
2172	2057			**4229**

	AM			PM		
Split %	47.0%	53.0%	**28.0%**	53.1%	46.9%	**72.0%**
Peak Hour	11:45	09:30	**11:15**	17:00	18:15	**18:15**
Volume	133	132	**246**	196	222	**371**
P.H.F.	0.74	0.89	**0.78**	0.86	0.88	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-070

Location: Congress St. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	8		6					12:00	49		47				
00:15	1		6					12:15	34		25				
00:30	1		5					12:30	36		25				
00:45	4	14	3	20			34	12:45	30	149	43	140			289
01:00	2		3					13:00	42		51				
01:15	0		2					13:15	24		42				
01:30	1		0					13:30	38		42				
01:45	1	4	1	6			10	13:45	30	134	36	171			305
02:00	1		0					14:00	22		43				
02:15	0		1					14:15	26		30				
02:30	1		3					14:30	31		33				
02:45	2	4	1	5			9	14:45	38	117	39	145			262
03:00	0		1					15:00	32		33				
03:15	4		3					15:15	30		40				
03:30	1		1					15:30	30		48				
03:45	1	6	0	5			11	15:45	32	124	51	172			296
04:00	0		1					16:00	42		46				
04:15	2		1					16:15	27		34				
04:30	1		4					16:30	30		32				
04:45	2	5	2	8			13	16:45	36	135	40	152			287
05:00	4		3					17:00	56		35				
05:15	5		2					17:15	54		35				
05:30	5		4					17:30	41		38				
05:45	10	24	3	12			36	17:45	35	186	45	153			339
06:00	12		5					18:00	29		42				
06:15	5		12					18:15	39		55				
06:30	9		7					18:30	44		55				
06:45	11	37	14	38			75	18:45	37	149	57	209			358
07:00	16		13					19:00	30		65				
07:15	17		16					19:15	31		48				
07:30	26		21					19:30	31		36				
07:45	19	78	24	74			152	19:45	39	131	15	164			295
08:00	19		17					20:00	59		14				
08:15	13		21					20:15	64		12				
08:30	22		17					20:30	67		19				
08:45	23	77	36	91			168	20:45	46	236	16	61			297
09:00	27		31					21:00	52		20				
09:15	34		24					21:15	54		21				
09:30	29		32					21:30	49		14				
09:45	33	123	28	115			238	21:45	36	191	18	73			264
10:00	32		29					22:00	31		13				
10:15	27		31					22:15	21		4				
10:30	24		36					22:30	14		12				
10:45	13	96	13	109			205	22:45	9	75	8	37			112
11:00	54		18					23:00	11		8				
11:15	35		29					23:15	5		3				
11:30	28		43					23:30	9		6				
11:45	38	155	26	116			271	23:45	6	31	6	23			54
Total Vol.		623		599			**1222**			1658		1500			**3158**

Daily Totals

	NB	SB	EB	WB	Combined
	2281	2099			**4380**

	AM			PM		
Split %	51.0%	49.0%	**27.9%**	52.5%	47.5%	**72.1%**
Peak Hour	11:45	11:15	**11:15**	20:00	18:15	**18:15**
Volume	157	145	**295**	236	232	**382**
P.H.F.	0.80	0.77	**0.77**	0.88	0.89	**0.96**

Prepared by NDS/ATD

Volumes for: Thursday, October 28, 2010 | **City: San Diego**

Location: Congress St (STATION#2466/FILE#MC0940-10) | **Project: 10-4300-021**

Daily Totals	NB	SB	EB	WB	Total
	1,891	2,392	0	0	4,283

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		3					12:00	42		38				
00:15	2		4					12:15	37		35				
00:30	3		1					12:30	36		45				
00:45	2	7	0	8	15			12:45	39	154	58	176			330
01:00	0		5					13:00	30		39				
01:15	1		1					13:15	29		47				
01:30	4		3					13:30	37		39				
01:45	0	5	1	10	15			13:45	28	124	54	179			303
02:00	2		0					14:00	19		37				
02:15	0		2					14:15	23		40				
02:30	0		1					14:30	27		46				
02:45	0	2	0	3	5			14:45	34	103	41	164			267
03:00	1		3					15:00	19		36				
03:15	2		5					15:15	36		32				
03:30	5		2					15:30	30		44				
03:45	3	11	4	14	25			15:45	30	115	56	168			283
04:00	0		2					16:00	33		47				
04:15	1		0					16:15	34		38				
04:30	1		0					16:30	46		65				
04:45	2	4	3	5	9			16:45	58	171	58	208			379
05:00	2		0					17:00	48		55				
05:15	2		3					17:15	45		46				
05:30	7		3					17:30	48		54				
05:45	6	17	5	11	28			17:45	40	181	39	194			375
06:00	3		13					18:00	37		44				
06:15	14		12					18:15	52		36				
06:30	10		13					18:30	23		53				
06:45	22	49	17	55	104			18:45	31	143	41	174			317
07:00	11		13					19:00	18		39				
07:15	17		25					19:15	23		42				
07:30	23		35					19:30	16		31				
07:45	17	68	38	111	179			19:45	25	82	40	152			234
08:00	34		18					20:00	16		32				
08:15	23		17					20:15	17		24				
08:30	31		36					20:30	23		26				
08:45	41	129	32	103	232			20:45	15	71	36	118			189
09:00	24		28					21:00	13		30				
09:15	39		28					21:15	9		12				
09:30	30		31					21:30	14		29				
09:45	22	115	31	118	233			21:45	15	51	30	101			152
10:00	30		30					22:00	14		18				
10:15	33		38					22:15	6		16				
10:30	23		19					22:30	7		14				
10:45	36	122	28	115	237			22:45	3	30	10	58			88
11:00	27		33					23:00	3		17				
11:15	26		28					23:15	0		7				
11:30	29		29					23:30	2		3				
11:45	49	131	27	117	248			23:45	1	6	3	30			36
Total Vol.		660		670	**1330**					1231		1722			**2953**

	NB	SB	EB	WB	Total
Daily Totals :	**1,891**	**2,392**	**0**	**0**	**4,283**

	AM			PM			
Split %	49.6%	50.4%	**31.1%**	41.7%	58.3%		**68.9%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	164	145	**309**	**Volume**	199	224	**421**
P.H.F.	0.837	0.806	**0.954**	**P.H.F.**	0.858	0.862	**0.907**
7 - 9 Vol.	197	214	**411**	**4 - 6 Vol.**	352	402	**754**
Peak Hr.	08:00	07:15	**08:00**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	129	116	**232**	**Volume**	199	224	**421**
P.H.F.	0.787	0.763	**0.795**	**P.H.F.**	0.858	0.862	**0.907**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-067

Location: San Diego Ave. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		0					12:00	22		32				
00:15	2		2					12:15	20		39				
00:30	2		1					12:30	17		38				
00:45	3	11	6	9			20	12:45	19	78	37	146			224
01:00	1		4					13:00	13		38				
01:15	1		3					13:15	18		38				
01:30	2		0					13:30	18		34				
01:45	1	5	0	7			12	13:45	17	66	36	146			212
02:00	6		3					14:00	19		33				
02:15	1		0					14:15	33		39				
02:30	1		1					14:30	30		34				
02:45	0	8	0	4			12	14:45	35	117	31	137			254
03:00	0		0					15:00	28		34				
03:15	0		1					15:15	24		38				
03:30	2		1					15:30	29		42				
03:45	0	2	0	2			4	15:45	33	114	40	154			268
04:00	1		0					16:00	30		43				
04:15	1		3					16:15	32		39				
04:30	0		1					16:30	22		34				
04:45	0	2	2	6			8	16:45	36	120	25	141			261
05:00	2		3					17:00	51		27				
05:15	2		1					17:15	60		26				
05:30	6		0					17:30	55		30				
05:45	3	13	1	5			18	17:45	41	207	31	114			321
06:00	2		0					18:00	46		43				
06:15	5		5					18:15	27		36				
06:30	7		1					18:30	38		43				
06:45	5	19	7	13			32	18:45	47	158	40	162			320
07:00	12		5					19:00	29		23				
07:15	10		5					19:15	36		34				
07:30	19		13					19:30	28		21				
07:45	12	53	17	40			93	19:45	31	124	13	91			215
08:00	24		16					20:00	39		15				
08:15	11		18					20:15	34		15				
08:30	22		18					20:30	23		17				
08:45	37	94	23	75			169	20:45	25	121	14	61			182
09:00	31		23					21:00	29		24				
09:15	22		20					21:15	26		13				
09:30	26		20					21:30	19		14				
09:45	35	114	23	86			200	21:45	29	103	7	58			161
10:00	37		28					22:00	23		10				
10:15	28		28					22:15	14		8				
10:30	22		26					22:30	18		7				
10:45	20	107	26	108			215	22:45	19	74	15	40			114
11:00	24		24					23:00	6		7				
11:15	29		20					23:15	9		7				
11:30	22		22					23:30	4		4				
11:45	20	95	19	85			180	23:45	3	22	3	21			43
Total Vol.		523		440			**963**			1304		1271			**2575**

Daily Totals

NB	SB	EB	WB	Combined
1827	1711			**3538**

	AM			PM		
Split %	54.3%	45.7%	**27.2%**	50.6%	49.4%	**72.8%**
Peak Hour	09:30	11:45	**09:45**	17:00	15:30	**17:15**
Volume	126	128	**227**	207	164	**332**
P.H.F.	0.85	0.82	**0.87**	0.86	0.95	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-068

Location: San Diego Ave. btwn. Conde St. & Arista St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		2					12:00	25		29				
00:15	3		3					12:15	21		33				
00:30	1		1					12:30	28		30				
00:45	2	11	6	12			23	12:45	32	106	28	120			226
01:00	3		7					13:00	30		24				
01:15	2		3					13:15	33		21				
01:30	3		4					13:30	29		14				
01:45	3	11	2	16			27	13:45	28	120	19	78			198
02:00	2		2					14:00	32		22				
02:15	1		1					14:15	30		20				
02:30	2		0					14:30	33		24				
02:45	0	5	1	4			9	14:45	39	134	41	107			241
03:00	0		0					15:00	31		52				
03:15	0		1					15:15	44		49				
03:30	1		1					15:30	40		43				
03:45	1	2	0	2			4	15:45	35	150	40	184			334
04:00	2		1					16:00	30		45				
04:15	2		1					16:15	34		47				
04:30	1		2					16:30	32		51				
04:45	6	11	1	5			16	16:45	44	140	55	198			338
05:00	1		5					17:00	54		58				
05:15	3		2					17:15	72		60				
05:30	7		3					17:30	69		52				
05:45	7	18	5	15			33	17:45	61	256	28	198			454
06:00	6		3					18:00	45		48				
06:15	11		1					18:15	33		49				
06:30	14		4					18:30	37		38				
06:45	13	44	19	27			71	18:45	46	161	53	188			349
07:00	24		14					19:00	45		39				
07:15	27		12					19:15	35		42				
07:30	21		18					19:30	38		47				
07:45	35	107	21	65			172	19:45	30	148	46	174			322
08:00	34		15					20:00	36		39				
08:15	23		22					20:15	33		33				
08:30	26		13					20:30	28		38				
08:45	43	126	19	69			195	20:45	28	125	36	146			271
09:00	33		22					21:00	25		45				
09:15	24		30					21:15	24		45				
09:30	38		26					21:30	21		28				
09:45	47	142	13	91			233	21:45	15	85	32	150			235
10:00	35		29					22:00	25		30				
10:15	30		21					22:15	13		13				
10:30	28		19					22:30	16		19				
10:45	29	122	22	91			213	22:45	14	68	23	85			153
11:00	22		16					23:00	9		15				
11:15	20		19					23:15	10		9				
11:30	24		14					23:30	5		11				
11:45	29	95	21	70			165	23:45	3	27	8	43			70
Total Vol.		694		467			**1161**			1520		1671			**3191**

Daily Totals

NB	SB	EB	WB	Combined
2214	2138			**4352**

	AM			PM		
Split %	59.8%	40.2%	**26.7%**	47.6%	52.4%	**73.3%**
Peak Hour	09:30	11:45	**09:15**	17:00	16:45	**16:45**
Volume	150	113	**242**	256	225	**464**
P.H.F.	0.80	0.86	**0.95**	0.89	0.94	**0.88**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: San Diego Ave (STATION#2460/FILE#MC0424-10)	Project:	10-4169-012	5,458	4,702	0	0	10,160

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		16					12:00	106		60				
00:15	7		16					12:15	82		76				
00:30	7		8					12:30	87		72				
00:45	1	20	10	50			70	12:45	92	367	70	278			645
01:00	6		5					13:00	83		69				
01:15	4		4					13:15	86		82				
01:30	3		2					13:30	73		66				
01:45	1	14	1	12			26	13:45	84	326	71	288			614
02:00	2		5					14:00	90		70				
02:15	2		3					14:15	92		83				
02:30	8		5					14:30	111		82				
02:45	0	12	2	15			27	14:45	105	398	87	322			720
03:00	1		2					15:00	99		83				
03:15	4		0					15:15	92		93				
03:30	2		5					15:30	103		87				
03:45	3	10	3	10			20	15:45	113	407	86	349			756
04:00	2		9					16:00	108		86				
04:15	1		2					16:15	123		82				
04:30	4		1					16:30	135		94				
04:45	5	12	3	15			27	16:45	131	497	82	344			841
05:00	3		9					17:00	146		97				
05:15	5		11					17:15	162		100				
05:30	10		9					17:30	119		98				
05:45	11	29	7	36			65	17:45	123	550	100	395			945
06:00	11		9					18:00	122		77				
06:15	16		16					18:15	122		63				
06:30	33		14					18:30	115		77				
06:45	29	89	22	61			150	18:45	96	455	67	284			739
07:00	48		25					19:00	121		90				
07:15	34		28					19:15	82		78				
07:30	50		31					19:30	85		80				
07:45	52	184	32	116			300	19:45	68	356	69	317			673
08:00	58		27					20:00	68		82				
08:15	52		28					20:15	71		65				
08:30	45		32					20:30	65		77				
08:45	78	233	50	137			370	20:45	47	251	105	329			580
09:00	62		39					21:00	31		86				
09:15	59		36					21:15	29		74				
09:30	73		39					21:30	38		101				
09:45	80	274	43	157			431	21:45	27	125	93	354			479
10:00	69		33					22:00	33		106				
10:15	90		49					22:15	27		100				
10:30	81		57					22:30	23		61				
10:45	85	325	57	196			521	22:45	19	102	56	323			425
11:00	79		55					23:00	11		35				
11:15	109		56					23:15	12		19				
11:30	90		59					23:30	5		24				
11:45	110	388	48	218			606	23:45	6	34	18	96			130
Total Vol.		1590		1023			**2613**			3868		3679			**7547**

	NB	SB	EB	WB	Total
Daily Totals :	**5,458**	**4,702**	**0**	**0**	**10,160**

	AM			PM			
Split %	60.8%	39.2%	**25.7%**	51.3%	48.7%		**74.3%**
AM				**PM**			
Peak Hr.	11:15	11:45	**11:45**	**Peak Hr.**	16:30	21:30	**16:30**
Volume	415	256	**641**	**Volume**	574	400	**947**
P.H.F.	0.943	0.842	**0.965**	**P.H.F.**	0.886	0.943	**0.904**
7 - 9 Vol.	417	253	**670**	**4 - 6 Vol.**	1047	739	**1786**
Peak Hr.	08:00	08:00	**08:00**	**Peak Hr.**	16:30	17:00	**16:30**
Volume	233	137	**370**	**Volume**	574	395	**947**
P.H.F.	0.747	0.685	**0.723**	**P.H.F.**	0.886	0.988	**0.904**

Prepared by NDS/ATD

VOLUME

San Diego Ave from Old Town Ave to Witherby St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_004

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	8		2				10		12:00	56		35				91	
00:15	8		7				15		12:15	97		35				132	
00:30	5		3				8		12:30	63		45				108	
00:45	3	24	3	15			6	39	12:45	60	276	54	169			114	445
01:00	2		1				3		13:00	60		44				104	
01:15	4		1				5		13:15	69		39				108	
01:30	1		2				3		13:30	53		30				83	
01:45	2	9	3	7			5	16	13:45	61	243	34	147			95	390
02:00	1		2				3		14:00	39		36				75	
02:15	2		2				4		14:15	48		45				93	
02:30	1		0				1		14:30	53		29				82	
02:45	0	4	2	6			2	10	14:45	58	198	34	144			92	342
03:00	3		0				3		15:00	49		31				80	
03:15	1		0				1		15:15	52		37				89	
03:30	0		1				1		15:30	46		40				86	
03:45	1	5	0	1			1	6	15:45	50	197	32	140			82	337
04:00	1		2				3		16:00	53		29				82	
04:15	2		2				4		16:15	44		33				77	
04:30	4		1				5		16:30	49		38				87	
04:45	3	10	4	9			7	19	16:45	53	199	41	141			94	340
05:00	5		5				10		17:00	59		52				111	
05:15	7		2				9		17:15	60		48				108	
05:30	10		3				13		17:30	53		51				104	
05:45	10	32	3	13			13	45	17:45	47	219	40	191			87	410
06:00	23		4				27		18:00	57		42				99	
06:15	20		8				28		18:15	71		38				109	
06:30	28		9				37		18:30	61		42				103	
06:45	26	97	10	31			36	128	18:45	47	236	44	166			91	402
07:00	26		15				41		19:00	65		45				110	
07:15	39		12				51		19:15	48		36				84	
07:30	52		16				68		19:30	33		42				75	
07:45	77	194	26	69			103	263	19:45	37	183	19	142			56	325
08:00	41		30				71		20:00	34		21				55	
08:15	63		15				78		20:15	44		23				67	
08:30	64		24				88		20:30	29		30				59	
08:45	41	209	28	97			69	306	20:45	22	129	18	92			40	221
09:00	46		33				79		21:00	30		23				53	
09:15	52		26				78		21:15	30		34				64	
09:30	33		35				68		21:30	32		23				55	
09:45	61	192	28	122			89	314	21:45	17	109	17	97			34	206
10:00	45		32				77		22:00	14		16				30	
10:15	45		22				67		22:15	16		13				29	
10:30	47		31				78		22:30	17		12				29	
10:45	44	181	34	119			78	300	22:45	9	56	10	51			19	107
11:00	51		29				80		23:00	14		7				21	
11:15	76		33				109		23:15	15		8				23	
11:30	49		35				84		23:30	7		7				14	
11:45	54	230	32	129			86	359	23:45	4	40	6	28			10	68
TOTALS		1187		618				1805	TOTALS		2085		1508				3593
SPLIT %		65.8%		34.2%				33.4%	SPLIT %		58.0%		42.0%				66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Peak Hour	11:45	11:45	11:45	PM Peak Hour	12:15	16:45	12:15
AM Pk Volume	270	147	417	PM Pk Volume	280	192	458
Pk Hr Factor	0.696	0.817	0.790	Pk Hr Factor	0.722	0.923	0.867
7 - 9 Volume	403	166	569	4 - 6 Volume	418	332	750
7 - 9 Peak Hour	07:45	08:00	07:45	4 - 6 Peak Hour	16:45	16:45	16:45
7 - 9 Pk Volume	245	97	340	4 - 6 Pk Volume	225	192	417
Pk Hr Factor	0.795	0.808	0.825	Pk Hr Factor	0.938	0.923	0.939

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-064

Location: Juan St. btwn. Taylor St. & Mason St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		1			12:00			32		28		
00:15			1		2			12:15			30		24		
00:30			0		1			12:30			29		41		
00:45			1	5	3	7	12	12:45			28	119	45	138	257
01:00			0		0			13:00			32		50		
01:15			3		2			13:15			30		39		
01:30			0		0			13:30			33		35		
01:45			4	7	3	5	12	13:45			41	136	44	168	304
02:00			0		5			14:00			45		46		
02:15			0		2			14:15			48		58		
02:30			1		0			14:30			48		57		
02:45			0	1	0	7	8	14:45			45	186	62	223	409
03:00			2		0			15:00			47		59		
03:15			3		1			15:15			46		70		
03:30			1		0			15:30			38		56		
03:45			0	6	0	1	7	15:45			54	185	73	258	443
04:00			0		4			16:00			47		66		
04:15			1		1			16:15			63		75		
04:30			2		1			16:30			63		52		
04:45			3	6	1	7	13	16:45			66	239	61	254	493
05:00			6		4			17:00			54		69		
05:15			2		7			17:15			50		57		
05:30			3		5			17:30			65		62		
05:45			8	19	14	30	49	17:45			59	228	48	236	464
06:00			6		14			18:00			69		50		
06:15			12		9			18:15			50		50		
06:30			22		18			18:30			44		48		
06:45			20	60	25	66	126	18:45			44	207	46	194	401
07:00			22		31			19:00			44		50		
07:15			21		36			19:15			44		29		
07:30			27		32			19:30			45		34		
07:45			34	104	44	143	247	19:45			34	167	48	161	328
08:00			30		39			20:00			36		28		
08:15			30		52			20:15			22		54		
08:30			26		48			20:30			26		31		
08:45			23	109	46	185	294	20:45			25	109	57	170	279
09:00			34		27			21:00			22		49		
09:15			37		40			21:15			15		25		
09:30			51		31			21:30			16		31		
09:45			33	155	38	136	291	21:45			10	63	25	130	193
10:00			53		49			22:00			11		27		
10:15			48		43			22:15			3		20		
10:30			36		33			22:30			8		19		
10:45			43	180	29	154	334	22:45			8	30	7	73	103
11:00			33		49			23:00			5		13		
11:15			55		38			23:15			3		5		
11:30			49		34			23:30			3		6		
11:45			36	173	20	141	314	23:45			4	15	7	31	46
Total Vol.				825		882	**1707**					1684		2036	**3720**

Daily Totals

NB	SB	EB	W8	**Combined**
		2509	2918	**5427**

	AM			**PM**		
Split %	48.3%	51.7%	**31.5%**	45.3%	54.7%	**68.5%**
Peak Hour	09:30	08:00	**09:30**	16:15	15:30	**16:15**
Volume	185	185	**346**	246	270	**503**
P.H.F.	0.87	0.89	**0.85**	0.93	0.90	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-065

Location: Juan St. btwn. Twiggs St. & Harney St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		4			12:00			39		19		
00:15			0		1			12:15			34		23		
00:30			1		2			12:30			38		20		
00:45			0	3	1	8	11	12:45			42	153	22	84	237
01:00			0		0			13:00			40		18		
01:15			1		4			13:15			43		30		
01:30			0		0			13:30			46		32		
01:45			1	2	2	6	8	13:45			35	164	16	96	260
02:00			1		3			14:00			40		26		
02:15			0		1			14:15			35		27		
02:30			0		0			14:30			44		17		
02:45			0	1	0	4	5	14:45			49	168	27	97	265
03:00			1		1			15:00			49		26		
03:15			1		2			15:15			47		27		
03:30			1		1			15:30			39		22		
03:45			0	3	0	4	7	15:45			40	175	32	107	282
04:00			0		2			16:00			54		32		
04:15			1		2			16:15			58		36		
04:30			1		2			16:30			64		30		
04:45			2	4	2	8	12	16:45			65	241	22	120	361
05:00			3		8			17:00			69		50		
05:15			0		5			17:15			59		52		
05:30			1		2			17:30			63		63		
05:45			7	11	13	28	39	17:45			50	241	41	206	447
06:00			5		7			18:00			70		68		
06:15			10		16			18:15			46		35		
06:30			9		19			18:30			49		57		
06:45			19	43	31	73	116	18:45			38	203	37	197	400
07:00			28		41			19:00			33		53		
07:15			30		41			19:15			41		37		
07:30			38		54			19:30			25		36		
07:45			29	125	53	189	314	19:45			20	119	30	156	275
08:00			33		46			20:00			28		37		
08:15			29		42			20:15			26		35		
08:30			25		52			20:30			27		40		
08:45			23	110	45	185	295	20:45			15	96	20	132	228
09:00			38		43			21:00			16		27		
09:15			30		47			21:15			10		19		
09:30			29		48			21:30			11		25		
09:45			30	127	55	193	320	21:45			8	45	15	86	131
10:00			33		51			22:00			9		14		
10:15			32		56			22:15			7		13		
10:30			44		53			22:30			3		15		
10:45			38	147	71	231	378	22:45			4	23	6	48	71
11:00			39		43			23:00			0		5		
11:15			33		49			23:15			4		7		
11:30			40		41			23:30			2		5		
11:45			34	146	36	169	315	23:45			3	9	7	24	33
Total Vol.				722		1098	**1820**					1637		1353	**2990**

Daily Totals

NB	SB	EB	WB	Combined
		2359	2451	**4810**

	AM			PM		
Split %	39.7%	60.3%	**37.8%**	54.7%	45.3%	**62.2%**
Peak Hour	10:30	10:00	**10:00**	16:30	17:15	**17:15**
Volume	154	231	**378**	257	224	**466**
P.H.F.	0.88	0.81	**0.87**	0.93	0.82	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-066

Location: Juan St. btwn. Harney St. & San Juan Rd.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			1	0		12:00			28	21	
00:15			0	1		12:15			32	24	
00:30			0	2		12:30			30	29	
00:45			0 1	0 3	4	12:45			33 123	30 104	227
01:00			0	3		13:00			29	32	
01:15			1	0		13:15			30	28	
01:30			0	0		13:30			32	21	
01:45			0 1	1 4	5	13:45			24 115	20 101	216
02:00			1	2		14:00			28	26	
02:15			0	1		14:15			27	37	
02:30			0	0		14:30			31	20	
02:45			0 1	0 3	4	14:45			28 114	30 113	227
03:00			0	0		15:00			28	26	
03:15			2	1		15:15			29	33	
03:30			1	0		15:30			22	26	
03:45			0 3	0 1	4	15:45			20 99	24 109	208
04:00			0	2		16:00			19	28	
04:15			1	1		16:15			21	28	
04:30			2	1		16:30			17	24	
04:45			2 5	2 6	11	16:45			15 72	32 112	184
05:00			2	3		17:00			11	31	
05:15			0	3		17:15			15	21	
05:30			0	2		17:30			19	22	
05:45			2 4	7 15	19	17:45			20 65	23 97	162
06:00			2	8		18:00			15	19	
06:15			9	11		18:15			25	22	
06:30			6	11		18:30			24	20	
06:45			12 29	13 43	72	18:45			29 93	17 78	171
07:00			13	27		19:00			22	19	
07:15			18	24		19:15			20	13	
07:30			20	32		19:30			21	11	
07:45			24 75	39 122	197	19:45			14 77	10 53	130
08:00			29	28		20:00			19	14	
08:15			22	25		20:15			13	18	
08:30			20	43		20:30			11	13	
08:45			24 95	29 125	220	20:45			10 53	11 56	109
09:00			26	21		21:00			14	10	
09:15			26	22		21:15			9	8	
09:30			32	25		21:30			7	6	
09:45			28 112	39 107	219	21:45			7 37	6 30	67
10:00			24	29		22:00			5	9	
10:15			29	31		22:15			5	6	
10:30			28	18		22:30			6	5	
10:45			24 105	27 105	210	22:45			2 18	2 22	40
11:00			29	25		23:00			0	2	
11:15			33	19		23:15			3	3	
11:30			30	24		23:30			1	0	
11:45			32 124	18 86	210	23:45			1 5	0 5	10
Total Vol.			555	620	**1175**				871	880	**1751**

Daily Totals

NB	SB	EB	WB	Combined
		1426	1500	**2926**

	AM			PM		
Split %	47.2%	52.8%	**40.2%**	49.7%	50.3%	**59.8%**
Peak Hour	11:00	07:45	**09:30**	12:15	12:30	**12:30**
Volume	124	135	**237**	124	119	**241**
P.H.F.	0.94	0.78	**0.88**	0.94	0.93	**0.96**

Prepared by NDS/ATD

VOLUME

Channel Way between W Mission Bay Dr & Hancock St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Period	NB		SB		EB		WB		TOTAL	
00:00					1		7		8	
00:15					0		1		1	
00:30					0		3		3	
00:45					0	1	2	13	2	14
01:00					1		0		1	
01:15					0		1		1	
01:30					1		2		3	
01:45					0	2	0	3	0	5
02:00					1		0		1	
02:15					0		0		0	
02:30					0		0		0	
02:45					0	1	0		0	1
03:00					1		1		2	
03:15					1		2		3	
03:30					0		0		0	
03:45					0	2	0	3	0	5
04:00					1		0		1	
04:15					1		1		2	
04:30					0		1		1	
04:45					0	2	2	4	2	6
05:00					0		1		1	
05:15					0		1		1	
05:30					1		3		4	
05:45					2	3	5	10	7	13
06:00					3		4		7	
06:15					1		6		7	
06:30					2		2		4	
06:45					3	9	7	19	10	28
07:00					3		5		8	
07:15					4		3		7	
07:30					5		10		15	
07:45					6	18	10	28	16	46
08:00					5		7		12	
08:15					6		12		18	
08:30					7		10		17	
08:45					4	22	10	39	14	61
09:00					6		10		16	
09:15					4		7		11	
09:30					8		12		20	
09:45					9	27	11	40	20	67
10:00					8		12		20	
10:15					10		13		23	
10:30					7		12		19	
10:45					5	30	8	45	13	75
11:00					4		14		18	
11:15					9		12		21	
11:30					7		17		24	
11:45					7	27	20	63	27	90
TOTALS						144		267		411
SPLIT %						35.0%		65.0%		32.1%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					4		9		13	
12:15					7		23		30	
12:30					14		11		25	
12:45					10	35	4	47	14	82
13:00					9		15		24	
13:15					6		22		28	
13:30					12		7		19	
13:45					8	35	13	57	21	92
14:00					4		24		28	
14:15					9		16		25	
14:30					10		22		32	
14:45					7	30	14	76	21	106
15:00					7		22		29	
15:15					5		17		22	
15:30					4		29		33	
15:45					9	25	27	95	36	120
16:00					8		30		38	
16:15					6		26		32	
16:30					11		28		39	
16:45					7	32	23	107	30	139
17:00					9		28		37	
17:15					7		29		36	
17:30					4		18		22	
17:45					8	28	18	93	26	121
18:00					6		14		20	
18:15					5		13		18	
18:30					3		12		15	
18:45					2	16	9	48	11	64
19:00					2		9		11	
19:15					3		11		14	
19:30					2		11		13	
19:45					0	7	7	38	7	45
20:00					1		6		7	
20:15					3		6		9	
20:30					2		6		8	
20:45					1	7	4	22	5	29
21:00					6		6		12	
21:15					2		7		9	
21:30					1		5		6	
21:45					2	11	7	25	9	36
22:00					2		3		5	
22:15					1		6		7	
22:30					4		2		6	
22:45					1	8	4	15	5	23
23:00					3		0		3	
23:15					2		2		4	
23:30					3		1		4	
23:45					0	8	1	4	1	12
TOTALS						242		627		869
SPLIT %						27.8%		72.2%		67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Peak Hour	09:30	11:30	11:45	PM Peak Hour	12:15	15:30	15:45
AM Pk Volume	35	69	95	PM Pk Volume	40	112	145
Pk Hr Factor	0.875	0.750	0.792	Pk Hr Factor	0.714	0.933	0.929
7 - 9 Volume	40	67	107	4 - 6 Volume	60	200	260
7 - 9 Peak Hour	07:45	07:30	07:45	4 - 6 Peak Hour	16:30	16:30	16:30
7 - 9 Pk Volume	24	39	63	4 - 6 Pk Volume	34	108	142
Pk Hr Factor	0.857	0.813	0.875	Pk Hr Factor	0.773	0.931	0.910

Prepared by NDS/ATD

VOLUME

Kemper St from Kenyon St to Midway Dr

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		10				13		12:00	91		101				192	
00:15	4		3				7		12:15	104		110				214	
00:30	3		8				11		12:30	75		93				168	
00:45	3	13	7	28			10	41	12:45	79	349	119	423			198	772
01:00	2		4				6		13:00	85		101				186	
01:15	5		5				10		13:15	85		118				203	
01:30	3		8				11		13:30	82		106				188	
01:45	1	11	2	19			3	30	13:45	72	324	92	417			164	741
02:00	2		2				4		14:00	57		105				162	
02:15	1		4				5		14:15	102		96				198	
02:30	1		5				6		14:30	79		114				193	
02:45	2	6	3	14			5	20	14:45	62	300	87	402			149	702
03:00	7		1				8		15:00	59		83				142	
03:15	1		4				5		15:15	82		86				168	
03:30	4		4				8		15:30	73		79				152	
03:45	1	13	3	12			4	25	15:45	70	284	80	328			150	612
04:00	0		4				4		16:00	68		83				151	
04:15	3		0				3		16:15	66		112				178	
04:30	1		3				4		16:30	70		106				176	
04:45	9	13	2	9			11	22	16:45	68	272	107	408			175	680
05:00	2		0				2		17:00	72		102				174	
05:15	11		3				14		17:15	75		117				192	
05:30	10		4				14		17:30	75		111				186	
05:45	14	37	5	12			19	49	17:45	73	295	93	423			166	718
06:00	19		3				22		18:00	64		98				162	
06:15	26		7				33		18:15	62		93				155	
06:30	50		14				64		18:30	67		92				159	
06:45	44	139	24	48			68	187	18:45	73	266	76	359			149	625
07:00	58		42				100		19:00	45		67				112	
07:15	64		22				86		19:15	44		52				96	
07:30	61		35				96		19:30	49		56				105	
07:45	57	240	40	139			97	379	19:45	40	178	51	226			91	404
08:00	57		42				99		20:00	50		49				99	
08:15	58		39				97		20:15	39		47				86	
08:30	61		46				107		20:30	29		53				82	
08:45	72	248	42	169			114	417	20:45	25	143	45	194			70	337
09:00	66		57				123		21:00	32		36				68	
09:15	84		63				147		21:15	25		35				60	
09:30	81		72				153		21:30	21		25				46	
09:45	61	292	60	252			121	544	21:45	10	88	40	136			50	224
10:00	91		77				168		22:00	16		28				44	
10:15	89		91				180		22:15	17		24				41	
10:30	64		68				132		22:30	10		27				37	
10:45	69	313	77	313			146	626	22:45	10	53	12	91			22	144
11:00	76		68				144		23:00	12		18				30	
11:15	75		71				146		23:15	9		12				21	
11:30	77		92				169		23:30	5		15				20	
11:45	89	317	79	310			168	627	23:45	5	31	7	52			12	83
TOTALS		1642		1325				2967	TOTALS		2583		3459				6042
SPLIT %		55.3%		44.7%				32.9%	SPLIT %		42.8%		57.2%				67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Peak Hour	11:30	11:45	11:30	PM Peak Hour	12:00	12:45	12:45
AM Pk Volume	361	383	743	PM Pk Volume	349	444	775
Pk Hr Factor	0.868	0.870	0.868	Pk Hr Factor	0.839	0.933	0.954
7 - 9 Volume	488	308	796	4 - 6 Volume	567	831	1398
7 - 9 Peak Hour	08:00	08:00	08:00	4 - 6 Peak Hour	17:00	16:45	16:45
7 - 9 Pk Volume	248	169	417	4 - 6 Pk Volume	295	437	727
Pk Hr Factor	0.861	0.918	0.914	Pk Hr Factor	0.983	0.934	0.947

Prepared by NDS/ATD

VOLUME

Kemper St from Midway Dr to Sports Arena Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_002

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		5						8		12:00	87		116						203	
00:15	1		3						4		12:15	93		107						200	
00:30	4		4						8		12:30	86		119						205	
00:45	1	9	3	15					4	24	12:45	72	338	110	452					182	790
01:00	1		2						3		13:00	74		66						140	
01:15	1		3						4		13:15	80		114						194	
01:30	0		2						2		13:30	84		103						187	
01:45	0	2	3	10					3	12	13:45	67	305	70	353					137	658
02:00	1		2						3		14:00	76		78						154	
02:15	0		1						1		14:15	72		96						168	
02:30	1		0						1		14:30	69		82						151	
02:45	1	3	4	7					5	10	14:45	61	278	73	329					134	607
03:00	1		0						1		15:00	62		68						130	
03:15	1		0						1		15:15	65		73						138	
03:30	1		3						4		15:30	61		72						133	
03:45	2	5	0	3					2	8	15:45	61	249	93	306					154	555
04:00	2		4						6		16:00	51		108						159	
04:15	3		1						4		16:15	66		92						158	
04:30	2		4						6		16:30	65		87						152	
04:45	3	10	3	12					6	22	16:45	69	251	77	364					146	615
05:00	5		2						7		17:00	66		90						156	
05:15	3		1						4		17:15	54		82						136	
05:30	12		5						17		17:30	59		73						132	
05:45	10	30	7	15					17	45	17:45	47	226	107	352					154	578
06:00	16		8						24		18:00	44		90						134	
06:15	20		11						31		18:15	59		92						151	
06:30	26		15						41		18:30	47		73						120	
06:45	21	83	33	67					54	150	18:45	42	192	52	307					94	499
07:00	38		27						65		19:00	47		51						98	
07:15	26		29						55		19:15	41		34						75	
07:30	45		43						88		19:30	52		48						100	
07:45	53	162	44	143					97	305	19:45	41	181	49	182					90	363
08:00	46		51						97		20:00	46		41						87	
08:15	43		64						107		20:15	18		32						50	
08:30	56		59						115		20:30	31		44						75	
08:45	61	206	62	236					123	442	20:45	21	116	18	135					39	251
09:00	63		76						139		21:00	23		22						45	
09:15	61		75						136		21:15	12		24						36	
09:30	70		56						126		21:30	11		26						37	
09:45	47	241	68	275					115	516	21:45	7	53	25	97					32	150
10:00	74		74						148		22:00	11		22						33	
10:15	77		108						185		22:15	11		23						34	
10:30	74		75						149		22:30	10		20						30	
10:45	80	305	99	356					179	661	22:45	8	40	14	79					22	119
11:00	75		86						161		23:00	3		9						12	
11:15	92		97						189		23:15	3		7						10	
11:30	80		102						182		23:30	3		6						9	
11:45	81	328	86	371					167	699	23:45	1	10	4	26					5	36
TOTALS		1384		1510						2894	TOTALS		2239		2982						5221
SPLIT %		47.8%		52.2%						35.7%	SPLIT %		42.9%		57.1%						64.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Peak Hour	11:45	11:45	11:45		PM Peak Hour	12:00	12:00	12:00
AM Pk Volume	347	428	775		PM Pk Volume	338	452	790
Pk Hr Factor	0.933	0.899	0.945		Pk Hr Factor	0.909	0.950	0.963
7 - 9 Volume	368	379	747		4 - 6 Volume	477	716	1193
7 - 9 Peak Hour	08:00	08:00	08:00		4 - 6 Peak Hour	16:15	16:00	16:00
7 - 9 Pk Volume	206	236	442		4 - 6 Pk Volume	266	364	615
Pk Hr Factor	0.844	0.922	0.898		Pk Hr Factor	0.964	0.843	0.967

Table 3-2. Roadway Segment Level of Service
Existing Conditions

Roadway	Segment	Class	Lanes	LOS E Capacity	Existing		
					ADT	V/C	LOS
Rosecrans Street	From Pacific Highway to Sports Arena Blvd.	Major	4	40,000	15,503	0.39	B
	From Sports Arena Blvd. to Midway Dr.	Major	6	50,000	59,120	1.18	F
	From Midway Dr. to Lytton St.	Major	6	50,000	46,384	0.93	E
	From Lytton St. to Roosevelt Rd.	Major	5	45,000	42,513	0.94	E
	From Laning Rd. to Nimitz Blvd.	Major	4	40,000	34,259	0.86	D
	From Nimitz Blvd. to N. Harbor Dr.	Major	4	40,000	36,450	0.91	E
	From N. Harbor Dr. to Canon St.	Major	4	40,000	34,390	0.86	D
	From Canon St. to Talbot St.	Major (1)	2	27,000	17,850	0.66	C
	From Talbot St. to Kellogg St.	Major (1)	2	27,000	15,200	0.56	B
Camino Del Rio	North of Sports Arena Blvd.	Prime	7	70,000	50,700	0.72	C
Pacific Highway	North of Rosecrans St.	Major (2)	2	20,000	5,818	0.29	A
	South of Rosecrans St.	Prime	6	60,000	13,070	0.22	A
Sports Arena Blvd.	Northwest of Rosecrans St.	Major	5	45,000	26,780	0.60	C
Midway Drive	Northwest of Rosecrans St.	Major	4	40,000	27,130	0.68	C
	Southeast of Rosecrans St.	Major	4	40,000	29,440	0.74	C
Lytton Street	Northwest of Rosecrans St.	Major (2)	2	20,000	11,797	0.59	C
	Southeast of Rosecrans St.	Major	4	40,000	19,650	0.49	B
Nimitz Boulevard	Northwest of Rosecrans St.	Major	4	40,000	17,264	0.43	B
	Southeast of Rosecrans St.	Major	4	40,000	12,020	0.30	A
North Harbor Drive	Rosecrans St. to Scott Rd.	Major	4	40,000	6,321	0.16	A
Canon Street	Northwest of Rosecrans St.	Collector	2	15,000	12,870	0.86	D
Talbot Street	Northwest of Rosecrans St.	Collector	2	8,000	5,950	0.74	D

(1) LOS E Capacity has been estimated based on results of the Highway Capacity Manual Urban Street Methodology.
(2) Since a published standard capacity for a 2-Lane Major does not exist, capacity is assumed to be half of a 4-Lane Major.

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
CAM RIO	[HANCOCK ST - MOORE ST]	03800W - 03700W	1032	SOUTH	:	35800	6/10/1992	0493-92
				*TOTAL	:	64900		
				NORTH	:	27610	7/27/2005	0408-05
				SOUTH	:	32160	7/27/2005	0408-05
				*TOTAL	:	59770		
				EAST	:	27290	9/16/2008	0346-08
				WEST	:	28560	9/16/2008	0346-08
				*TOTAL	:	55852		
CAM RIO	[SPORTS ARENA BL - KURTZ ST]	03899W - 03850W	9369	NORTH	:	24400	6/4/1987	1019-87
				SOUTH	:	28700	6/4/1987	1020-87
				*TOTAL	:	53100		
				NORTH	:	23900	6/25/1990	1005-90
				SOUTH	:	29100	6/25/1990	1006-90
				*TOTAL	:	53000		
				NORTH	:	24200	6/20/1991	0934-91
				SOUTH	:	30200	6/20/1991	0935-91
				*TOTAL	:	54400		
				NORTH	:	25780	7/25/2002	0814-02
				SOUTH	:	27180	7/25/2002	0815-02
				*TOTAL	:	52960		
				NORTH	:	23720	9/10/2008	0405-08
				SOUTH	:	26980	9/10/2008	0405-08
				*TOTAL	:	50700		
CAM RIO N	[CAM ARR - MSS CTR RD]	00750 - 01200	6721	EAST	:	4400	9/27/1990	1924-90
				WEST	:	5300	9/27/1990	1925-90
				*TOTAL	:	9700		
				EAST	:	3400	10/14/1993	0900-93
				WEST	:	4400	10/25/1993	0901-93
				EAST	:	3700	10/17/1996	1006-96
				WEST	:	4200	10/17/1996	1007-96
				*TOTAL	:	7900		

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION	WK-DAY VOLUME	STARTING DATE	FILE NUMBER
ROSECRANS ST	[MALAGA ST - MADRID ST]	03050 - 03200	9371	SOUTH	20220	7/21/2005	0668-05
				*TOTAL	39770		
				NORTH	21650	9/9/2008	0407-08
				SOUTH	21120	9/9/2008	0407-08
				*TOTAL	42770		
ROSECRANS ST	[MIDWAY DR - SPORTS ARENA BL]	03500 - 03650	9370	NORTH	26900	6/2/1987	0986-87
				SOUTH	27300	6/2/1987	0987-87
				*TOTAL	54200		
				NORTH	28100	6/6/1988	1008-88
				SOUTH	28200	6/6/1988	1009-88
				*TOTAL	56300		
				NORTH	26700	6/25/1990	1009-90
				SOUTH	26700	6/25/1990	1010-90
				*TOTAL	53400		
				NORTH	27400	6/20/1991	0936-91
				SOUTH	28200	6/20/1991	0937-91
				*TOTAL	55600		
				NORTH	31110	7/16/2002	0674-02
				SOUTH	27000	7/16/2002	0675-02
				*TOTAL	58110		
				NORTH	28720	9/9/2008	0406-08
				SOUTH	30400	9/9/2008	0406-08
				*TOTAL	59120		
ROSECRANS ST	[SPORTS ARENA BL - KURTZ ST]	03650 - 03750	1882	NORTH	12000	6/2/1987	0992-87
				SOUTH	9500	6/2/1987	0993-87
				*TOTAL	21500		
				NORTH	14300	6/28/1988	1133-88
				SOUTH	10800	6/28/1988	1134-88
				*TOTAL	25100		
				NORTH	12700	6/9/1989	0693-89
				SOUTH	8300	6/9/1989	0694-89
				*TOTAL	21000		

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-002
Location: Barnett Ave between Midway St & Pacific Hwy File No. MC0306-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	52	359			34	402				
12:15	31	417			34	411				
12:30	30	405			28	417				
12:45	27	395	140	1576	26	388	122	1618	262	3194
1:00	34	408			23	374				
1:15	17	433			19	370				
1:30	30	493			24	400				
1:45	22	479	103	1813	29	364	95	1508	198	3321
2:00	27	414			20	374				
2:15	18	421			15	358				
2:30	19	460			23	397				
2:45	9	475	73	1770	11	443	69	1572	142	3342
3:00	20	477			19	398				
3:15	19	538			14	486				
3:30	23	597			31	495				
3:45	12	701	74	2313	30	501	94	1880	168	4193
4:00	16	663			22	505				
4:15	25	661			26	485				
4:30	54	576			33	518				
4:45	46	572	141	2472	77	513	158	2021	299	4493
5:00	58	583			76	502				
5:15	76	575			113	592				
5:30	88	597			166	575				
5:45	140	567	362	2322	228	515	583	2184	945	4506
6:00	118	565			198	479				
6:15	169	443			345	473				
6:30	208	422			376	463				
6:45	207	451	702	1881	474	454	1393	1869	2095	3750
7:00	275	459			485	441				
7:15	342	422			481	397				
7:30	361	411			493	400				
7:45	339	412	1317	1704	525	362	1984	1600	3301	3304
8:00	331	407			515	322				
8:15	344	362			536	312				
8:30	419	374			473	311				
8:45	351	357	1445	1500	448	266	1972	1211	3417	2711
9:00	355	382			341	314				
9:15	297	365			337	289				
9:30	264	345			342	257				
9:45	246	302	1162	1394	348	265	1368	1125	2530	2519
10:00	289	320			286	260				
10:15	264	310			288	233				
10:30	296	272			304	233				
10:45	292	263	1141	1165	341	262	1219	988	2360	2153
11:00	302	284			348	229				
11:15	356	286			384	241				
11:30	331	263			412	226				
11:45	338	194	1327	1027	383	174	1527	870	2854	1897
Total	7987	20937	7987	20937	10584	18446	10584	18446	18571	39383
Combined Total	28924		28924		29030		29030		57954	
AM Peak	11:45 AM				7:30 AM					
Vol.	1519				2069					
P.H.F.	0.911				0.965					
PM Peak		3:30 PM				5:00 PM				
Vol.		2622				2184				
P.H.F.		0.935				0.922				
Percentage	27.6%	72.4%			36.5%	63.5%				

Day: TUESDAY
Date: 5/11/10

Classification Report / Prepared by: National Data & Surveying Services
Location: Washington St from Pacific Hwy & Frontage Rd

City: San Diego
Project #: 10-4143-030

SUMMARY

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	30	4	2	1	1	0	0	1	0	0	0	0	39
01:00	0	46	8	0	3	0	0	2	1	0	0	0	0	60
02:00	0	43	7	0	1	2	0	2	5	0	0	0	0	60
03:00	2	67	14	2	7	0	0	5	9	0	0	0	0	106
04:00	2	116	37	0	18	1	0	6	5	0	0	0	0	185
05:00	6	271	56	8	24	6	0	15	15	0	3	0	0	404
06:00	9	350	55	21	32	6	0	16	6	0	2	0	0	497
07:00	10	425	49	20	24	5	0	14	8	0	1	0	0	556
08:00	11	475	81	25	35	9	0	18	7	0	3	0	0	664
09:00	4	474	78	15	36	5	0	17	9	0	2	0	0	640
10:00	5	510	65	29	28	2	0	21	7	0	1	0	0	668
11:00	6	526	83	27	31	5	0	20	8	0	3	0	0	709
12:00 PM	6	503	81	29	34	8	0	22	2	0	3	0	0	688
13:00	12	536	68	19	25	1	0	21	4	0	1	0	0	687
14:00	5	563	78	17	30	5	0	14	4	0	2	0	0	718
15:00	7	603	86	22	14	1	0	12	1	0	0	0	0	746
16:00	7	702	82	33	22	7	0	22	1	0	0	0	0	876
17:00	9	636	62	23	23	4	0	16	3	0	0	0	0	776
18:00	4	433	48	8	23	4	0	11	4	0	0	0	0	535
19:00	5	325	34	6	18	2	0	8	3	0	0	0	0	401
20:00	1	250	23	3	5	2	0	0	3	0	0	0	0	287
21:00	1	179	24	1	2	0	0	2	2	0	0	0	0	211
22:00	3	75	14	2	2	0	0	0	1	0	0	0	0	97
23:00	0	59	4	1	2	0	0	0	0	0	0	0	0	66
Totals	**115**	**8197**	**1141**	**313**	**440**	**76**		**264**	**109**		**21**			**10676**
% of Totals	1%	77%	11%	3%	4%	1%		2%	1%		0%			100%
	55	3333	537	149	240	42	0	136	81	0	15	0	0	4588
% AM	1%	31%	5%	1%	2%	0%		1%	1%		0%			43%
AM Peak Hour	08:00	11:00	11:00	10:00	09:00	08:00		10:00	05:00		05:00			11:00
Volume	11	526	83	29	36	9		21	15		3			709
	60	4864	604	164	200	34	0	128	28	0	6	0	0	6088
% PM	1%	46%	6%	2%	2%	0%		1%	0%		0%			57%
PM Peak Hour	13:00	16:00	15:00	16:00	12:00	12:00		12:00	13:00		12:00			16:00
Volume	12	702	86	33	34	8		22	4		3			876

Peak Period Totals	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1220 ⟷	11%	1375 ⟷	13%	1652 ⟷	15%	6429 ⟷	60%

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-106

Location: Washington St. btwn. Frontage St. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		6			12:00			133		132		
00:15			13		8			12:15			133		119		
00:30			12		4			12:30			117		128		
00:45			10	47	2	20	67	12:45			128	511	121	500	1011
01:00			11		6			13:00			143		139		
01:15			7		4			13:15			148		114		
01:30			4		1			13:30			128		109		
01:45			2	24	3	14	38	13:45			129	548	115	477	1025
02:00			4		4			14:00			126		106		
02:15			1		2			14:15			110		110		
02:30			1		1			14:30			158		126		
02:45			6	12	4	11	23	14:45			156	550	117	459	1009
03:00			3		2			15:00			142		121		
03:15			2		7			15:15			141		143		
03:30			3		11			15:30			129		124		
03:45			1	9	7	27	36	15:45			159	571	97	485	1056
04:00			3		6			16:00			134		128		
04:15			4		9			16:15			133		97		
04:30			4		9			16:30			180		108		
04:45			12	23	19	43	66	16:45			136	583	118	451	1034
05:00			19		19			17:00			144		121		
05:15			13		33			17:15			123		108		
05:30			20		47			17:30			119		96		
05:45			24	76	63	162	238	17:45			80	466	55	380	846
06:00			28		70			18:00			68		49		
06:15			20		62			18:15			68		59		
06:30			31		111			18:30			67		53		
06:45			35	114	104	347	461	18:45			68	271	50	211	482
07:00			48		107			19:00			72		44		
07:15			68		112			19:15			65		43		
07:30			75		106			19:30			64		37		
07:45			71	262	138	463	725	19:45			65	266	42	166	432
08:00			87		117			20:00			59		42		
08:15			89		135			20:15			45		31		
08:30			96		123			20:30			50		37		
08:45			103	375	119	494	869	20:45			33	187	28	138	325
09:00			89		125			21:00			55		22		
09:15			89		116			21:15			39		31		
09:30			106		112			21:30			36		25		
09:45			80	364	98	451	815	21:45			37	167	23	101	268
10:00			101		95			22:00			34		15		
10:15			97		80			22:15			29		20		
10:30			89		98			22:30			36		14		
10:45			114	401	111	384	785	22:45			26	125	14	63	188
11:00			112		113			23:00			17		7		
11:15			135		113			23:15			29		10		
11:30			124		121			23:30			21		13		
11:45			113	484	120	467	951	23:45			17	84	7	37	121
Total Vol.				2191		2883	**5074**					4329		3468	**7797**

Daily Totals

NB	SB	EB	WB	Combined
		6520	6351	**12871**

	AM			PM		
Split %	43.2%	56.8%	**39.4%**	55.5%	44.5%	**60.6%**
Peak Hour	11:15	07:45	**11:30**	15:45	12:15	**14:30**
Volume	505	513	**995**	606	507	**1104**
P.H.F.	0.94	0.93	**0.94**	0.84	0.91	**0.97**

Prepared by NDS/ATO

VOLUME

Vine St from California St to Kettner Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0		0		0	12:00	6		0		6
00:15	0		0		0	12:15	7		1		8
00:30	0		0		0	12:30	1		1		2
00:45	0		0		0	12:45	0	14	0	2	0 16
01:00	0		0		0	13:00	2		1		3
01:15	0		0		0	13:15	1		3		4
01:30	0		0		0	13:30	2		1		3
01:45	0		0		0	13:45	4	9	0	5	4 14
02:00	0		0		0	14:00	5		2		7
02:15	0		0		0	14:15	9		2		11
02:30	0		0		0	14:30	8		3		11
02:45	0		0		0	14:45	4	26	2	9	6 35
03:00	0		0		0	15:00	2		2		4
03:15	0		0		0	15:15	0		4		4
03:30	0		0		0	15:30	1		2		3
03:45	0		0		0	15:45	2	5	1	9	3 14
04:00	1		0		1	16:00	1		3		4
04:15	0		0		0	16:15	2		5		7
04:30	0		0		0	16:30	4		6		10
04:45	0	1	0		0 1	16:45	5	12	3	17	8 29
05:00	0		0		0	17:00	3		2		5
05:15	0		1		1	17:15	1		2		3
05:30	0		0		0	17:30	2		1		3
05:45	4	4	0	1	4 5	17:45	1	7	0	5	1 12
06:00	1		0		1	18:00	2		1		3
06:15	3		1		4	18:15	1		0		1
06:30	0		1		1	18:30	0		1		1
06:45	2	6	0	2	2 8	18:45	0	3	0	2	0 5
07:00	0		1		1	19:00	1		1		2
07:15	0		2		2	19:15	1		1		2
07:30	4		2		6	19:30	0		0		0
07:45	1	5	2	7	3 12	19:45	1	3	1	3	2 6
08:00	5		1		6	20:00	1		1		2
08:15	4		1		5	20:15	1		5		6
08:30	2		0		2	20:30	2		0		2
08:45	2	13	0	2	2 15	20:45	0	4	0	6	0 10
09:00	3		1		4	21:00	0		0		0
09:15	3		3		6	21:15	0		0		0
09:30	5		0		5	21:30	0		0		0
09:45	1	12	2	6	3 18	21:45	1	1	0		1 1
10:00	5		3		8	22:00	1		0		1
10:15	2		0		2	22:15	2		1		3
10:30	5		2		7	22:30	0		0		0
10:45	2	14	1	6	3 20	22:45	0	3	0	1	0 4
11:00	3		1		4	23:00	0		0		0
11:15	2		0		2	23:15	2		0		2
11:30	5		2		7	23:30	0		0		0
11:45	4	14	2	5	6 19	23:45	1	3	0		1 3
TOTALS		69		29	98	TOTALS		90		59	149
SPLIT %		70.4%		29.6%	39.7%	SPLIT %		60.4%		39.6%	60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Peak Hour	11:30	09:15	11:30	PM Peak Hour	13:45	16:00	14:00
AM Pk Volume	22	8	27	PM Pk Volume	26	17	35
Pk Hr Factor	0.786	0.667	0.844	Pk Hr Factor	0.722	0.708	0.795
7 - 9 Volume	18	9	27	4 - 6 Volume	19	22	41
7 - 9 Peak Hour	07:30	07:00	07:30	4 - 6 Peak Hour	16:15	16:00	16:15
7 - 9 Pk Volume	14	7	20	4 - 6 Pk Volume	14	17	30
Pk Hr Factor	0.700	0.875	0.833	Pk Hr Factor	0.700	0.708	0.750

Prepared by NDS/ATD

Volumes for: Thursday, May 26, 2011	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Sassafras St between Kettner Blvd & Pacific Hy	Project: 11-4109-048	0	0	3,496	5,220	8,716

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			19		2			12:00			82		94		
00:15			15		1			12:15			77		75		
00:30			15		2			12:30			67		83		
00:45			17	66	1	6	72	12:45			73	299	74	326	625
01:00			13		2			13:00			53		91		
01:15			10		4			13:15			59		65		
01:30			2		5			13:30			66		54		
01:45			4	29	3	14	43	13:45			53	231	68	278	509
02:00			2		1			14:00			48		65		
02:15			3		1			14:15			59		72		
02:30			4		3			14:30			47		58		
02:45			1	10	1	6	16	14:45			78	232	70	265	497
03:00			1		0			15:00			57		54		
03:15			1		3			15:15			49		85		
03:30			1		4			15:30			44		63		
03:45			0	3	2	9	12	15:45			46	196	66	268	464
04:00			6		6			16:00			52		73		
04:15			6		9			16:15			55		57		
04:30			11		31			16:30			54		68		
04:45			10	33	42	88	121	16:45			56	217	65	263	480
05:00			8		59			17:00			60		54		
05:15			15		84			17:15			69		52		
05:30			11		92			17:30			67		67		
05:45			15	49	74	309	358	17:45			58	254	52	225	479
06:00			17		81			18:00			55		62		
06:15			20		84			18:15			40		50		
06:30			19		118			18:30			38		58		
06:45			28	84	100	383	467	18:45			32	165	55	225	390
07:00			23		104			19:00			53		44		
07:15			32		109			19:15			45		35		
07:30			24		125			19:30			67		51		
07:45			33	112	114	452	564	19:45			42	207	67	197	404
08:00			31		106			20:00			50		43		
08:15			47		127			20:15			33		40		
08:30			35		104			20:30			45		35		
08:45			42	155	121	458	613	20:45			40	168	53	171	339
09:00			34		94			21:00			49		33		
09:15			33		85			21:15			38		44		
09:30			36		101			21:30			30		41		
09:45			32	135	99	379	514	21:45			38	155	30	148	303
10:00			35		78			22:00			35		36		
10:15			49		82			22:15			35		29		
10:30			53		80			22:30			35		16		
10:45			53	190	79	319	509	22:45			49	154	14	95	249
11:00			72		83			23:00			39		22		
11:15			51		60			23:15			27		13		
11:30			62		67			23:30			19		8		
11:45			63	248	78	288	536	23:45			19	104	5	48	152

Total Vol.			1114		2711	3825					2382		2991	5373
									NB	SB	EB		WB	Total
								Daily Totals :	0	0	3,496		5,220	8,716
			AM								PM			
Split %			29.1%		70.9%	43.9%					44.3%		55.7%	56.1%
ADT								PHF						
Peak Hr.			11:00		07:00	11:00		Peak Hr.			12:00		12:00	12:00
Volume			268		472	613		Volume			299		326	625
P.H.F.			0.953		0.929	0.879		P.H.F.			0.913		0.837	0.888
7 - 9 Vol.			267		518	1177		4 - 6 Vol.			471		488	959
Peak Hr.			10:00		07:30	08:00		Peak Hr.			17:00		16:30	16:45
Volume			155		472	613		Volume			254		263	480
P.H.F.			0.774		0.929	0.879		P.H.F.			0.913		0.911	0.914

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-109

Location: Laurel St. btwn. Pacific Highway & Kettner Blvd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			36		20			12:00			181		168		
00:15			37		14			12:15			240		195		
00:30			33		17			12:30			239		194		
00:45			18	124	12	63	187	12:45			201	861	200	757	1618
01:00			14		2			13:00			217		210		
01:15			11		8			13:15			173		183		
01:30			13		2			13:30			185		183		
01:45			9	47	5	17	64	13:45			204	779	139	715	1494
02:00			11		2			14:00			280		171		
02:15			4		2			14:15			185		163		
02:30			5		5			14:30			228		163		
02:45			3	23	6	15	38	14:45			175	868	136	633	1501
03:00			4		3			15:00			219		151		
03:15			6		6			15:15			205		145		
03:30			3		20			15:30			186		148		
03:45			4	17	14	43	60	15:45			219	829	158	602	1431
04:00			8		24			16:00			185		163		
04:15			2		45			16:15			203		139		
04:30			23		81			16:30			269		164		
04:45			47	80	147	297	377	16:45			212	869	155	621	1490
05:00			89		195			17:00			219		140		
05:15			130		199			17:15			206		154		
05:30			155		189			17:30			175		116		
05:45			139	513	191	774	1287	17:45			154	754	133	543	1297
06:00			126		151			18:00			157		167		
06:15			105		172			18:15			155		149		
06:30			120		137			18:30			187		214		
06:45			87	438	131	591	1029	18:45			177	676	159	689	1365
07:00			96		147			19:00			170		169		
07:15			100		143			19:15			186		154		
07:30			118		142			19:30			179		180		
07:45			133	447	183	615	1062	19:45			167	702	181	684	1386
08:00			136		188			20:00			207		157		
08:15			161		205			20:15			217		160		
08:30			149		172			20:30			212		147		
08:45			167	613	173	738	1351	20:45			212	848	138	602	1450
09:00			160		191			21:00			186		145		
09:15			173		186			21:15			157		146		
09:30			162		227			21:30			155		145		
09:45			165	660	221	825	1485	21:45			195	693	102	538	1231
10:00			187		221			22:00			135		99		
10:15			210		212			22:15			138		118		
10:30			246		228			22:30			124		109		
10:45			216	859	207	868	1727	22:45			162	559	94	420	979
11:00			218		223			23:00			120		84		
11:15			210		183			23:15			171		72		
11:30			195		216			23:30			124		47		
11:45			192	815	216	838	1653	23:45			74	489	36	239	728
Total Vol.				4636		5684	**10320**					8927		7043	**15970**

Daily Totals

NB	SB	EB	WB	Combined
		13563	12727	**26290**

	AM			PM		
Split %	44.9%	55.1%	**39.3%**	55.9%	44.1%	**60.7%**
Peak Hour	10:15	09:45	**10:15**	16:30	12:15	**12:15**
Volume	890	882	**1760**	906	799	**1696**
P.H.F.	0.90	0.97	**0.93**	0.84	0.95	**0.97**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
TAYLOR ST	[HOTEL CR S - SD 008 R-A, E]	-	2631	EAST	:	7170	6/30/2010	MC0522-1
				WEST	:	7425	6/30/2010	MC0522-1
				*TOTAL	:	14595		
TAYLOR ST	[PACIFIC HY - CONGRESS ST]	04000 - 04010	2493	EAST	:	10500	7/22/1997	0524-97
				WEST	:	11900	7/22/1997	0525-97
				*TOTAL	:	22400		
				EAST	:	9300	6/2/1999	0330-99
				WEST	:	8000	6/2/1999	0330-99
				*TOTAL	:	17300		
				EAST	:	12230	6/20/2002	0648-02
				WEST	:	14880	6/20/2002	0649-02
				*TOTAL	:	27110		
				EAST	:	11780	6/15/2005	0315-05
				WEST	:	10230	6/15/2005	0315-05
				*TOTAL	:	22010		
				EAST	:	11990	8/20/2008	0336-08
				WEST	:	10060	8/20/2008	0336-08
				*TOTAL	:	22050		
TAYLOR ST	[PACIFIC HY - SN DIEGO AV]	04000 - 04010	2625	EAST	:	11700	3/8/1990	0341-90
				WEST	:	9700	3/8/1990	0342-90
				*TOTAL	:	21400		
				EAST	:	11000	3/15/1991	0420-91
				WEST	:	8400	3/15/1991	0421-91
				*TOTAL	:	19400		
				EAST	:	10100	11/3/1994	0810-94
				WEST	:	7500	11/3/1994	0811-94
				*TOTAL	:	17600		
				EAST	:	12500	6/18/1996	0666-96
				WEST	:	7000	6/18/1996	0667-96
				*TOTAL	:	19500		
TAYLOR ST	[CALHOUN ST - JUAN ST]	04030 - 04100	2491	NORTH	:	11300	9/21/1994	0700-94
				SOUTH	:	7700	9/21/1994	0701-94

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-099

Location: Taylor St. btwn. Congress St. & Juan St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		6					12:00	129		107				
00:15	9		9					12:15	140		116				
00:30	10		3					12:30	142		130				
00:45	3	40	7	25			65	12:45	149	560	93	446			1006
01:00	4		0					13:00	135		110				
01:15	3		1					13:15	149		99				
01:30	3		0					13:30	155		129				
01:45	4	14	0	1			15	13:45	140	579	96	434			1013
02:00	6		5					14:00	144		104				
02:15	3		3					14:15	141		95				
02:30	8		3					14:30	152		90				
02:45	1	18	1	12			30	14:45	164	601	87	376			977
03:00	3		1					15:00	185		92				
03:15	2		3					15:15	145		84				
03:30	2		9					15:30	193		119				
03:45	1	8	5	18			26	15:45	229	752	91	386			1138
04:00	5		3					16:00	214		117				
04:15	3		9					16:15	107		111				
04:30	7		12					16:30	117		123				
04:45	6	21	8	32			53	16:45	111	549	113	464			1013
05:00	7		14					17:00	134		122				
05:15	10		24					17:15	102		71				
05:30	13		27					17:30	119		105				
05:45	18	48	51	116			164	17:45	101	456	99	397			853
06:00	22		55					18:00	81		98				
06:15	28		69					18:15	87		66				
06:30	45		73					18:30	110		57				
06:45	49	144	99	296			440	18:45	76	354	69	290			644
07:00	53		125					19:00	82		49				
07:15	75		130					19:15	80		48				
07:30	85		111					19:30	80		46				
07:45	62	275	124	490			765	19:45	70	312	47	190			502
08:00	102		144					20:00	89		54				
08:15	124		110					20:15	75		40				
08:30	112		170					20:30	56		42				
08:45	91	429	224	648			1077	20:45	58	278	31	167			445
09:00	87		184					21:00	61		33				
09:15	115		207					21:15	49		37				
09:30	92		108					21:30	50		23				
09:45	92	386	103	602			988	21:45	41	201	32	125			326
10:00	85		75					22:00	39		22				
10:15	99		92					22:15	38		22				
10:30	101		101					22:30	33		18				
10:45	104	389	95	363			752	22:45	19	129	11	73			202
11:00	118		95					23:00	24		16				
11:15	142		101					23:15	16		12				
11:30	151		103					23:30	16		4				
11:45	121	532	112	411			943	23:45	20	76	11	43			119
Total Vol.		2304		3014			**5318**			4847		3391			**8238**

Daily Totals

NB	SB	EB	WB	Combined
7151	6405			**13556**

	AM			PM		
Split %	43.3%	56.7%	**39.2%**	58.8%	41.2%	**60.8%**
Peak Hour	11:15	08:30	**08:30**	15:15	16:15	**15:15**
Volume	543	785	**1190**	781	469	**1192**
P.H.F.	0.90	0.88	**0.92**	0.85	0.95	**0.90**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-003

Location: Taylor St (STATION#2490/FILE#MC0594-10) between Juan St & Sunset St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	20		8					12:00	203		143				
00:15	23		6					12:15	172		164				
00:30	10		9					12:30	153		132				
00:45	5	58	6	29			87	12:45	172	700	139	578			1278
01:00	15		2					13:00	205		130				
01:15	3		7					13:15	187		139				
01:30	7		4					13:30	179		136				
01:45	2	27	5	18			45	13:45	164	735	134	539			1274
02:00	4		0					14:00	163		125				
02:15	1		1					14:15	175		113				
02:30	3		3					14:30	199		131				
02:45	4	12	6	10			22	14:45	191	728	116	485			1213
03:00	2		2					15:00	196		110				
03:15	4		5					15:15	223		136				
03:30	1		6					15:30	231		132				
03:45	1	8	6	19			27	15:45	213	863	128	506			1369
04:00	4		4					16:00	238		143				
04:15	3		8					16:15	263		116				
04:30	7		6					16:30	257		152				
04:45	7	21	13	31			52	16:45	284	1042	129	540			1582
05:00	12		24					17:00	249		143				
05:15	15		40					17:15	300		135				
05:30	18		30					17:30	231		145				
05:45	21	66	59	153			219	17:45	186	966	133	556			1522
06:00	16		52					18:00	189		138				
06:15	32		83					18:15	179		117				
06:30	40		85					18:30	159		113				
06:45	51	139	107	327			466	18:45	100	627	85	453			1080
07:00	59		112					19:00	142		93				
07:15	59		132					19:15	131		85				
07:30	69		121					19:30	93		88				
07:45	103	290	148	513			803	19:45	125	491	70	336			827
08:00	79		123					20:00	97		67				
08:15	124		132					20:15	99		73				
08:30	99		127					20:30	117		53				
08:45	92	394	149	531			925	20:45	94	407	44	237			644
09:00	87		173					21:00	94		50				
09:15	103		141					21:15	106		29				
09:30	88		136					21:30	86		43				
09:45	101	379	120	570			949	21:45	98	384	33	155			539
10:00	118		116					22:00	76		26				
10:15	112		120					22:15	78		26				
10:30	113		126					22:30	49		29				
10:45	123	466	130	492			958	22:45	36	239	21	102			341
11:00	120		123					23:00	39		12				
11:15	162		132					23:15	24		16				
11:30	148		149					23:30	32		8				
11:45	155	585	164	568			1153	23:45	12	107	11	47			154
Total Vol.		2445		3261			**5706**			7289		4534			**11823**

Daily Totals

NB	SB	EB	WB	Combined
9734	7795			**17529**

	AM			PM		
Split %	42.8%	57.2%	**32.6%**	61.7%	38.3%	**67.4%**
Peak Hour	11:45	11:30	**11:30**	16:30	12:00	**16:30**
Volume	683	620	**1298**	1090	578	**1649**
P.H.F.	0.84	0.95	**0.94**	0.91	0.88	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-100

Location: Taylor St. btwn. Morena Blvd. & I-8 EB Ramps - Hotel Circle

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		7					12:00	118		114				
00:15	7		8					12:15	94		128				
00:30	7		4					12:30	89		124				
00:45	4	27	8	27			54	12:45	98	399	119	485			884
01:00	5		1					13:00	93		105				
01:15	4		1					13:15	102		93				
01:30	0		2					13:30	125		108				
01:45	6	15	0	4			19	13:45	109	429	110	416			845
02:00	4		1					14:00	115		91				
02:15	1		4					14:15	125		99				
02:30	0		1					14:30	121		85				
02:45	3	8	1	7			15	14:45	133	494	84	359			853
03:00	1		2					15:00	147		96				
03:15	1		1					15:15	148		94				
03:30	2		5					15:30	188		100				
03:45	0	4	0	8			12	15:45	189	672	99	389			1061
04:00	5		3					16:00	191		116				
04:15	0		8					16:15	201		113				
04:30	4		10					16:30	196		105				
04:45	1	10	12	33			43	16:45	211	799	113	447			1246
05:00	4		10					17:00	212		100				
05:15	3		21					17:15	205		96				
05:30	8		29					17:30	183		122				
05:45	15	30	41	101			131	17:45	138	738	98	416			1154
06:00	13		61					18:00	112		100				
06:15	17		73					18:15	86		104				
06:30	16		83					18:30	102		108				
06:45	28	74	113	330			404	18:45	79	379	74	386			765
07:00	28		124					19:00	90		51				
07:15	33		132					19:15	78		40				
07:30	43		129					19:30	72		43				
07:45	43	147	132	517			664	19:45	70	310	46	180			490
08:00	56		152					20:00	73		42				
08:15	74		129					20:15	59		51				
08:30	53		252					20:30	48		34				
08:45	74	257	261	794			1051	20:45	56	236	32	159			395
09:00	62		243					21:00	53		27				
09:15	54		249					21:15	62		24				
09:30	73		144					21:30	50		19				
09:45	62	251	128	764			1015	21:45	33	198	21	91			289
10:00	66		113					22:00	27		18				
10:15	63		96					22:15	28		13				
10:30	82		98					22:30	31		11				
10:45	64	275	96	403			678	22:45	23	109	19	61			170
11:00	84		89					23:00	16		10				
11:15	81		122					23:15	17		18				
11:30	127		113					23:30	10		5				
11:45	86	378	98	422			800	23:45	11	54	12	45			99
Total Vol.		1476		3410			**4886**			4817		3434			**8251**

Daily Totals

NB	SB	EB	WB	Combined
6293	6844			**13137**

	AM			PM		
Split %	30.2%	69.8%	**37.2%**	58.4%	41.6%	**62.8%**
Peak Hour	11:30	08:30	**08:30**	16:30	12:00	**16:15**
Volume	425	1005	**1248**	824	485	**1251**
P.H.F.	0.84	0.96	**0.93**	0.97	0.95	**0.97**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Twiggs St (STATION#1589/FILE#MC05334-10)	Project:	10-4169-122	0	0	840	1,240	2,080

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB		
00:00			2	2		12:00			21	19		
00:15			1	3		12:15			16	28		
00:30			2	2		12:30			11	20		
00:45			2	7	0	7	14	12:45			13	61	26	93	154
01:00			3	1		13:00			10	19		
01:15			1	1		13:15			15	23		
01:30			1	1		13:30			12	18		
01:45			0	5	1	4	9	13:45			16	53	14	74	127
02:00			1	1		14:00			13	19		
02:15			0	1		14:15			11	21		
02:30			0	1		14:30			8	22		
02:45			0	1	0	3	4	14:45			14	46	21	83	129
03:00			0	0		15:00			9	26		
03:15			0	0		15:15			12	25		
03:30			1	0		15:30			10	20		
03:45			0	1	1	1	2	15:45			19	50	15	86	136
04:00			1	0		16:00			21	17		
04:15			0	0		16:15			15	23		
04:30			1	0		16:30			23	16		
04:45			0	2	1	1	3	16:45			16	75	22	78	153
05:00			0	0		17:00			17	21		
05:15			0	1		17:15			17	27		
05:30			0	0		17:30			25	27		
05:45			1	1	1	2	3	17:45			24	83	32	107	190
06:00			0	2		18:00			17	36		
06:15			3	1		18:15			23	29		
06:30			3	4		18:30			25	31		
06:45			6	12	1	8	20	18:45			18	83	30	126	209
07:00			3	3		19:00			17	32		
07:15			4	1		19:15			24	30		
07:30			5	5		19:30			12	25		
07:45			10	22	3	12	34	19:45			13	66	21	108	174
08:00			9	7		20:00			9	17		
08:15			6	4		20:15			12	14		
08:30			8	15		20:30			7	18		
08:45			9	32	7	33	65	20:45			15	43	16	65	108
09:00			8	13		21:00			8	13		
09:15			11	9		21:15			7	21		
09:30			7	13		21:30			10	19		
09:45			9	35	13	48	83	21:45			8	33	17	70	103
10:00			10	17		22:00			8	24		
10:15			8	21		22:15			9	16		
10:30			11	17		22:30			6	15		
10:45			10	39	20	75	114	22:45			2	25	6	61	86
11:00			12	13		23:00			6	2		
11:15			13	29		23:15			4	4		
11:30			10	18		23:30			3	2		
11:45			15	50	24	84	134	23:45			2	15	3	11	26
Total Vol.			207		278	**485**					633		962	**1595**

	NB	SB	EB	WB	Total
Daily Totals :	**0**	**0**	**840**	**1,240**	**2,080**

	AM			PM		
Split %	42.7%	57.3%	**23.3%**	39.7%	60.3%	**76.7%**
AM				**PM**		
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	17:30	17:45	**17:45**
Volume	63	91	**154**	**Volume**	89	128	**217**
P.H.F.	0.750	0.813	**0.875**	**P.H.F.**	0.890	0.889	**0.969**
7 - 9 Vol.	54	45	**99**	**4 - 6 Vol.**	158	185	**343**
Peak Hr.	07:45	08:00	**08:00**	**Peak Hr.**	17:00	17:00	**17:00**
Volume	33	33	**65**	**Volume**	83	107	**190**
P.H.F.	0.825	0.550	**0.707**	**P.H.F.**	0.830	0.836	**0.848**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-101

Location: Twiggs St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			4	2		12:00			22	25	
00:15			1	2		12:15			21	32	
00:30			2	1		12:30			21	39	
00:45			2	1		12:45			23	38	
			9	6	15				87	134	221
01:00			1	0		13:00			19	33	
01:15			1	0		13:15			23	28	
01:30			4	0		13:30			15	42	
01:45			1	0		13:45			27	41	
			7	0	7				84	144	228
02:00			0	0		14:00			23	26	
02:15			0	0		14:15			11	28	
02:30			1	0		14:30			16	26	
02:45			0	1		14:45			16	33	
			1	1	2				66	113	179
03:00			0	1		15:00			20	31	
03:15			1	1		15:15			22	29	
03:30			3	0		15:30			29	28	
03:45			2	0		15:45			26	36	
			6	2	8				97	124	221
04:00			1	1		16:00			12	24	
04:15			0	0		16:15			19	24	
04:30			1	1		16:30			22	30	
04:45			1	0		16:45			26	28	
			3	2	5				79	106	185
05:00			2	4		17:00			38	23	
05:15			1	0		17:15			33	19	
05:30			1	1		17:30			37	12	
05:45			5	4		17:45			22	21	
			9	9	18				130	75	205
06:00			4	1		18:00			37	19	
06:15			6	1		18:15			22	25	
06:30			7	3		18:30			31	21	
06:45			6	4		18:45			36	16	
			23	9	32				126	81	207
07:00			8	4		19:00			26	18	
07:15			6	8		19:15			24	16	
07:30			7	11		19:30			18	17	
07:45			16	7		19:45			27	16	
			37	30	67				95	67	162
08:00			12	9		20:00			25	14	
08:15			11	11		20:15			22	16	
08:30			27	12		20:30			19	14	
08:45			20	13		20:45			22	13	
			70	45	115				88	57	145
09:00			15	11		21:00			23	26	
09:15			23	10		21:15			10	10	
09:30			11	10		21:30			13	2	
09:45			22	15		21:45			15	7	
			71	46	117				61	45	106
10:00			12	11		22:00			7	14	
10:15			18	18		22:15			15	5	
10:30			17	15		22:30			13	7	
10:45			34	13		22:45			7	2	
			81	57	138				42	28	70
11:00			22	18		23:00			6	3	
11:15			35	14		23:15			9	2	
11:30			31	15		23:30			5	6	
11:45			31	9		23:45			4	4	
			119	56	175				24	15	39
Total Vol.			436	263	**699**				979	989	**1968**

Daily Totals

NB	SB	EB	WB	Combined
		1415	1252	**2667**

	AM			PM		
Split %	62.4%	37.6%	**26.2%**	49.7%	50.3%	**73.8%**
Peak Hour	10:45	11:45	**11:45**	16:45	13:00	**13:00**
Volume	122	105	**200**	134	144	**228**
P.H.F.	0.87	0.67	**0.83**	0.88	0.86	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-102

Location: Harney St. btwn. Congress St. & San Diego Ave.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			1		2			12:00			7		10		
00:15			1		2			12:15			23		17		
00:30			8		2			12:30			17		8		
00:45			1	11	2	8	19	12:45			16	63	10	45	108
01:00			0		2			13:00			13		14		
01:15			3		0			13:15			5		6		
01:30			0		0			13:30			8		13		
01:45			0	3	0	2	5	13:45			14	40	9	42	82
02:00			0		0			14:00			11		8		
02:15			0		0			14:15			8		11		
02:30			0		0			14:30			13		11		
02:45			0	0	0	0		14:45			18	50	13	43	93
03:00			1		2			15:00			7		13		
03:15			0		2			15:15			10		13		
03:30			0		0			15:30			17		15		
03:45			0	1	0	4	5	15:45			21	55	13	54	109
04:00			0		0			16:00			16		16		
04:15			0		0			16:15			12		14		
04:30			0		1			16:30			13		11		
04:45			1	1	1	2	3	16:45			7	48	3	44	92
05:00			1		0			17:00			19		19		
05:15			2		2			17:15			22		19		
05:30			0		1			17:30			18		16		
05:45			1	4	4	7	11	17:45			5	64	14	68	132
06:00			2		3			18:00			21		14		
06:15			0		4			18:15			10		11		
06:30			1		8			18:30			28		21		
06:45			2	5	7	22	27	18:45			17	76	15	61	137
07:00			1		3			19:00			23		17		
07:15			3		11			19:15			16		15		
07:30			4		6			19:30			18		16		
07:45			4	12	11	31	43	19:45			22	79	15	63	142
08:00			4		11			20:00			12		13		
08:15			3		6			20:15			7		5		
08:30			4		11			20:30			9		3		
08:45			8	19	16	44	63	20:45			8	36	7	28	64
09:00			4		6			21:00			8		7		
09:15			3		3			21:15			13		12		
09:30			9		7			21:30			12		12		
09:45			6	22	2	18	40	21:45			13	46	9	40	86
10:00			10		6			22:00			5		10		
10:15			19		13			22:15			9		7		
10:30			7		3			22:30			8		7		
10:45			5	41	10	32	73	22:45			7	29	2	26	55
11:00			14		11			23:00			10		7		
11:15			7		9			23:15			7		4		
11:30			13		10			23:30			4		0		
11:45			16	50	14	44	94	23:45			3	24	2	13	37
Total Vol.				169		214	**383**					610		527	**1137**

Daily Totals

NB	SB	EB	WB	Combined
		779	741	**1520**

	AM			PM		
Split %	44.1%	55.9%	**25.2%**	53.6%	46.4%	**74.8%**
Peak Hour	11:45	11:30	**11:45**	18:30	17:00	**18:30**
Volume	63	51	**112**	84	68	**152**
P.H.F.	0.68	0.75	**0.70**	0.75	0.89	**0.78**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-103

Location: Harney St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		3			12:00			18		15		
00:15			1		3			12:15			34		13		
00:30			0		3			12:30			21		26		
00:45			2	6	1	10	16	12:45			23	96	14	68	164
01:00			1		1			13:00			15		27		
01:15			0		2			13:15			20		21		
01:30			0		0			13:30			15		32		
01:45			0	1	0	3	4	13:45			13	63	33	113	176
02:00			1		1			14:00			32		18		
02:15			0		1			14:15			27		18		
02:30			0		1			14:30			8		29		
02:45			0	1	0	3	4	14:45			19	86	44	109	195
03:00			0		2			15:00			18		27		
03:15			1		0			15:15			12		37		
03:30			0		1			15:30			12		30		
03:45			0	1	1	4	5	15:45			22	64	35	129	193
04:00			0		0			16:00			18		28		
04:15			0		1			16:15			24		22		
04:30			1		1			16:30			22		21		
04:45			2	3	5	7	10	16:45			30	94	25	96	190
05:00			0		0			17:00			19		23		
05:15			0		3			17:15			24		21		
05:30			1		4			17:30			29		18		
05:45			0	1	7	14	15	17:45			20	92	22	84	176
06:00			0		8			18:00			29		11		
06:15			1		10			18:15			24		12		
06:30			3		11			18:30			24		14		
06:45			1	5	17	46	51	18:45			25	102	11	48	150
07:00			4		7			19:00			17		28		
07:15			6		18			19:15			18		17		
07:30			6		19			19:30			18		19		
07:45			6	22	30	74	96	19:45			11	64	24	88	152
08:00			7		24			20:00			10		22		
08:15			13		19			20:15			7		18		
08:30			8		19			20:30			2		17		
08:45			8	36	28	90	126	20:45			10	29	11	68	97
09:00			5		22			21:00			9		18		
09:15			4		24			21:15			8		11		
09:30			5		20			21:30			7		2		
09:45			9	23	12	78	101	21:45			3	27	7	38	65
10:00			6		19			22:00			6		11		
10:15			16		22			22:15			3		10		
10:30			1		37			22:30			5		9		
10:45			12	35	23	101	136	22:45			2	16	4	34	50
11:00			25		18			23:00			2		6		
11:15			12		22			23:15			0		3		
11:30			21		18			23:30			3		2		
11:45			24	82	22	80	162	23:45			2	7	2	13	20
Total Vol.				216		510	**726**					740		888	**1628**

Daily Totals

NB	SB	EB	WB	Combined
		956	1398	**2354**

	AM			PM		
Split %	29.8%	70.2%	**30.8%**	45.5%	54.5%	**69.2%**
Peak Hour	11:30	10:00	**11:45**	16:45	14:45	**14:45**
Volume	97	101	**173**	102	138	**199**
P.H.F.	0.71	0.68	**0.92**	0.85	0.78	**0.79**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-104

Location: Old Town Ave. btwn. I-5 SB Ramps & I-5 NB Ramps

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		14			12:00			147		97		
00:15			4		4			12:15			109		64		
00:30			9		9			12:30			131		102		
00:45			10	35	16	43	78	12:45			133	520	112	375	895
01:00			7		4			13:00			129		113		
01:15			6		4			13:15			135		102		
01:30			6		1			13:30			118		105		
01:45			4	23	1	10	33	13:45			117	499	71	391	890
02:00			9		5			14:00			120		97		
02:15			8		4			14:15			142		98		
02:30			1		2			14:30			119		99		
02:45			4	22	2	13	35	14:45			123	504	91	385	889
03:00			8		4			15:00			162		95		
03:15			3		8			15:15			140		111		
03:30			4		4			15:30			153		122		
03:45			3	18	4	20	38	15:45			162	617	107	435	1052
04:00			7		7			16:00			168		144		
04:15			2		6			16:15			149		101		
04:30			7		7			16:30			179		106		
04:45			8	24	12	32	56	16:45			169	665	102	453	1118
05:00			10		10			17:00			158		121		
05:15			10		14			17:15			180		74		
05:30			9		6			17:30			145		92		
05:45			27	56	8	38	94	17:45			153	636	78	365	1001
06:00			25		22			18:00			132		84		
06:15			20		24			18:15			122		71		
06:30			34		10			18:30			106		50		
06:45			44	123	38	94	217	18:45			104	464	56	261	725
07:00			51		30			19:00			100		49		
07:15			71		26			19:15			83		59		
07:30			83		50			19:30			85		54		
07:45			91	296	33	139	435	19:45			66	334	58	220	554
08:00			88		44			20:00			69		54		
08:15			90		40			20:15			53		39		
08:30			76		48			20:30			53		41		
08:45			91	345	52	184	529	20:45			48	223	51	185	408
09:00			84		58			21:00			44		50		
09:15			91		63			21:15			47		52		
09:30			105		47			21:30			39		38		
09:45			99	379	63	231	610	21:45			33	163	35	175	338
10:00			89		67			22:00			37		39		
10:15			83		56			22:15			30		27		
10:30			120		60			22:30			24		35		
10:45			118	410	53	236	646	22:45			27	118	21	122	240
11:00			115		53			23:00			25		15		
11:15			123		56			23:15			18		25		
11:30			113		69			23:30			18		30		
11:45			113	464	75	253	717	23:45			9	70	8	78	148
Total Vol.				2195		1293	**3488**					4813		3445	**8258**

Daily Totals

NB	SB	EB	WB	Combined
		7008	4738	**11746**

	AM			PM		
Split %	62.9%	37.1%	**29.7%**	58.3%	41.7%	**70.3%**
Peak Hour	11:45	11:45	**11:45**	16:30	15:15	**16:00**
Volume	500	338	**838**	686	484	**1118**
P.H.F.	0.85	0.83	**0.86**	0.95	0.84	**0.90**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-105

Location: Old Town Ave. btwn. I-5 NB Ramps & Jefferson St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		18			12:00			56		37		
00:15			4		11			12:15			36		61		
00:30			8		14			12:30			56		29		
00:45			4	24	9	52	76	12:45			44	192	51	178	370
01:00			7		8			13:00			60		35		
01:15			5		9			13:15			58		34		
01:30			1		3			13:30			32		43		
01:45			1	14	4	24	38	13:45			58	208	33	145	353
02:00			2		4			14:00			47		36		
02:15			0		2			14:15			38		41		
02:30			1		1			14:30			46		42		
02:45			1	4	0	7	11	14:45			48	179	46	165	344
03:00			3		1			15:00			80		34		
03:15			0		0			15:15			84		37		
03:30			1		3			15:30			56		55		
03:45			1	5	0	4	9	15:45			52	272	53	179	451
04:00			2		3			16:00			55		53		
04:15			3		2			16:15			62		47		
04:30			2		5			16:30			47		58		
04:45			1	8	5	15	23	16:45			63	227	61	219	446
05:00			0		9			17:00			49		57		
05:15			2		7			17:15			39		61		
05:30			1		11			17:30			54		41		
05:45			1	4	16	43	47	17:45			65	207	50	209	416
06:00			6		12			18:00			41		67		
06:15			16		23			18:15			31		72		
06:30			16		27			18:30			39		42		
06:45			17	55	27	89	144	18:45			60	171	38	219	390
07:00			19		32			19:00			33		56		
07:15			33		42			19:15			30		58		
07:30			27		63			19:30			32		55		
07:45			42	121	63	200	321	19:45			28	123	63	232	355
08:00			51		47			20:00			24		49		
08:15			45		38			20:15			21		48		
08:30			45		40			20:30			24		58		
08:45			54	195	43	168	363	20:45			21	90	55	210	300
09:00			45		28			21:00			14		64		
09:15			41		33			21:15			19		58		
09:30			43		46			21:30			22		58		
09:45			75	204	42	149	353	21:45			20	75	43	223	298
10:00			43		38			22:00			21		36		
10:15			61		31			22:15			14		28		
10:30			43		38			22:30			8		27		
10:45			66	213	34	141	354	22:45			11	54	21	112	166
11:00			52		40			23:00			10		28		
11:15			58		38			23:15			8		12		
11:30			56		41			23:30			5		19		
11:45			70	236	45	164	400	23:45			3	26	11	70	96
Total Vol.				1083		1056	**2139**					1824		2161	**3985**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			2907	3217	**6124**

	AM			**PM**		
Split %	50.6%	49.4%	**34.9%**	45.8%	54.2%	**65.1%**
Peak Hour	11:15	07:15	**11:30**	15:00	16:30	**15:00**
Volume	240	215	**402**	272	237	**451**
P.H.F.	0.86	0.85	**0.87**	0.81	0.97	**0.93**

Appendix C
Peak Hour Arterial Analysis Worksheets – Existing Conditions

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	11.6	84.3	0.81	34.5	B
Total	II		72.7	11.6	84.3	0.81	34.5	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.1	34.5	0.17	17.6	D
Rosecrans St.	II	40	72.7	51.1	123.8	0.81	23.5	C
Total	II		92.1	66.2	158.3	0.98	22.2	C

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	31.3	97.6	0.55	20.4	C
Total	III		66.3	31.3	97.6	0.55	20.4	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	57.1	88.7	0.25	10.1	E
Total	III		31.6	57.1	88.7	0.25	10.1	E

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	46.2	106.0	0.50	16.9	D
East Dr	III	35	22.9	5.0	27.9	0.19	24.6	B
Kemper Street	III	35	39.9	21.5	61.4	0.33	19.5	C
Sports Arena	III	35	34.5	47.0	81.5	0.29	12.7	E
Total	III		157.1	119.7	276.8	1.31	17.0	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	21.7	56.2	0.29	18.4	C
East Drive	III	35	39.9	4.7	44.6	0.33	26.8	B
Rosecrans St.	III	35	22.9	43.2	66.1	0.19	10.4	E
Barnett Ave	III	35	59.8	25.2	85.0	0.50	21.1	C
Total	III		157.1	94.8	251.9	1.31	18.7	C

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	13.0	30.6	0.08	9.4	D
San Diego Ave	IV	25	25.0	24.3	49.3	0.11	8.3	E
Total	IV		42.6	37.3	79.9	0.19	8.7	E

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.6	26.3	0.07	9.7	D
Moore St	IV	25	25.0	5.9	30.9	0.11	13.2	C
Total	IV		43.7	13.5	57.2	0.18	11.6	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	12.4	29.5	0.13	16.3	D
Nimitz Blvd	III	35	22.4	42.3	64.7	0.19	10.4	E
Laning Rd	III	35	34.5	8.8	43.3	0.29	23.9	C
Barnett Ave	III	35	97.9	42.2	140.1	0.95	24.5	B
Midway Dr	III	35	58.8	23.7	82.5	0.49	21.4	C
Rosecrans St	III	35	16.7	17.3	34.0	0.13	13.8	E
Total	III		247.4	146.7	394.1	2.18	19.9	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	32.4	49.1	0.13	9.5	F
Lytton St	III	35	58.8	48.2	107.0	0.49	16.5	D
Laning Rd	III	35	97.9	7.9	105.8	0.95	32.4	A
Lowell St	III	35	34.5	35.2	69.7	0.29	14.8	D
Hugo St	III	35	22.4	5.5	27.9	0.19	24.1	B
Total	III		230.3	129.2	359.5	2.05	20.5	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	11.1	25.3	0.05	7.6	E
Total	IV		14.2	11.1	25.3	0.05	7.6	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	5.7	21.8	0.06	10.0	D
Total	IV		16.1	5.7	21.8	0.06	10.0	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	9.8	25.5	0.10	13.4	C
Juan St	IV	35	11.2	11.0	22.2	0.07	11.0	D
	IV	35	18.3	6.1	24.4	0.13	19.3	B
Total	IV		45.2	26.9	72.1	0.29	14.7	C

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	14.6	32.3	0.11	11.9	D
	IV	35	18.3	9.0	27.3	0.13	17.2	C
Congress St	IV	35	11.2	7.1	18.3	0.07	13.4	C
Pacific Highway	IV	35	15.7	20.1	35.8	0.10	9.6	D
Total	IV		62.9	50.8	113.7	0.40	12.7	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	9.8	45.9	0.30	23.6	C
Total	III		36.1	9.8	45.9	0.30	23.6	C

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	13.9	56.1	0.35	22.6	C
Sports Arena	III	35	36.1	46.0	82.1	0.30	13.2	E
Total	III		78.3	59.9	138.2	0.65	17.0	D

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	21.7	94.4	0.81	30.8	B
Total	II		72.7	21.7	94.4	0.81	30.8	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.9	35.3	0.17	17.2	D
Rosecrans St.	II	40	72.7	71.5	144.2	0.81	20.2	D
Total	II		92.1	87.4	179.5	0.98	19.6	D

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	16.7	83.0	0.55	24.0	C
Total	III		66.3	16.7	83.0	0.55	24.0	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	69.2	100.8	0.25	8.9	F
Total	III		31.6	69.2	100.8	0.25	8.9	F

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	71.5	131.3	0.50	13.7	E
East Dr	III	35	22.9	12.7	35.6	0.19	19.3	C
Kemper Street	III	35	39.9	28.0	67.9	0.33	17.6	D
Sport Arena Blvd	III	35	34.5	42.8	77.3	0.29	13.4	E
Total	III		157.1	155.0	312.1	1.31	15.1	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	16.0	50.5	0.29	20.5	C
East Drive	III	35	39.9	14.3	54.2	0.33	22.1	C
Rosecrans St.	III	35	22.9	62.4	85.3	0.19	8.0	F
Barnett Ave	III	35	59.8	32.4	92.2	0.50	19.5	C
Total	III		157.1	125.1	282.2	1.31	16.7	D

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	81.1	98.7	0.08	2.9	F
San Diego Ave	IV	25	25.0	13.9	38.9	0.11	10.5	D
Total	IV		42.6	95.0	137.6	0.19	5.1	F

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.9	26.6	0.07	9.6	D
Moore St	IV	25	25.0	5.3	30.3	0.11	13.5	C
Total	IV		43.7	13.2	56.9	0.18	11.7	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	15.4	32.5	0.13	14.8	D
Nimitz Blvd	III	35	22.4	46.5	68.9	0.19	9.8	F
Laning Rd	III	35	34.5	6.1	40.6	0.29	25.5	B
Barnett Ave	III	35	97.9	37.7	135.6	0.95	25.3	B
Midway Dr	III	35	58.8	20.1	78.9	0.49	22.3	C
Rosecrans St	III	35	16.7	30.8	47.5	0.13	9.9	F
Total	III		247.4	156.6	404.0	2.18	19.4	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	45.1	61.8	0.13	7.6	F
Lytton St	III	35	58.8	27.4	86.2	0.49	20.5	C
Laning Rd	III	35	97.9	5.7	103.6	0.95	33.1	A
Lowell St	III	35	34.5	62.9	97.4	0.29	10.6	E
Hugo St	III	35	22.4	4.1	26.5	0.19	25.4	B
Total	III		230.3	145.2	375.5	2.05	19.6	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	8.6	22.8	0.05	8.5	E
Total	IV		14.2	8.6	22.8	0.05	8.5	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	4.0	20.1	0.06	10.9	D
Total	IV		16.1	4.0	20.1	0.06	10.9	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	12.1	27.8	0.10	12.3	D
Juan St	IV	35	11.2	17.5	28.7	0.07	8.5	E
	IV	35	18.3	7.9	26.2	0.13	17.9	C
Total	IV		45.2	37.5	82.7	0.29	12.8	D

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	15.7	33.4	0.11	11.6	D
	IV	35	18.3	8.7	27.0	0.13	17.4	C
Congress St	IV	35	11.2	6.8	18.0	0.07	13.6	C
Pacific Highway	IV	35	15.7	24.8	40.5	0.10	8.5	E
Total	IV		62.9	56.0	118.9	0.40	12.1	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	34.0	70.1	0.30	15.5	D
Total	III		36.1	34.0	70.1	0.30	15.5	D

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	70.4	112.6	0.35	11.3	E
W Point Loma Blvd	III	35	36.1	65.8	101.9	0.30	10.6	E
Total	III		78.3	136.2	214.5	0.65	11.0	E

Appendix D
Peak Hour Intersection Counts

Vehicle Intersection Counts

(1)

10

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

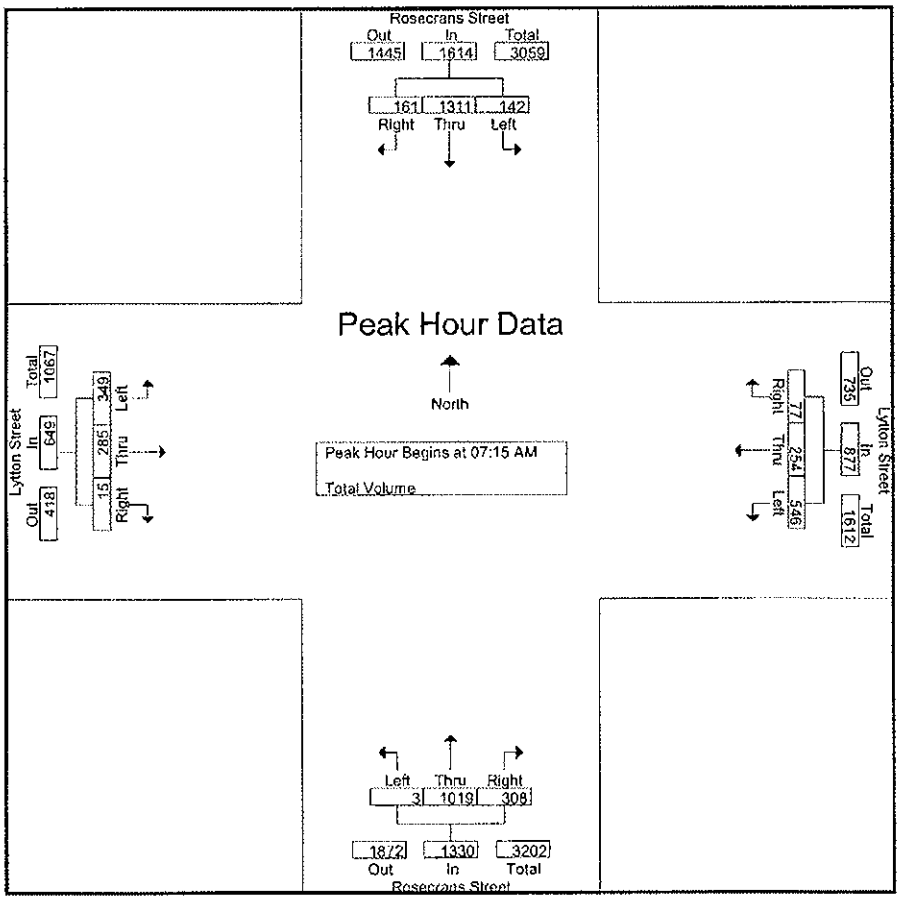
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
Total	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
07:00 AM	25	334	78	437	151	94	4	249	2	160	38	200	51	55	12	118	1004
07:15 AM	35	363	54	452	145	71	9	225	0	263	62	325	100	80	3	183	1185
07:30 AM	36	262	32	330	147	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	38	327	37	402	135	70	27	232	1	247	85	333	101	88	6	195	1162
Total	134	1286	201	1621	578	295	60	933	3	901	259	1163	336	284	23	643	4360
08:00 AM	33	359	38	430	119	53	21	193	2	278	87	367	64	56	4	124	1114
08:15 AM	35	349	60	444	103	72	25	200	3	285	77	365	55	59	1	115	1124
08:30 AM	20	269	46	335	96	52	20	168	1	321	88	410	69	49	1	119	1032
Grand Total	244	2561	409	3214	1059	533	131	1723	10	1976	532	2518	586	502	32	1120	8575
Apprch %	7.6	79.7	12.7		61.5	30.9	7.6		0.4	78.5	21.1		52.3	44.8	2.9		
Total %	2.8	29.9	4.8	37.5	12.3	6.2	1.5	20.1	0.1	23	6.2	29.4	6.8	5.9	0.4	13.1	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	**363**	**54**	**452**	145	71	9	225	0	263	62	325	100	80	3	183	**1185**
07:30 AM	36	262	32	330	**147**	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	**38**	327	37	402	135	70	**27**	**232**	1	247	85	333	**101**	**88**	**6**	**195**	1162
08:00 AM	33	359	38	430	119	53	21	193	**2**	**278**	**87**	**367**	64	56	4	124	1114
Total Volume	142	1311	161	1614	546	254	77	877	3	1019	308	1330	349	285	15	649	4470
% App. Total	8.8	81.2	10		62.3	29	8.8		0.2	76.6	23.2		53.8	43.9	2.3		
PHF	.934	.903	.745	.893	.929	.894	.713	.945	.375	.916	.885	.906	.864	.810	.625	.832	.943

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	25	334	78	437	151	94	4	249	1	247	85	333	100	80	3	183
+15 mins.	35	363	54	452	145	71	9	225	2	278	87	367	84	61	2	147
+30 mins.	36	262	32	330	147	60	20	227	3	285	77	365	101	88	6	195
+45 mins.	38	327	37	402	135	70	27	232	1	321	88	410	64	56	4	124
Total Volume	134	1286	201	1621	578	295	60	933	7	1131	337	1475	349	285	15	649
% App. Total	8.3	79.3	12.4		62	31.6	6.4		0.5	76.7	22.8		53.8	43.9	2.3	
PHF	.882	.886	.644	.897	.957	.785	.556	.937	.583	.881	.957	.899	.864	.810	.625	.832

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

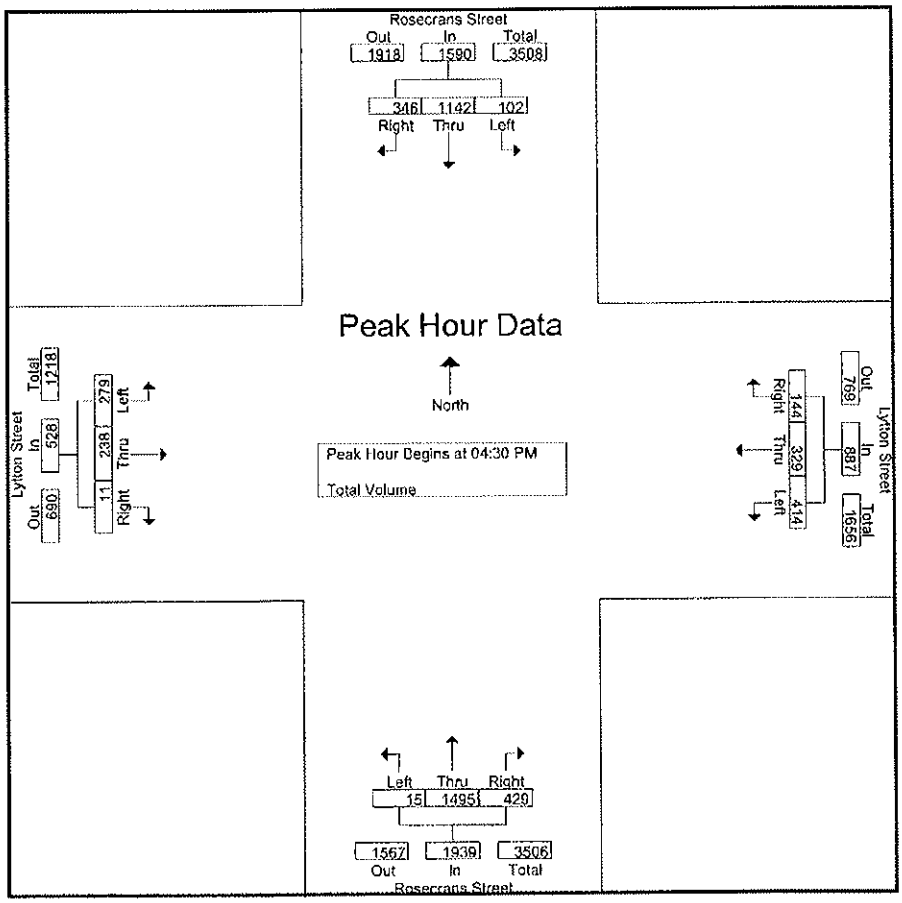
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	250	40	312	108	107	17	232	3	405	98	506	60	81	2	143	1193
04:15 PM	14	255	52	321	116	71	24	211	5	376	107	488	54	43	3	100	1120
04:30 PM	29	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	313	73	409	107	77	42	226	3	347	98	448	70	61	1	132	1215
Total	88	1088	240	1416	424	335	122	881	15	1470	411	1896	249	238	8	495	4688
05:00 PM	22	273	71	366	103	81	37	221	1	433	119	553	76	62	3	141	1281
05:15 PM	28	286	127	441	111	91	26	228	7	373	104	484	68	62	5	135	1288
05:30 PM	14	314	84	412	71	76	28	175	3	362	69	434	55	60	2	117	1138
05:45 PM	11	307	42	360	85	82	25	192	2	307	69	378	50	42	6	98	1028
Total	75	1180	324	1579	370	330	116	816	13	1475	361	1849	249	226	16	491	4735
Grand Total	163	2268	564	2995	794	665	238	1697	28	2945	772	3745	498	464	24	986	9423
Apprch %	5.4	75.7	18.8		46.8	39.2	14		0.7	78.6	20.6		50.5	47.1	2.4		
Total %	1.7	24.1	6	31.8	8.4	7.1	2.5	18	0.3	31.3	8.2	39.7	5.3	4.9	0.3	10.5	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**29**	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	**313**	73	409	107	77	**42**	226	3	347	98	448	70	61	1	132	1215
05:00 PM	22	273	71	366	103	81	37	221	1	**433**	**119**	**553**	**76**	**62**	3	**141**	1281
05:15 PM	28	286	**127**	**441**	**111**	**91**	26	**228**	7	373	104	484	68	62	**5**	135	**1288**
Total Volume	102	1142	346	1590	414	329	144	887	15	1495	429	1939	279	238	11	528	4944
% App. Total	6.4	71.8	21.8		46.7	37.1	16.2		0.8	77.1	22.1		52.8	45.1	2.1		
PHF	.879	.912	.681	.901	.932	.904	.857	.973	.536	.863	.901	.877	.918	.960	.550	.936	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	23	313	73	409	93	80	39	212	5	376	107	488	65	53	2	120
+15 mins.	22	273	71	366	107	77	42	226	4	342	108	454	70	61	1	132
+30 mins.	28	286	127	441	103	81	37	221	3	347	98	448	76	62	3	141
+45 mins.	14	314	84	412	111	91	26	228	1	433	119	553	68	62	5	135
Total Volume	87	1186	355	1628	414	329	144	887	13	1498	432	1943	279	238	11	528
% App. Total	5.3	72.9	21.8		46.7	37.1	16.2		0.7	77.1	22.2		52.8	45.1	2.1	
PHF	.777	.944	.699	.923	.932	.904	.857	.973	.650	.865	.908	.878	.918	.960	.550	.936

(2A)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		66								108		182	356
7:15 AM		59								91		196	346
7:30 AM		70								97		242	409
7:45 AM		73								124		289	486
8:00 AM		83								109		256	448
8:15 AM		80								122		267	469
8:30 AM		108								83		205	396
8:45 AM		97								86		215	398

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	636	0	0	0	0	0	0	0	820	0	1852	3308
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	30.69%	0.00%	69.31%	

[illegible]													
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CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

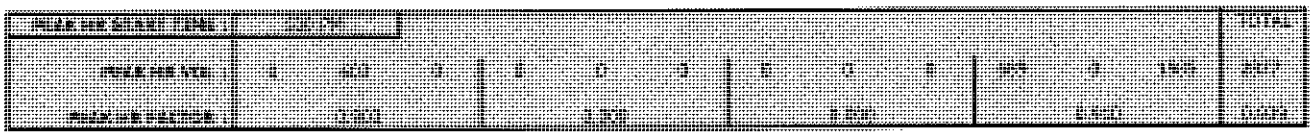
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SDUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		149								167		252	568
4:15 PM		150								176		297	623
4:30 PM		149								168		301	618
4:45 PM		144								157		363	664
5:00 PM		155								161		336	652
5:15 PM		141								180		445	766
5:30 PM		167								167		430	764
5:45 PM		140								181		374	695
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1195	0	0	0	0	0	0	0	1357	0	2798	5350
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	32.66%	0.00%	67.34%	



CONTROL :

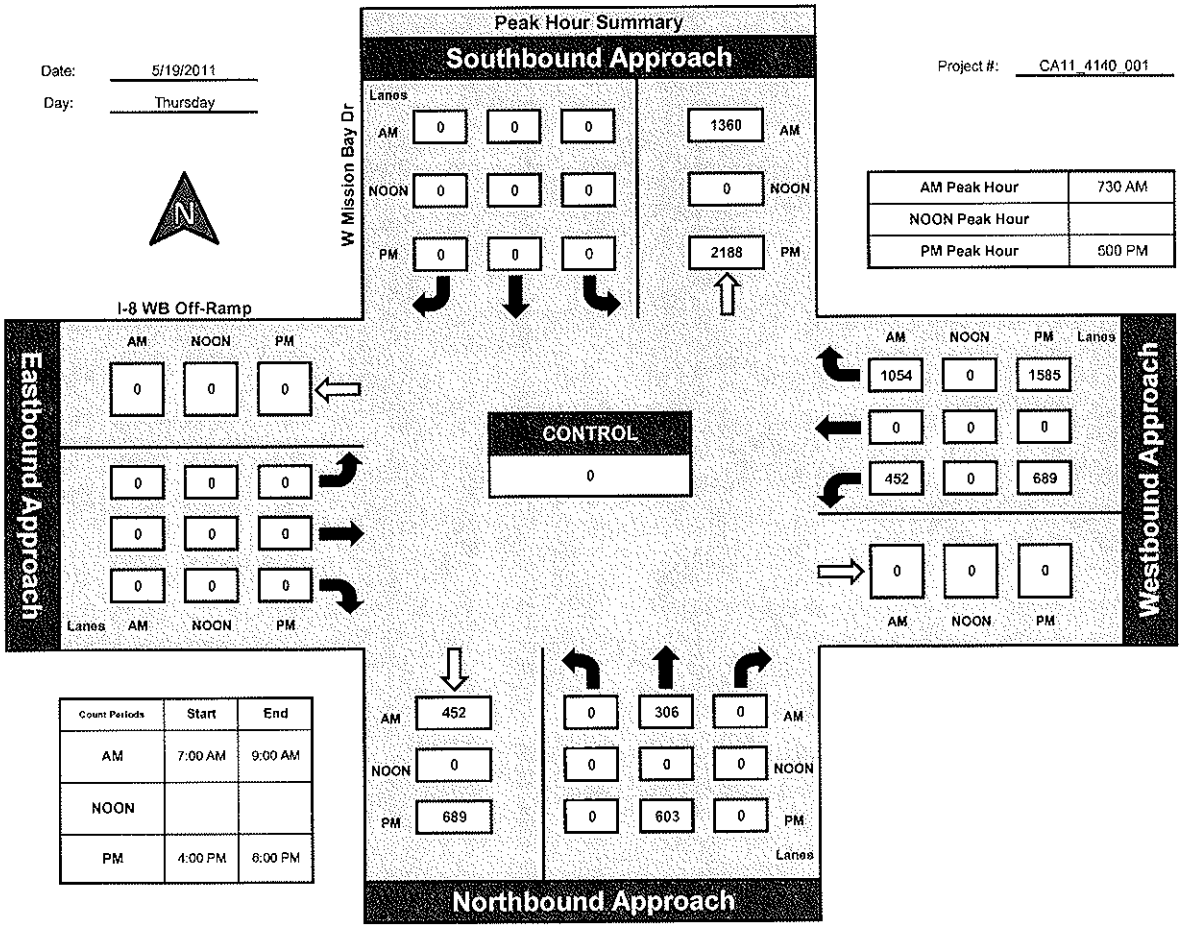
ITM Peak Hour Summary

Prepared by:

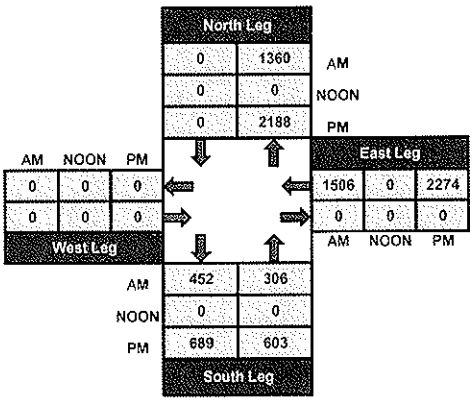
NDS

National Data & Surveying Services

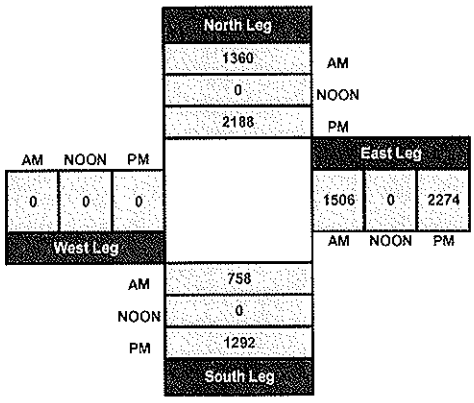
W Mission Bay Dr and I-8 WB Off-Ramp , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(2B)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	57	130		154	6			2				349
7:15 AM	0	67	130		163	2			3				365
7:30 AM	2	63	167		199	3			2				436
7:45 AM	2	80	166		211	9			3				471
8:00 AM	7	76	131		218	4			4				440
8:15 AM	1	86	163		225	1			4				480
8:30 AM	6	103	158		205	7			4				483
8:45 AM	3	101	145		220	0			4				473
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	633	1190	0	1595	32	0	0	26	0	0	0	3497
APPROACH %'s :	1.14%	34.33%	64.53%	0.00%	98.03%	1.97%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	6	152	187		252	9			6				612
4:15 PM	1	146	184		274	10			5				620
4:30 PM	7	154	174		280	16			4				635
4:45 PM	3	152	147		277	13			3				595
5:00 PM	5	147	174		310	15			5				656
5:15 PM	5	145	126		278	16			8				578
5:30 PM	3	164	154		314	10			0				645
5:45 PM	4	141	161		306	13			7				632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	1201	1307	0	2291	102	0	0	38	0	0	0	4973
APPROACH %'s :	1.34%	47.25%	51.42%	0.00%	95.74%	4.26%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sport Arena Blvd and I-8 EB On-Ramp , City of San Diego

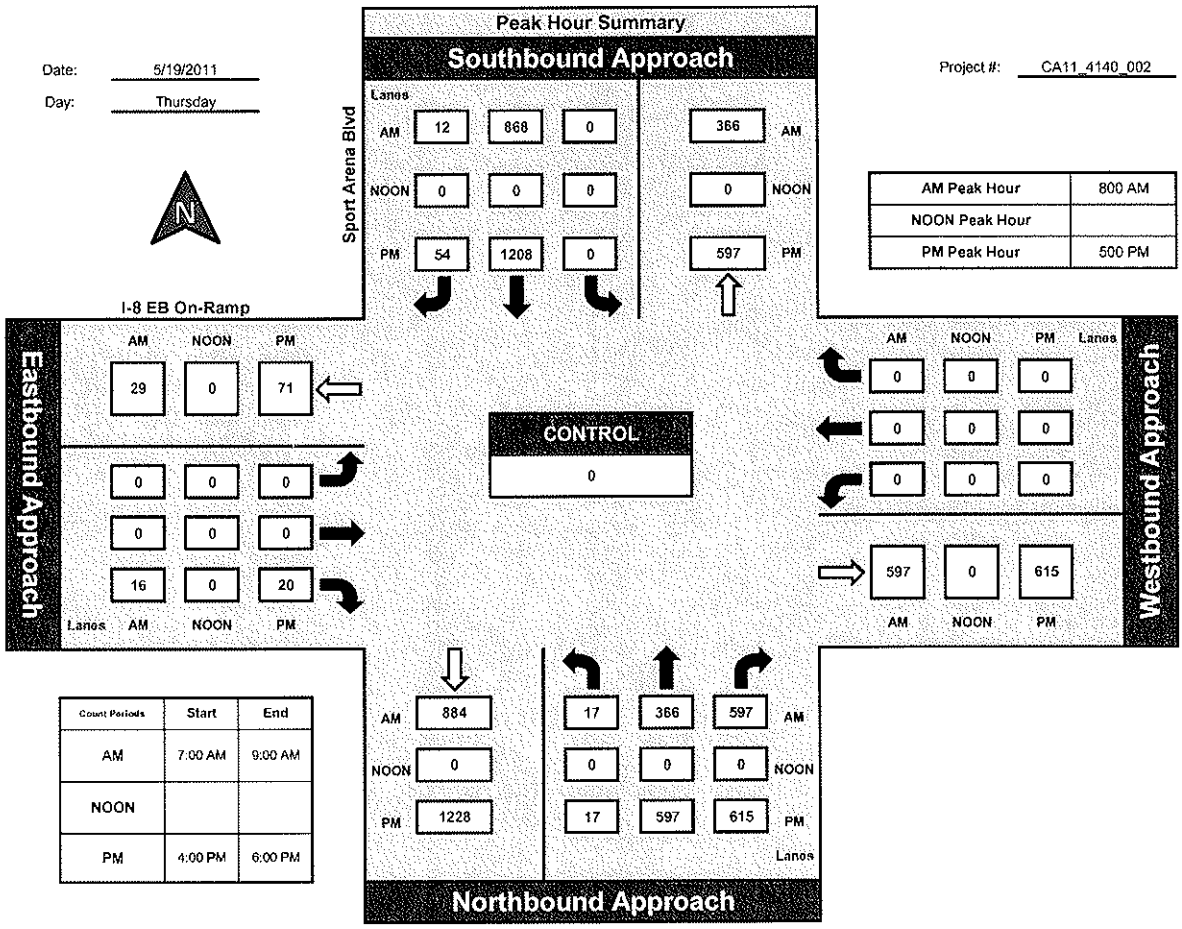
Date: 5/19/2011

Day: Thursday

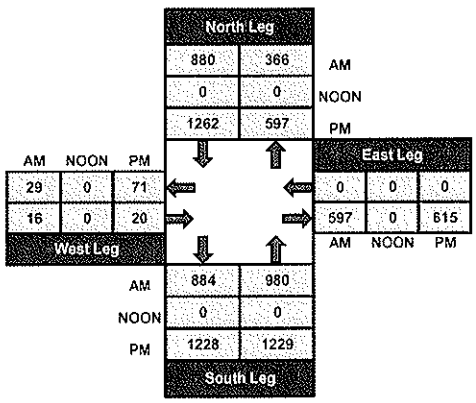
Project #: CA11_4140_002

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

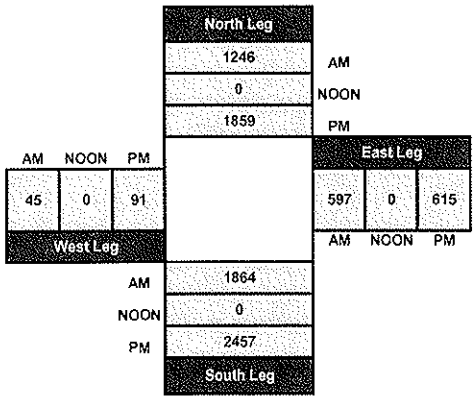
Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Total Ins & Outs



Total Volume Per Leg



③

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001

Day: THURSDAY

City: City of San Diego

Date: 6/9/2011

AM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
7:00 AM						3		137			157	2	299
7:15 AM						6		178			220	0	404
7:30 AM						4		164			250	3	421
7:45 AM						5		217			216	3	441
8:00 AM						8		204			214	1	427
8:15 AM						8		231			245	3	487
8:30 AM						13		190			226	3	432
8:45 AM						7		200			184	5	396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	54	0	1521	0	0	1712	20	3307
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	98.85%	1.15%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001 **Day:** THURSDAY

City: City of San Diego **Date:** 6/9/2011

PM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
4:00 PM						29		266			334	6	635
4:15 PM						21		321			283	10	635
4:30 PM						35		287			319	5	646
4:45 PM						26		291			308	4	629
5:00 PM						36		324			306	9	675
5:15 PM						39		348			308	7	702
5:30 PM						17		334			246	3	600
5:45 PM						16		306			300	10	632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	219	0	2477	0	0	2404	54	5154
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	97.80%	2.20%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

ITM Peak Hour Summary

Prepared by:

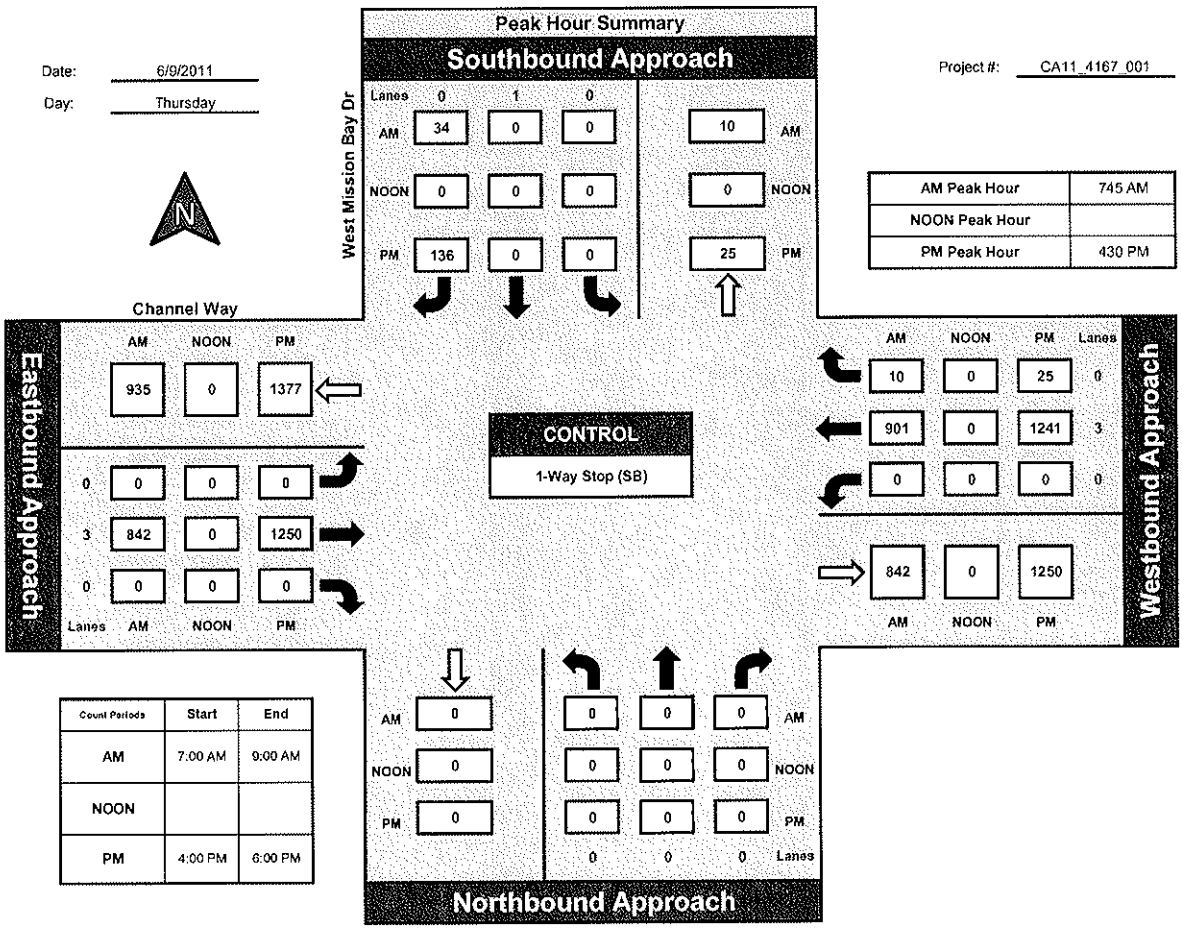
National Data & Surveying Services

West Mission Bay Dr and Channel Way , City of San Diego

Date: 6/9/2011

Day: Thursday

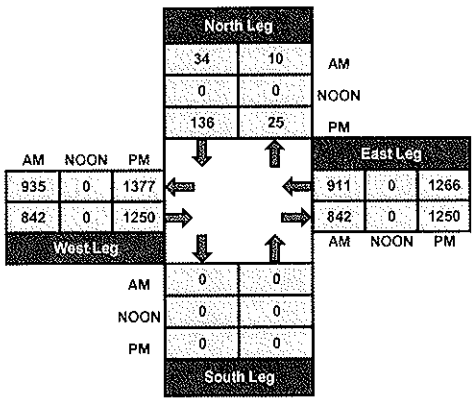
Project #: CA11_4167_001



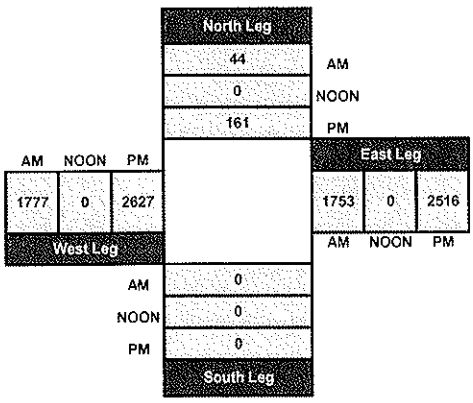
AM Peak Hour	7:45 AM
NOON Peak Hour	
PM Peak Hour	4:30 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(4)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	22	53	0	55	61	34	88	34	48	3	20	38	456
7:15 AM	29	62	1	61	81	49	135	50	57	2	20	45	592
7:30 AM	29	99	1	71	81	68	146	50	62	2	12	47	668
7:45 AM	29	67	2	79	97	54	121	73	62	3	23	47	657
8:00 AM	36	82	4	68	92	44	103	45	66	5	21	46	612
8:15 AM	25	70	8	79	118	36	98	42	51	3	36	52	618
8:30 AM	36	73	4	72	99	51	121	41	60	3	35	56	651
8:45 AM	52	102	3	79	119	40	90	49	67	5	33	69	708
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	258	608	23	564	748	376	902	384	473	26	200	400	4962
APPROACH %'s :	29.02%	68.39%	2.59%	33.41%	44.31%	22.27%	51.28%	21.83%	26.89%	4.15%	31.95%	63.90%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	76	141	4	45	135	46	84	56	86	8	47	103	831
4:15 PM	90	140	2	61	142	54	73	54	76	10	62	97	861
4:30 PM	79	110	6	67	126	62	84	52	66	6	79	133	870
4:45 PM	73	107	4	65	136	52	85	60	59	7	74	98	820
5:00 PM	77	118	7	77	184	74	85	56	70	9	81	134	972
5:15 PM	94	114	3	62	113	65	92	46	75	11	88	104	867
5:30 PM	102	123	10	87	161	79	92	54	68	7	51	82	916
5:45 PM	86	81	10	86	136	76	81	50	74	12	83	90	865
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	677	934	46	550	1133	508	676	428	574	70	565	841	7002
APPROACH %'s :	40.86%	56.37%	2.78%	25.10%	51.71%	23.19%	40.29%	25.51%	34.21%	4.74%	38.28%	56.98%	
[illegible]													

CONTROL :

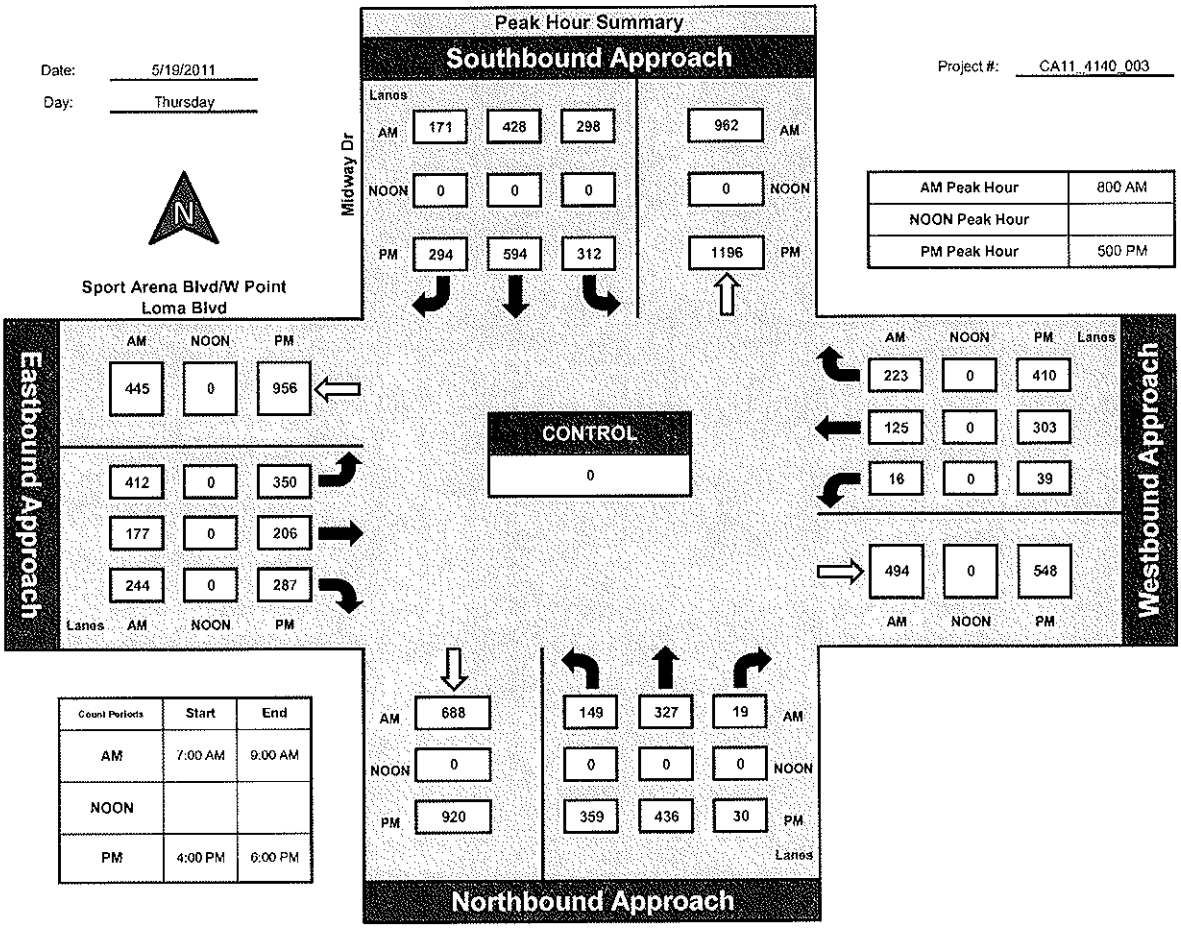
ITM Peak Hour Summary

Prepared by:

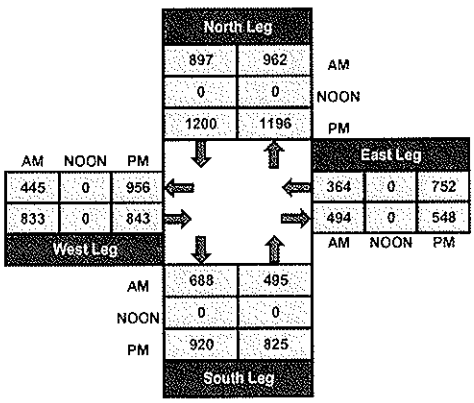
NDS

National Data & Surveying Services

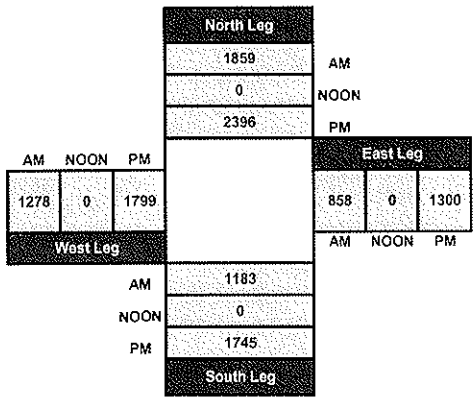
Midway Dr and Sport Arena Blvd/W Point Loma Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(5)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	18	23	3	9	3	3	57	13	9	56	10	224
7:15 AM	28	16	20	4	6	6	12	69	17	6	33	6	223
7:30 AM	26	20	28	5	9	5	18	86	16	11	56	9	289
7:45 AM	29	30	23	8	7	13	14	87	13	10	53	11	298
8:00 AM	19	22	14	6	11	12	16	91	21	21	68	7	308
8:15 AM	29	21	21	5	17	13	14	105	15	9	68	11	328
8:30 AM	24	30	34	8	10	11	18	103	20	18	84	6	366
8:45 AM	25	22	22	6	11	17	14	91	14	16	89	11	338
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	200	179	185	45	80	80	109	689	129	100	507	71	2374
APPROACH %'s :	35.46%	31.74%	32.80%	21.95%	39.02%	39.02%	11.76%	74.33%	13.92%	14.75%	74.78%	10.47%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	47	28	38	12	31	12	34	140	26	62	158	15	603
4:15 PM	26	38	35	9	34	19	32	118	24	70	140	16	561
4:30 PM	26	32	39	9	28	26	37	130	25	55	175	16	598
4:45 PM	41	29	47	15	42	10	23	91	53	49	138	11	549
5:00 PM	56	33	41	19	26	22	33	130	29	59	142	14	604
5:15 PM	47	31	31	9	35	28	34	151	27	59	174	17	643
5:30 PM	42	29	38	10	38	14	32	128	31	58	167	17	604
5:45 PM	49	15	28	9	39	18	29	122	29	47	146	9	540
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	334	235	297	92	273	149	254	1010	244	459	1240	115	4702
APPROACH %'s :	38.57%	27.14%	34.30%	17.90%	53.11%	28.99%	16.84%	66.98%	16.18%	25.30%	68.36%	6.34%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

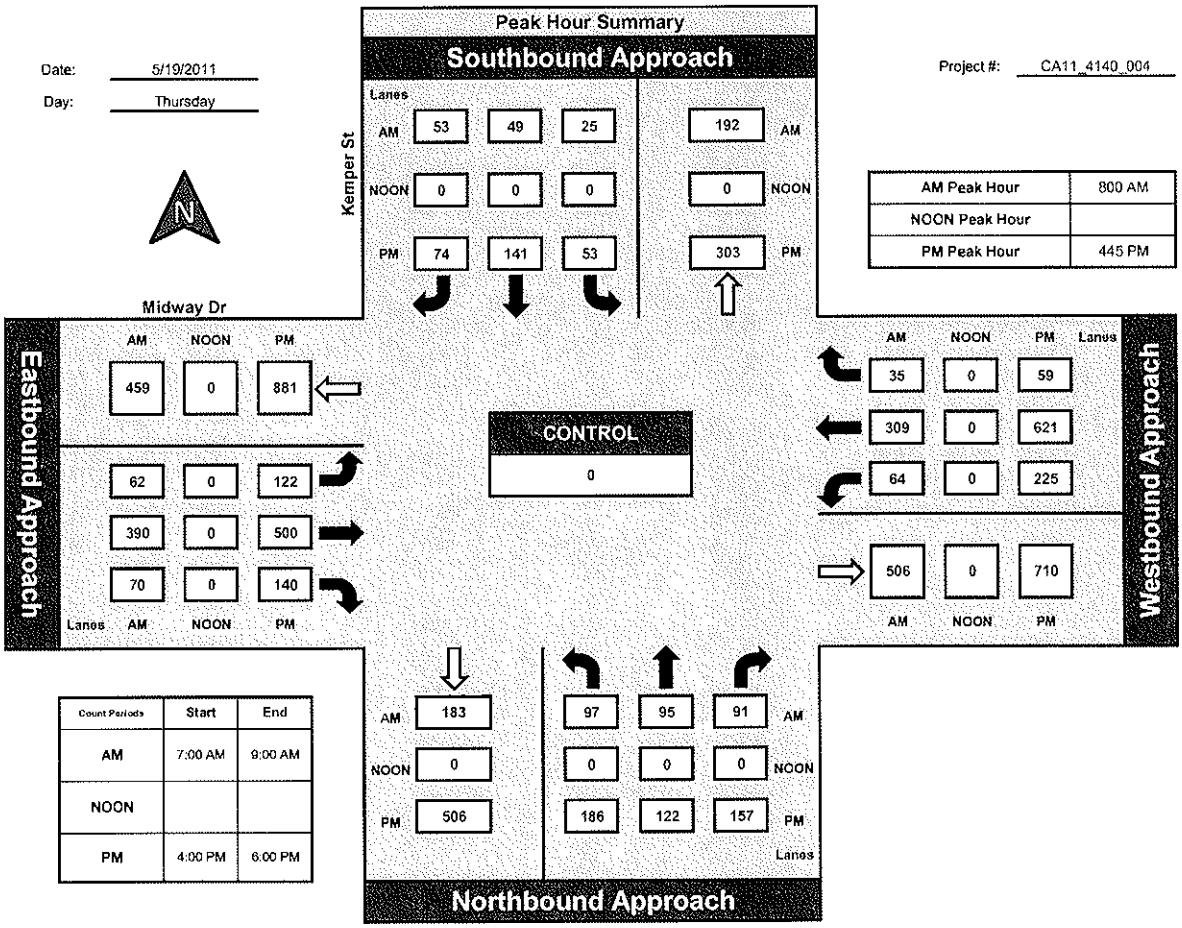
National Data & Surveying Services

Kemper St and Midway Dr , City of San Diego

Date: 5/19/2011

Day: Thursday

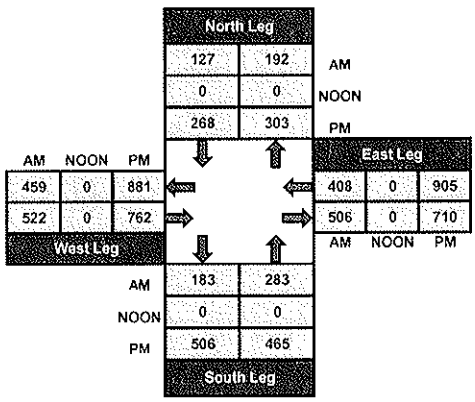
Project #: CA11_4140_004



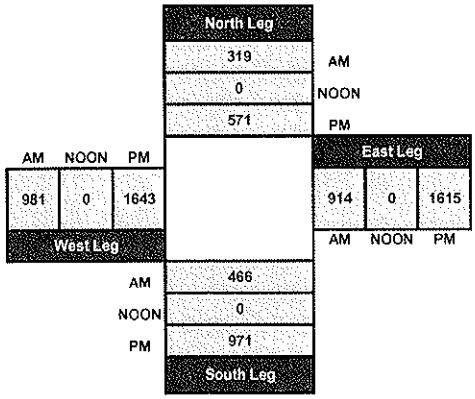
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(6)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	4	0	3	4	0	1	4	106	3	4	81	2	212
7:15 AM	1	2	1	1	0	2	3	102	2	2	90	4	210
7:30 AM	4	0	1	1	0	4	1	132	1	5	126	7	282
7:45 AM	3	0	1	1	1	4	1	114	2	7	132	11	277
8:00 AM	6	1	0	2	0	3	1	131	3	7	148	13	315
8:15 AM	7	1	3	4	1	3	4	139	5	6	158	12	343
8:30 AM	3	0	1	7	0	4	5	148	2	6	183	23	382
8:45 AM	3	1	1	3	1	5	6	119	0	6	140	20	305
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	5	11	23	3	26	25	991	18	43	1058	92	2326
APPROACH %'s :	65.96%	10.64%	23.40%	44.23%	5.77%	50.00%	2.42%	95.84%	1.74%	3.60%	88.68%	7.71%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	3	4	1	12	1	10	19	203	1	8	273	39	574
4:15 PM	4	2	1	12	4	13	11	205	4	6	242	34	538
4:30 PM	7	4	2	20	2	20	14	221	4	8	267	35	604
4:45 PM	3	1	3	16	2	16	11	170	5	6	240	34	507
5:00 PM	6	0	4	11	0	10	7	217	2	7	284	44	592
5:15 PM	8	1	5	22	0	6	14	197	5	6	246	51	561
5:30 PM	1	3	2	14	3	19	23	219	4	5	278	27	598
5:45 PM	4	0	5	14	1	7	9	186	9	1	242	27	505
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	36	15	23	121	13	101	108	1618	34	47	2072	291	4479
APPROACH %'s :	48.65%	20.27%	31.08%	51.49%	5.53%	42.98%	6.14%	91.93%	1.93%	1.95%	85.98%	12.07%	



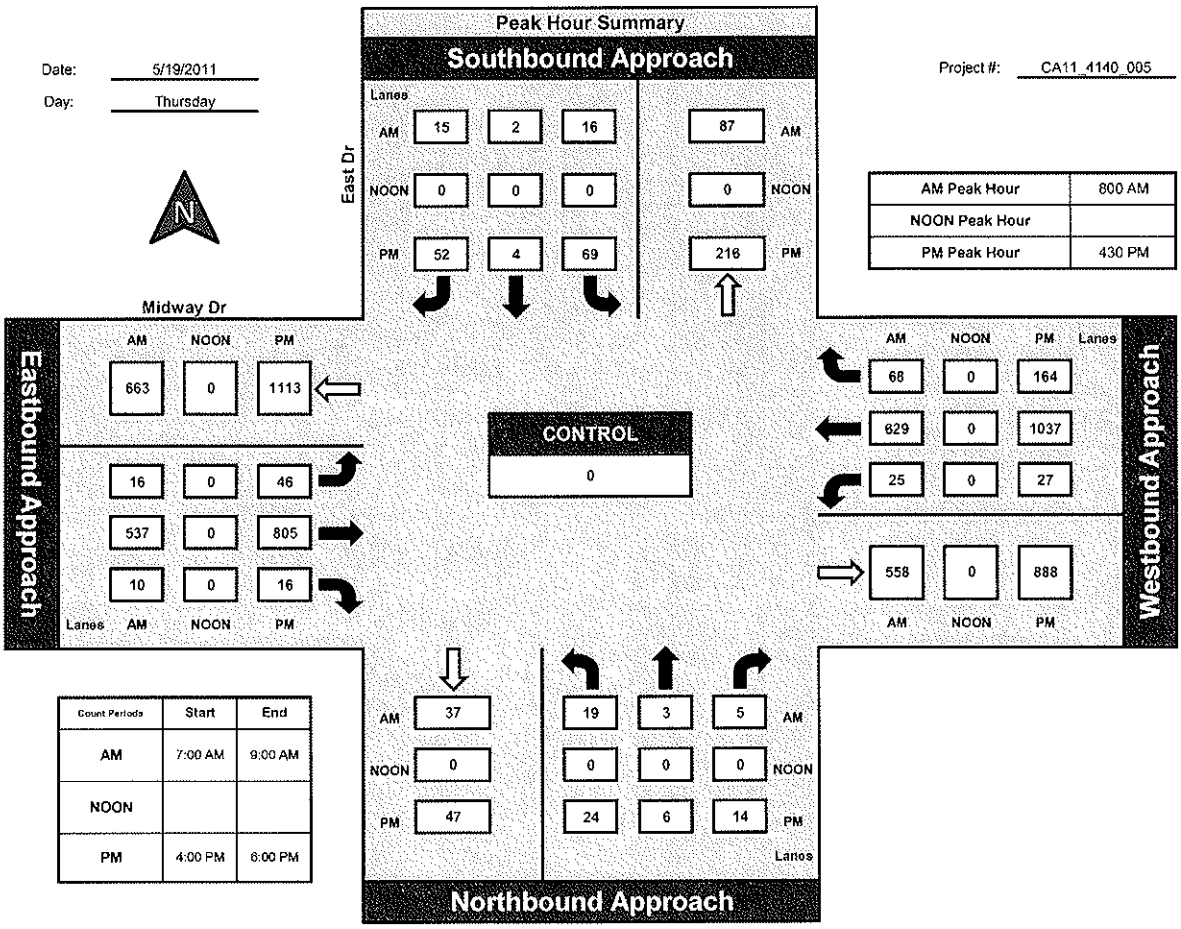
CONTROL :

ITM Peak Hour Summary

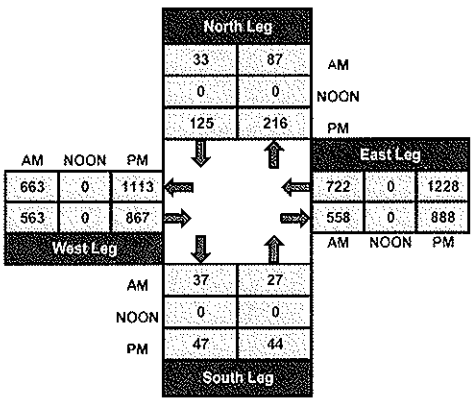
Prepared by:

National Data & Surveying Services

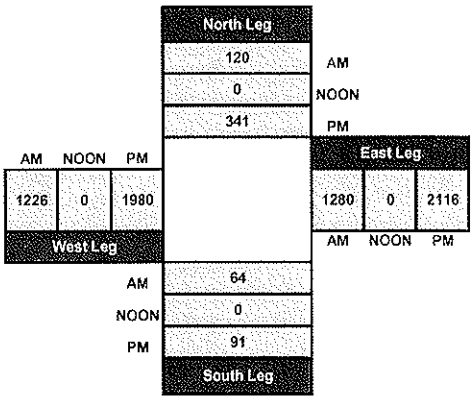
East Dr and Midway Dr , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(7)

8

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

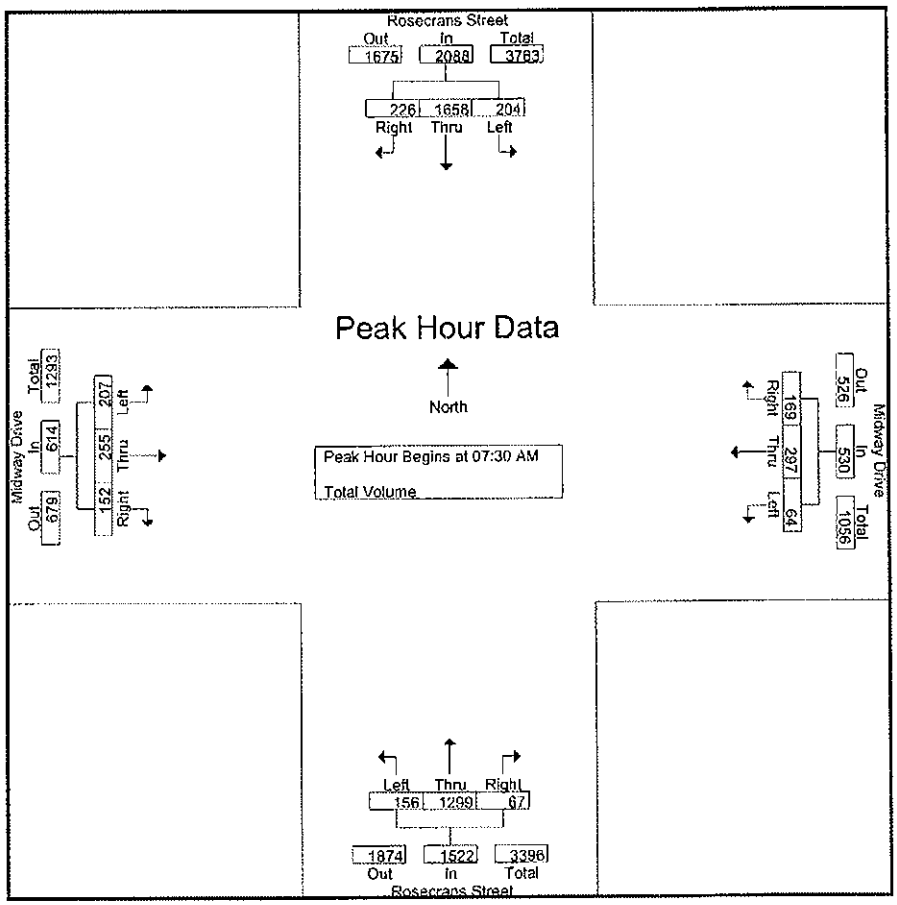
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
Total	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
07:00 AM	78	384	31	493	14	44	32	90	24	246	17	287	27	46	28	101	971
07:15 AM	67	472	45	584	18	54	25	97	17	283	13	313	45	59	16	120	1114
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
Total	259	1695	192	2146	62	240	127	429	104	1196	51	1351	165	238	115	518	4444
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
08:30 AM	58	310	55	423	15	88	45	148	33	332	20	385	55	77	35	167	1123
Grand Total	467	3165	378	4010	121	525	296	942	245	2328	131	2704	376	483	253	1112	8768
Apprch %	11.6	78.9	9.4		12.8	55.7	31.4		9.1	86.1	4.8		33.8	43.4	22.8		
Total %	5.3	36.1	4.3	45.7	1.4	6	3.4	10.7	2.8	26.6	1.5	30.8	4.3	5.5	2.9	12.7	

	Rosecrans Street Southbound				Midwny Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
Total Volume	204	1658	226	2088	64	297	169	530	156	1299	67	1522	207	255	152	614	4754
% App. Total	9.8	79.4	10.8		12.1	56	31.9		10.2	85.3	4.4		33.7	41.5	24.8		
PHF	.718	.856	.831	.877	.762	.773	.716	.844	.780	.931	.698	.926	.772	.951	.905	.914	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	67	472	45	584	20	72	36	128	34	**349**	11	394	44	67	33	144
+15 mins.	**71**	355	48	474	13	59	**59**	131	29	318	10	357	**67**	62	39	**168**
+30 mins.	43	**484**	**68**	**595**	**21**	**96**	40	**157**	**50**	286	**24**	360	47	60	**42**	149
+45 mins.	48	417	57	522	15	88	45	148	43	346	22	**411**	55	77	35	167
Total Volume	229	1728	218	2175	69	315	180	564	156	1299	67	1522	213	266	149	628
% App. Total	10.5	79.4	10		12.2	55.9	31.9		10.2	85.3	4.4		33.9	42.4	23.7	
PHF	.806	.893	.801	.914	.821	.820	.763	.898	.780	.931	.698	.926	.795	.864	.887	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

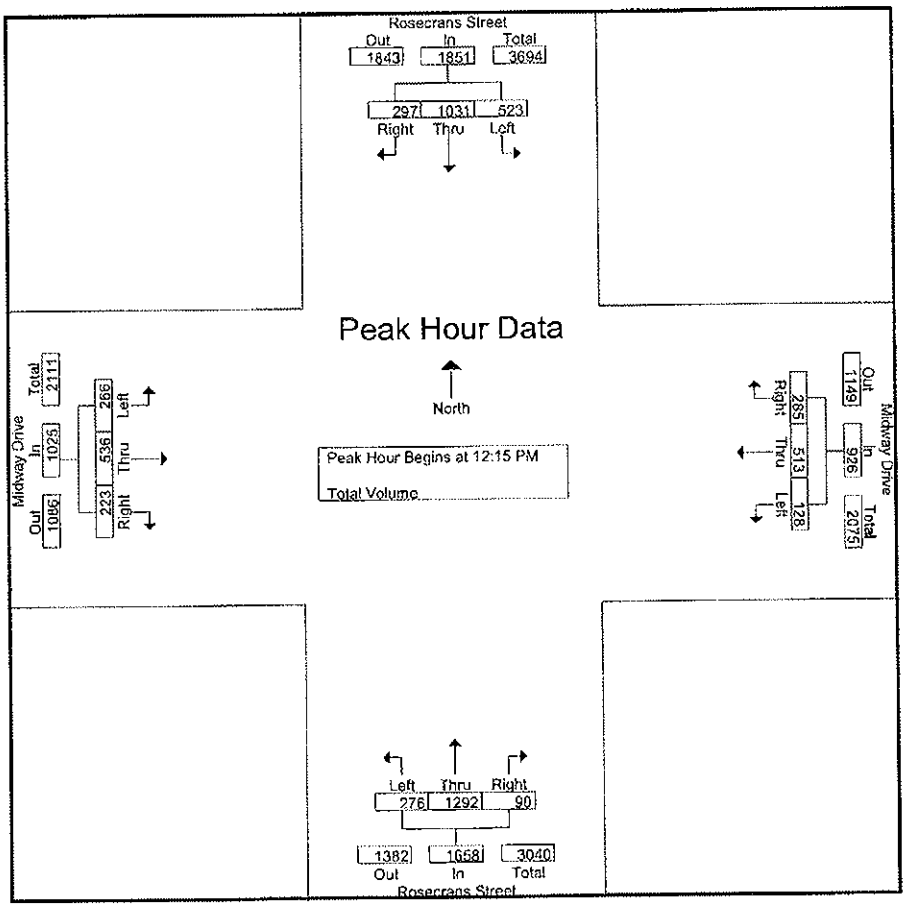
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	123	255	86	464	28	107	62	197	76	270	16	362	90	110	46	246	1269
11:45 AM	131	222	49	402	34	145	55	234	89	319	20	428	50	108	43	201	1265
Total	254	477	135	866	62	252	117	431	165	589	36	790	140	218	89	447	2534
12:00 PM	152	299	69	520	46	120	68	234	49	287	22	358	56	102	42	200	1312
12:15 PM	120	237	76	433	34	143	77	254	73	282	24	379	72	144	68	284	1350
12:30 PM	120	288	84	492	37	120	77	234	76	377	22	475	56	126	55	237	1438
12:45 PM	131	233	68	432	27	144	76	247	63	308	19	390	69	130	58	257	1326
Total	523	1057	297	1877	144	527	298	969	261	1254	87	1602	253	502	223	978	5426
01:00 PM	152	273	69	494	30	106	55	191	64	325	25	414	69	136	42	247	1346
01:15 PM	135	211	73	419	35	102	43	180	72	288	24	384	51	107	36	194	1177
Grand Total	1064	2018	574	3656	271	987	513	1771	562	2456	172	3190	513	963	390	1866	10483
Apprch %	29.1	55.2	15.7		15.3	55.7	29		17.6	77	5.4		27.5	51.6	20.9		
Total %	10.1	19.3	5.5	34.9	2.6	9.4	4.9	16.9	5.4	23.4	1.6	30.4	4.9	9.2	3.7	17.8	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	120	237	76	433	34	143	77	**254**	73	282	24	379	**72**	**144**	**68**	**284**	1350
12:30 PM	120	**288**	**84**	492	**37**	120	77	234	**76**	**377**	**22**	**475**	56	126	55	237	**1438**
12:45 PM	131	233	68	432	27	**144**	76	247	63	308	19	390	69	130	58	257	1326
01:00 PM	**152**	273	69	**494**	30	106	55	191	64	325	**25**	414	69	136	42	247	1346
Total Volume	523	1031	297	1851	128	513	285	926	276	1292	90	1658	266	536	223	1025	5460
% App. Total	28.3	55.7	16		13.8	55.4	30.8		16.6	77.9	5.4		26	52.3	21.8		
PHF	.860	.895	.884	.937	.865	.891	.925	.911	.908	.857	.900	.873	.924	.931	.820	.902	.949

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

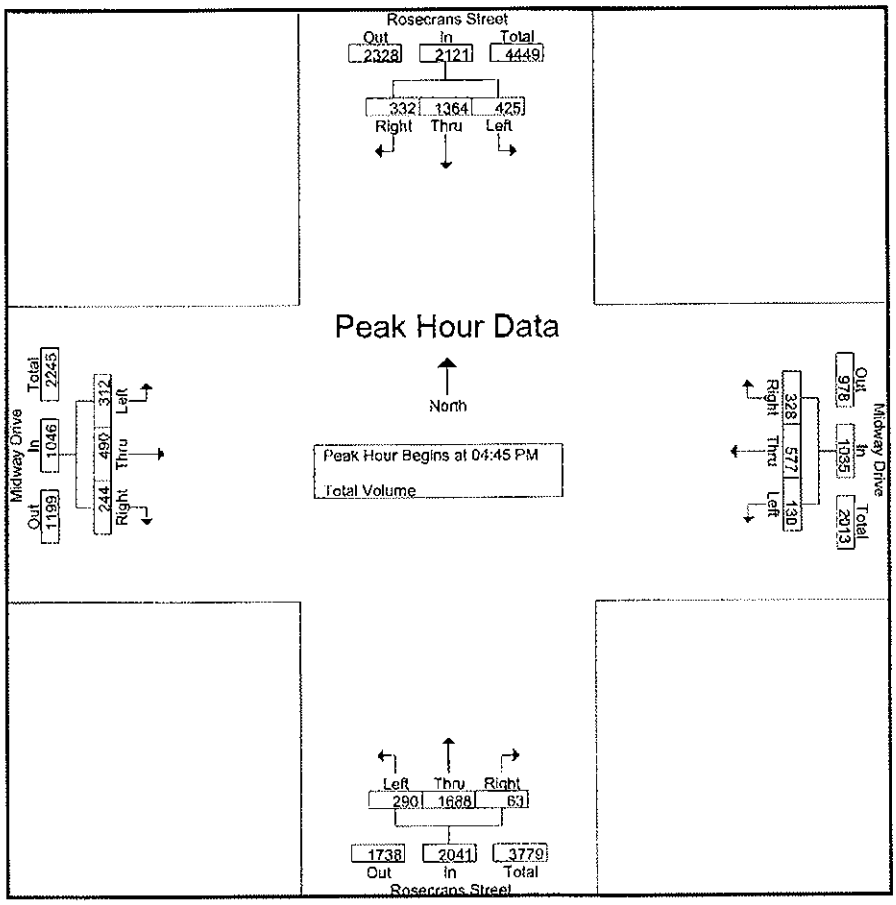
Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				12:30 PM				12:15 PM			
+0 mins.	**152**	**299**	69	**520**	**46**	120	68	234	**76**	**377**	22	**475**	**72**	**144**	**68**	**284**
+15 mins.	120	237	76	433	34	143	77	**254**	63	308	19	390	56	126	55	237
+30 mins.	120	288	**84**	492	37	120	77	234	64	325	**25**	414	69	130	58	257
+45 mins.	131	233	68	432	27	**144**	76	247	72	288	24	384	69	136	42	247
Total Volume	523	1057	297	1877	144	527	298	969	275	1298	90	1663	266	536	223	1025
% App. Total	27.9	56.3	15.8		14.9	54.4	30.8		16.5	78.1	5.4		26	52.3	21.8	
PHF	.860	.884	.884	.902	.783	.915	.968	.954	.905	.861	.900	.875	.924	.931	.820	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	116	330	90	536	40	133	95	268	62	427	17	506	60	109	80	249
+15 mins.	120	332	81	533	23	129	90	242	69	455	14	538	84	108	52	244
+30 mins.	99	344	89	532	38	154	84	276	67	424	13	504	86	129	46	261
+45 mins.	90	358	72	520	39	152	83	274	75	434	14	523	82	144	66	292
Total Volume	425	1364	332	2121	140	568	352	1060	273	1740	58	2071	312	490	244	1046
% App. Total	20	64.3	15.7		13.2	53.6	33.2		13.2	84	2.8		29.8	46.8	23.3	
PHF	.885	.953	.922	.989	.875	.922	.926	.960	.910	.956	.853	.962	.907	.851	.763	.896

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	106	301	72	479	34	138	80	252	62	427	17	506	75	117	42	234	1471
04:15 PM	107	324	78	509	33	128	96	257	69	455	14	538	77	111	52	240	1544
04:30 PM	103	285	80	468	40	133	95	268	67	424	13	504	72	131	56	259	1499
04:45 PM	116	330	90	536	23	129	90	242	75	434	14	523	60	109	80	249	1550
Total	432	1240	320	1992	130	528	361	1019	273	1740	58	2071	284	468	230	982	6064
05:00 PM	120	332	81	533	38	154	84	276	69	398	20	487	84	108	52	244	1540
05:15 PM	99	344	89	532	39	152	83	274	71	432	14	517	86	129	46	261	1584
05:30 PM	90	358	72	520	30	142	71	243	75	424	15	514	82	144	66	292	1569
05:45 PM	121	327	67	515	37	119	62	218	71	350	20	441	64	119	52	235	1409
Total	430	1361	309	2100	144	567	300	1011	286	1604	69	1959	316	500	216	1032	6102
Grand Total	862	2601	629	4092	274	1095	661	2030	559	3344	127	4030	600	968	446	2014	12166
Apprch %	21.1	63.6	15.4		13.5	53.9	32.6		13.9	83	3.2		29.8	48.1	22.1		
Total %	7.1	21.4	5.2	33.6	2.3	9	5.4	16.7	4.6	27.5	1	33.1	4.9	8	3.7	16.6	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	116	330	**90**	**536**	23	129	**90**	242	**75**	**434**	14	**523**	60	109	**80**	249	1550
05:00 PM	**120**	332	81	533	38	**154**	84	**276**	69	398	**20**	487	84	108	52	244	1540
05:15 PM	99	344	89	532	**39**	152	83	274	71	432	14	517	**86**	129	46	261	**1584**
05:30 PM	90	**358**	72	520	30	142	71	243	75	424	15	514	82	**144**	66	**292**	1569
Total Volume	425	1364	332	2121	130	577	328	1035	290	1688	63	2041	312	490	244	1046	6243
% App. Total	20	64.3	15.7		12.6	55.7	31.7		14.2	82.7	3.1		29.8	46.8	23.3		
PHF	.885	.953	.922	.989	.833	.937	.911	.938	.967	.972	.788	.976	.907	.851	.763	.896	.985

(9)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		85	4		87							17	193
7:15 AM		92	8		75							14	189
7:30 AM		118	2		117							10	247
7:45 AM		118	6		99							20	243
8:00 AM		114	8		112							21	255
8:15 AM		129	4		118							20	271
8:30 AM		149	7		150							24	330
8:45 AM		141	6		130							17	294

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	946	45	0	888	0	0	0	0	0	0	143	2022
APPROACH %'s :	0.00%	95.46%	4.54%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		172	4		203							63	442
4:15 PM		185	4		182							44	415
4:30 PM		169	1		228							71	469
4:45 PM		186	2		222							52	462
5:00 PM		220	1		232							53	506
5:15 PM		190	2		183							52	427
5:30 PM		164	1		206							43	414
5:45 PM		151	1		170							30	352
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1437	16	0	1626	0	0	0	0	0	0	408	3487
APPROACH %'s :	0.00%	98.90%	1.10%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
[illegible]													
[illegible]													

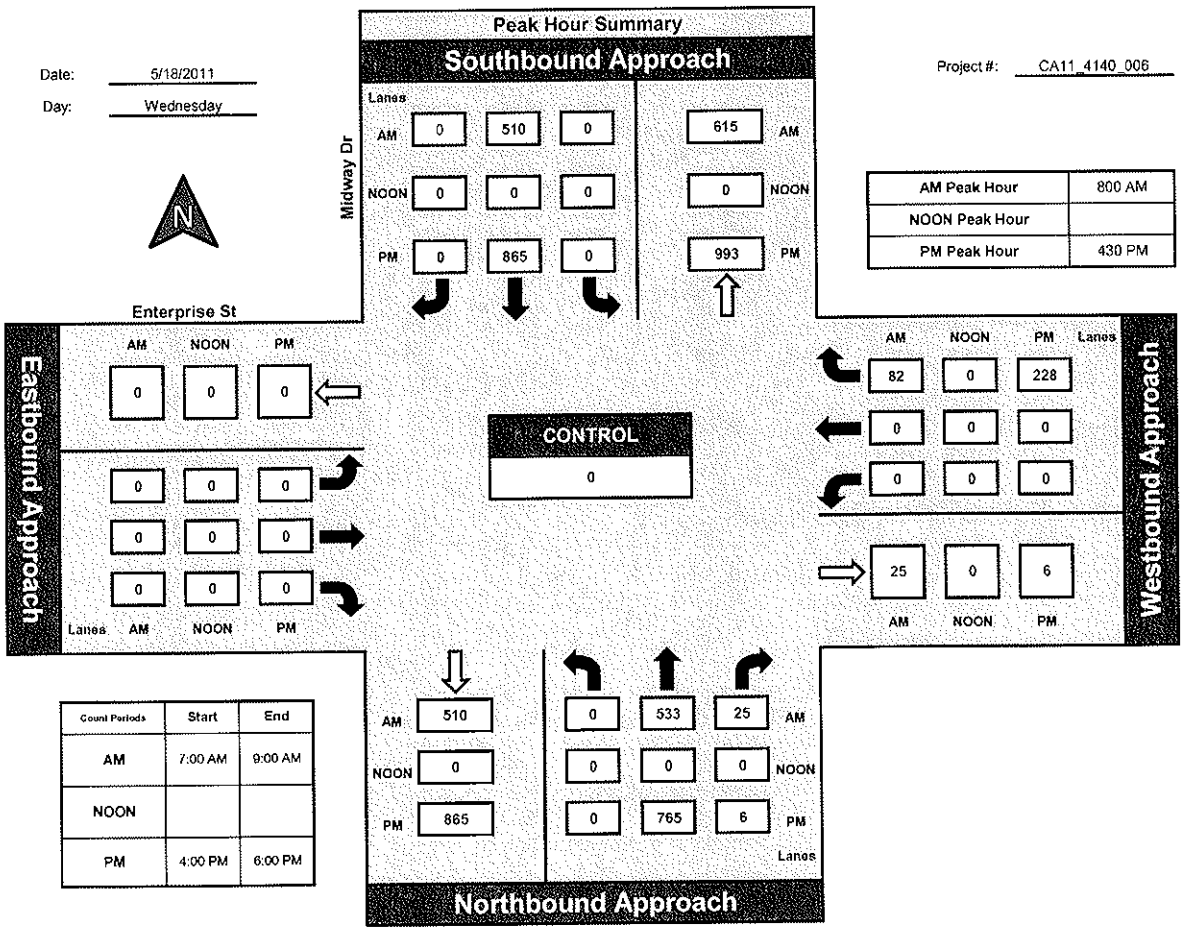
CONTROL :

ITM Peak Hour Summary

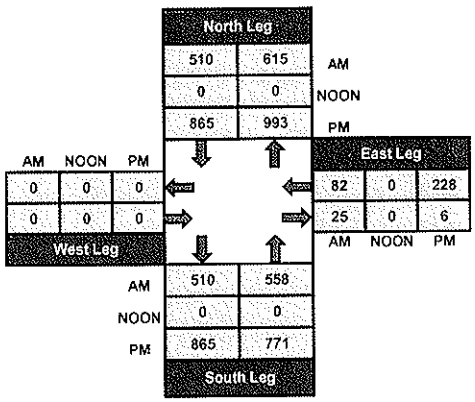
Prepared by:

National Data & Surveying Services

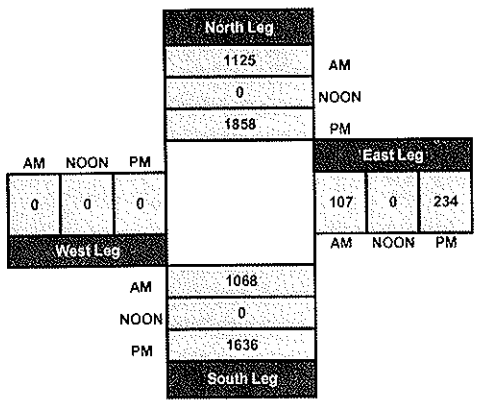
Midway Dr and Enterprise St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(10)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				65		21		160			380	84	710
7:15 AM				55		21		210			329	105	720
7:30 AM				95		21		186			248	115	665
7:45 AM				87		13		189			338	129	756
8:00 AM				89		19		210			314	119	751
8:15 AM				102		19		227			306	132	786
8:30 AM				119		28		210			253	152	762
8:45 AM				108		25		170			204	151	658

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	720	0	167	0	1562	0	0	2372	987	5808
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	81.17%	0.00%	18.83%	0.00%	100.00%	0.00%	0.00%	70.62%	29.38%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

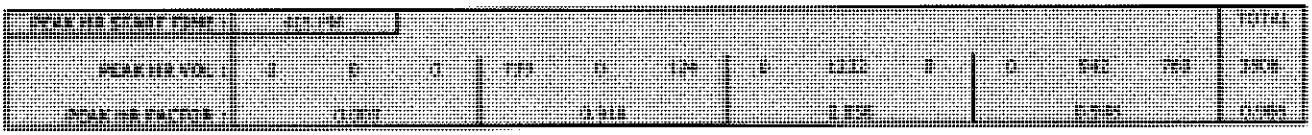
City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				172		27		333			223	175	930
4:15 PM				159		27		359			230	190	965
4:30 PM				192		32		310			227	170	931
4:45 PM				187		31		293			255	188	954
5:00 PM				201		34		270			230	221	956
5:15 PM				157		25		278			211	189	860
5:30 PM				175		31		216			206	169	797
5:45 PM				148		17		180			193	149	687

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	1391	0	224	0	2239	0	0	1775	1451	7080
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	86.13%	0.00%	13.87%	0.00%	100.00%	0.00%	0.00%	55.02%	44.98%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

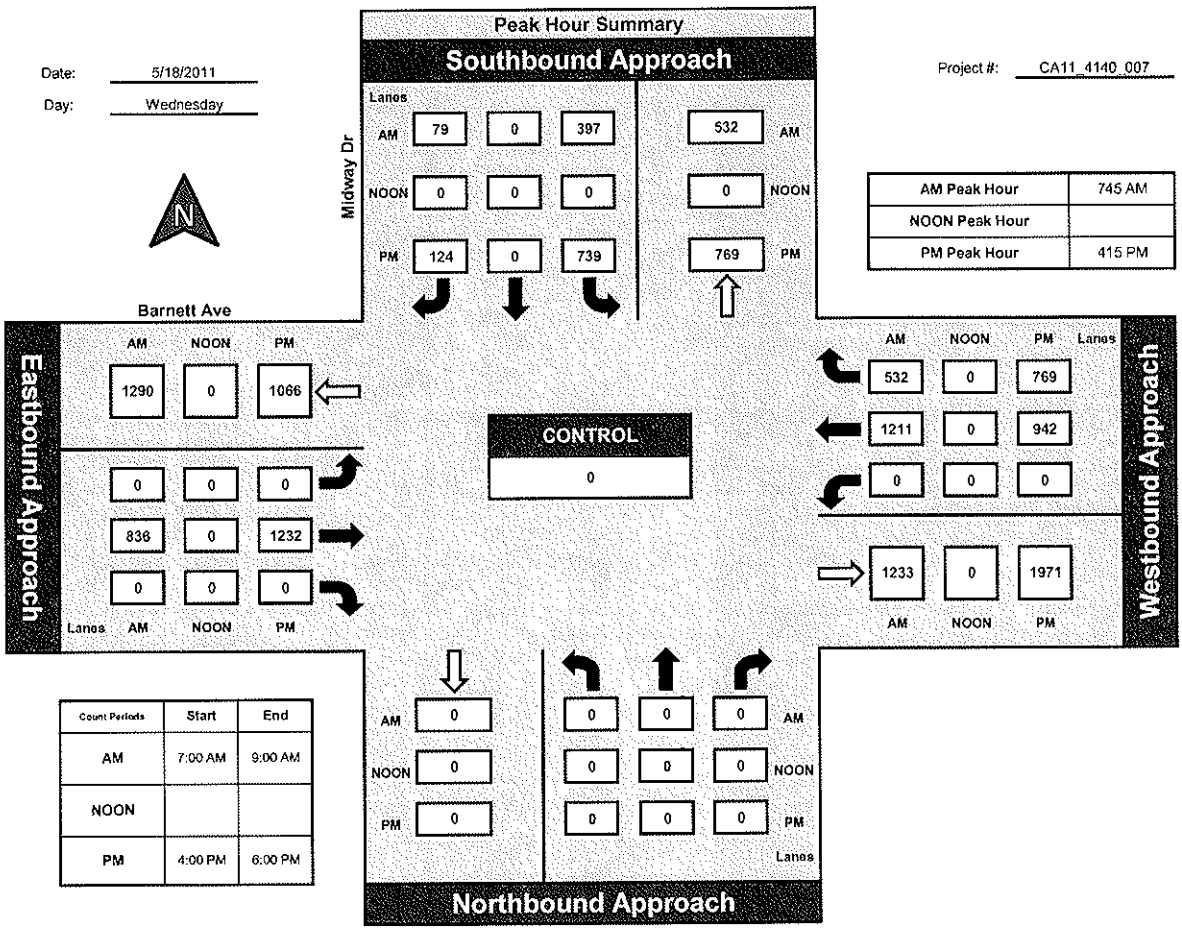
National Data & Surveying Services

Midway Dr and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

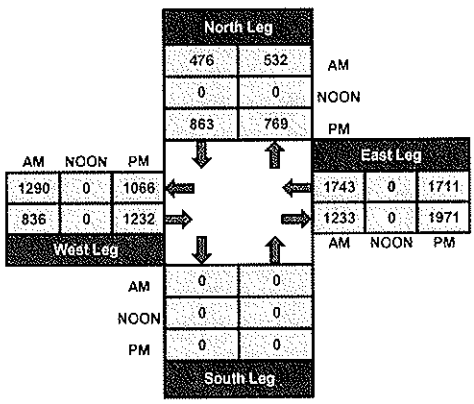
Project #: CA11_4140_007



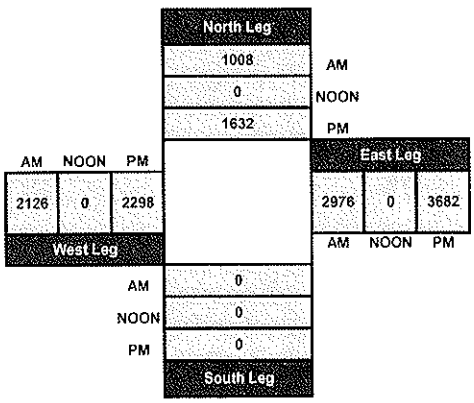
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

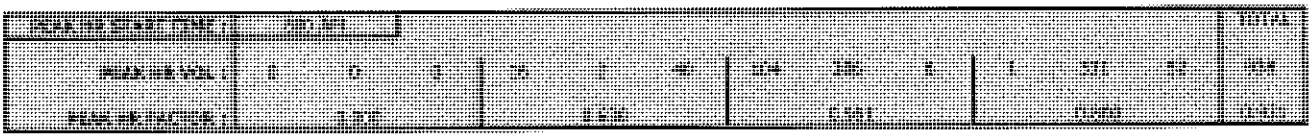
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				7	0	11	24	66	1	0	47	9	165
7:15 AM				7	1	18	30	83	0	0	36	6	181
7:30 AM				8	0	8	36	74	1	0	54	18	199
7:45 AM				3	0	16	32	99	2	0	68	15	235
8:00 AM				1	0	13	33	95	1	1	69	12	225
8:15 AM				8	1	14	25	99	0	0	78	14	239
8:30 AM				3	0	8	25	93	3	0	80	10	222
8:45 AM				4	1	5	21	99	2	0	104	16	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	41	3	93	226	708	10	1	536	100	1718
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	29.93%	2.19%	67.88%	23.94%	75.00%	1.06%	0.16%	84.14%	15.70%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

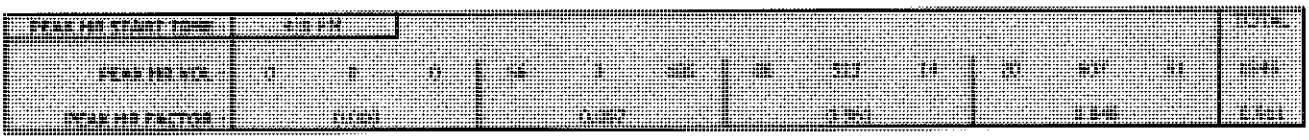
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				9	0	24	13	83	0	1	109	9	248
4:15 PM				12	0	36	13	105	2	4	121	11	304
4:30 PM				15	1	43	21	131	4	7	150	16	388
4:45 PM				14	0	48	25	130	7	5	177	18	424
5:00 PM				13	2	53	22	127	3	2	128	8	358
5:15 PM				14	0	41	18	135	0	6	152	9	375
5:30 PM				11	0	27	23	123	2	2	137	9	334
5:45 PM				12	2	35	28	136	5	3	149	8	378
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	100	5	307	163	970	23	30	1123	88	2809
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	24.27%	1.21%	74.51%	14.10%	83.91%	1.99%	2.42%	90.49%	7.09%	



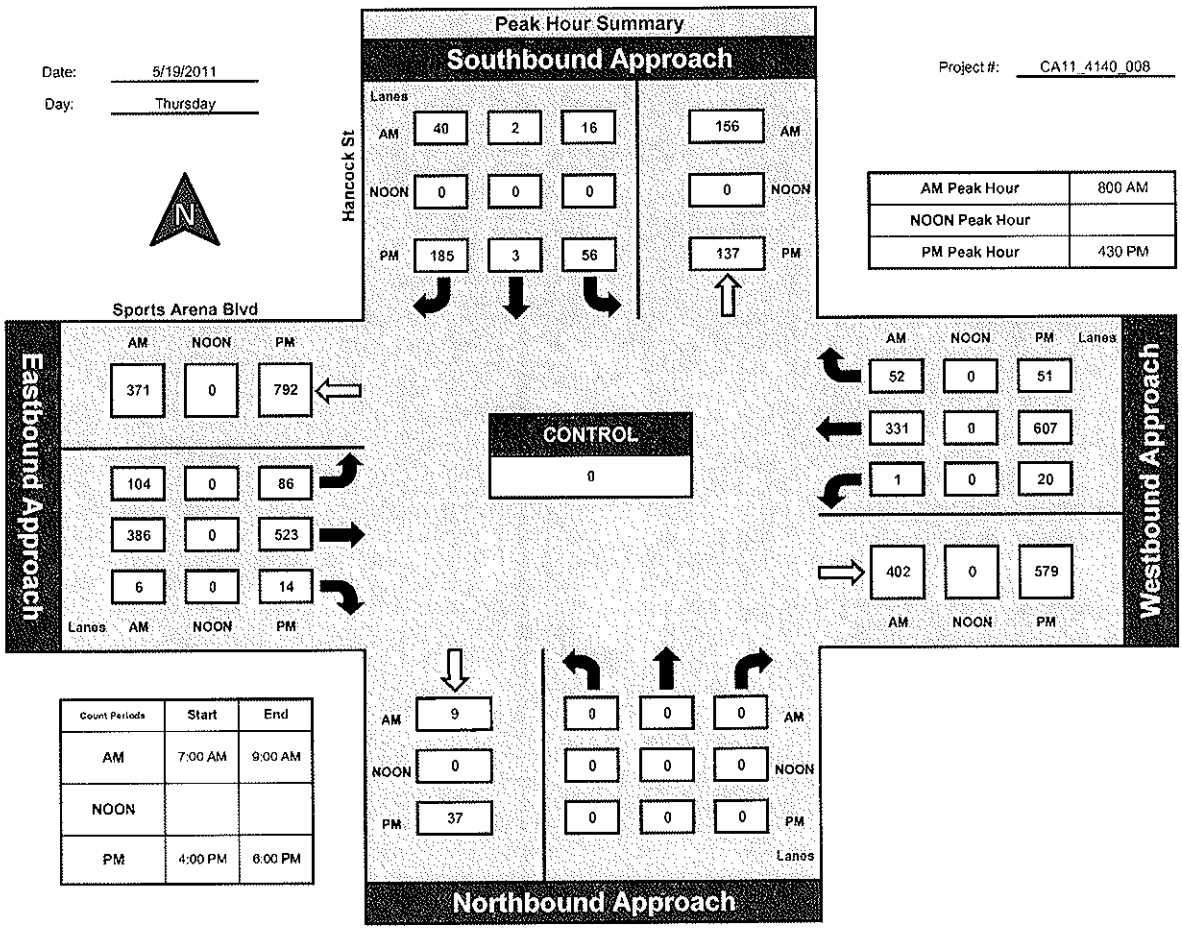
CONTROL :

ITM Peak Hour Summary

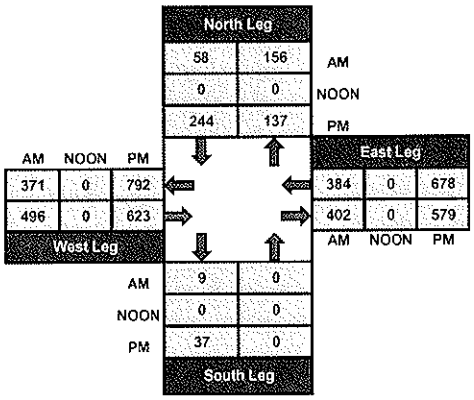
Prepared by:

National Data & Surveying Services

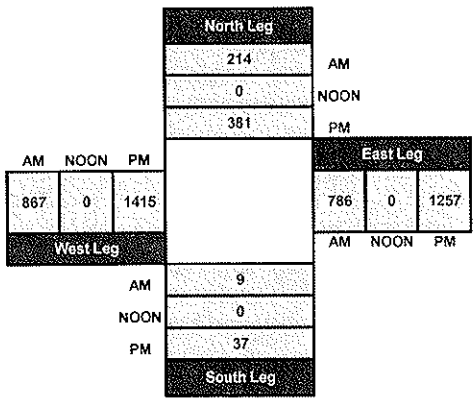
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		1		0				0	0			1
7:15 AM	0		1		0				0	0			1
7:30 AM	1		2		1				0	0			4
7:45 AM	0		1		0				0	0			1
8:00 AM	0		0		1				0	1			2
8:15 AM	0		2		1				1	0			4
8:30 AM	2		0		1				1	1			5
8:45 AM	0		0		0				0	0			

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	7	0	4	0	0	0	2	2	0	0	18
APPROACH %'s :	30.00%	0.00%	70.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

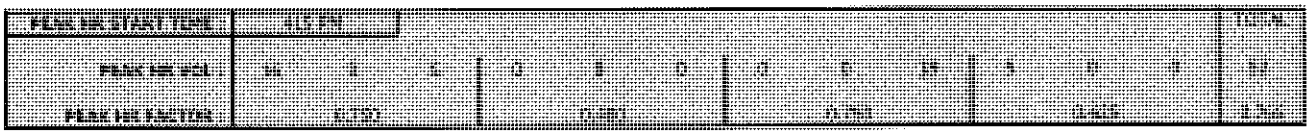
Project ID: CA11_4140_008 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		1		1				2	0			4
4:15 PM	5		2		0				2	2			11
4:30 PM	4		1		5				6	1			17
4:45 PM	4		2		0				5	2			13
5:00 PM	3		0		3				5	0			11
5:15 PM	2		0		0				1	1			4
5:30 PM	1		2		1				2	1			7
5:45 PM	3		2		2				3	2			12

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	0	10	0	12	0	0	0	26	9	0	0	79
APPROACH %'s :	68.75%	0.00%	31.25%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



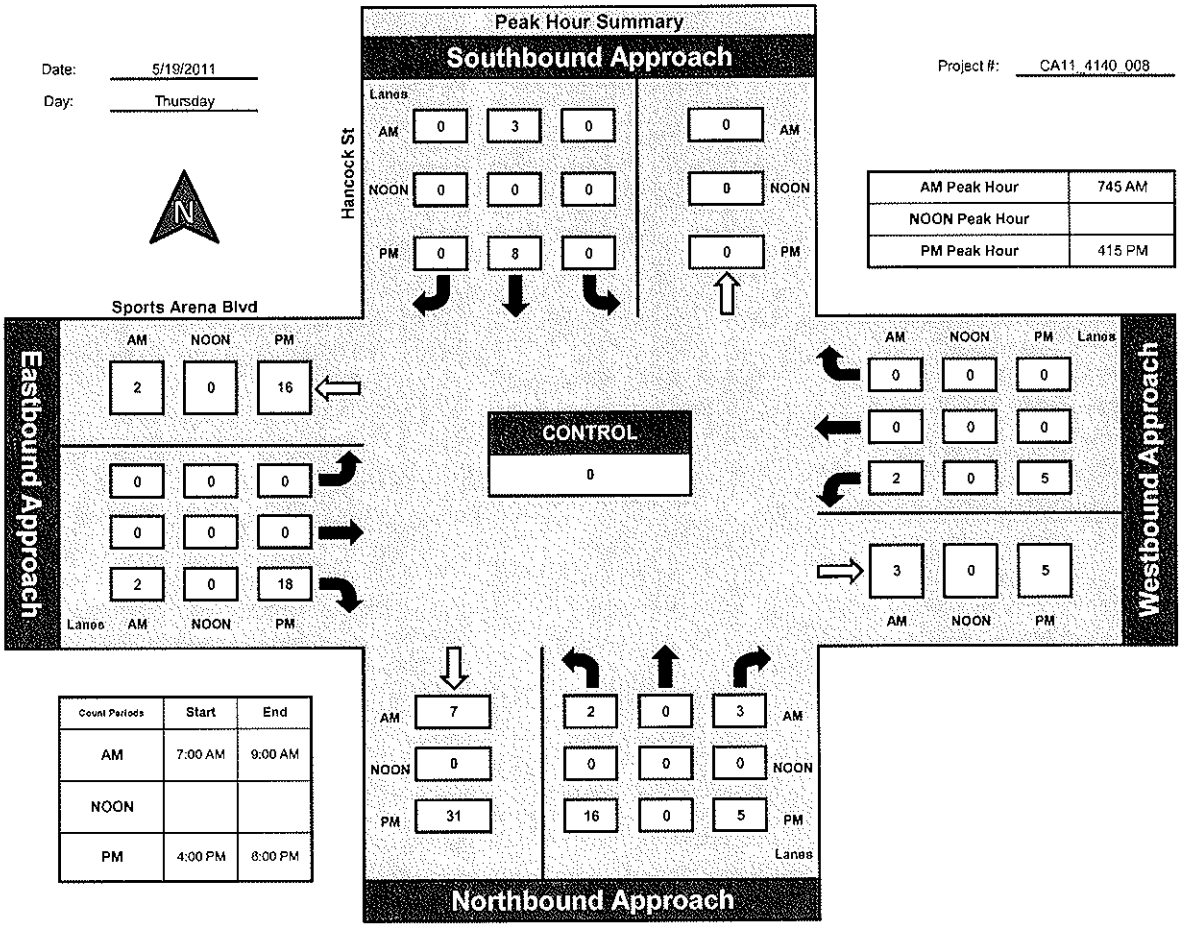
CONTROL :

ITM Peak Hour Summary

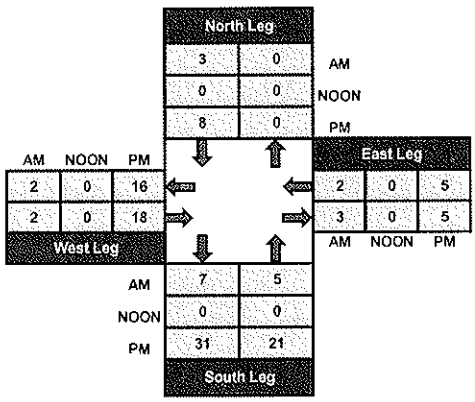
Prepared by:

National Data & Surveying Services

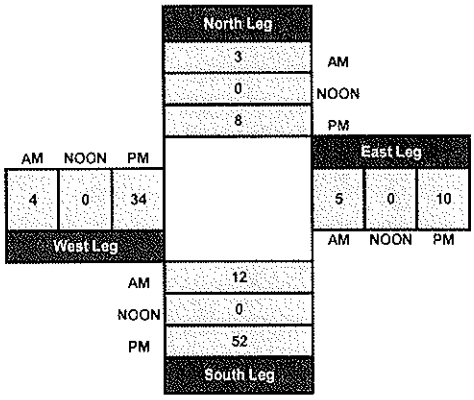
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(12)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	1	30	1	2	5	7	79	6	20	57	6	229
7:15 AM	13	2	20	3	5	3	4	90	15	14	49	9	227
7:30 AM	17	6	39	4	3	6	9	74	7	29	74	11	279
7:45 AM	12	10	22	7	4	13	9	68	16	27	57	10	255
8:00 AM	12	6	15	11	4	15	19	64	17	28	50	22	263
8:15 AM	23	8	19	10	6	23	20	71	11	24	44	20	279
8:30 AM	16	15	34	8	6	32	17	65	28	34	51	23	329
8:45 AM	23	11	27	17	7	30	12	81	20	30	82	15	355
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	131	59	206	61	37	127	97	592	120	206	464	116	2216
APPROACH %'s :	33.08%	14.90%	52.02%	27.11%	16.44%	56.44%	11.99%	73.18%	14.83%	26.21%	59.03%	14.76%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	74	40	110	36	20	83	65	290	72	116	279	76	1261
PEAK HR FACTOR :	0.803			0.782			0.906			0.906			0.907

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

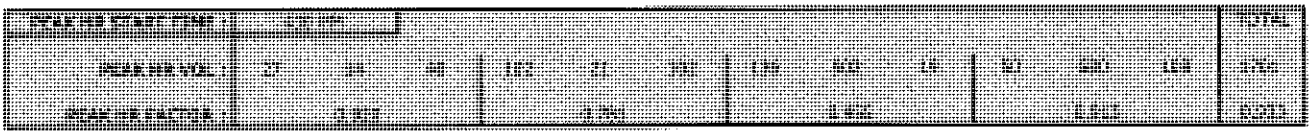
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	2	10	33	2	23	27	95	2	18	135	29	377
4:15 PM	6	3	8	28	5	23	35	106	10	8	139	29	400
4:30 PM	10	3	9	33	6	33	44	112	4	19	150	33	456
4:45 PM	6	5	10	22	5	19	25	125	6	9	158	18	408
5:00 PM	8	3	11	24	4	23	34	130	8	11	137	25	418
5:15 PM	3	3	10	23	6	27	33	135	1	11	135	32	419
5:30 PM	8	0	9	22	3	22	27	123	5	13	140	21	393
5:45 PM	5	5	8	28	6	21	21	136	5	10	119	35	399
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	47	24	75	213	37	191	246	962	41	99	1113	222	3270
APPROACH %'s :	32.19%	16.44%	51.37%	48.30%	8.39%	43.31%	19.70%	77.02%	3.28%	6.90%	77.62%	15.48%	



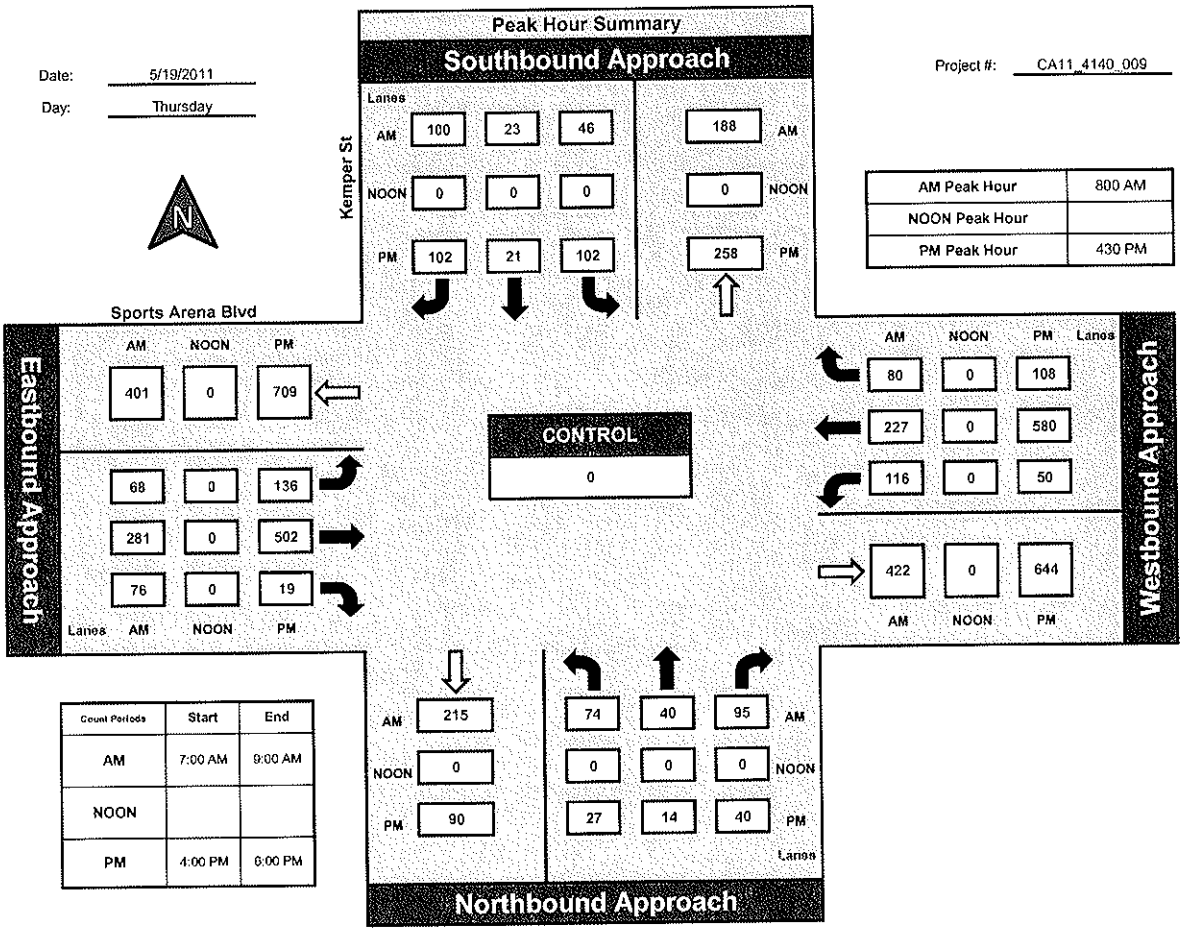
CONTROL :

ITM Peak Hour Summary

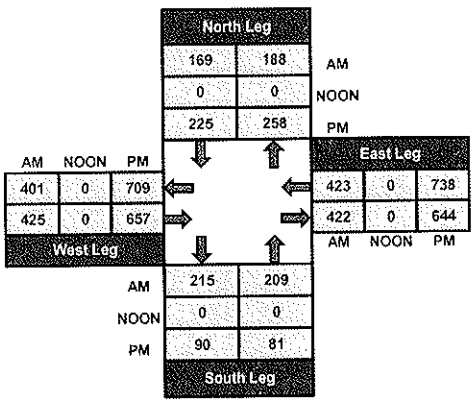
Prepared by:

National Data & Surveying Services

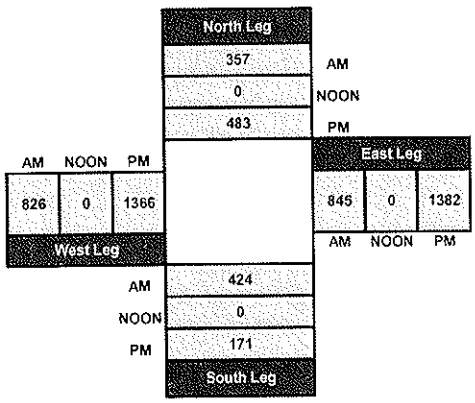
Kemper St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(13)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_010

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	0	1	2	0	4	11	69	12	1	63	1	171
7:15 AM	4	0	4	2	2	4	16	74	11	2	73	5	197
7:30 AM	5	0	1	7	0	5	14	87	15	1	96	2	233
7:45 AM	7	0	3	1	0	8	12	81	10	2	87	3	214
8:00 AM	7	1	0	5	0	7	20	65	11	4	78	2	200
8:15 AM	4	0	3	4	1	10	23	75	7	2	82	5	216
8:30 AM	6	3	2	5	1	11	16	66	9	2	92	11	224
8:45 AM	9	1	3	11	1	12	13	76	12	2	106	7	253
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	49	5	17	37	5	61	125	593	87	16	677	36	1708
APPROACH %'s :	69.01%	7.04%	23.94%	35.92%	4.85%	59.22%	15.53%	73.66%	10.81%	2.19%	92.87%	4.94%	
PEAK HR START TIME	[illegible]												
PEAK HR VOL	[illegible]												
PEAK HR FACTOR	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

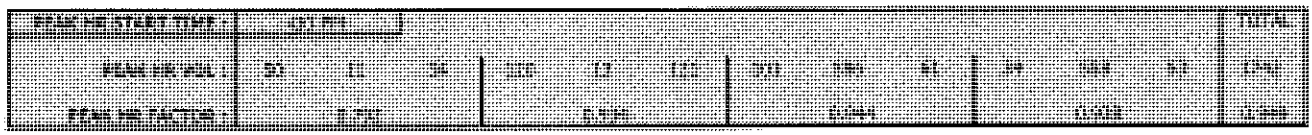
National Data & Surveying Services

Project ID: CA11_4140_010 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	12	3	7	18	3	37	35	146	10	4	136	13	424
4:15 PM	8	9	8	22	3	40	25	139	17	9	131	14	425
4:30 PM	17	4	9	25	2	36	25	152	17	8	146	18	459
4:45 PM	7	2	4	33	3	32	24	129	15	7	138	8	402
5:00 PM	15	3	9	33	5	24	24	162	12	6	143	11	447
5:15 PM	11	2	12	29	3	29	28	143	17	13	131	16	434
5:30 PM	11	2	9	20	0	24	13	149	19	10	130	13	400
5:45 PM	13	0	10	33	3	23	25	131	21	9	131	17	416
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	94	25	68	213	22	245	199	1151	128	66	1086	110	3407
APPROACH %'s :	50.27%	13.37%	36.36%	44.38%	4.58%	51.04%	13.46%	77.88%	8.66%	5.23%	86.05%	8.72%	



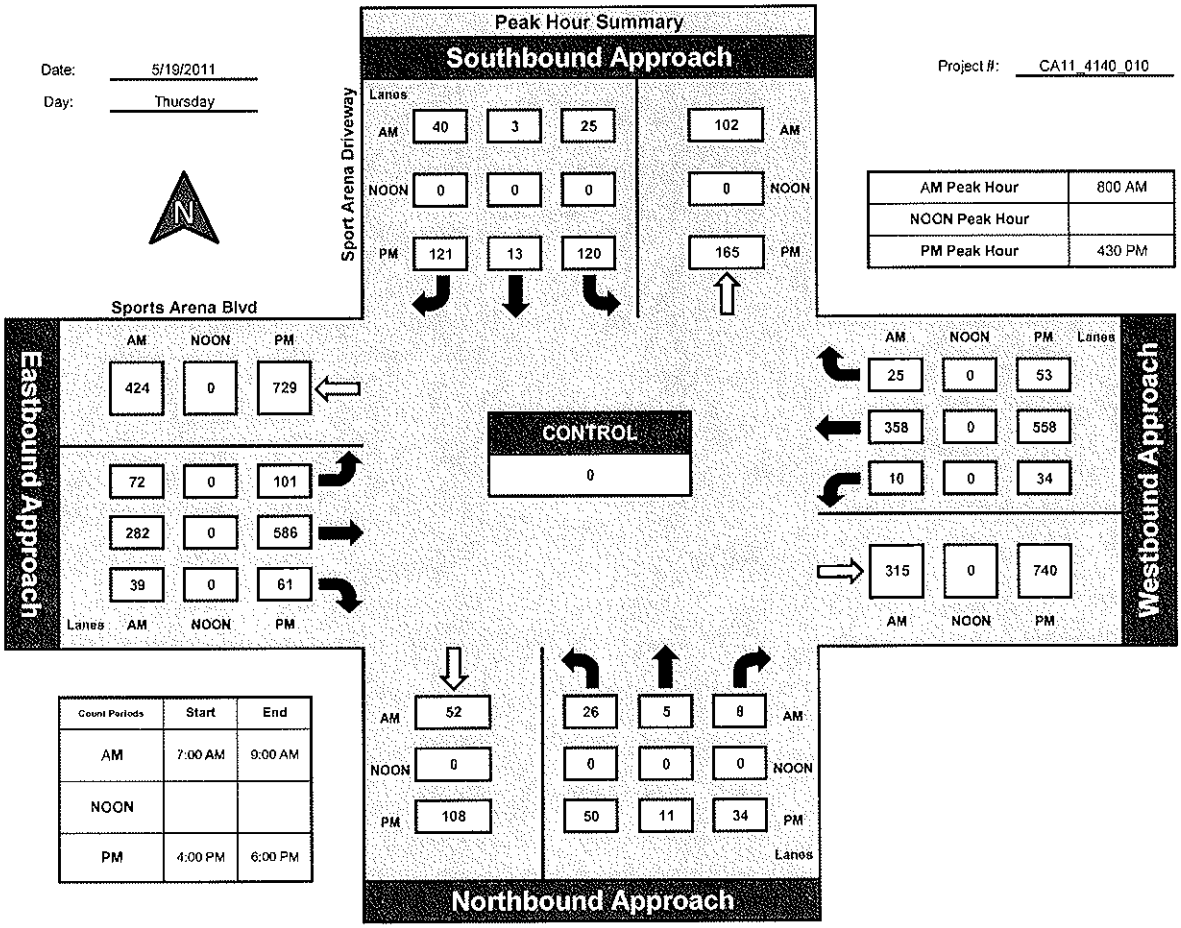
CONTROL :

ITM Peak Hour Summary

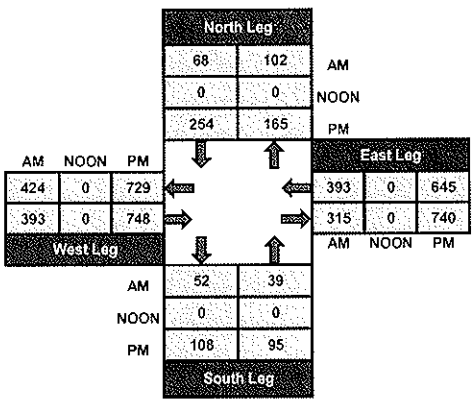
Prepared by:

National Data & Surveying Services

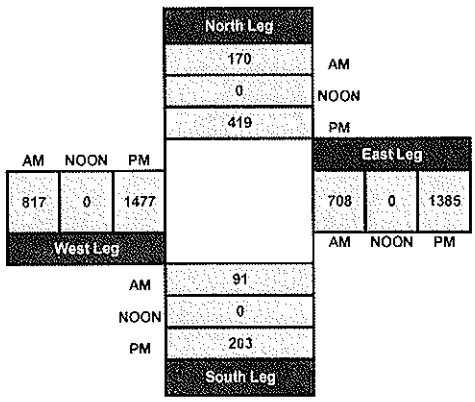
Sport Arena Driveway and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(14)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	0	5			0	3	77	1	7	98	10	203
7:15 AM	2	0	6			0	7	83	5	5	117	8	233
7:30 AM	1	0	2			0	7	122	9	8	121	9	279
7:45 AM	1	1	9			0	6	105	9	11	139	5	286
8:00 AM	3	0	10			1	5	108	6	6	135	10	284
8:15 AM	3	0	8			0	8	146	5	9	144	8	331
8:30 AM	3	0	5			0	11	131	6	8	161	9	334
8:45 AM	4	0	11			1	6	139	9	18	149	9	346
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	1	56	0	0	2	53	911	50	72	1064	68	2296
APPROACH %'s :	25.00%	1.32%	73.68%	0.00%	0.00%	100.00%	5.23%	89.84%	4.93%	5.98%	88.37%	5.65%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]			[illegible]			[illegible]			[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	5	1	21			1	11	196	23	26	179	5	468
4:15 PM	8	1	14			4	5	183	25	26	198	3	467
4:30 PM	3	1	11			0	5	202	33	30	217	2	504
4:45 PM	8	2	10			0	1	193	29	41	177	1	462
5:00 PM	6	1	20			1	0	189	24	18	190	0	449
5:15 PM	7	0	19			0	1	175	22	25	221	0	470
5:30 PM	8	1	24			1	3	181	20	30	194	0	462
5:45 PM	12	1	20			3	0	193	15	24	194	1	463
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	57	8	139	0	0	10	26	1512	191	220	1570	12	3745
APPROACH %'s :	27.94%	3.92%	68.14%	0.00%	0.00%	100.00%	1.50%	87.45%	11.05%	12.21%	87.13%	0.67%	
PEAK HR START TIME :	4:0 PM												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

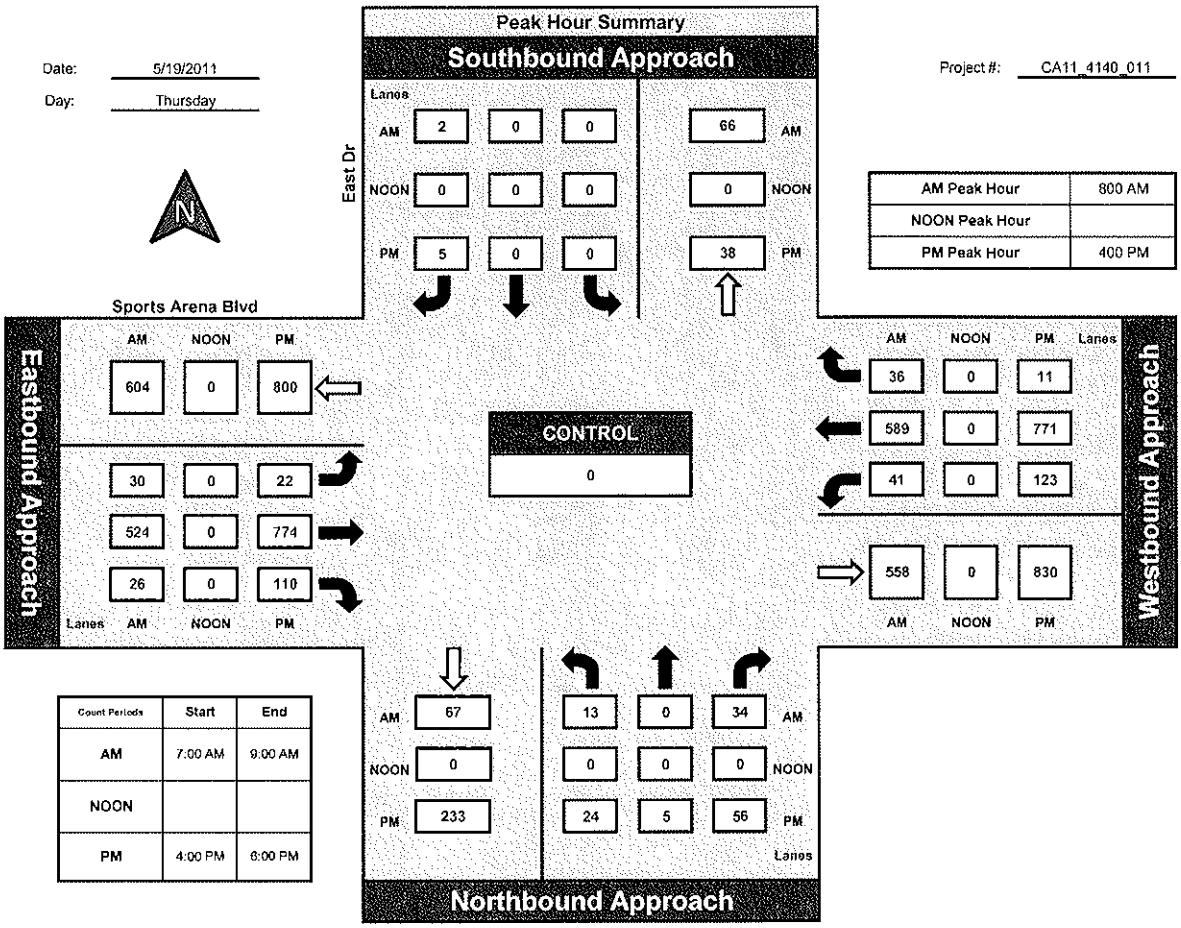
National Data & Surveying Services

East Dr and Sports Arena Blvd , City of San Diego

Date: 5/19/2011

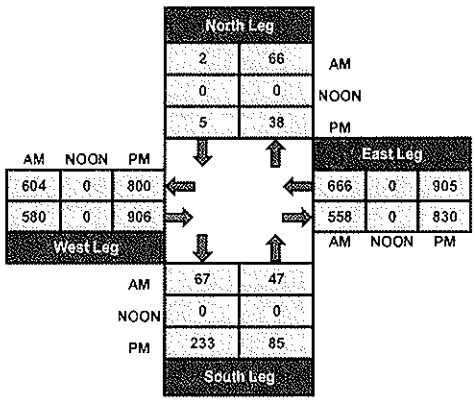
Day: Thursday

Project #: CA11_4140_011

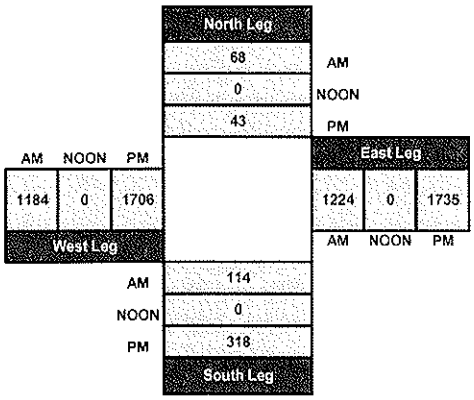


AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Total Ins & Outs



Total Volume Per Leg



(15)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

(15)

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

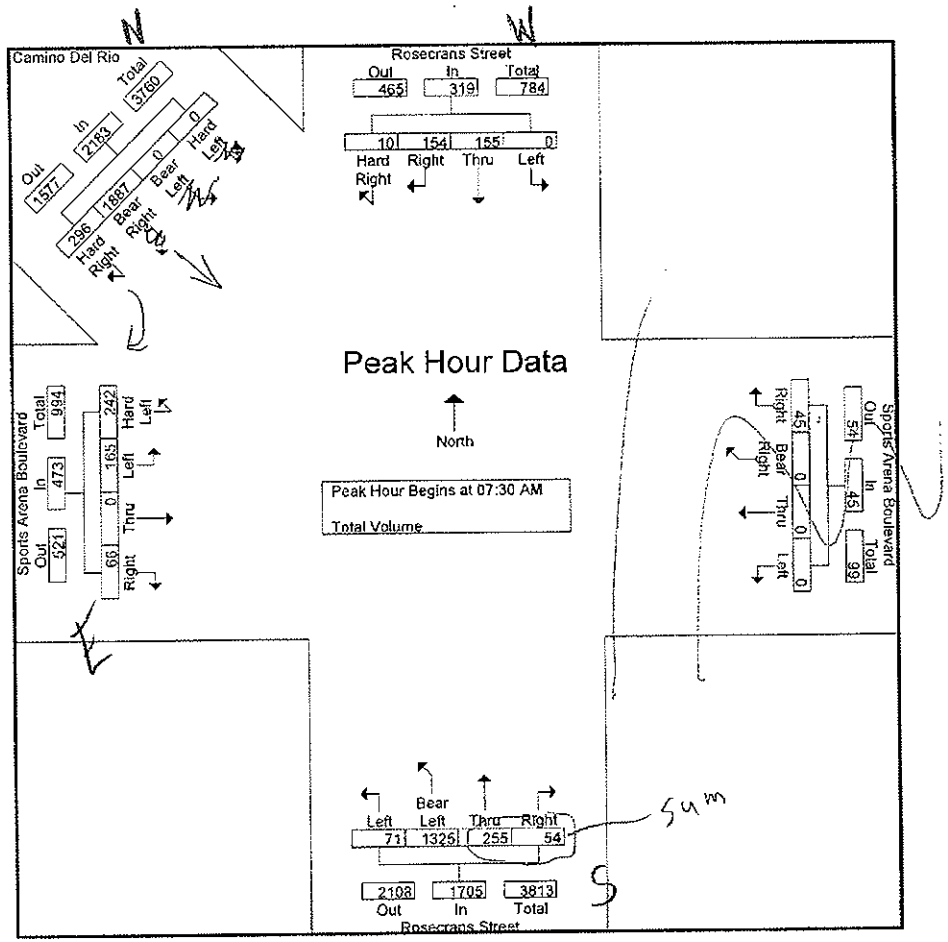
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
06:45 AM	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
Total	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
07:00 AM	0	25	23	1	49	0	0	0	8	8	20	227	39	4	290	42	30	0	15	87	0	0	504	54	558	992
07:15 AM	0	31	36	1	68	0	0	0	13	13	15	292	57	8	372	53	33	0	9	95	0	0	495	65	560	1108
07:30 AM	0	36	28	2	66	0	0	0	10	10	25	343	56	9	433	80	51	0	17	148	0	0	419	54	473	1130
07:45 AM	0	47	48	3	98	0	0	0	9	9	14	310	67	21	412	54	41	0	18	113	0	0	525	80	605	1237
Total	0	139	135	7	281	0	0	0	40	40	74	1172	219	42	1507	229	155	0	59	443	0	0	1943	253	2196	4467
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	74	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	15	15	23	351	58	13	445	50	43	0	18	111	0	0	454	88	542	1202
08:30 AM	0	45	44	4	93	0	0	0	18	18	27	322	64	9	422	62	37	0	16	115	0	0	352	67	419	1067
Grand Total	0	278	283	16	577	0	0	0	88	88	151	2378	457	85	3071	432	295	0	118	845	0	0	3653	542	4195	8776
Apprch %	0	48.2	49	2.8		0	0	0	100		4.9	77.4	14.9	2.8		51.1	34.9	0	14		0	0	87.1	12.9		
Total %	0	3.2	3.2	0.2	6.6	0	0	0	1	1	1.7	27.1	5.2	1	35	4.9	3.4	0	1.3	9.6	0	0	41.6	6.2	47.8	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:30 AM																										
07:30 AM	0	36	28	2	66	0	0	0	10	10	**25**	343	56	9	433	**80**	**51**	0	17	**148**	0	0	419	54	473	1130
07:45 AM	0	**47**	**48**	3	**98**	0	0	0	9	9	14	310	67	**21**	412	54	41	0	**18**	113	0	0	**525**	80	**605**	**1237**
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	**74**	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	**15**	**15**	23	**351**	58	13	445	50	43	0	18	111	0	0	454	**88**	542	1202
Total Volume	0	155	154	10	319	0	0	0	45	45	71	1325	255	54	1705	242	165	0	66	473	0	0	1887	296	2183	4725
% App. Total	0	48.6	48.3	3.1		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	86.4	13.6		
PHF	.000	.824	.802	.625	.814	.000	.000	.000	.750	.750	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.899	.841	.902	.955

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					07:45 AM					07:30 AM					07:30 AM					07:15 AM				
+0 mins.	0	47	48	3	98	0	0	0	9	9	25	343	56	9	433	80	51	0	17	148	0	0	495	65	560
+15 mins.	0	34	31	1	66	0	0	0	11	11	14	310	67	21	412	54	41	0	18	113	0	0	419	54	473
+30 mins.	0	38	47	4	89	0	0	0	15	15	9	321	74	11	415	58	30	0	13	101	0	0	525	80	605
+45 mins.	0	45	44	4	93	0	0	0	18	18	23	351	58	13	445	50	43	0	18	111	0	0	489	74	563
Total Volume	0	164	170	12	346	0	0	0	53	53	71	1325	255	54	1705	242	165	0	66	473	0	0	1928	273	2201
% App. Total	0	47.4	49.1	3.5		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	87.6	12.4	
PHF	.000	.872	.885	.750	.883	.000	.000	.000	.736	.736	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.918	.853	.910

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

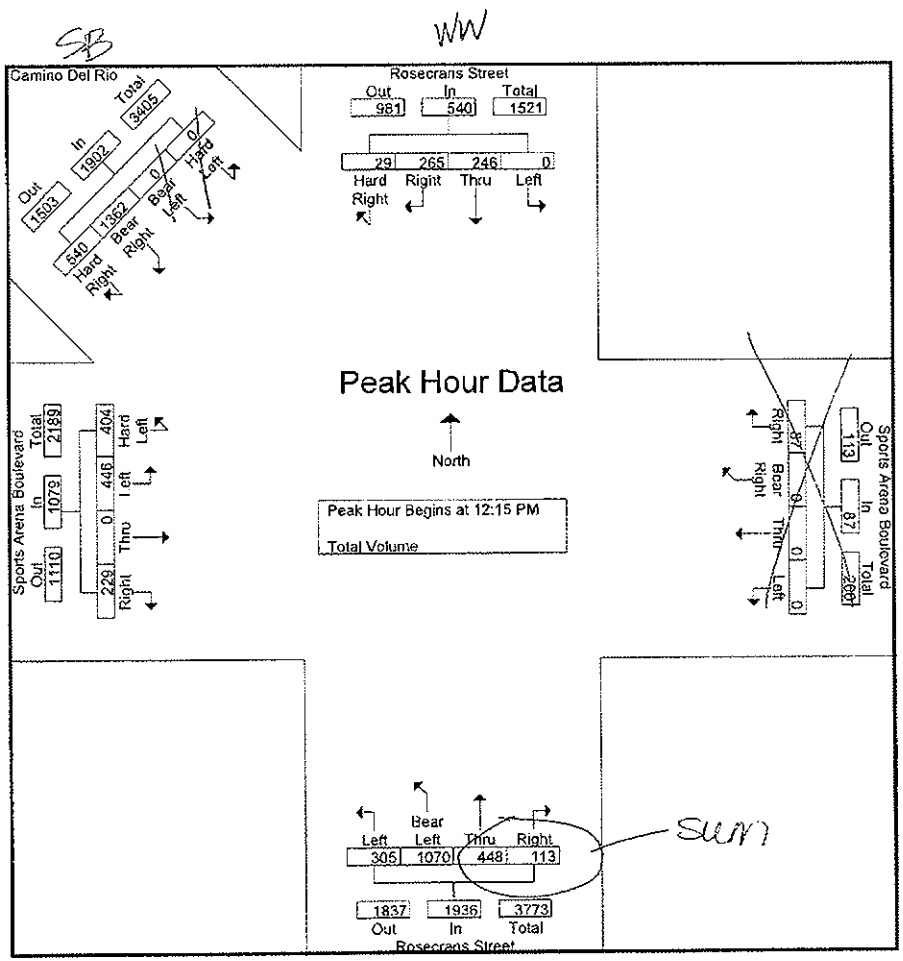
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
11:30 AM	0	55	87	6	148	0	0	0	25	25	81	228	100	26	435	86	79	0	48	213	0	0	328	132	460	1281
11:45 AM	0	47	93	7	147	0	0	0	23	23	79	246	104	18	447	84	86	0	53	223	0	0	377	161	538	1378
Total	0	102	180	13	295	0	0	0	48	48	160	474	204	44	882	170	165	0	101	436	0	0	705	293	998	2659
12:00 PM	0	73	90	2	165	0	0	0	19	19	71	252	99	9	431	93	105	0	59	257	0	0	328	146	474	1346
12:15 PM	0	66	70	7	143	0	0	0	17	17	93	231	105	23	452	78	93	0	68	239	0	0	353	159	512	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	299	122	27	525	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	10	118	0	0	0	23	23	75	241	116	38	470	95	105	0	43	243	0	0	339	119	458	1312
Total	0	245	284	21	550	0	0	0	81	81	316	1023	442	97	1878	376	418	0	224	1018	0	0	1364	556	1920	5447
01:00 PM	0	74	71	10	155	0	0	0	25	25	60	299	105	25	489	121	133	0	64	318	0	0	326	130	456	1443
01:15 PM	0	51	61	5	117	0	0	0	21	21	48	221	94	18	381	87	122	0	41	250	0	0	330	119	449	1218
Grand Total	0	472	596	49	1117	0	0	0	175	175	584	2017	845	184	3630	754	838	0	430	2022	0	0	2725	1098	3823	10767
Apprch %	0	42.3	53.4	4.4		0	0	0	100		16.1	55.6	23.3	5.1		37.3	41.4	0	21.3		0	0	71.3	28.7		
Total %	0	4.4	5.5	0.5	10.4	0	0	0	1.6	1.6	5.4	18.7	7.8	1.7	33.7	7	7.8	0	4	18.8	0	0	25.3	10.2	35.5	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 12:15 PM																										
12:15 PM	0	66	70	7	143	0	0	0	17	17	**93**	231	105	23	452	78	93	0	**68**	239	0	0	**353**	**159**	**512**	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	**299**	**122**	27	**525**	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	**10**	118	0	0	0	23	23	75	241	116	**38**	470	95	105	0	43	243	0	0	339	119	458	1312
01:00 PM	0	**74**	**71**	10	**155**	0	0	0	**25**	**25**	60	299	105	25	489	**121**	**133**	0	64	**318**	0	0	326	130	456	**1443**
Total Volume	0	246	265	29	540	0	0	0	87	87	305	1070	448	113	1936	404	446	0	229	1079	0	0	1362	540	1902	5544
% App. Total	0	45.6	49.1	5.4		0	0	0	100		15.8	55.3	23.1	5.8		37.4	41.3	0	21.2		0	0	71.6	28.4		
PHF	.000	.831	.933	.725	.871	.000	.000	.000	.870	.870	.820	.895	.918	.743	.922	.835	.838	.000	.842	.848	.000	.000	.965	.849	.929	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:30 AM					12:30 PM					12:15 PM					12:30 PM					11:45 AM				
+0 mins.	0	55	87	6	148	0	0	0	22	22	**93**	231	105	23	452	110	115	0	54	279	0	0	377	**161**	**538**
+15 mins.	0	47	**93**	7	147	0	0	0	23	23	77	**299**	**122**	27	**525**	95	105	0	43	243	0	0	328	146	474
+30 mins.	0	**73**	90	2	**165**	0	0	0	**25**	**25**	75	241	116	38	470	**121**	**133**	0	**64**	**318**	0	0	353	159	512
+45 mins.	0	66	70	7	143	0	0	0	21	21	60	299	105	25	489	87	122	0	41	250	0	0	344	132	476
Total Volume	0	241	340	22	603	0	0	0	91	91	305	1070	448	113	1936	413	475	0	202	1090	0	0	1402	598	2000
% App. Total	0	40	56.4	3.6		0	0	0	100		15.8	55.3	23.1	5.8		37.9	43.6	0	18.5		0	0	70.1	29.9	
PHF	.000	.825	.914	.786	.914	.000	.000	.000	.910	.910	.820	.895	.918	.743	.922	.853	.893	.000	.789	.857	.000	.000	.930	.929	.929

Counts Unlimited Inc.
25286 Jadyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

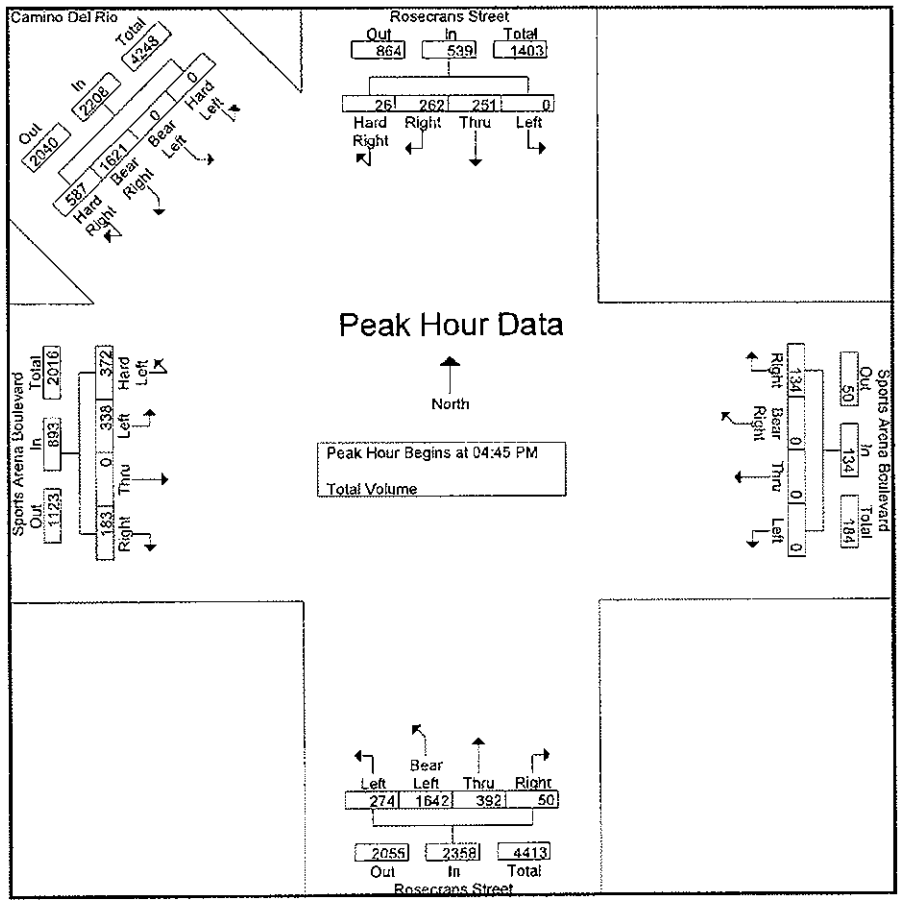
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
04:00 PM	0	47	67	9	123	0	0	0	29	29	50	417	101	17	585	117	81	0	46	244	0	0	384	134	518	1499
04:15 PM	0	60	83	5	148	0	0	0	45	45	60	488	90	21	659	82	84	0	34	200	0	0	403	104	507	1559
04:30 PM	0	51	87	7	145	0	0	0	47	47	54	407	106	18	585	85	78	0	30	193	0	0	368	129	497	1467
04:45 PM	0	55	53	8	116	0	0	0	35	35	58	430	98	19	605	100	90	0	48	238	0	0	425	136	561	1555
Total	0	213	290	29	532	0	0	0	156	156	222	1742	395	75	2434	384	333	0	158	875	0	0	1580	503	2083	6080
05:00 PM	0	61	62	7	130	0	0	0	38	38	62	387	109	12	570	92	78	0	49	219	0	0	397	165	562	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	74	433	92	12	611	87	81	0	40	208	0	0	407	148	555	1557
05:30 PM	0	61	80	6	147	0	0	0	24	24	80	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
05:45 PM	0	62	74	9	145	0	0	0	24	24	63	338	83	16	500	87	85	0	51	223	0	0	381	134	515	1407
Total	0	258	283	27	568	0	0	0	123	123	279	1550	377	47	2253	359	333	0	186	878	0	0	1577	585	2162	5984
Grand Total	0	471	573	56	1100	0	0	0	279	279	501	3292	772	122	4687	743	666	0	344	1753	0	0	3157	1088	4245	12064
Apprch %	0	42.8	52.1	5.1		0	0	0	100		10.7	70.2	16.5	2.6		42.4	38	0	19.6		0	0	74.4	25.6		
Total %	0	3.9	4.7	0.5	9.1	0	0	0	2.3	2.3	4.2	27.3	6.4	1	38.9	6.2	5.5	0	2.9	14.5	0	0	26.2	9	35.2	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 04:45 PM																										
04:45 PM	0	55	53	**8**	116	0	0	0	35	35	58	430	98	**19**	605	**100**	**90**	0	48	**238**	0	0	**425**	136	561	1555
05:00 PM	0	61	62	7	130	0	0	0	**38**	**38**	62	387	**109**	12	570	92	78	0	**49**	219	0	0	397	**165**	**562**	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	**74**	**433**	92	12	**611**	87	81	0	40	208	0	0	407	148	555	**1557**
05:30 PM	0	61	**80**	6	**147**	0	0	0	24	24	**80**	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
Total Volume	0	251	262	26	539	0	0	0	134	134	274	1642	392	50	2358	372	338	0	183	893	0	0	1621	587	2208	6132
% App. Total	0	46.6	48.6	4.8		0	0	0	100		11.6	69.6	16.6	2.1		41.7	37.8	0	20.5		0	0	73.4	26.6		
PHF	.000	.848	.819	.813	.917	.000	.000	.000	.882	.882	.856	.948	.899	.658	.965	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982	.985

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
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Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					04:15 PM					04:00 PM					04:45 PM					04:45 PM				
+0 mins.	0	61	62	7	130	0	0	0	45	45	50	417	101	17	585	**100**	**90**	0	48	**238**	0	0	425	136	561
+15 mins.	0	**74**	67	5	146	0	0	0	**47**	**47**	**60**	**488**	90	**21**	**659**	92	78	0	**49**	219	0	0	397	**165**	**562**
+30 mins.	0	61	**80**	6	**147**	0	0	0	35	35	54	407	**106**	18	585	87	81	0	40	208	0	0	407	148	555
+45 mins.	0	62	74	9	145	0	0	0	38	38	58	430	98	19	605	93	89	0	46	228	0	0	392	138	530
Total Volume	0	258	283	27	568	0	0	0	165	165	222	1742	395	75	2434	372	338	0	183	893	0	0	1621	587	2208
% App. Total	0	45.4	49.8	4.8		0	0	0	100		9.1	71.6	16.2	3.1		41.7	37.8	0	20.5		0	0	73.4	26.6	
PHF	.000	.872	.884	.750	.966	.000	.000	.000	.878	.878	.925	.892	.932	.893	.923	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982

(17)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		134			120	3			2				259
7:15 AM		137			103	5			7				252
7:30 AM		130			110	3			3				246
7:45 AM		182			135	5			10				332
8:00 AM		183			156	4			10				353
8:15 AM		175			134	6			7				322
8:30 AM		138			143	9			10				300
8:45 AM		147			130	6			14				297

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1226	0	0	1031	41	0	0	63	0	0	0	2361
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	96.18%	3.82%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		228			224	4			32				488
4:15 PM		210			202	6			26				444
4:30 PM		211			222	3			30				466
4:45 PM		203			196	6			29				434
5:00 PM		206			234	7			33				480
5:15 PM		190			181	1			32				404
5:30 PM		142			171	3			22				338
5:45 PM		125			180	2			13				320

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1515	0	0	1610	32	0	0	217	0	0	0	3374
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	98.05%	1.95%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[illegible]													
[illegible]	[illegible]												
[illegible]													

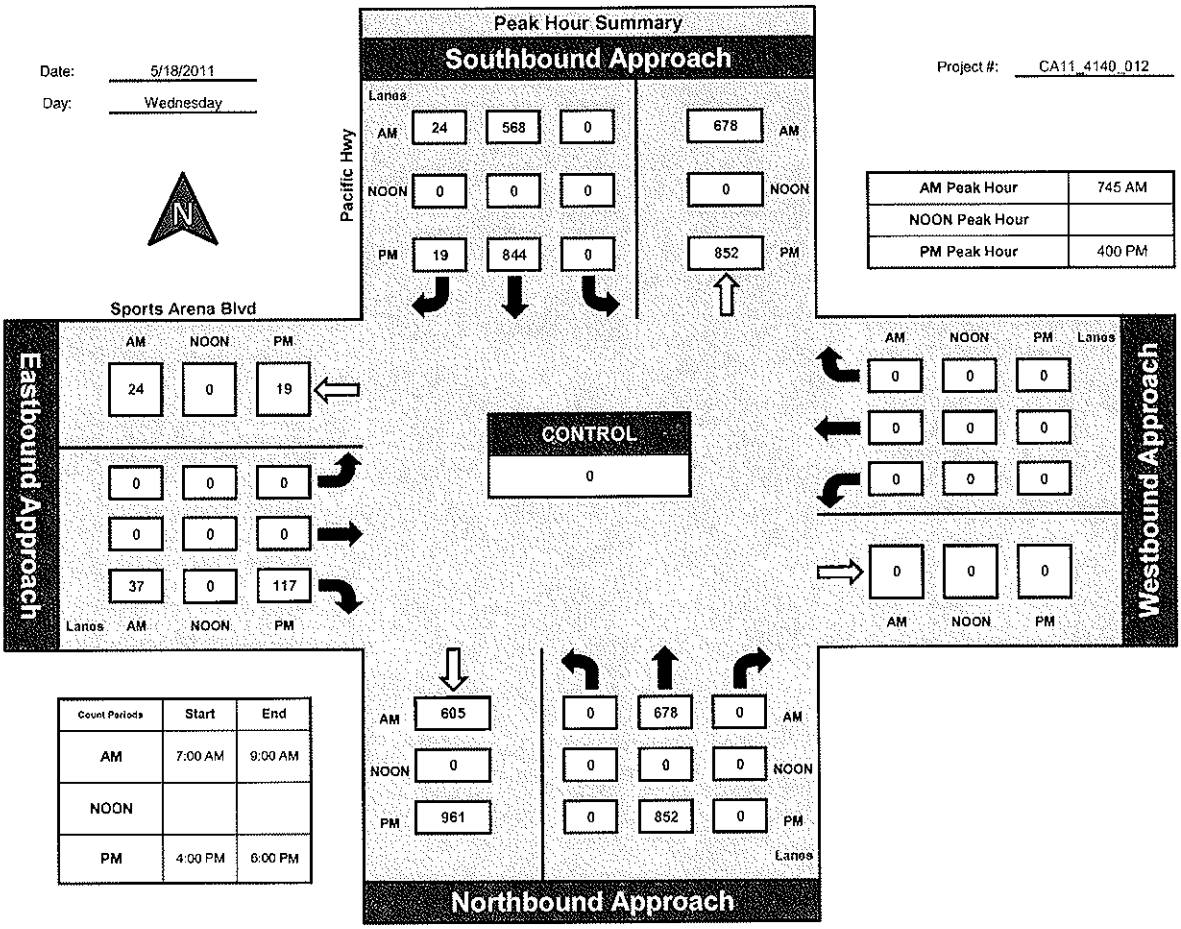
CONTROL :

ITM Peak Hour Summary

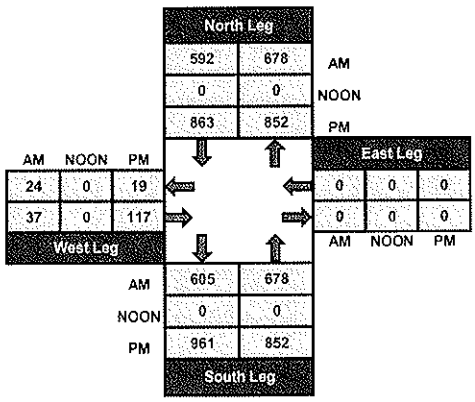
Prepared by:

National Data & Surveying Services

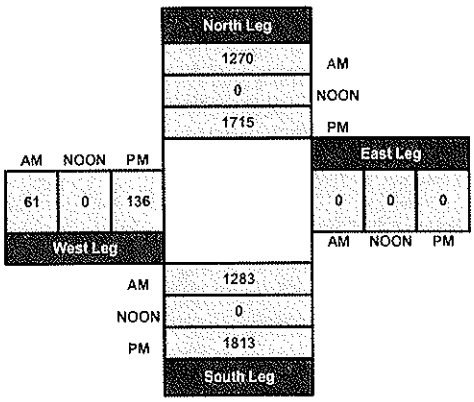
Pacific Hwy and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(18)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

Day: THURSDAY

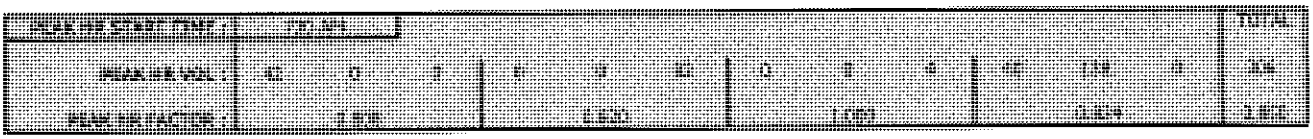
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0					5	0		0	0	6		11
7:15 AM	1					18	0		1	10	28		58
7:30 AM	13					18	0		1	13	32		77
7:45 AM	10					19	0		1	5	32		67
8:00 AM	10					25	0		1	16	38		90
8:15 AM	9					20	0		1	6	36		72
8:30 AM	17					14	1		2	12	30		76
8:45 AM	9					18	0		0	13	26		66

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	69	0	0	0	0	137	1	0	7	75	228	0	517
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	12.50%	0.00%	87.50%	24.75%	75.25%	0.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

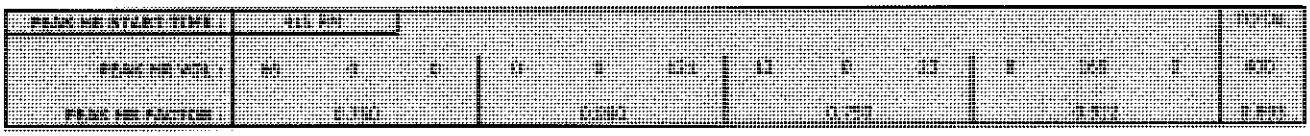
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	8					13	1		0	0	21		43
4:15 PM	22					32	5		7	3	42		111
4:30 PM	22					34	2		6	2	46		112
4:45 PM	9					23	3		3	3	41		82
5:00 PM	13					32	3		7	0	40		95
5:15 PM	11					22	1		10	0	43		87
5:30 PM	10					16	2		8	1	26		63
5:45 PM	11					13	2		12	0	32		70
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	106	0	0	0	0	185	19	0	53	9	291	0	663
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	26.39%	0.00%	73.61%	3.00%	97.00%	0.00%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

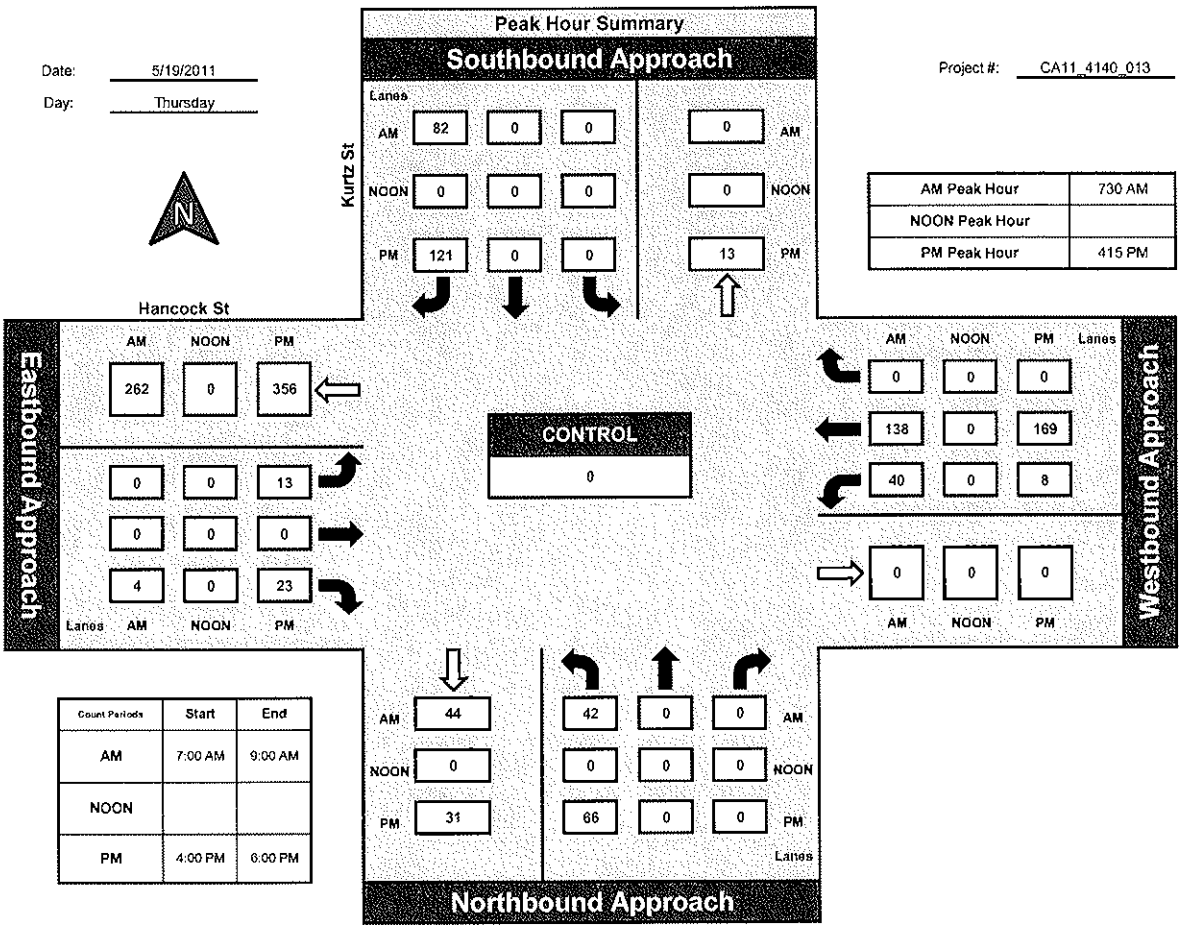
National Data & Surveying Services

Kurtz St and Hancock St , City of San Diego

Date: 5/19/2011

Day: Thursday

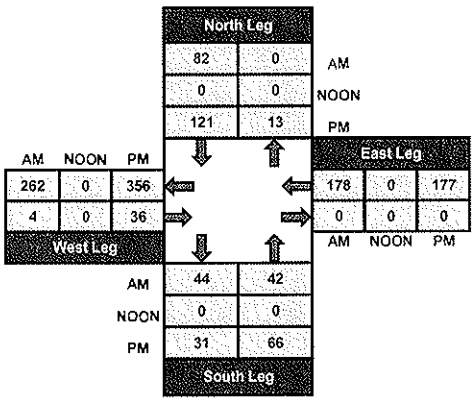
Project #: CA11_4140_013



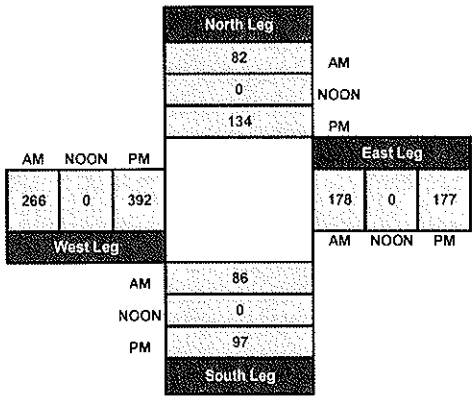
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

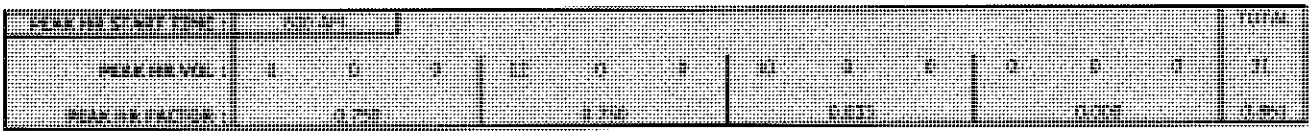
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM			3	0			1						4
7:15 AM			2	3			0						5
7:30 AM			1	1			3						5
7:45 AM			2	1			3						6
8:00 AM			1	4			1						6
8:15 AM			2	3			3						8
8:30 AM			3	3			3						9
8:45 AM			3	2			3						8

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	17	17	0	0	17	0	0	0	0	0	51
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM			4	2			3						9
4:15 PM			0	3			2						5
4:30 PM			2	1			1						4
4:45 PM			3	0			3						6
5:00 PM			2	1			2						5
5:15 PM			2	0			0						2
5:30 PM			2	1			0						3
5:45 PM			1	0			1						2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	16	8	0	0	12	0	0	0	0	0	36
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

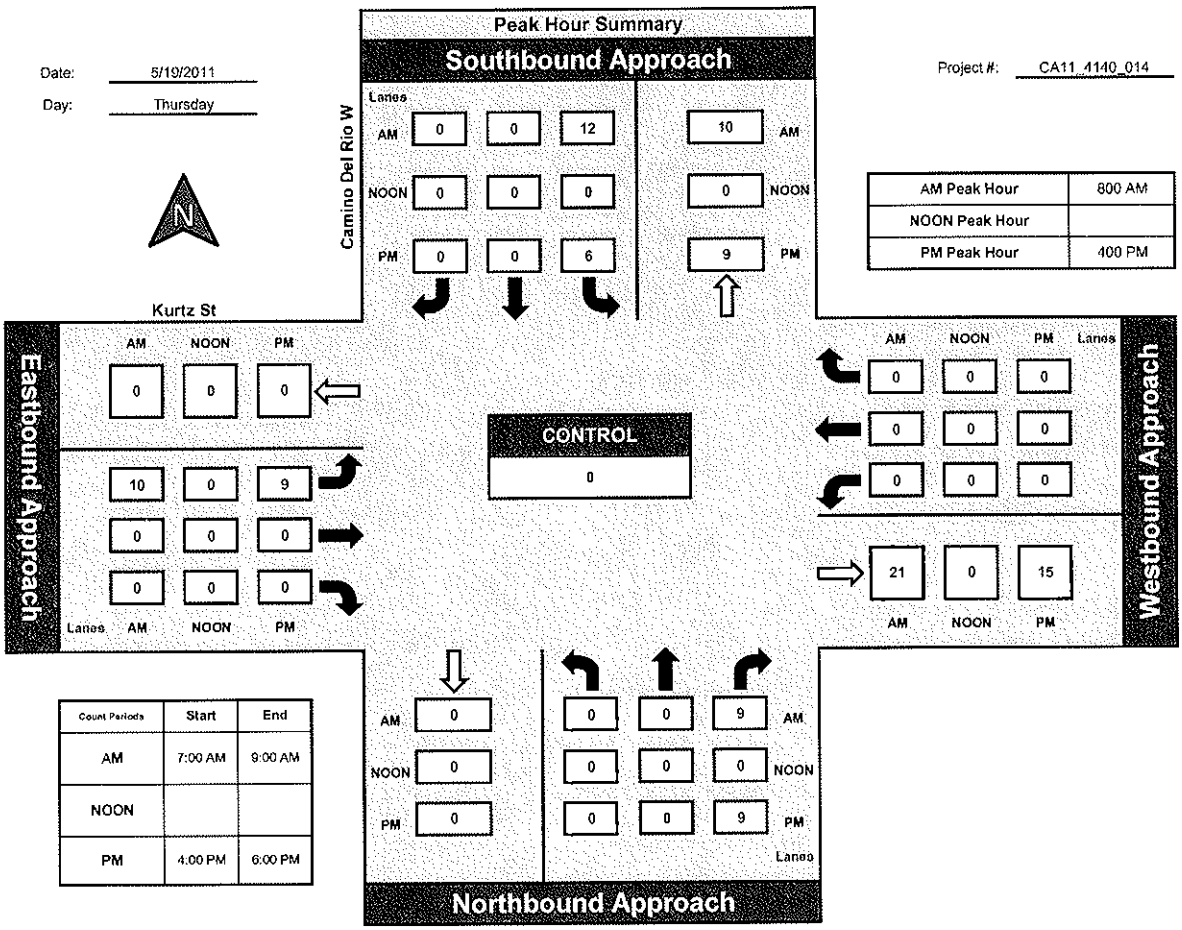
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

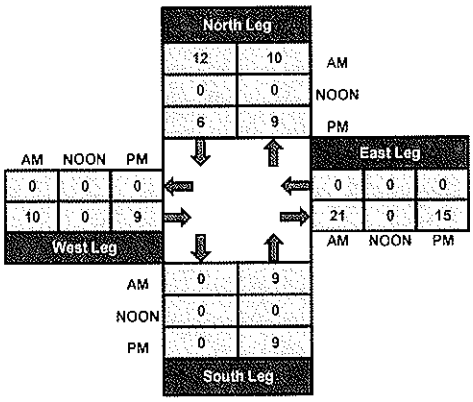
Project #: CA11_4140_014



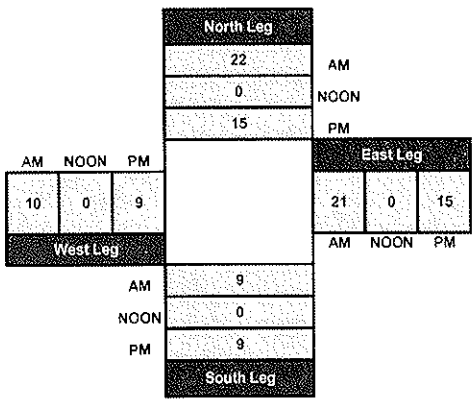
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				2									2
7:15 AM				1									1
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				2									2
8:15 AM				4									4
8:30 AM				2									2
8:45 AM				3									3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	17	0	0	0	0	0	0	0	0	17
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				5									5
4:15 PM				2									2
4:30 PM				3									3
4:45 PM				6									6
5:00 PM				0									
5:15 PM				3									3
5:30 PM				5									5
5:45 PM				4									4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	28	0	0	0	0	0	0	0	0	28
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

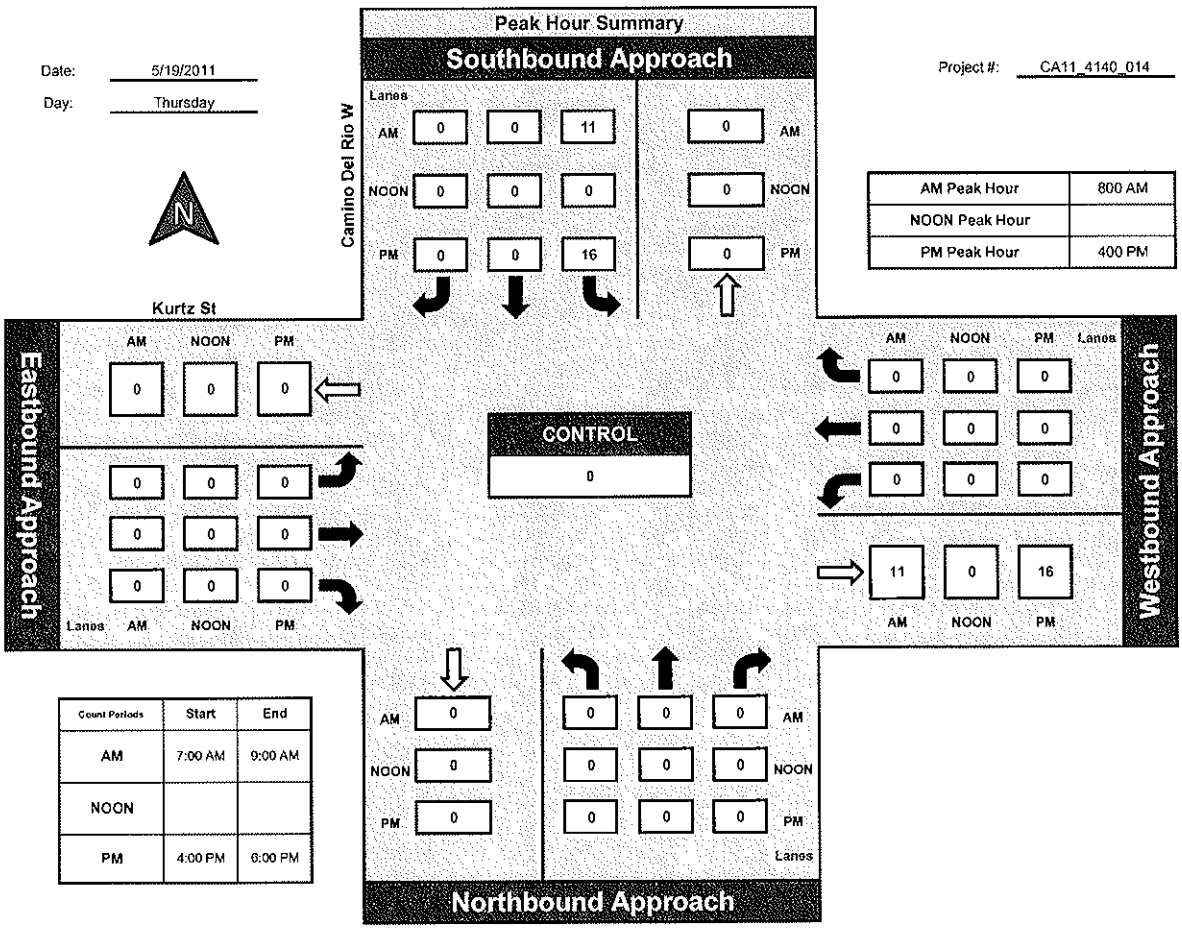
CONTROL :

ITM Peak Hour Summary

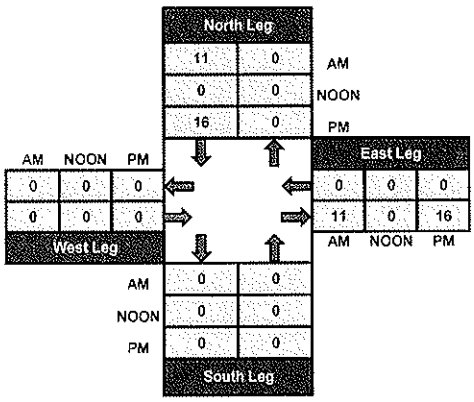
Prepared by:

National Data & Surveying Services

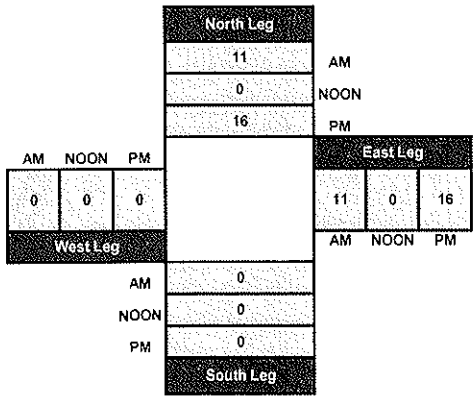
Camino Del Rio W and Kurtz St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

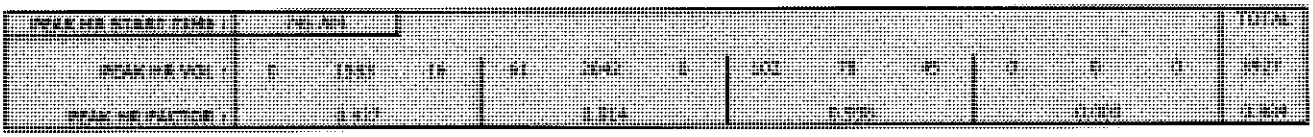
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		217	1	12	475		26	6	6				743
7:15 AM		330	2	8	521		18	13	9				901
7:30 AM		425	1	17	498		28	17	5				991
7:45 AM		386	5	5	524		22	15	17				974
8:00 AM		348	2	13	562		23	26	11				985
8:15 AM		427	4	18	468		25	20	8				970
8:30 AM		422	5	25	488		32	17	9				998
8:45 AM		368	4	23	479		38	23	18				953

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2923	24	121	4015	0	212	137	83	0	0	0	7515
APPROACH %'s :	0.00%	99.19%	0.81%	2.93%	97.07%	0.00%	49.07%	31.71%	19.21%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

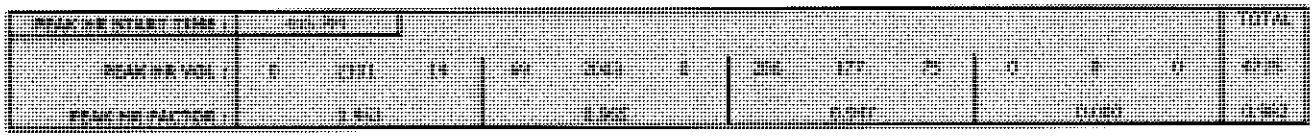
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		500	3	22	447		68	36	14				1090
4:15 PM		547	2	22	510		67	34	21				1203
4:30 PM		553	2	19	466		82	41	16				1179
4:45 PM		495	8	20	498		63	51	21				1156
5:00 PM		506	2	8	529		74	51	17				1187
5:15 PM		489	2	9	531		67	36	20				1154
5:30 PM		417	11	9	507		62	23	12				1041
5:45 PM		438	2	13	563		42	31	12				1101

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3945	32	122	4051	0	525	303	133	0	0	0	9111
APPROACH %'s :	0.00%	99.20%	0.80%	2.92%	97.08%	0.00%	54.63%	31.53%	13.84%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

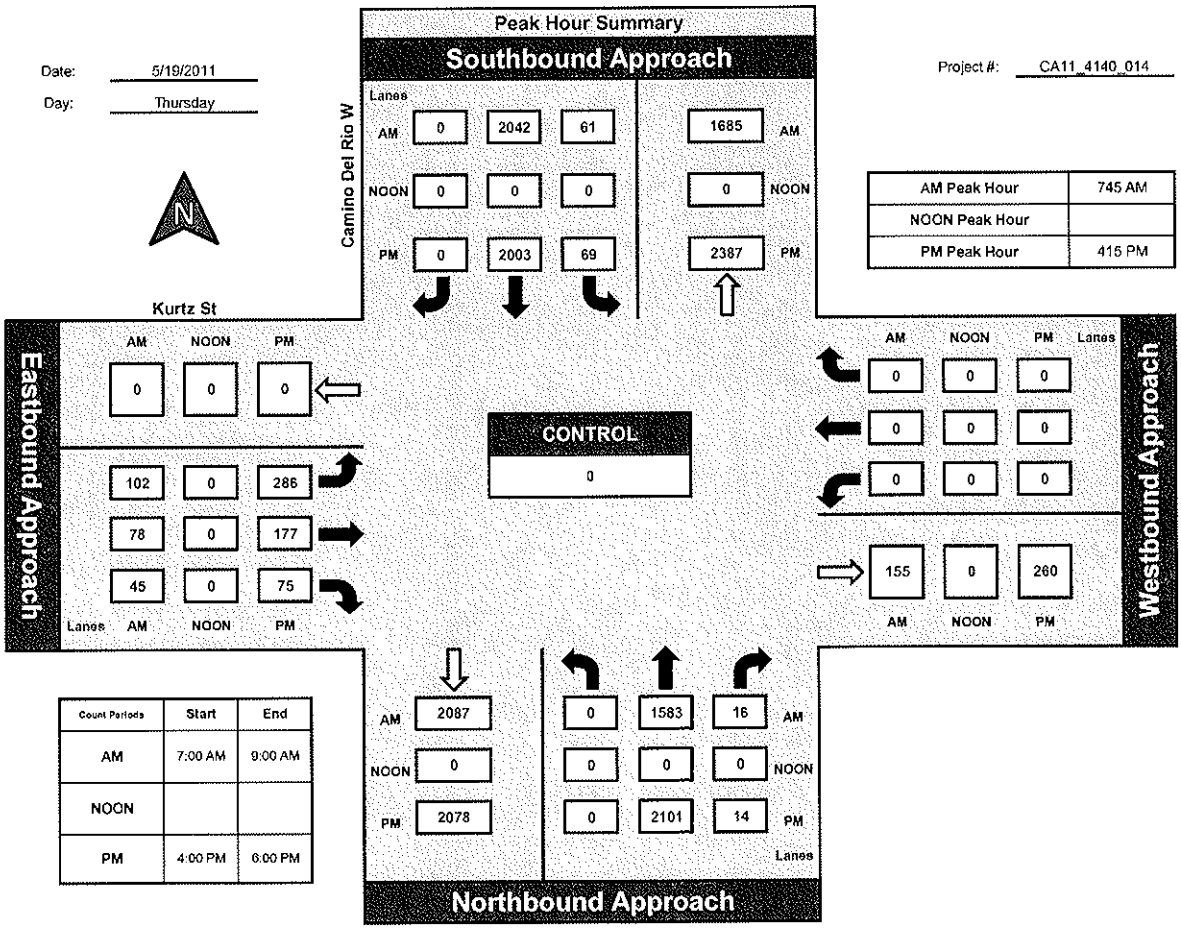
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

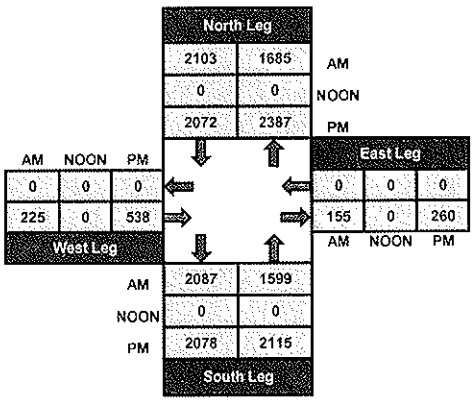
Project #: CA11_4140_014



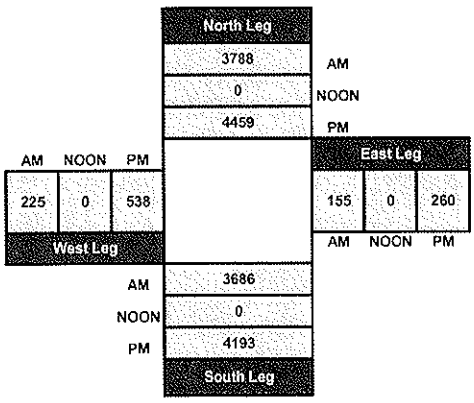
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(20)

6

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

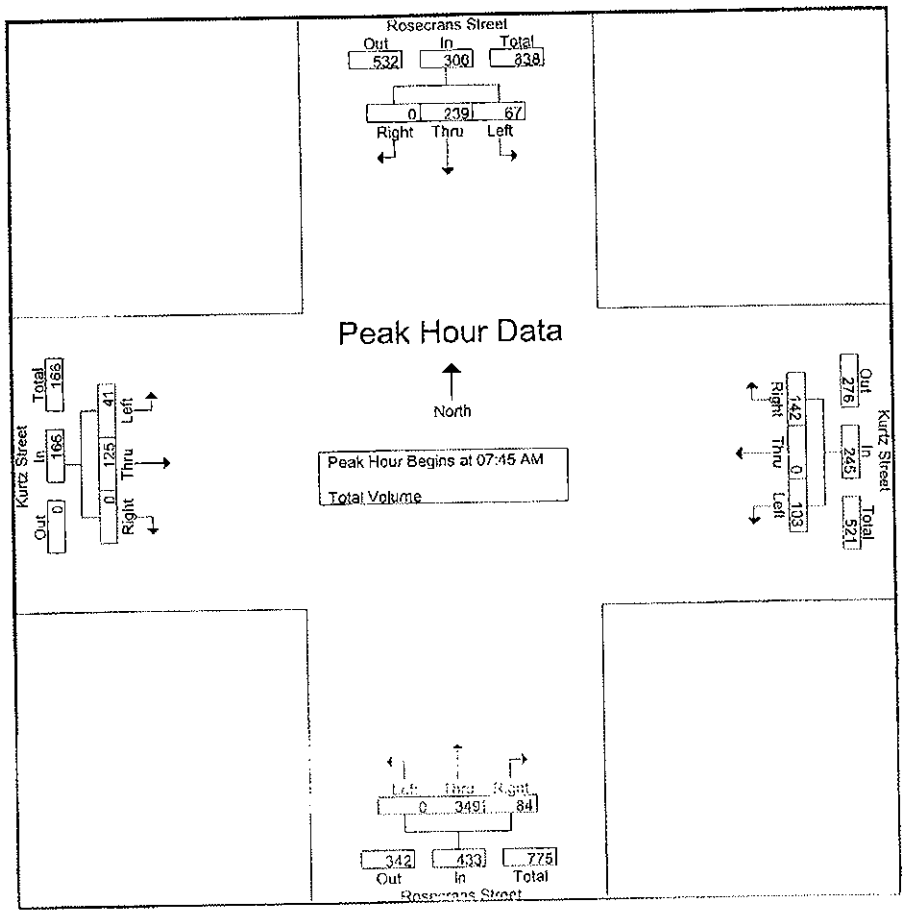
	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
Total	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
07:00 AM	18	36	0	54	17	0	28	45	0	50	23	73	6	26	0	32	204
07:15 AM	28	42	0	70	19	0	33	52	0	68	22	90	4	31	0	35	247
07:30 AM	19	58	0	77	16	0	35	51	0	77	29	106	10	35	0	45	279
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
Total	85	206	0	291	73	0	131	204	0	287	93	380	30	118	0	148	1023
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Grand Total	153	399	0	552	178	0	276	454	0	601	178	779	69	244	0	313	2098
Apprch %	27.7	72.3	0		39.2	0	60.8		0	77.2	22.8		22	78	0		
Total %	7.3	19	0	26.3	8.5	0	13.2	21.6	0	28.6	8.5	37.1	3.3	11.6	0	14.9	

	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	41	125	0	166	1150
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		24.7	75.3	0		
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.946	.913	.975	.854	.744	.000	.767	.913

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	20	70	0	90	21	0	35	56	0	92	19	111	10	35	0	45
+15 mins.	18	44	0	62	18	0	38	56	0	80	23	103	10	26	0	36
+30 mins.	15	61	0	76	36	0	38	74	0	91	20	111	11	26	0	37
+45 mins.	14	64	0	78	28	0	31	59	0	86	22	108	12	42	0	54
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	43	129	0	172
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		25	75	0	
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.948	.913	.975	.896	.768	.000	.796

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

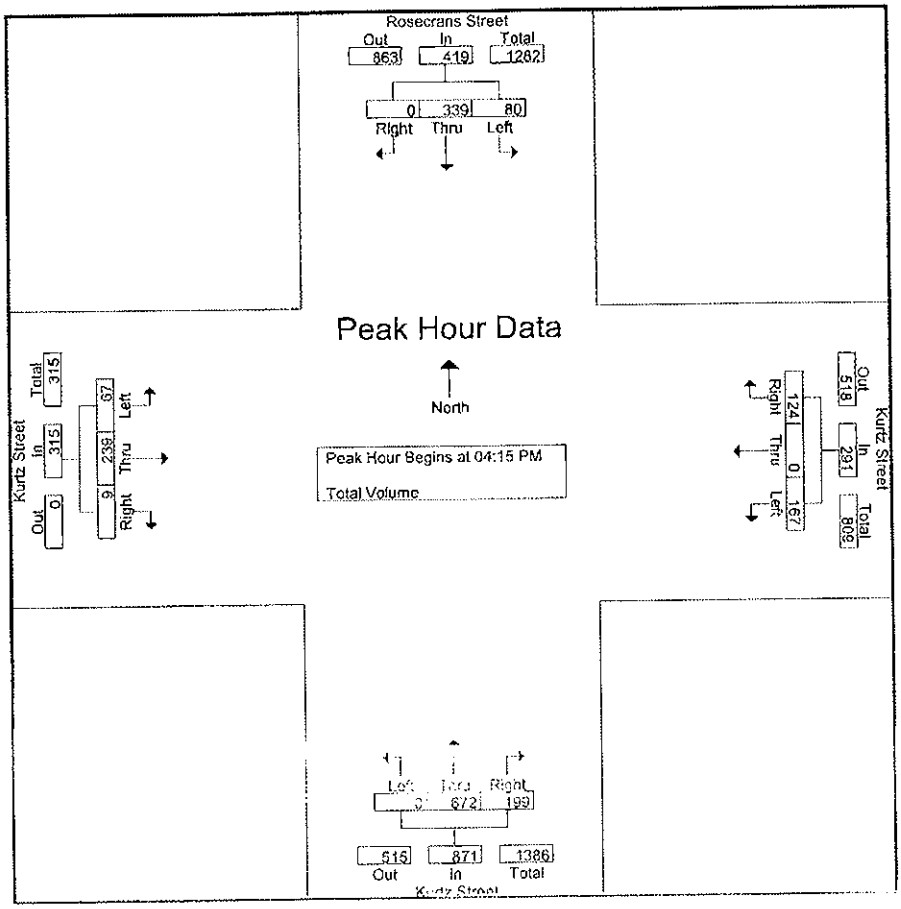
	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	19	88	0	107	34	0	32	66	0	167	48	215	12	60	3	75	463
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
Total	85	342	0	427	170	0	132	302	0	660	205	865	60	228	8	296	1890
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
05:15 PM	10	93	0	103	40	0	35	75	0	150	47	197	15	44	4	63	438
05:30 PM	17	100	0	117	36	0	27	63	0	151	49	200	23	40	2	65	445
05:45 PM	11	105	0	116	45	0	20	65	0	133	45	178	12	35	3	50	409
Total	52	383	0	435	152	0	106	258	0	613	183	796	69	190	13	272	1761
Grand Total	137	725	0	862	322	0	238	560	0	1273	388	1661	129	418	21	568	3651
Apprch %	15.9	84.1	0		57.5	0	42.5		0	76.6	23.4		22.7	73.6	3.7		
Total %	3.8	19.9	0	23.6	8.8	0	6.5	15.3	0	34.9	10.6	45.5	3.5	11.4	0.6	15.6	

	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
Total Volume	80	339	0	419	167	0	124	291	0	672	199	871	67	239	9	315	1896
% App. Total	19.1	80.9	0		57.4	0	42.6		0	77.2	22.8		21.3	75.9	2.9		
PHF	.714	.808	.000	.927	.819	.000	.800	.856	.000	.938	.843	.976	.698	.841	.563	.838	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM								04:15 PM							
+0 mins.	14	85	0	99	34	0	32	66	0	165	51	216	12	60	2	74
+15 mins.	10	93	0	103	49	0	36	85	0	152	59	211	13	53	2	68
+30 mins.	17	100	0	117	51	2	25	76	0	174	47	221	21	55	1	77
+45 mins.	11	105	0	116	36	0	39	75	0	179	42	221	19	71	4	94
Total Volume	52	383	0	435	170	0	132	302	0	672	199	871	67	239	9	315
% App. Total	12	88	0		56.3	0	43.7		0	77.2	22.8		21.3	75.9	2.9	
PHF	.765	.912	.000	.929	.833	.000	.846	.888	.000	.939	.843	.976	.698	.842	.563	.838

(21)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	54	78			77	3			43				255
7:15 AM	57	76			71	2			42				248
7:30 AM	55	84			69	1			44				253
7:45 AM	78	101			91	1			58				329
8:00 AM	68	107			95	1			67				338
8:15 AM	89	99			80	4			65				337
8:30 AM	59	84			87	3			57				290
8:45 AM	56	80			66	2			73				277

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	516	709	0	0	636	17	0	0	449	0	0	0	2327
APPROACH %'s :	42.12%	57.88%	0.00%	0.00%	97.40%	2.60%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

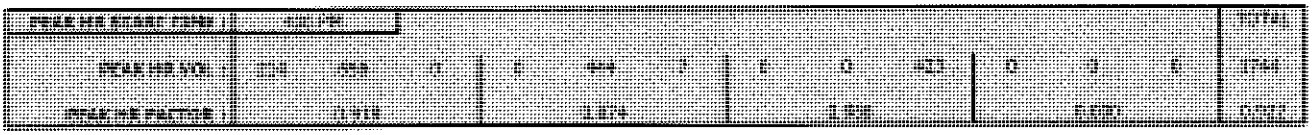
Project ID: CA11_4140_015 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	59	178			127	2			107				473
4:15 PM	38	185			100	3			106				432
4:30 PM	67	146			123	1			104				441
4:45 PM	50	147			94	1			106				398
5:00 PM	36	176			120	2			125				459
5:15 PM	47	137			69	3			110				366
5:30 PM	44	96			83	5			91				319
5:45 PM	39	90			86	1			103				319

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	380	1155	0	0	802	18	0	0	852	0	0	0	3207
APPROACH %'s :	24.76%	75.24%	0.00%	0.00%	97.80%	2.20%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

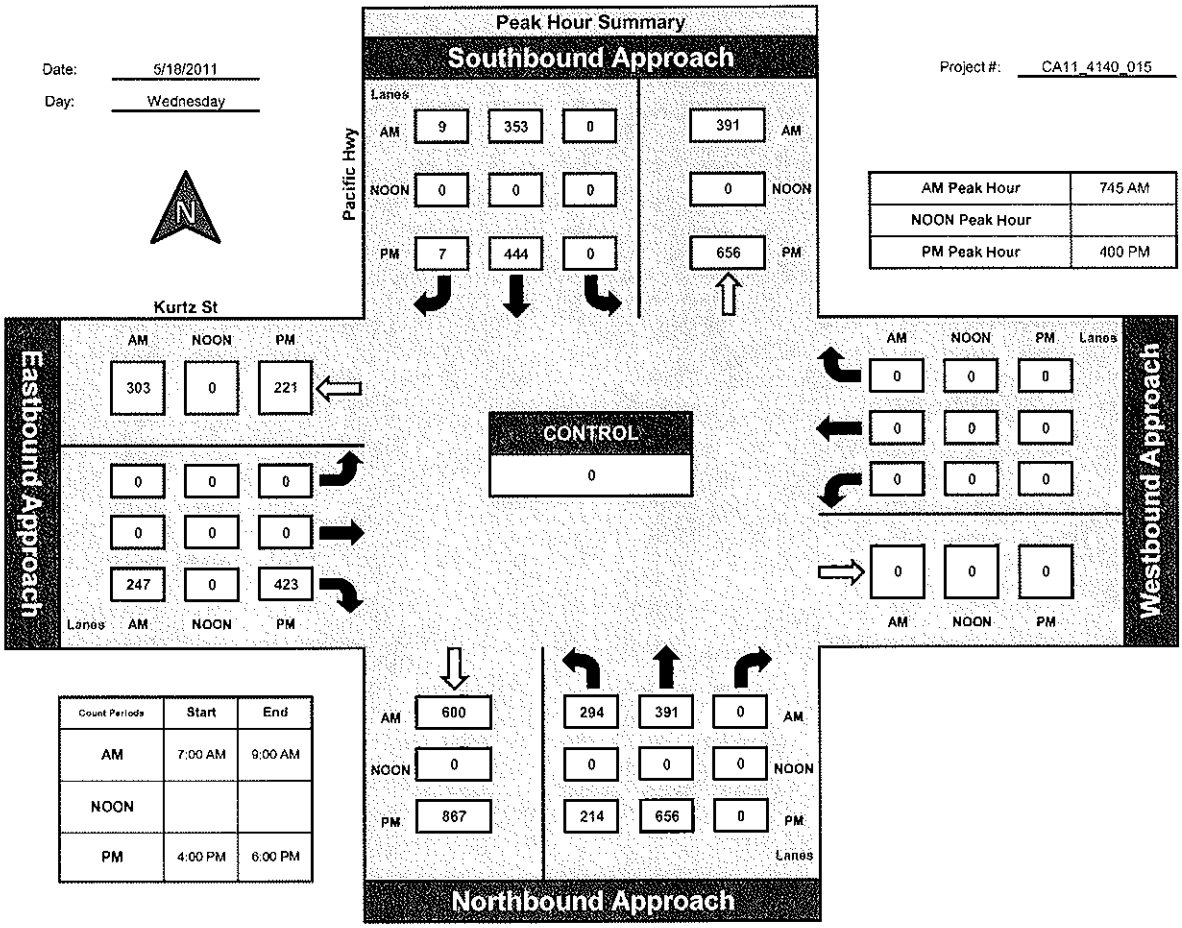
National Data & Surveying Services

Pacific Hwy and Kurtz St , City of San Diego

Date: 5/18/2011

Day: Wednesday

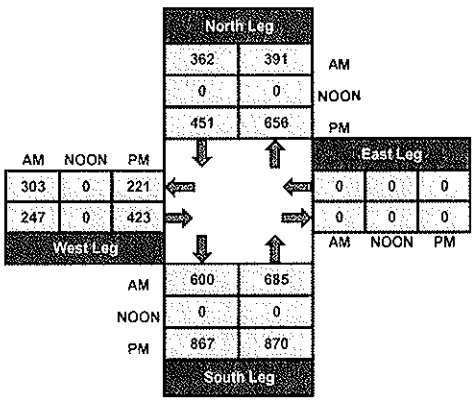
Project #: CA11_4140_015



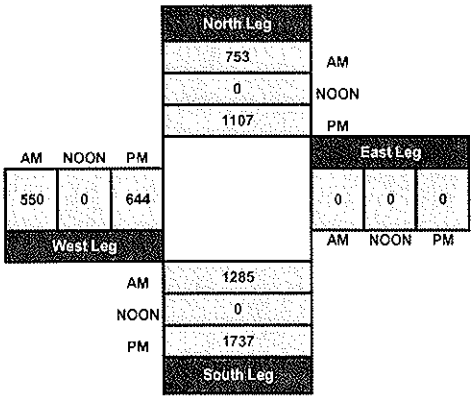
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(23)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

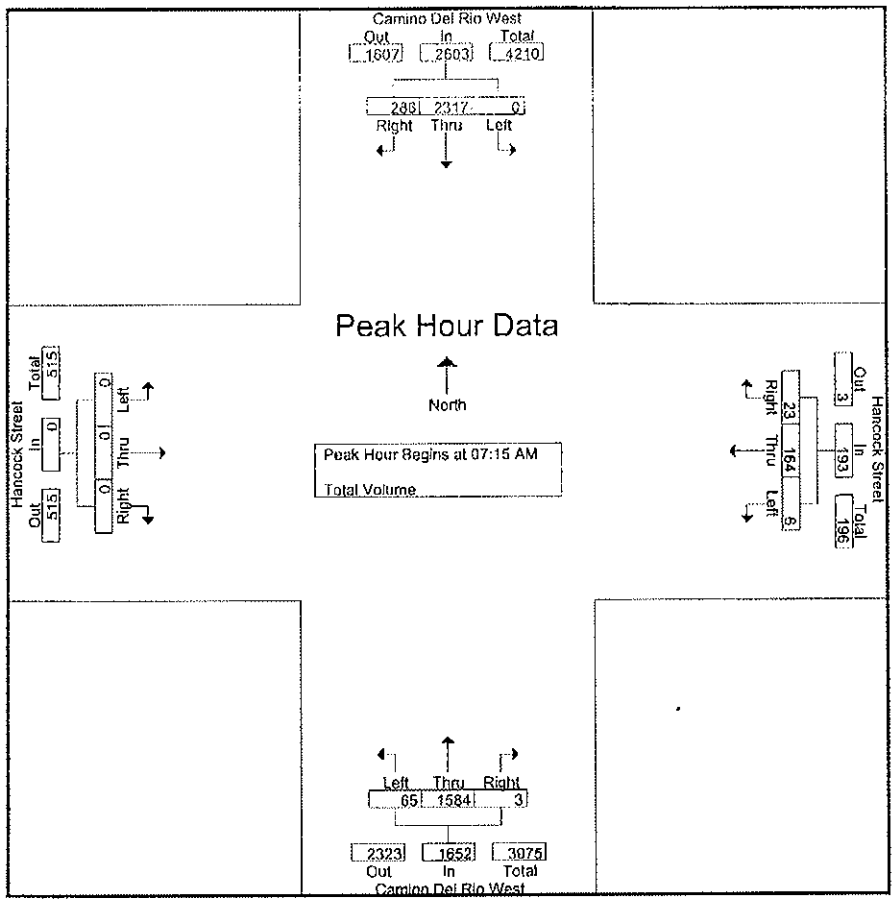
	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
Total	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
07:00 AM	0	589	35	624	9	12	8	29	15	279	9	303	0	0	0	0	956
07:15 AM	0	618	39	657	0	30	11	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	3	41	3	47	10	455	0	465	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	3	443	0	0	0	0	1146
Total	0	2311	214	2525	14	122	25	161	56	1498	12	1566	0	0	0	0	4252
08:00 AM	0	595	107	702	1	54	6	61	24	365	0	389	0	0	0	0	1152
08:15 AM	0	515	70	585	2	47	7	56	14	389	1	404	0	0	0	0	1045
08:30 AM	0	425	94	519	6	54	17	77	16	411	0	427	0	0	0	0	1023
Grand Total	0	4371	517	4888	32	289	63	384	124	2888	22	3034	0	0	0	0	8306
Apprch %	0	89.4	10.6		8.3	75.3	16.4		4.1	95.2	0.7		0	0	0		
Total %	0	52.6	6.2	58.8	0.4	3.5	0.8	4.6	1.5	34.8	0.3	36.5	0	0	0	0	

	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**618**	39	657	0	30	**11**	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	**3**	41	3	47	10	**455**	0	**465**	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	**3**	443	0	0	0	0	1146
08:00 AM	0	595	**107**	**702**	1	**54**	6	**61**	**24**	365	0	389	0	0	0	0	**1152**
Total Volume	0	2317	286	2603	6	164	23	193	65	1584	3	1652	0	0	0	0	4448
% App. Total	0	89	11		3.1	85	11.9		3.9	95.9	0.2		0	0	0		
PHF	.000	.937	.668	.927	.500	.759	.523	.791	.677	.870	.250	.888	.000	.000	.000	.000	.965

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				06:45 AM			
+0 mins.	0	618	39	657	2	39	3	44	10	455	0	465	0	0	0	0
+15 mins.	0	525	60	585	1	54	6	61	15	425	3	443	0	0	0	0
+30 mins.	0	579	80	659	2	47	7	56	24	365	0	389	0	0	0	0
+45 mins.	0	595	107	702	6	54	17	77	14	389	1	404	0	0	0	0
Total Volume	0	2317	286	2603	11	194	33	238	63	1634	4	1701	0	0	0	0
% App. Total	0	89	11		4.6	81.5	13.9		3.7	96.1	0.2		0	0	0	
PHF	.000	.937	.668	.927	.458	.898	.485	.773	.656	.898	.333	.915	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

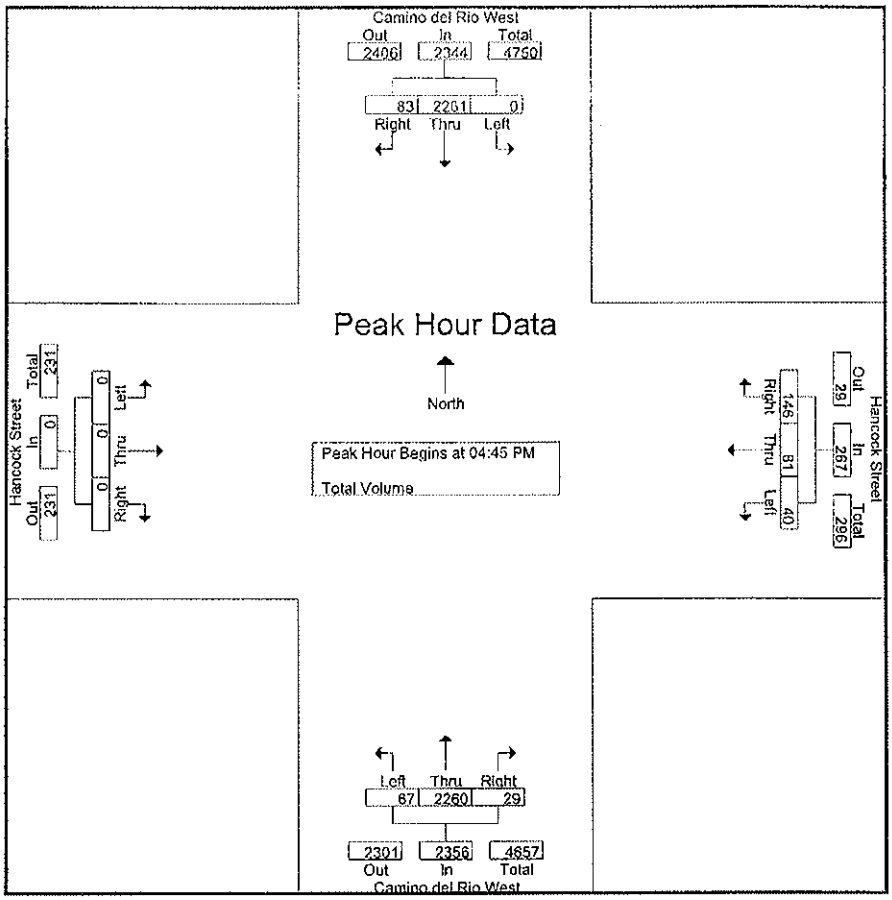
	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	476	31	507	1	34	14	49	17	585	5	607	0	0	0	0	1163
04:15 PM	0	523	30	553	5	23	34	62	11	525	5	541	0	0	0	0	1156
04:30 PM	0	532	25	557	9	21	33	63	11	569	2	582	0	0	0	0	1202
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
Total	0	2061	112	2173	29	97	118	244	68	2264	21	2353	0	0	0	0	4770
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
05:45 PM	0	538	23	561	8	21	27	56	15	489	7	511	0	0	0	0	1128
Total	0	2269	80	2349	34	83	136	253	53	2164	27	2244	0	0	0	0	4846
Grand Total	0	4330	192	4522	63	180	254	497	121	4428	48	4597	0	0	0	0	9616
Apprch %	0	95.8	4.2		12.7	36.2	51.1		2.6	96.3	1		0	0	0		
Total %	0	45	2	47	0.7	1.9	2.6	5.2	1.3	46	0.5	47.8	0	0	0	0	

	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
Total Volume	0	2261	83	2344	40	81	146	267	67	2260	29	2356	0	0	0	0	4967
% App. Total	0	96.5	3.5		15	30.3	54.7		2.8	95.9	1.2		0	0	0		
PHF	.000	.971	.798	.975	.714	.653	.869	.845	.578	.959	.518	.945	.000	.000	.000	.000	.983

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	0	570	20	590	5	23	34	62	11	569	2	582	0	0	0	0
+15 mins.	0	579	18	597	9	21	33	63	29	585	9	623	0	0	0	0
+30 mins.	0	582	19	601	14	19	37	70	11	525	14	550	0	0	0	0
+45 mins.	0	538	23	561	6	31	42	79	19	589	4	612	0	0	0	0
Total Volume	0	2269	80	2349	34	94	146	274	70	2268	29	2367	0	0	0	0
% App. Total	0	96.6	3.4		12.4	34.3	53.3		3	95.8	1.2		0	0	0	
PHF	.000	.975	.870	.977	.607	.758	.869	.867	.603	.963	.518	.950	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

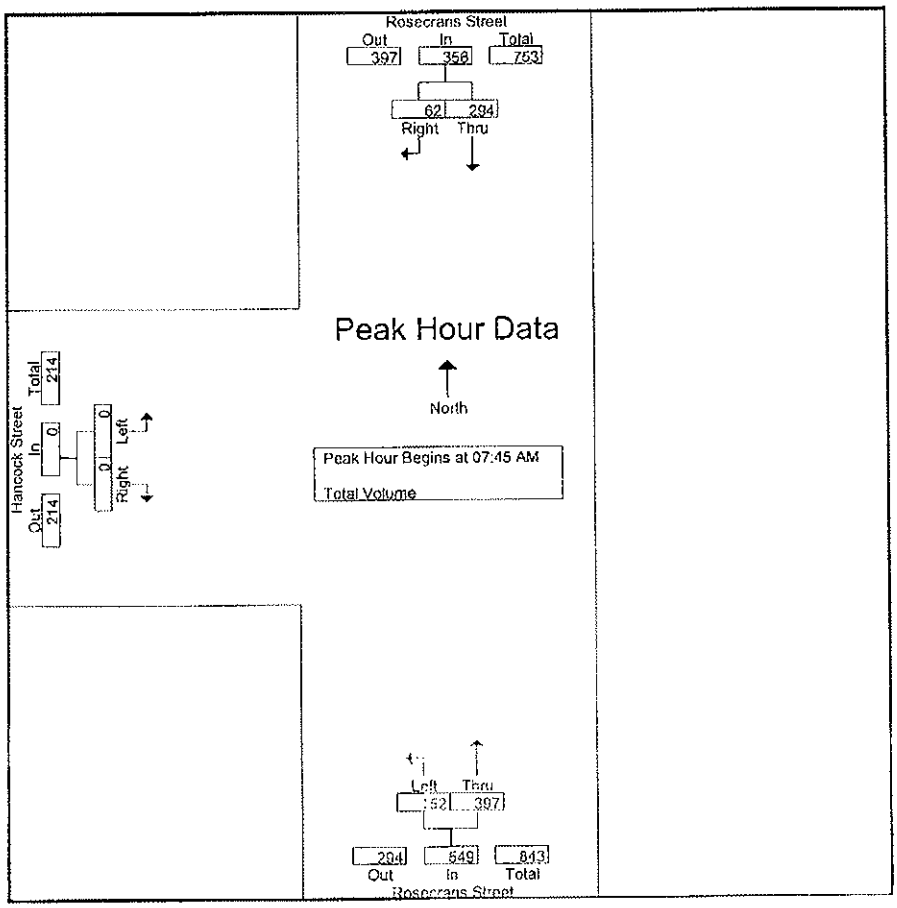
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:45 AM	46	6	52	40	70	110	0	0	0	162
Total	46	6	52	40	70	110	0	0	0	162
07:00 AM	50	5	55	23	59	82	0	0	0	137
07:15 AM	66	13	79	25	93	118	0	0	0	197
07:30 AM	72	19	91	27	101	128	0	0	0	219
07:45 AM	87	14	101	27	116	143	0	0	0	244
Total	275	51	326	102	369	471	0	0	0	797
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Grand Total	528	105	633	267	720	987	0	0	0	1620
Apprch %	83.4	16.6		27.1	72.9		0	0		
Total %	32.6	6.5	39.1	16.5	44.4	60.9	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	87	14	101	27	116	143	0	0	0	244
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Total Volume	294	62	356	152	397	549	0	0	0	905
% App. Total	82.6	17.4		27.7	72.3		0	0		
PHF	.845	.861	.881	.844	.856	.960	.000	.000	.000	.927

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:45 AM			06:45 AM		
+0 mins.	72	19	91	27	116	143	0	0	0
+15 mins.	87	14	101	45	85	130	0	0	0
+30 mins.	60	18	78	44	99	143	0	0	0
+45 mins.	70	16	86	36	97	133	0	0	0
Total Volume	289	67	356	152	397	549	0	0	0
% App. Total	81.2	18.8		27.7	72.3		0	0	
PHF	.830	.882	.881	.844	.856	.960	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

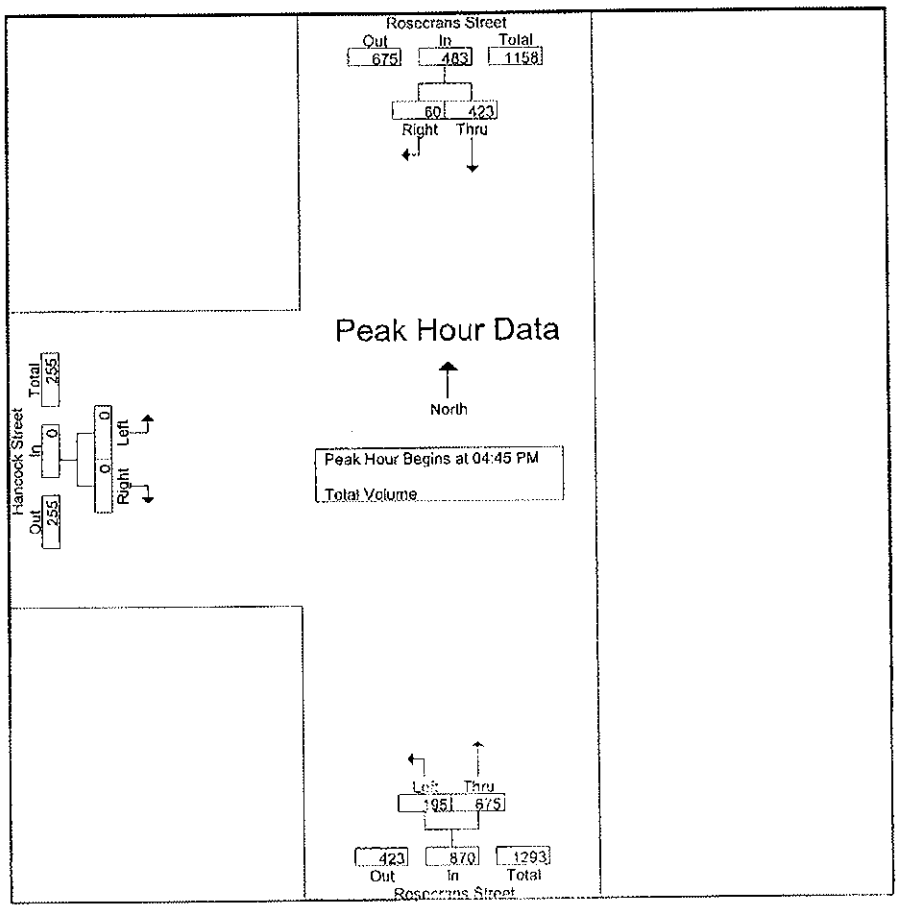
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	104	18	122	48	157	205	0	0	0	327
04:15 PM	109	17	126	53	153	206	0	0	0	332
04:30 PM	106	20	126	44	158	202	0	0	0	328
04:45 PM	89	14	103	51	187	238	0	0	0	341
Total	408	69	477	196	655	851	0	0	0	1328
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
05:45 PM	117	12	129	31	138	169	0	0	0	298
Total	451	58	509	175	626	801	0	0	0	1310
Grand Total	859	127	986	371	1281	1652	0	0	0	2638
Apprch %	87.1	12.9		22.5	77.5		0	0		
Total %	32.6	4.8	37.4	14.1	48.6	62.6	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	89	14	103	51	187	238	0	0	0	341
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
Total Volume	423	60	483	195	675	870	0	0	0	1353
% App. Total	87.6	12.4		22.4	77.6		0	0		
PHF	.896	.882	.901	.956	.902	.914	.000	.000	.00	.990

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			04:00 PM		
+0 mins.	107	17	124	44	158	202	0	0	0
+15 mins.	109	13	122	51	187	238	0	0	0
+30 mins.	118	16	134	51	167	218	0	0	0
+45 mins.	117	12	129	48	168	216	0	0	0
Total Volume	451	58	509	194	680	874	0	0	0
% App. Total	88.6	11.4		22.2	77.8		0	0	
PHF	.956	.853	.950	.951	.909	.918	.000	.000	.000

(25)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				12			37	101				14	164
7:15 AM				16			46	158				24	244
7:30 AM				15			58	111				31	215
7:45 AM				17			60	103				32	212
8:00 AM				12			86	117				23	238
8:15 AM				10			66	76				18	170
8:30 AM				14			43	62				37	156
8:45 AM				22			58	66				27	173
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	118	0	0	454	794	0	0	0	206	1572
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	36.38%	63.62%	0.00%	0.00%	0.00%	100.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021

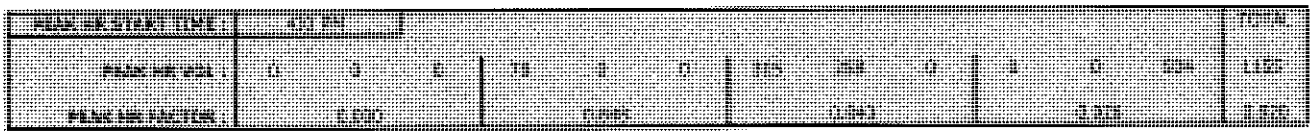
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				11			54	46				124	235
4:15 PM				18			66	63				107	254
4:30 PM				15			66	68				136	285
4:45 PM				17			78	58				116	269
5:00 PM				23			83	50				131	287
5:15 PM				23			88	82				121	314
5:30 PM				14			79	45				54	192
5:45 PM				23			124	38				75	260
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	144	0	0	638	450	0	0	0	864	2096
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	58.64%	41.36%	0.00%	0.00%	0.00%	100.00%	



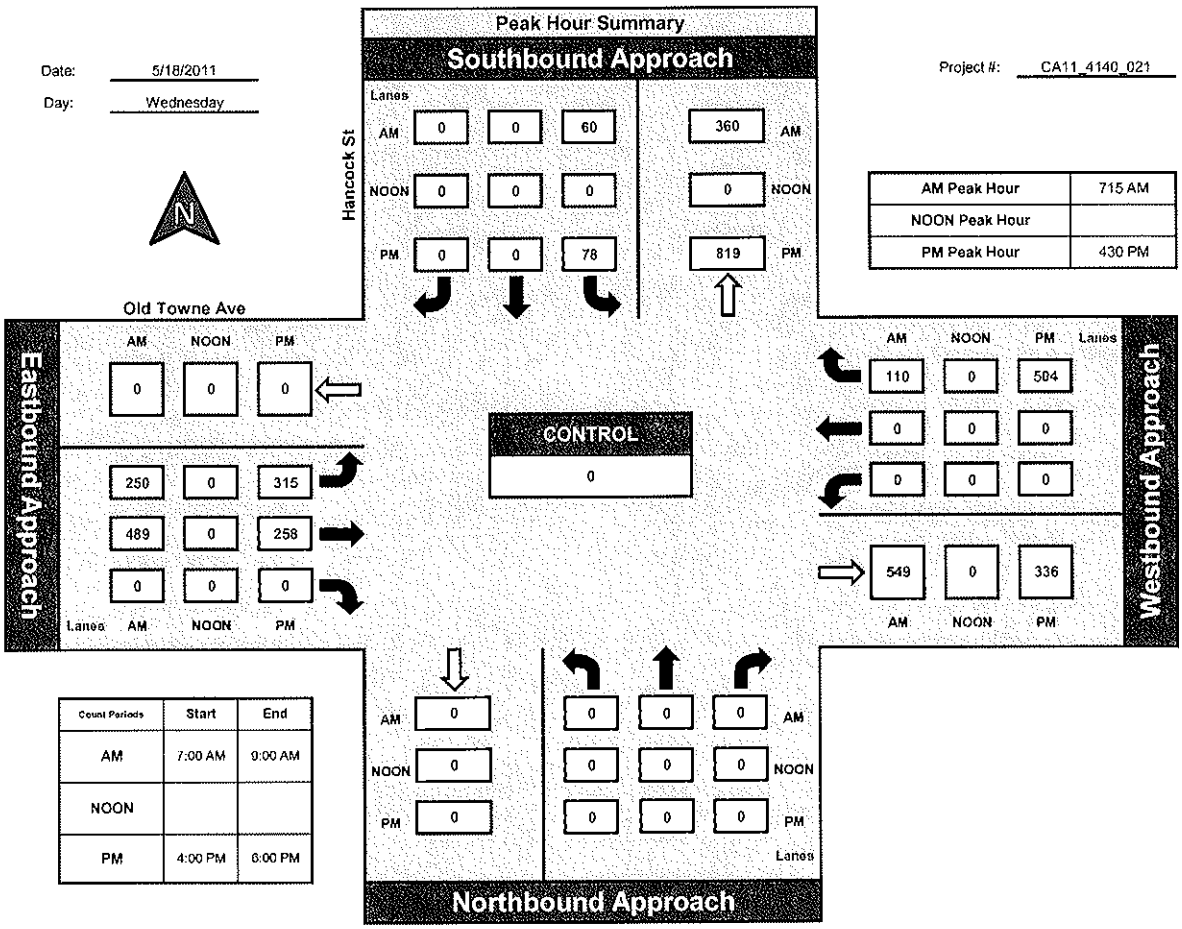
CONTROL :

ITM Peak Hour Summary

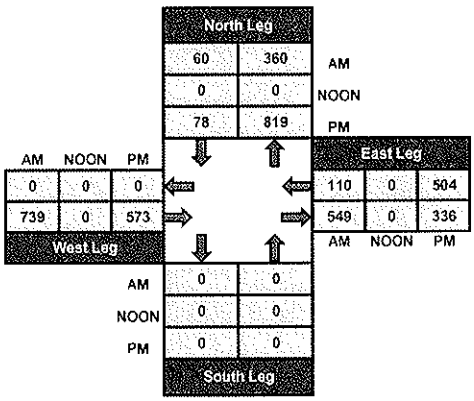
Prepared by:

National Data & Surveying Services

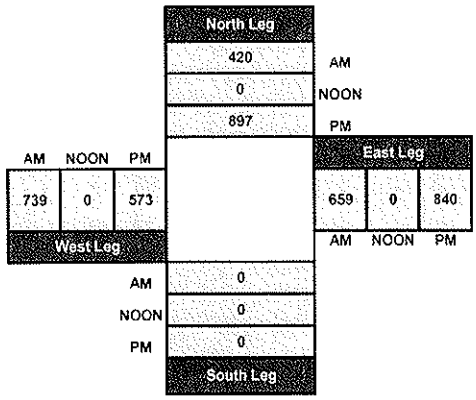
Hancock St and Old Towne Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(26)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	13	2	7	1	0	1	5	21	91	2	2	0	145
7:15 AM	19	1	9	0	1	0	1	21	141	2	3	2	200
7:30 AM	35	0	5	0	0	0	1	24	110	0	1	0	176
7:45 AM	23	1	8	0	0	1	2	33	81	0	3	1	153
8:00 AM	16	0	13	0	0	0	3	45	79	5	12	0	173
8:15 AM	9	0	10	0	1	0	0	21	67	4	4	0	116
8:30 AM	28	1	7	0	1	1	0	27	55	0	12	0	132
8:45 AM	14	1	7	0	2	2	1	33	47	1	7	0	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	6	66	1	5	5	13	225	671	14	44	3	1210
APPROACH %'s :	68.56%	2.62%	28.82%	9.09%	45.45%	45.45%	1.43%	24.75%	73.82%	22.95%	72.13%	4.92%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	120	0	18	0	0	0	2	27	31	1	8	0	207
4:15 PM	79	0	19	0	1	5	2	43	32	2	19	1	203
4:30 PM	116	1	14	0	1	5	1	42	39	4	19	0	242
4:45 PM	97	2	12	1	2	5	1	32	44	2	12	0	210
5:00 PM	100	2	7	1	1	3	1	33	41	2	26	0	217
5:15 PM	109	2	17	2	2	0	5	47	48	2	18	0	252
5:30 PM	42	0	11	0	1	1	1	30	28	2	5	0	121
5:45 PM	60	1	11	1	0	1	0	36	27	1	20	0	158
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	723	8	109	5	8	20	13	290	290	16	127	1	1610
APPROACH %'s :	86.07%	0.95%	12.98%	15.15%	24.24%	60.61%	2.19%	48.90%	48.90%	11.11%	88.19%	0.69%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

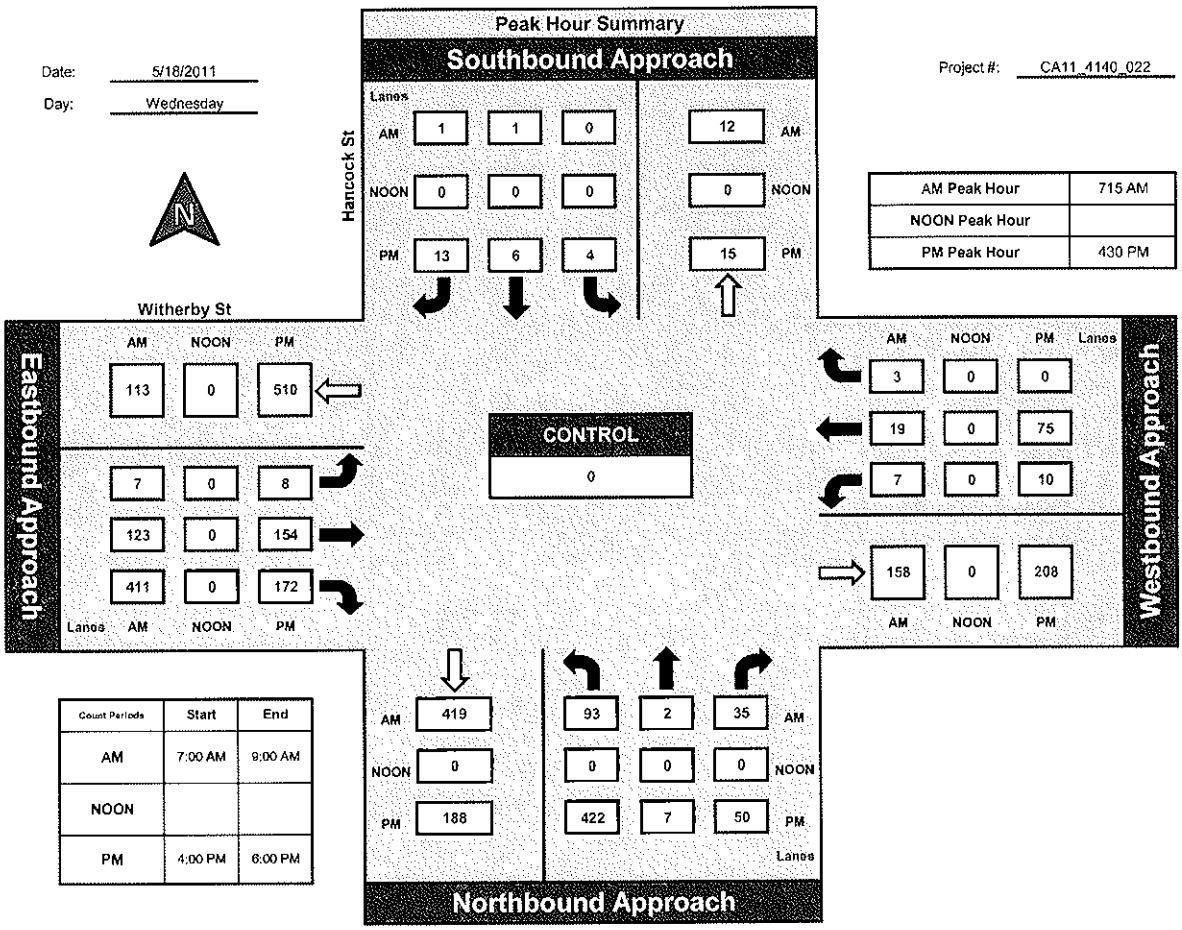
National Data & Surveying Services

Hancock St and Witherby St , City of San Diego

Date: 5/18/2011

Day: Wednesday

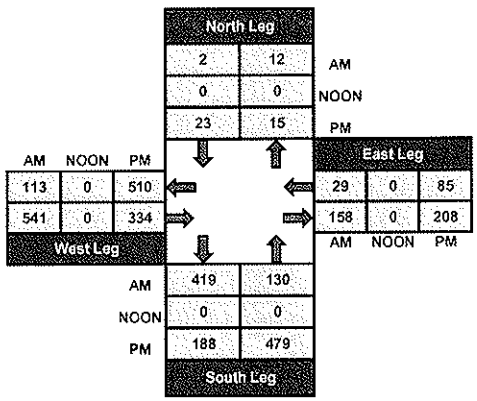
Project #: CA11_4140_022



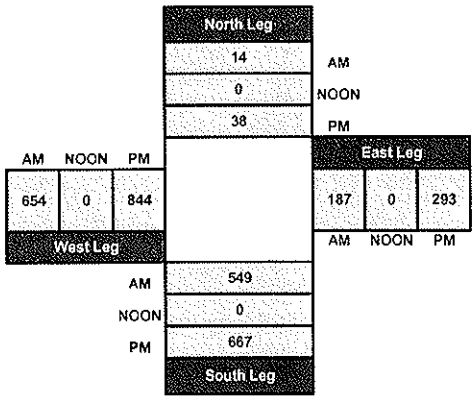
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(28)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					235	2			1	6			244
7:15 AM					216	4			1	3			224
7:30 AM					268	1			4	5			278
7:45 AM					355	7			2	6			370
8:00 AM					323	1			2	5			331
8:15 AM					367	5			5	7			384
8:30 AM					359	1			1	10			371
8:45 AM					346	1			2	12			361

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	2469	22	0	0	18	54	0	0	2563
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.12%	0.88%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

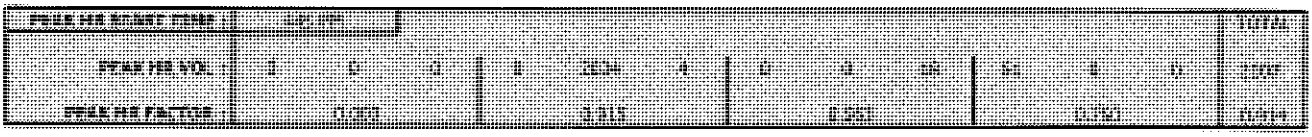
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					291	1			1	9			302
4:15 PM					344	4			7	6			361
4:30 PM					388	2			7	10			407
4:45 PM					477	0			7	17			501
5:00 PM					556	1			8	11			576
5:15 PM					536	1			3	7			547
5:30 PM					465	2			0	16			483
5:45 PM					381	2			0	13			396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3438	13	0	0	33	89	0	0	3573
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.62%	0.38%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



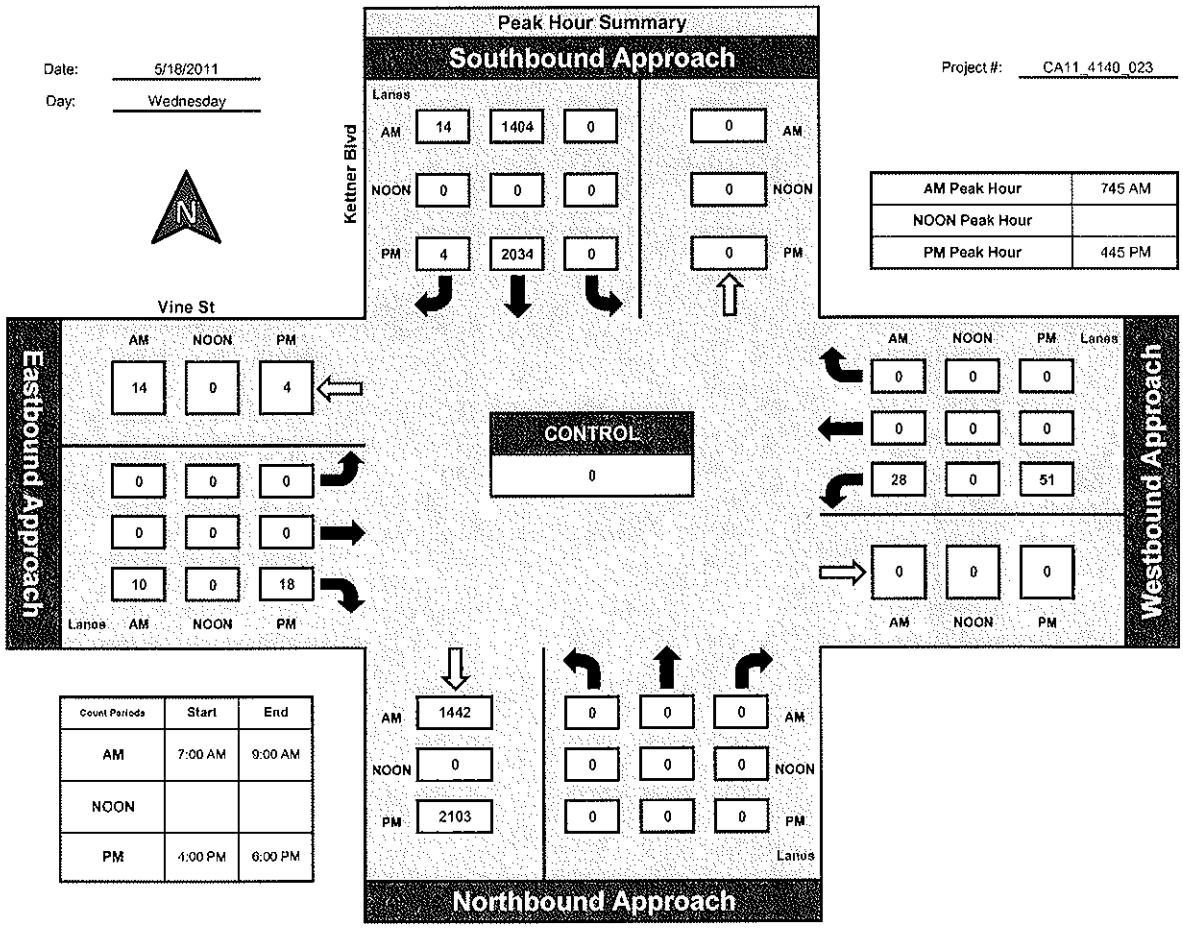
CONTROL :

ITM Peak Hour Summary

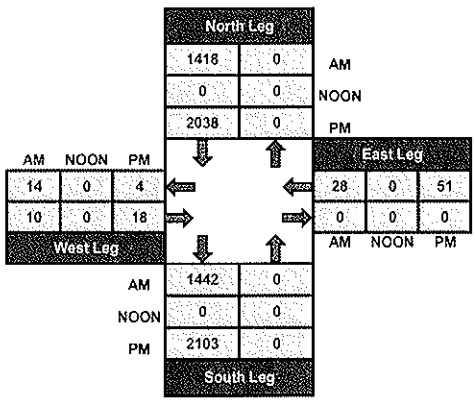
Prepared by:

National Data & Surveying Services

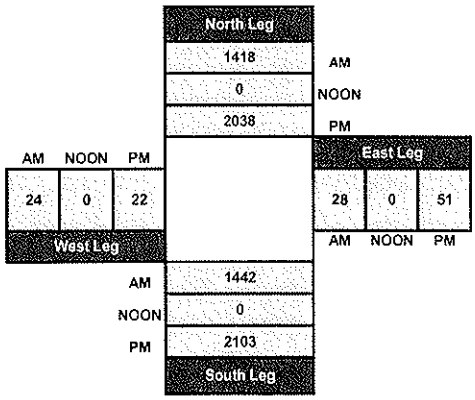
Kettner Blvd and Vine St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(31)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_018

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	450					19			222				691
7:15 AM	410					7			265				682
7:30 AM	358					15			272				645
7:45 AM	444					22			274				740
8:00 AM	413					18			286				717
8:15 AM	418					17			312				747
8:30 AM	390					16			309				715
8:45 AM	341					15			274				630

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3224	0	0	0	0	129	0	0	2214	0	0	0	5567
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]													
[redacted]													
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

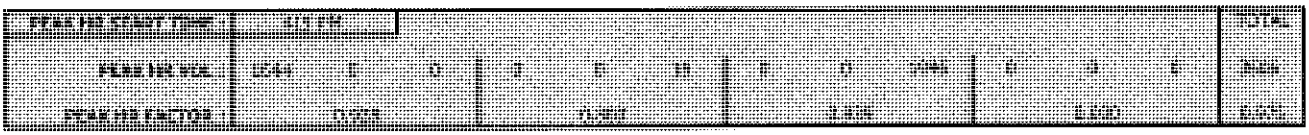
Project ID: CA11_4140_018 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	376					1			501				878
4:15 PM	404					3			518				925
4:30 PM	371					4			498				873
4:45 PM	426					5			470				901
5:00 PM	443					4			460				907
5:15 PM	405					2			436				843
5:30 PM	351					2			384				737
5:45 PM	333					2			309				644

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3109	0	0	0	0	23	0	0	3576	0	0	0	6708
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_018

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
	73	0	AM
	0	0	NOON
	16	0	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
1738	0	1660		0	0	0
1181	0	1946		0	0	0

	South Leg	
AM	1181	1665
NOON	0	0
PM	1946	1644

Total Volume Per Leg

	North Leg	
	73	AM
	0	NOON
	16	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
2919	0	3606		0	0	0

	South Leg
AM	2846
NOON	0
PM	3590

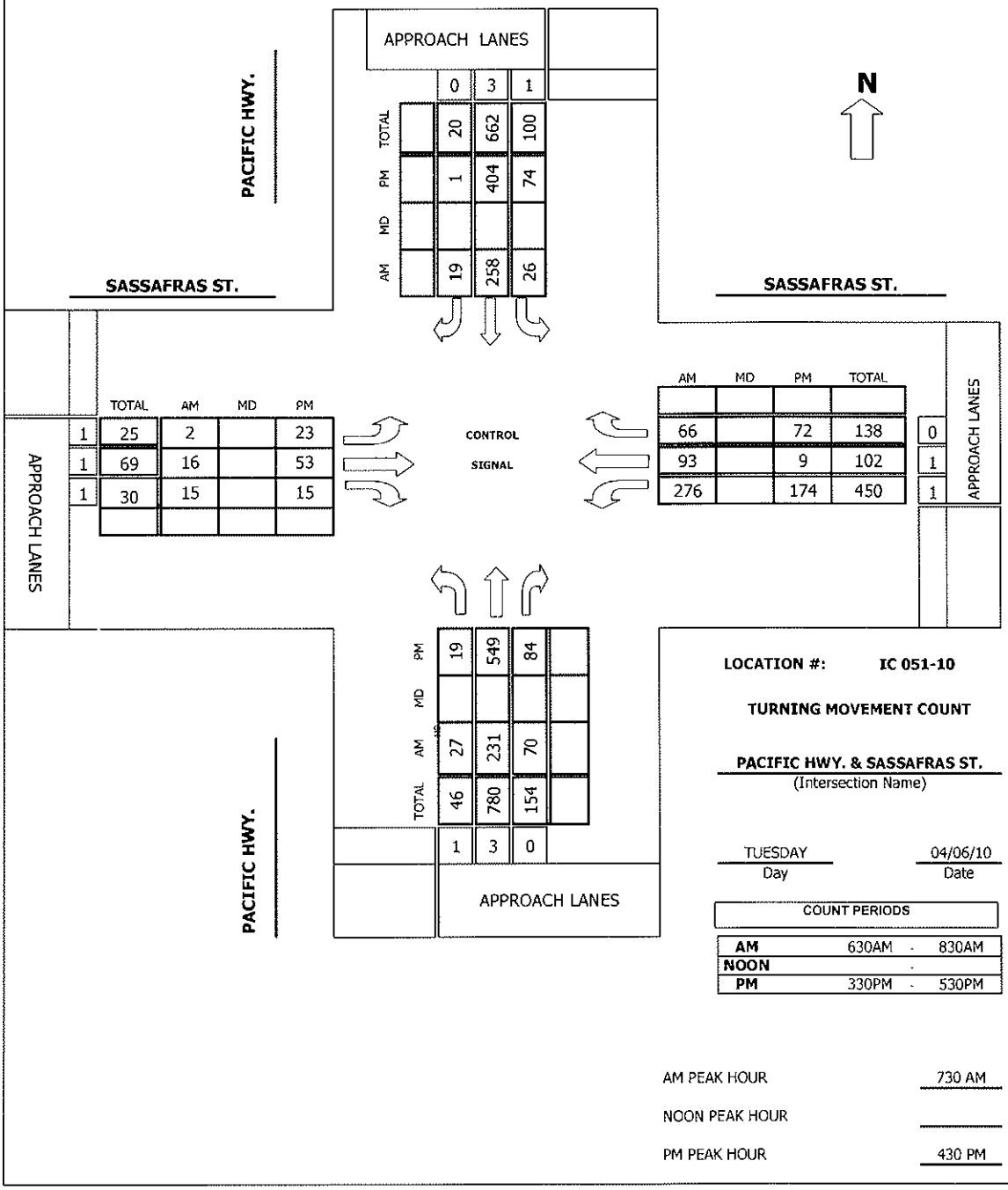
(34)

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: IC 051-10

TMC SUMMARY OF PACIFIC HWY. & SASSAFRAS ST.



LOCATION #: IC 051-10

TURNING MOVEMENT COUNT

PACIFIC HWY. & SASSAFRAS ST.
(Intersection Name)

TUESDAY (Day) 04/06/10 (Date)

COUNT PERIODS			
AM	630AM	-	830AM
NOON		-	
PM	330PM	-	530PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM	5	39	19	3	38	2	1	0	2	75	32	5	221
6:45 AM	6	47	9	4	63	1	1	1	1	104	15	7	259
7:00 AM	7	45	15	5	45	2	0	0	4	73	18	13	227
7:15 AM	8	55	16	4	67	3	0	0	1	50	21	8	233
7:30 AM	6	35	13	4	65	6	0	1	2	68	30	13	243
7:45 AM	7	72	12	7	69	4	0	3	2	77	20	19	292
8:00 AM	5	71	16	6	68	6	1	3	6	64	19	17	282
8:15 AM	9	53	29	9	56	3	1	9	5	67	24	17	282
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	53	417	129	42	471	27	4	17	23	578	179	99	2039
Approach %	8.85	69.62	21.54	7.78	87.22	5.00	9.09	38.64	52.27	67.52	20.91	11.57	
App/Depart	599	/	520	540	/	1072	44	/	188	856	/	259	

AM Peak Hr Begins at: 730 AM

PEAK													
Volumes	27	231	70	26	258	19	2	16	15	276	93	66	1099
Approach %	8.23	70.43	21.34	8.58	85.15	6.27	6.06	48.48	45.45	63.45	21.38	15.17	
PEAK HR. FACTOR:		0.891			0.947			0.550			0.938		0.941

CONTROL: SIGNAL
COMMENT 1:
COMMENT 2:

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	5	115	37	20	89	1	1	8	4	50	2	15	347
3:45 PM	6	127	26	16	90	1	2	2	3	42	1	19	335
4:00 PM	7	126	23	13	105	1	1	12	7	46	5	16	362
4:15 PM	5	98	23	18	105	1	2	11	4	59	4	17	347
4:30 PM	3	117	23	20	105	1	5	16	2	44	4	18	358
4:45 PM	6	130	19	17	99	0	3	7	3	42	1	17	344
5:00 PM	8	138	25	19	104	0	8	23	6	44	1	21	397
5:15 PM	2	164	17	18	96	0	7	7	4	44	3	16	378
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	42	1015	193	141	793	5	29	86	33	371	21	139	2868
Approach %	3.36	81.20	15.44	15.02	84.45	0.53	19.59	58.11	22.30	69.87	3.95	26.18	
App/Depart	1250	/	1183	939	/	1197	148	/	420	531	/	68	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	19	549	84	74	404	1	23	53	15	174	9	72	1477
Approach %	2.91	84.20	12.88	15.45	84.34	0.21	25.27	58.24	16.48	68.24	3.53	28.24	
PEAK HR. FACTOR:		0.891			0.950			0.615			0.966		0.930

CONTROL: SIGNAL
COMMENT 1: 0
COMMENT 2: 0

FIELD DATA SERVICES OF ARIZONA, INC.

520.316.6745

Pedestrian & Bicycle Study

Location: PACIFIC HWY. & SASSAFRAS ST.

Date: 04/06/10
Day: TUESDAY

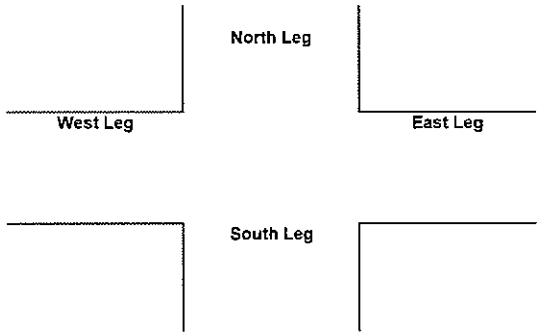
City: SAN DIEGO
Project #: IC 051-10

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	2	2	0
6:45 AM	0	1	0	0
7:00 AM	0	1	1	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	0
7:45 AM	0	1	0	0
8:00 AM	0	1	0	1
8:15 AM	0	1	0	0
TOTAL	0	8	3	1

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	0	1	2
6:45 AM	0	0	0	4
7:00 AM	0	0	0	2
7:15 AM	0	0	1	0
7:30 AM	0	0	1	0
7:45 AM	0	0	0	1
8:00 AM	0	0	0	2
8:15 AM	0	0	1	2
TOTAL	0	0	4	13

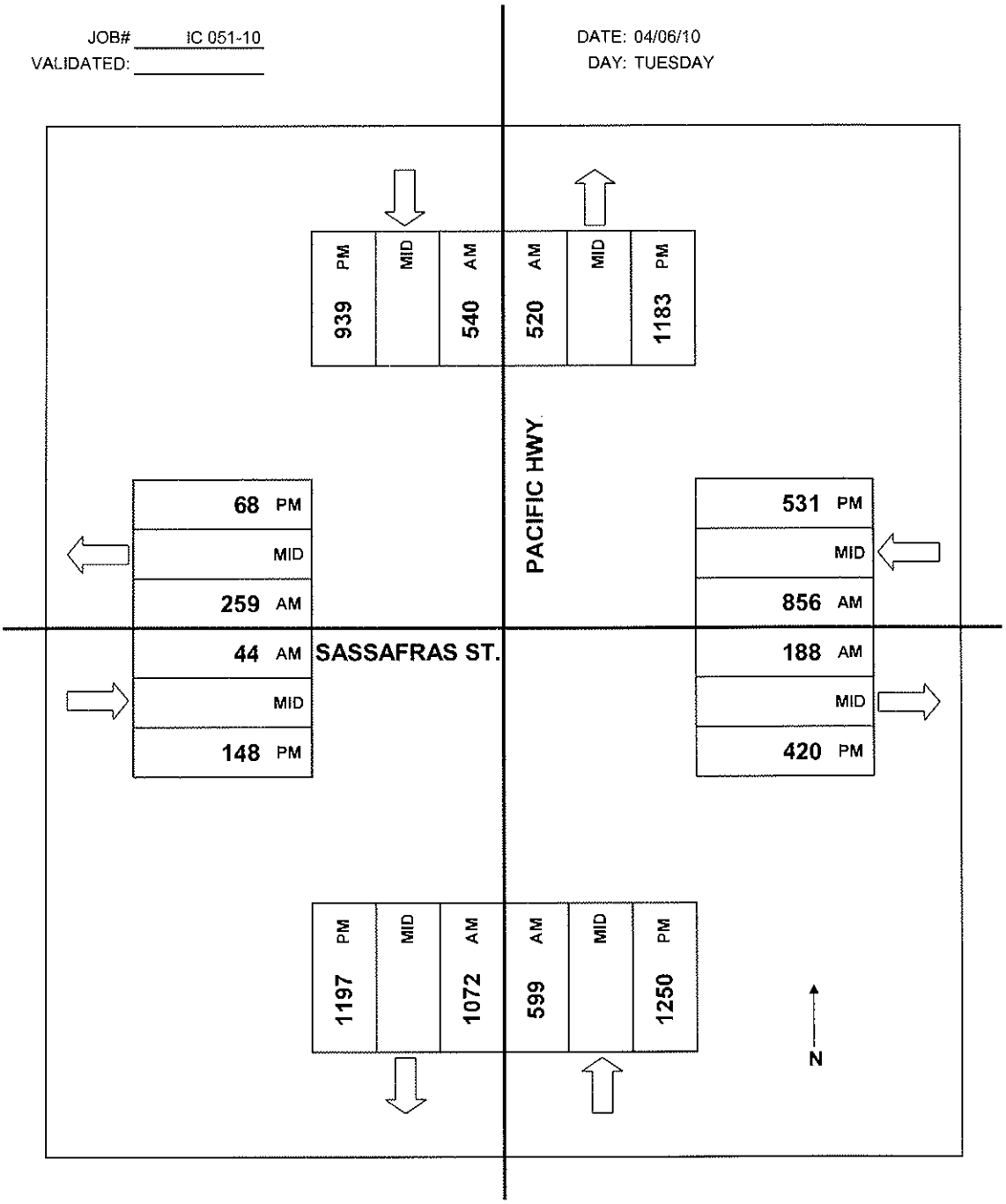
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	0	1
3:45 PM	0	0	0	0
4:00 PM	0	3	0	0
4:15 PM	0	1	0	2
4:30 PM	0	6	0	0
4:45 PM	0	1	0	2
5:00 PM	0	2	0	0
5:15 PM	0	0	0	0
TOTAL	0	13	0	5

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	2	0
3:45 PM	0	0	4	1
4:00 PM	0	0	2	2
4:15 PM	0	0	3	1
4:30 PM	0	0	1	2
4:45 PM	0	0	0	1
5:00 PM	0	0	2	1
5:15 PM	0	0	0	1
TOTAL	0	0	14	9



JOB# IC 051-10
VALIDATED: _____

DATE: 04/06/10
DAY: TUESDAY



(36)

2

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

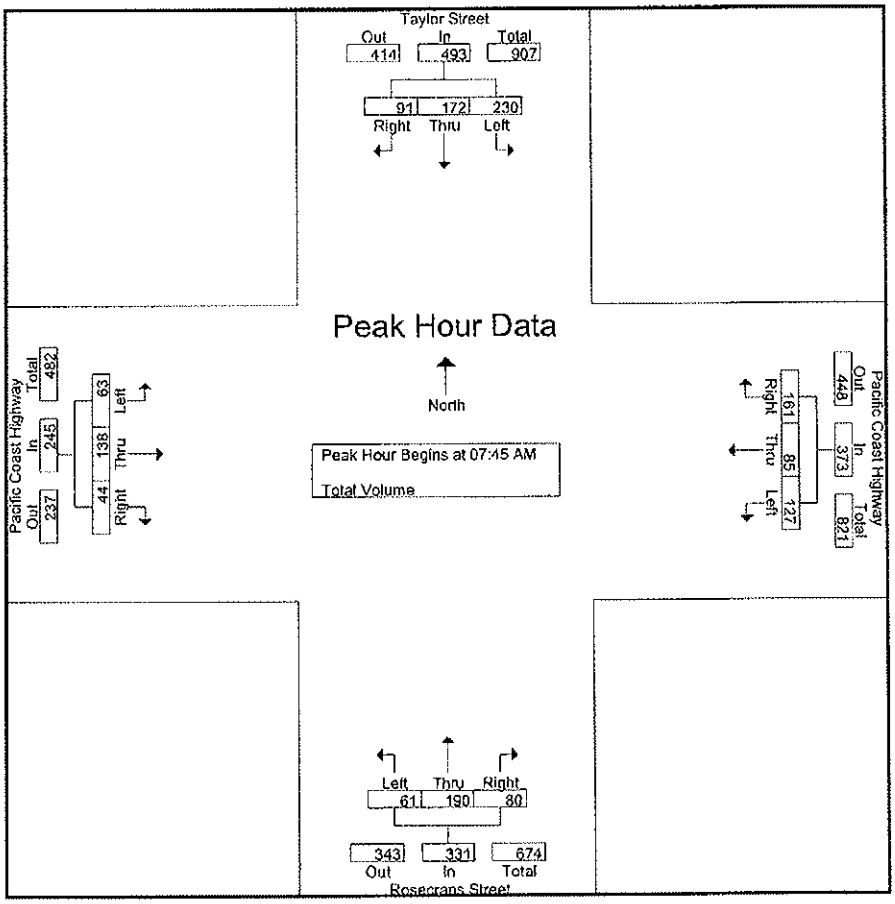
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
Total	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
07:00 AM	76	19	16	111	23	11	18	52	10	23	27	60	15	26	12	53	276
07:15 AM	92	21	11	124	43	18	21	82	13	29	21	63	12	21	6	39	308
07:30 AM	65	44	24	133	37	19	31	87	10	41	30	81	8	30	14	52	353
07:45 AM	66	53	20	139	37	20	41	98	11	51	18	80	22	50	15	87	404
Total	299	137	71	507	140	68	111	319	44	144	96	284	57	127	47	231	1341
08:00 AM	58	31	19	108	36	21	45	102	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	29	118	24	20	33	77	19	68	19	106	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Grand Total	533	268	162	963	250	146	261	657	101	304	186	591	114	236	82	432	2643
Apprch %	55.3	27.8	16.8		38.1	22.2	39.7		17.1	51.4	31.5		26.4	54.6	19		
Total %	20.2	10.1	6.1	36.4	9.5	5.5	9.9	24.9	3.8	11.5	7	22.4	4.3	8.9	3.1	16.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**66**	**53**	20	**139**	37	20	41	98	11	51	18	80	**22**	**50**	**15**	**87**	**404**
08:00 AM	58	31	19	108	36	21	**45**	**102**	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	**29**	118	24	20	33	77	**19**	**68**	19	**106**	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Total Volume	230	172	91	493	127	85	161	373	61	190	80	331	63	138	44	245	1442
% App. Total	46.7	34.9	18.5		34	22.8	43.2		18.4	57.4	24.2		25.7	56.3	18		
PHF	.871	.811	.784	.887	.858	.885	.894	.914	.803	.699	.870	.781	.716	.690	.733	.704	.892

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	76	19	16	111	37	20	41	98	10	41	**30**	81	**22**	**50**	**15**	**87**
+15 mins.	**92**	21	11	124	36	21	**45**	**102**	11	51	18	80	9	27	12	48
+30 mins.	65	44	**24**	133	24	20	33	77	13	31	23	67	13	31	7	51
+45 mins.	66	**53**	20	**139**	30	**24**	42	96	**19**	**68**	19	**106**	19	30	10	59
Total Volume	299	137	71	507	127	85	161	373	53	191	90	334	63	138	44	245
% App. Total	59	27	14		34	22.8	43.2		15.9	57.2	26.9		25.7	56.3	18	
PHF	.813	.646	.740	.912	.858	.885	.894	.914	.697	.702	.750	.788	.716	.690	.733	.704

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009

Groups Printed- Total Volume

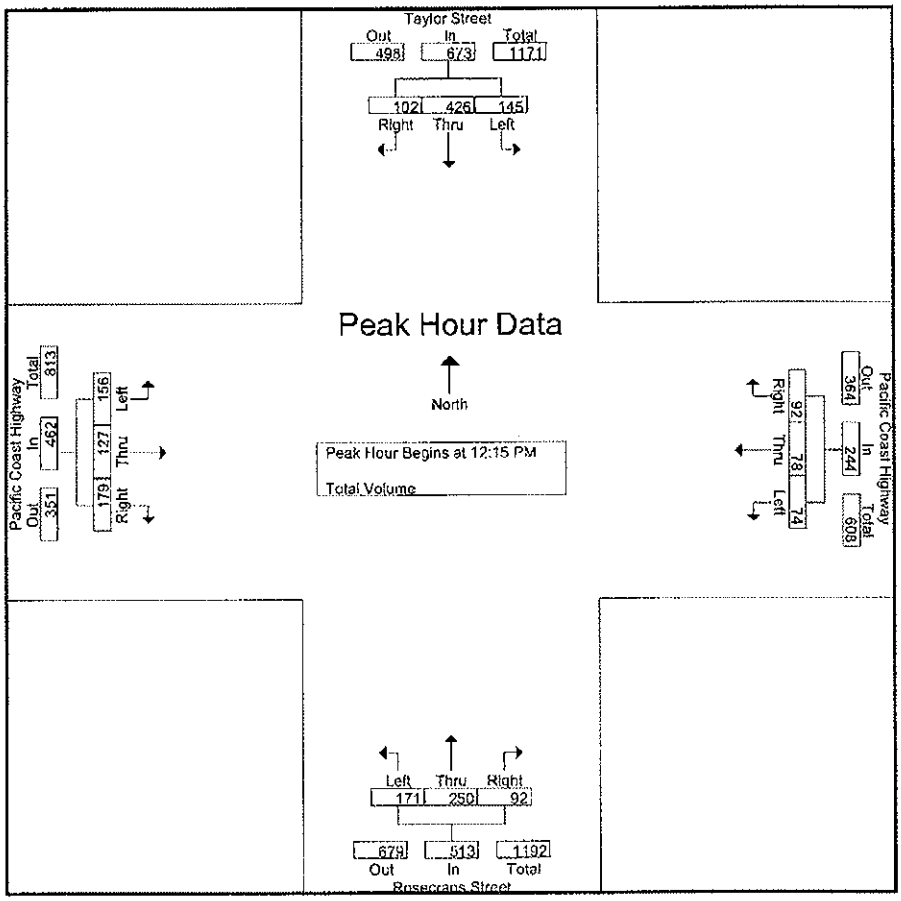
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	23	86	27	136	16	17	27	60	42	60	13	115	46	24	48	118	429
11:45 AM	21	94	29	144	16	23	13	52	27	77	21	125	45	28	54	127	448
Total	44	180	56	280	32	40	40	112	69	137	34	240	91	52	102	245	877
12:00 PM	30	70	19	119	13	28	32	73	33	62	12	107	41	32	41	114	413
12:15 PM	34	116	22	172	29	13	26	68	33	66	31	130	47	36	39	122	492
12:30 PM	34	110	33	177	14	20	18	52	45	58	25	128	38	26	54	118	475
12:45 PM	31	118	32	181	13	17	20	50	45	63	15	123	47	39	43	129	483
Total	129	414	106	649	69	78	96	243	156	249	83	488	173	133	177	483	1863
01:00 PM	46	82	15	143	18	28	28	74	48	63	21	132	24	26	43	93	442
01:15 PM	28	85	10	123	24	24	15	63	19	50	15	84	61	40	65	166	436
Grand Total	247	761	187	1195	143	170	179	492	292	499	153	944	349	251	387	987	3618
Apprch %	20.7	63.7	15.6		29.1	34.6	36.4		30.9	52.9	16.2		35.4	25.4	39.2		
Total %	6.8	21	5.2	33	4	4.7	4.9	13.6	8.1	13.8	4.2	26.1	9.6	6.9	10.7	27.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	34	116	22	172	**29**	13	26	68	33	**66**	**31**	130	**47**	36	39	122	**492**
12:30 PM	34	110	**33**	177	14	20	18	52	45	58	25	128	38	26	**54**	118	475
12:45 PM	31	**118**	32	**181**	13	17	20	50	45	63	15	123	47	**39**	43	**129**	483
01:00 PM	**46**	82	15	143	18	**28**	**28**	**74**	**48**	63	21	**132**	24	26	43	93	442
Total Volume	145	426	102	673	74	78	92	244	171	250	92	513	156	127	179	462	1892
% App. Total	21.5	63.3	15.2		30.3	32	37.7		33.3	48.7	17.9		33.8	27.5	38.7		
PHF	.788	.903	.773	.930	.638	.696	.821	.824	.891	.947	.742	.972	.830	.814	.829	.895	.961

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				12:15 PM				12:30 PM			
+0 mins.	34	116	22	172	16	17	27	60	33	**66**	31	130	38	26	54	118
+15 mins.	34	110	**33**	177	16	23	13	52	45	58	25	128	47	39	43	129
+30 mins.	31	**118**	32	**181**	13	**28**	**32**	**73**	45	63	15	123	24	26	43	93
+45 mins.	**46**	82	15	143	**29**	13	26	68	**48**	63	21	**132**	**61**	**40**	**65**	**166**
Total Volume	145	426	102	673	74	81	98	253	171	250	92	513	170	131	205	506
% App. Total	21.5	63.3	15.2		29.2	32	38.7		33.3	48.7	17.9		33.6	25.9	40.5	
PHF	.788	.903	.773	.930	.638	.723	.766	.866	.891	.947	.742	.972	.697	.819	.788	.762

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

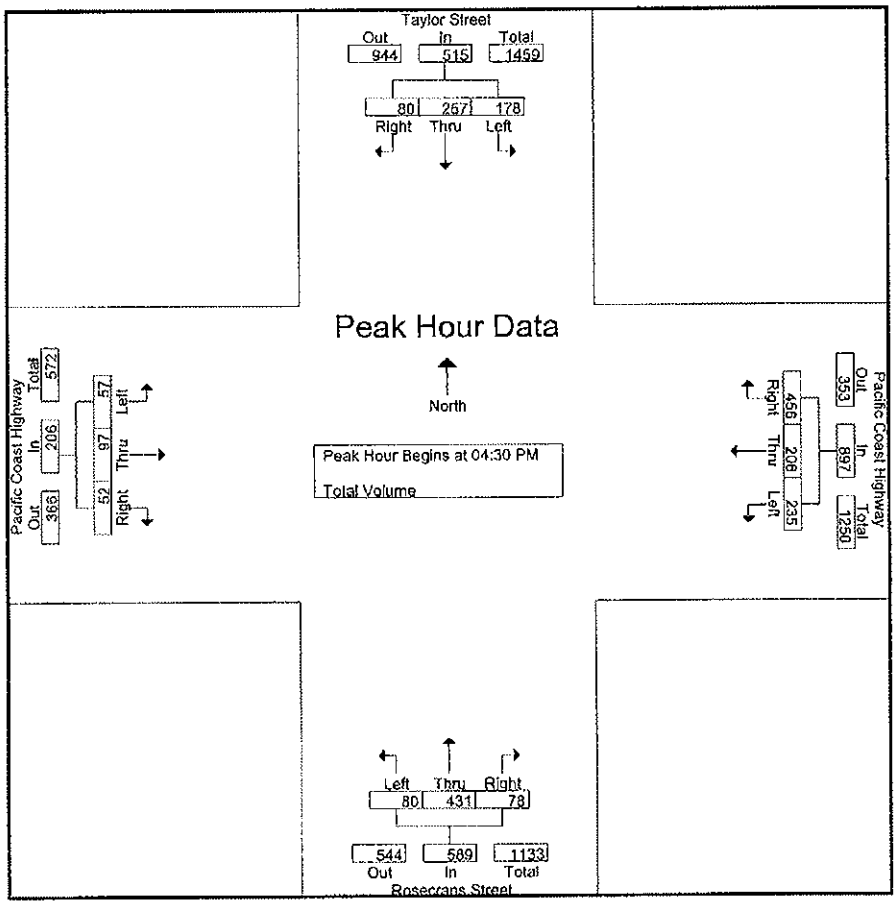
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	57	49	27	133	70	65	123	258	19	87	19	125	22	23	17	62	578
04:15 PM	32	54	20	106	83	46	103	232	22	64	32	118	11	27	12	50	506
04:30 PM	51	56	15	122	60	48	127	235	25	113	30	168	19	27	13	59	584
04:45 PM	40	57	16	113	62	38	107	207	18	90	10	118	14	13	7	34	472
Total	180	216	78	474	275	197	460	932	84	354	91	529	66	90	49	205	2140
05:00 PM	46	79	21	146	57	61	115	233	20	133	16	169	16	27	14	57	605
05:15 PM	41	65	28	134	56	59	107	222	17	95	22	134	8	30	18	56	546
05:30 PM	42	78	17	137	70	32	103	205	19	102	24	145	14	15	12	41	528
05:45 PM	42	80	20	142	42	36	92	170	18	90	22	130	12	24	15	51	493
Total	171	302	86	559	225	188	417	830	74	420	84	578	50	96	59	205	2172
Grand Total	351	518	164	1033	500	385	877	1762	158	774	175	1107	116	186	108	410	4312
Apprch %	34	50.1	15.9		28.4	21.9	49.8		14.3	69.9	15.8		28.3	45.4	26.3		
Total %	8.1	12	3.8	24	11.6	8.9	20.3	40.9	3.7	17.9	4.1	25.7	2.7	4.3	2.5	9.5	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**51**	56	15	122	60	48	**127**	**235**	**25**	113	**30**	168	**19**	27	13	**59**	584
04:45 PM	40	57	16	113	**62**	38	107	207	18	90	10	118	14	13	7	34	472
05:00 PM	46	**79**	21	**146**	57	**61**	115	233	20	**133**	16	**169**	16	27	14	57	**605**
05:15 PM	41	65	**28**	134	56	59	107	222	17	95	22	134	8	**30**	**18**	56	546
Total Volume	178	257	80	515	235	206	456	897	80	431	78	589	57	97	52	206	2207
% App. Total	34.6	49.9	15.5		26.2	23	50.8		13.6	73.2	13.2		27.7	47.1	25.2		
PHF	.873	.813	.714	.882	.948	.844	.898	.954	.800	.810	.650	.871	.750	.808	.722	.873	.912

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	**46**	79	21	**146**	70	**65**	123	**258**	**25**	113	**30**	168	**19**	27	13	**59**
+15 mins.	41	65	**28**	134	**83**	46	103	232	18	90	10	118	14	13	7	34
+30 mins.	42	78	17	137	60	48	**127**	235	20	**133**	16	**169**	16	27	14	57
+45 mins.	42	**80**	20	142	62	38	107	207	17	95	22	134	8	**30**	**18**	56
Total Volume	171	302	86	559	275	197	460	932	80	431	78	589	57	97	52	206
% App. Total	30.6	54	15.4		29.5	21.1	49.4		13.6	73.2	13.2		27.7	47.1	25.2	
PHF	.929	.944	.768	.957	.828	.758	.906	.903	.800	.810	.650	.871	.750	.808	.722	.873

(37)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	29	8	0	29	27	0	0	2	9	7	27	158
7:15 AM	27	35	2	0	32	33	1	0	0	7	11	31	179
7:30 AM	33	36	8	1	39	39	1	0	4	7	19	25	212
7:45 AM	37	43	9	1	31	38	1	0	6	9	35	45	255
8:00 AM	24	56	12	1	26	37	0	1	5	9	46	55	272
8:15 AM	27	37	7	0	21	69	1	0	3	7	51	42	265
8:30 AM	31	33	7	0	27	52	0	0	2	11	29	43	235
8:45 AM	24	43	5	5	28	61	1	0	5	11	28	41	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	223	312	58	8	233	356	5	1	27	70	226	309	1828
APPROACH %'s :	37.61%	52.61%	9.78%	1.34%	39.03%	59.63%	15.15%	3.03%	81.82%	11.57%	37.36%	51.07%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	91	46	3	1	42	31	0	0	1	15	16	34	280
4:15 PM	97	66	2	1	41	28	0	1	6	21	22	45	330
4:30 PM	96	70	4	0	52	39	0	1	6	17	26	38	349
4:45 PM	104	67	2	0	45	29	0	0	5	21	20	50	343
5:00 PM	107	54	1	0	53	46	0	0	9	24	26	50	370
5:15 PM	99	69	2	0	52	23	1	1	1	9	16	57	330
5:30 PM	76	52	3	0	47	36	1	0	4	16	25	53	313
5:45 PM	42	39	1	0	33	27	0	0	2	10	17	38	209
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	712	463	18	2	365	259	2	3	34	133	168	365	2524
APPROACH %'s :	59.68%	38.81%	1.51%	0.32%	58.31%	41.37%	5.13%	7.69%	87.18%	19.97%	25.23%	54.80%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

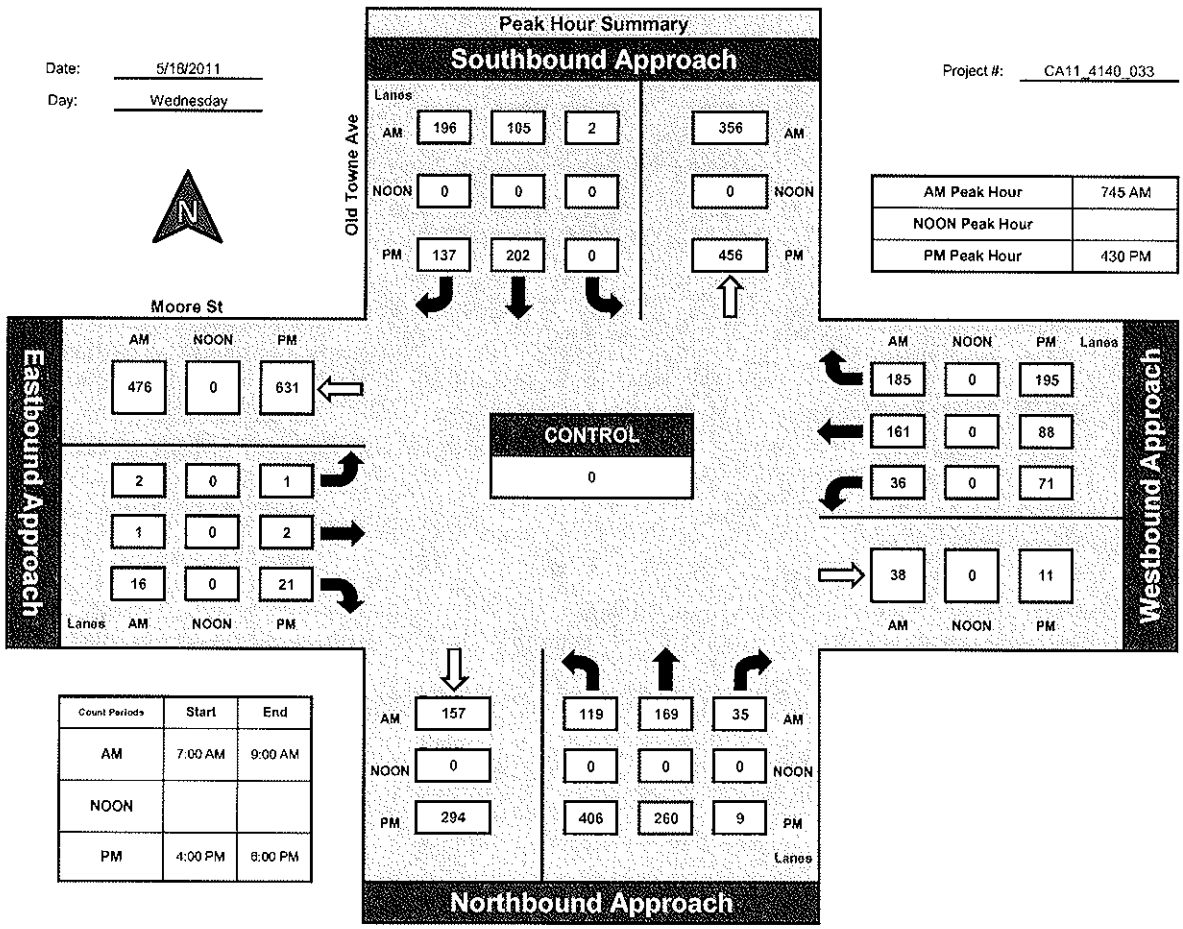
National Data & Surveying Services

Old Towne Ave and Moore St , City of San Diego

Date: 5/18/2011

Day: Wednesday

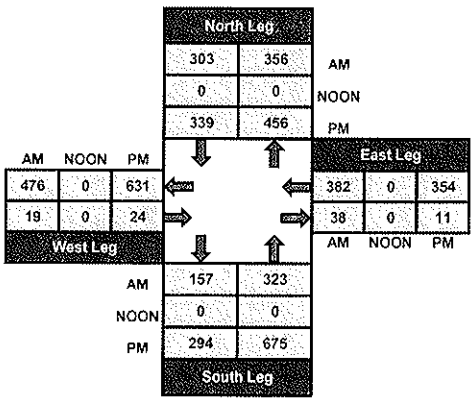
Project #: CA11_4140_033



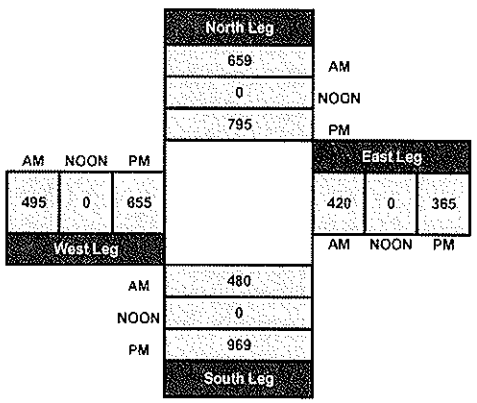
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(38)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

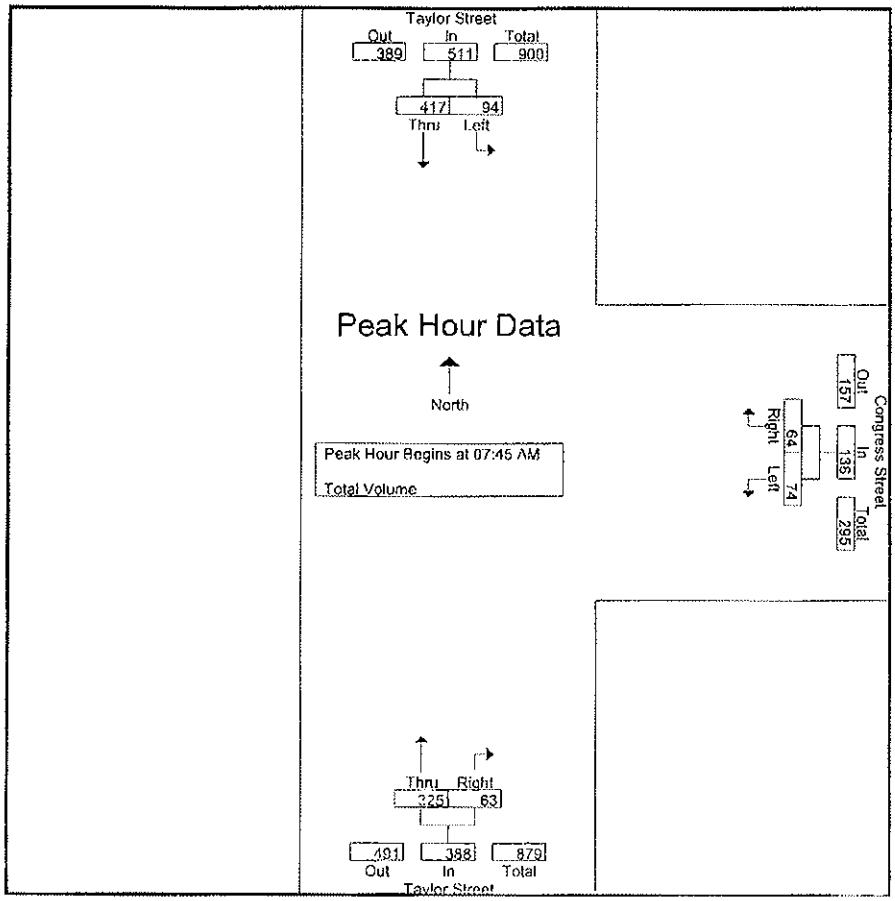
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:45 AM	10	92	102	13	4	17	42	11	53	172
Total	10	92	102	13	4	17	42	11	53	172
07:00 AM	14	108	122	7	11	18	58	6	64	204
07:15 AM	13	124	137	10	12	22	55	8	63	222
07:30 AM	21	121	142	9	17	26	63	8	71	239
07:45 AM	23	122	145	19	18	37	93	13	106	288
Total	71	475	546	45	58	103	269	35	304	953
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	19	32	80	18	98	252
08:30 AM	27	99	126	29	11	40	80	19	99	265
Grand Total	152	862	1014	113	108	221	543	96	639	1874
Apprch %	15	85		51.1	48.9		85	15		
Total %	8.1	46	54.1	6	5.8	11.8	29	5.1	34.1	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	23	**122**	**145**	19	18	37	**93**	13	**106**	**288**
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	**19**	32	80	18	98	252
08:30 AM	**27**	99	126	**29**	11	**40**	80	19	99	265
Total Volume	94	417	511	74	64	138	325	63	388	1037
% App. Total	18.4	81.6		53.6	46.4		83.8	16.2		
PHF	.870	.855	.881	.638	.842	.863	.874	.829	.915	.901

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:45 AM		
+0 mins.	14	108	122	19	18	37	93	13	106
+15 mins.	13	124	137	13	16	29	72	13	85
+30 mins.	21	121	142	13	19	32	80	18	98
+45 mins.	23	122	145	29	11	40	80	19	99
Total Volume	71	475	546	74	64	138	325	63	388
% App. Total	13	87		53.6	46.4		83.8	16.2	
PHF	.772	.958	.941	.638	.842	.863	.874	.82[illegible]	.915

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

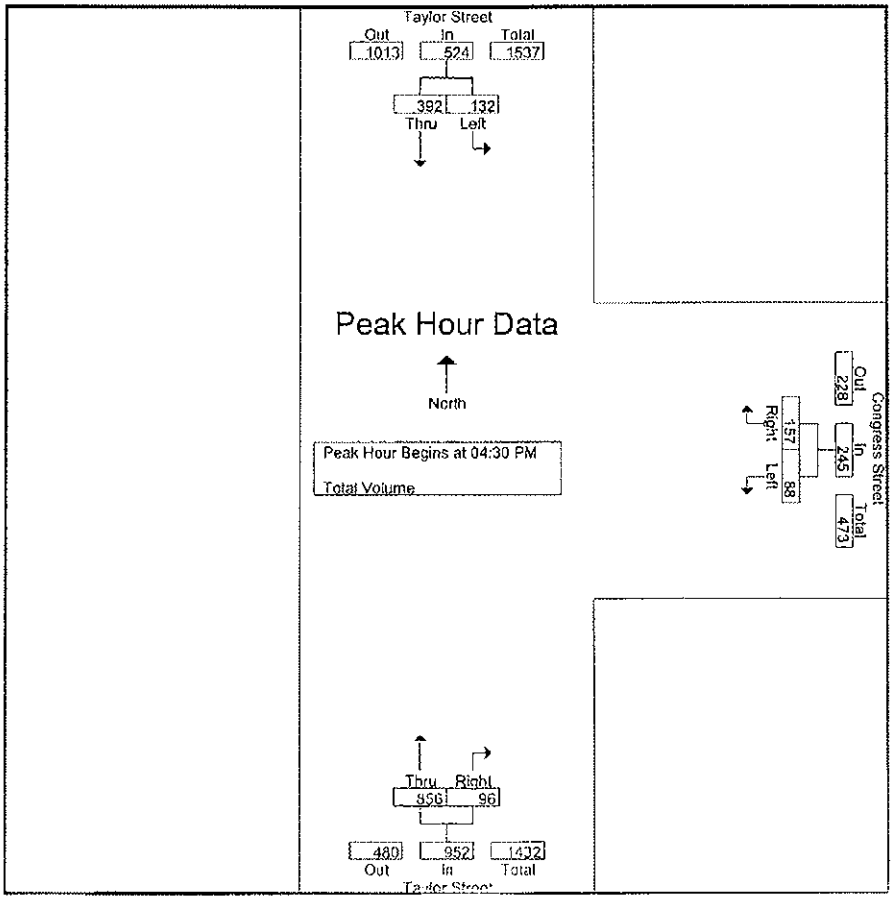
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	33	104	137	21	37	58	197	16	213	408
04:15 PM	29	85	114	12	25	37	182	12	194	345
04:30 PM	52	93	145	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
Total	135	368	503	71	133	204	795	72	867	1574
05:00 PM	26	111	137	24	36	60	240	20	260	457
05:15 PM	33	102	135	26	50	76	200	32	232	443
05:30 PM	28	101	129	24	33	57	194	26	220	406
05:45 PM	31	95	126	16	35	51	173	22	195	372
Total	118	409	527	90	154	244	807	100	907	1678
Grand Total	253	777	1030	161	287	448	1602	172	1774	3252
Apprch %	24.6	75.4		35.9	64.1		90.3	9.7		
Total %	7.8	23.9	31.7	5	8.8	13.8	49.3	5.3	54.6	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**52**	93	**145**	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
05:00 PM	26	111	137	24	36	60	**240**	20	**260**	**457**
05:15 PM	33	102	135	26	50	76	200	32	232	443
Total Volume	132	392	524	88	157	245	856	96	952	1721
% App. Total	25.2	74.8		35.9	64.1		89.9	10.1		
PHF	.635	.883	.903	.846	.785	.806	.892	.750	.915	.941

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	26	111	137	20	38	58	224	25	249
+15 mins.	33	102	135	24	36	60	192	24	216
+30 mins.	28	101	129	26	50	76	240	20	260
+45 mins.	31	95	126	24	33	57	200	32	232
Total Volume	118	409	527	94	157	251	856	96	952
% App. Total	22.4	77.6		37.5	62.5		89.9	10.1	
PHF	.894	.921	.962	.904	.785	.826	.893	.75	.915

(39)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

Day: WEDNESDAY

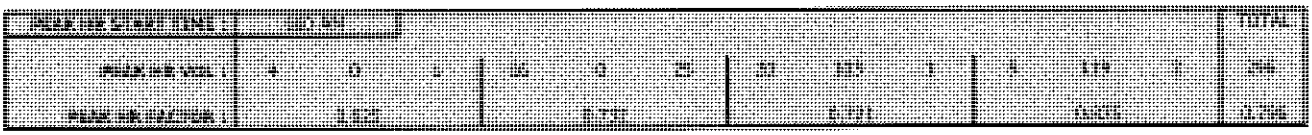
City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	2		2	2	12	1	0	12	1	32
7:15 AM	0	0	0	3		4	4	15	2	0	25	0	53
7:30 AM	2	0	1	4		4	2	25	0	0	21	0	59
7:45 AM	0	1	0	3		3	6	25	0	0	23	1	62
8:00 AM	1	0	0	3		3	2	24	0	2	23	1	59
8:15 AM	0	0	1	4		4	4	18	0	1	28	0	60
8:30 AM	1	0	0	3		11	5	28	0	1	35	0	84
8:45 AM	2	0	0	6		7	9	33	1	1	33	1	93

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	1	2	28	0	38	34	180	4	5	200	4	502
APPROACH %'s :	66.67%	11.11%	22.22%	42.42%	0.00%	57.58%	15.60%	82.57%	1.83%	2.39%	95.69%	1.91%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

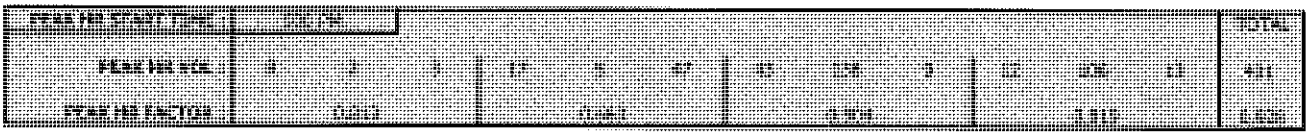
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	1	5	1	11	6	28	2	0	32	1	87
4:15 PM	0	2	1	7	0	5	6	28	2	0	34	4	89
4:30 PM	0	2	1	4	1	9	10	35	1	2	35	3	103
4:45 PM	1	0	2	3	0	6	10	26	0	1	27	4	80
5:00 PM	2	0	1	3	0	9	7	37	2	3	25	5	94
5:15 PM	2	0	0	2	0	11	10	32	2	4	31	5	99
5:30 PM	1	2	1	3	1	14	11	34	1	3	35	2	108
5:45 PM	3	0	1	9	4	13	15	33	4	2	15	1	100
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	6	8	36	7	78	75	253	14	15	234	25	760
APPROACH %'s :	39.13%	26.09%	34.78%	29.75%	5.79%	64.46%	21.93%	73.98%	4.09%	5.47%	85.40%	9.12%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

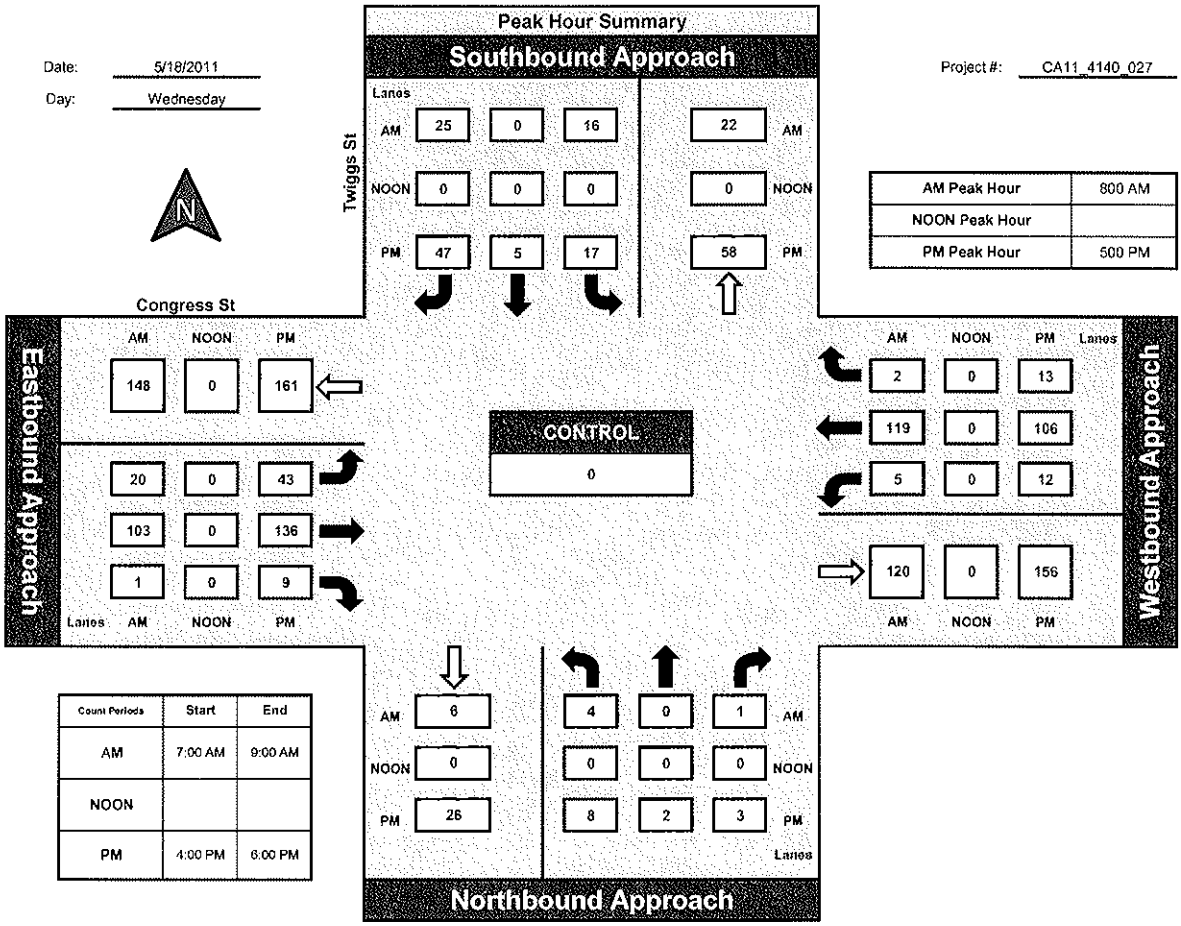
National Data & Surveying Services

Twiggs St and Congress St , City of San Diego

Date: 5/18/2011

Day: Wednesday

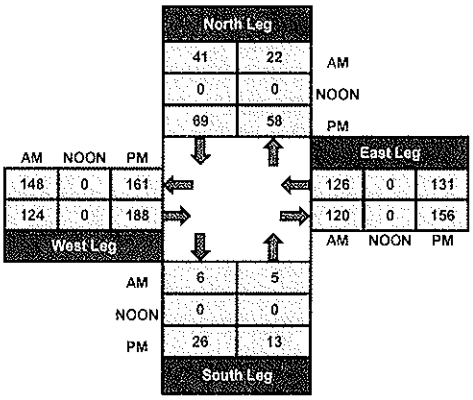
Project #: CA11_4140_027



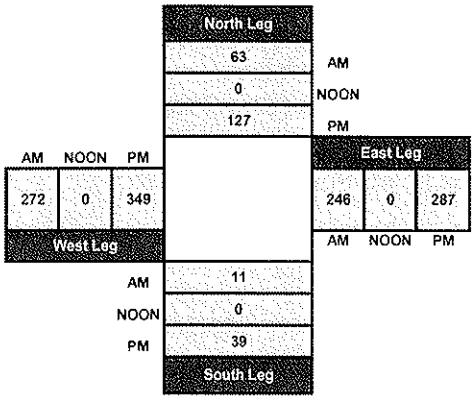
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(40)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	3	2	0	1	3	3	1	10	3	0	7	1	34
7:15 AM	7	1	0	3	3	1	0	12	6	1	17	0	51
7:30 AM	1	0	1	3	3	1	0	24	2	0	19	1	55
7:45 AM	2	2	1	2	3	0	2	27	1	0	19	0	59
8:00 AM	3	1	2	3	3	2	1	23	2	1	24	1	66
8:15 AM	0	0	0	2	3	1	1	19	1	0	27	4	58
8:30 AM	2	0	1	2	4	0	2	22	3	2	35	1	74
8:45 AM	3	1	0	3	4	2	1	27	12	2	30	2	87
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	7	5	19	26	10	8	164	30	6	178	10	484
APPROACH %'s :	63.64%	21.21%	15.15%	34.55%	47.27%	18.18%	3.96%	81.19%	14.85%	3.09%	91.75%	5.15%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

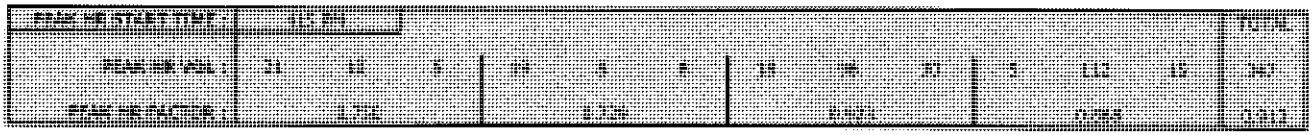
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	2	1	2	6	0	2	4	28	2	2	30	3	82
4:15 PM	5	2	1	7	2	3	5	26	6	1	33	4	95
4:30 PM	4	2	3	5	2	1	5	29	5	0	28	4	88
4:45 PM	6	5	1	5	0	1	2	20	7	3	26	5	81
5:00 PM	6	1	0	2	4	3	6	21	12	1	25	2	83
5:15 PM	4	1	2	4	3	7	2	24	7	2	30	1	87
5:30 PM	9	0	0	5	2	0	5	34	2	0	28	2	87
5:45 PM	6	3	3	9	1	2	3	27	10	0	16	6	86
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	42	15	12	43	14	19	32	209	51	9	216	27	689
APPROACH %'s :	60.87%	21.74%	17.39%	56.58%	18.42%	25.00%	10.96%	71.58%	17.47%	3.57%	85.71%	10.71%	



CONTROL :

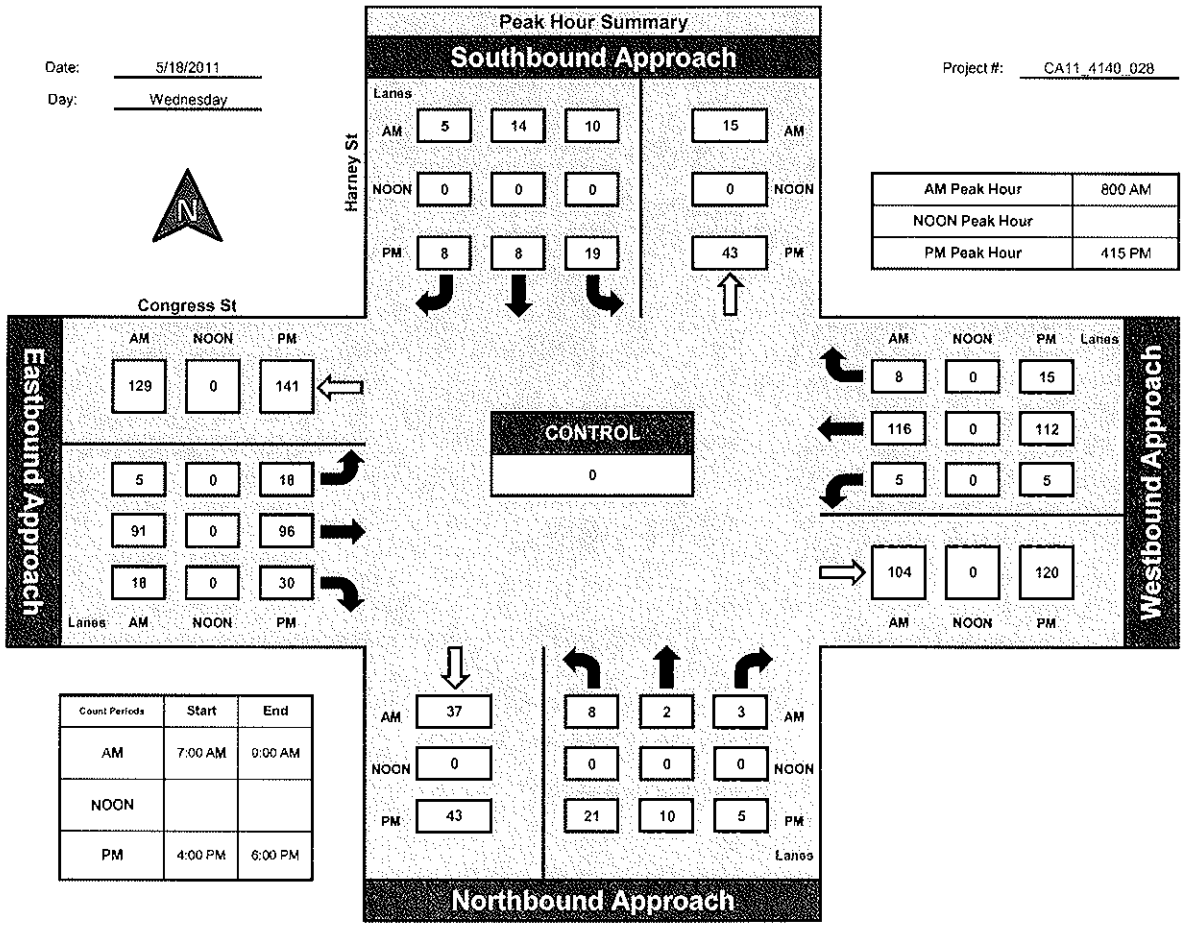
ITM Peak Hour Summary

Prepared by:

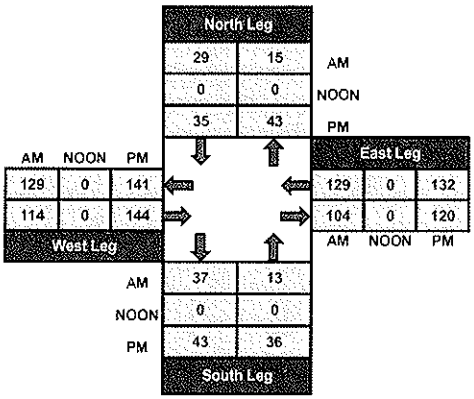
NDS

National Data & Surveying Services

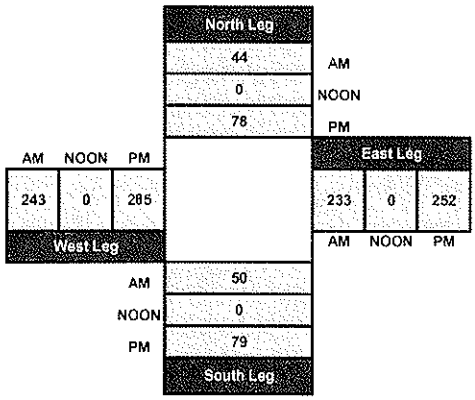
Harney St and Congress St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0			0			2	0			2
7:15 AM	1	0	1			0			2	1			5
7:30 AM	0	0	1			2			3	2			8
7:45 AM	0	0	1			4			1	1			7
8:00 AM	0	2	2			0			2	2			8
8:15 AM	2	3	3			2			3	6			19
8:30 AM	0	0	2			0			2	3			7
8:45 AM	0	3	2			5			1	4			15
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	8	12	0	0	13	0	0	16	19	0	0	71
APPROACH %'s :	13.04%	34.78%	52.17%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	
[illegible]	[illegible]												

CONTROL :

Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below **PM**

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	1	3			0			2	2			9
4:15 PM	2	2	1			3			4	1			13
4:30 PM	1	2	0			0			0	2			5
4:45 PM	1	1	0			2			5	0			9
5:00 PM	1	1	1			2			2	1			8
5:15 PM	0	1	1			3			1	3			9
5:30 PM	1	1	4			3			1	3			13
5:45 PM	2	2	0			2			3	2			11

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	11	10	0	0	15	0	0	18	14	0	0	77
APPROACH %'s :	30.00%	36.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

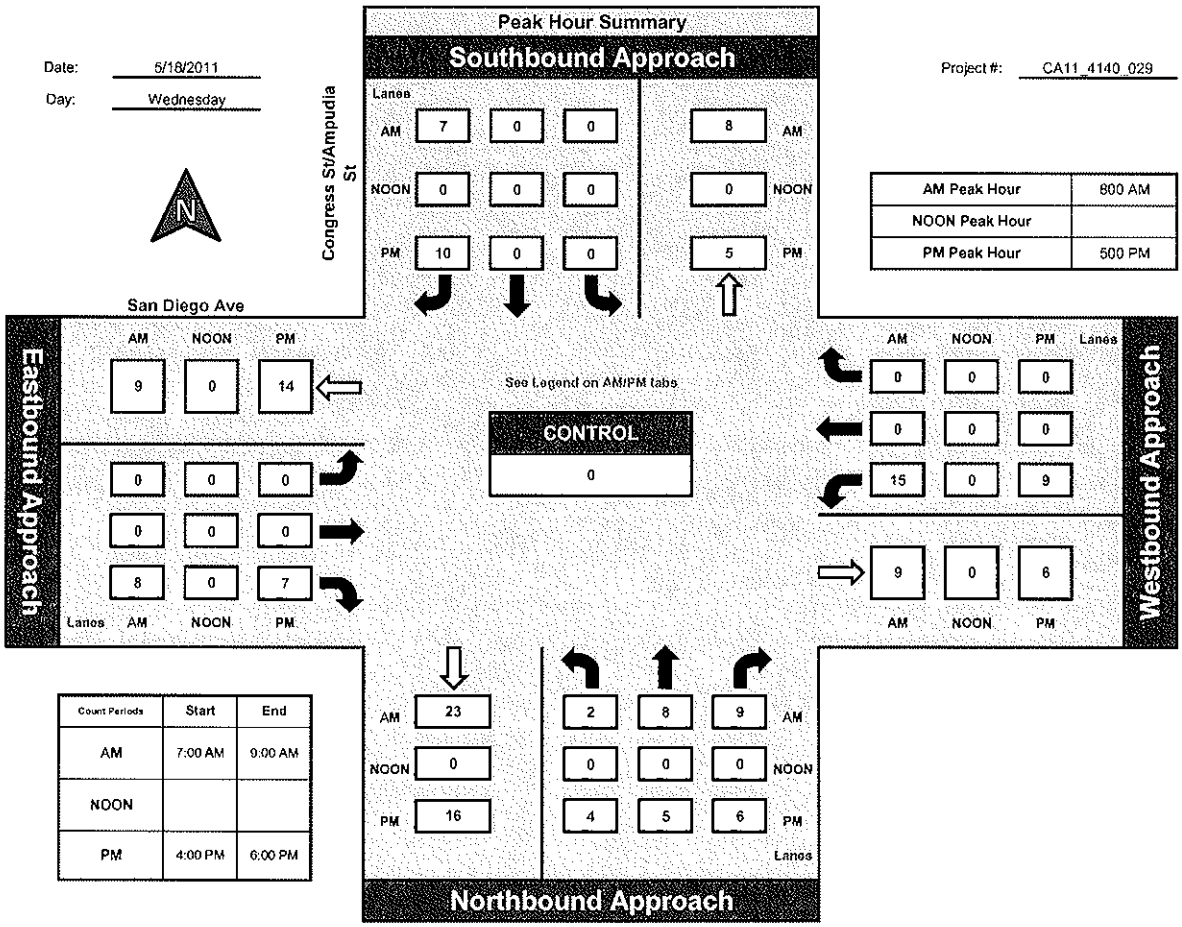
Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

ITM Peak Hour Summary

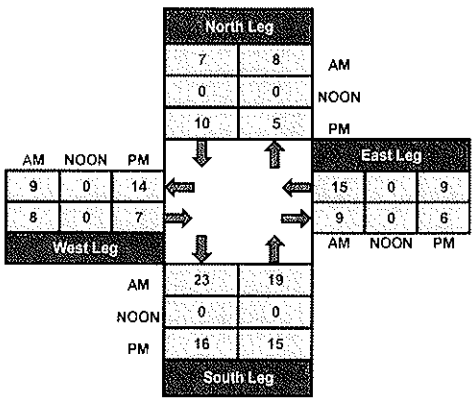
Prepared by:

National Data & Surveying Services

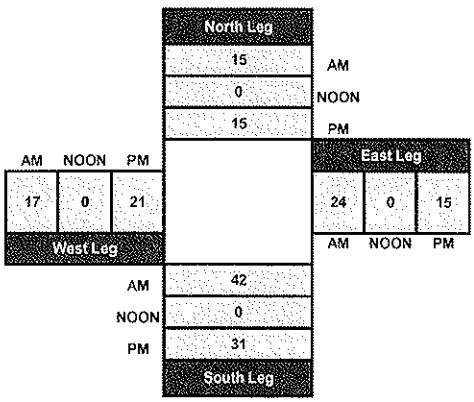
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		5	2	0			13	0	8	21	0	49
7:15 AM	0		6	0	0			8	3	17	22	1	57
7:30 AM	0		20	0	0			17	3	20	27	0	87
7:45 AM	0		18	0	1			16	0	30	33	2	100
8:00 AM	1		16	1	1			8	1	34	41	1	104
8:15 AM	1		14	1	0			14	0	27	63	0	120
8:30 AM	0		18	0	0			14	0	37	57	0	126
8:45 AM	0		19	0	0			13	0	30	61	0	123
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	116	4	2	0	0	103	7	203	325	4	766
APPROACH %'s :	1.69%	0.00%	98.31%	66.67%	33.33%	0.00%	0.00%	93.64%	6.36%	38.16%	61.09%	0.75%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029

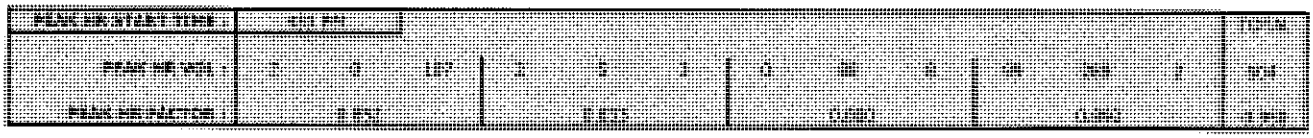
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		28	0	3	1		44	1	19	52	0	148
4:15 PM	1		24	0	1	0		22	1	20	49	1	119
4:30 PM	1		31	1	0	2		23	2	24	73	1	158
4:45 PM	0		24	0	2	0		19	2	22	69	0	138
5:00 PM	1		25	0	2	0		26	4	29	61	1	149
5:15 PM	0		27	1	1	1		20	0	24	85	0	159
5:30 PM	0		21	0	2	0		22	0	24	72	1	142
5:45 PM	0		31	0	0	0		25	2	16	76	0	150
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	211	2	11	4	0	201	12	178	537	4	1163
APPROACH %'s :	1.40%	0.00%	98.60%	11.76%	64.71%	23.53%	0.00%	94.37%	5.63%	24.76%	74.69%	0.56%	



CONTROL :

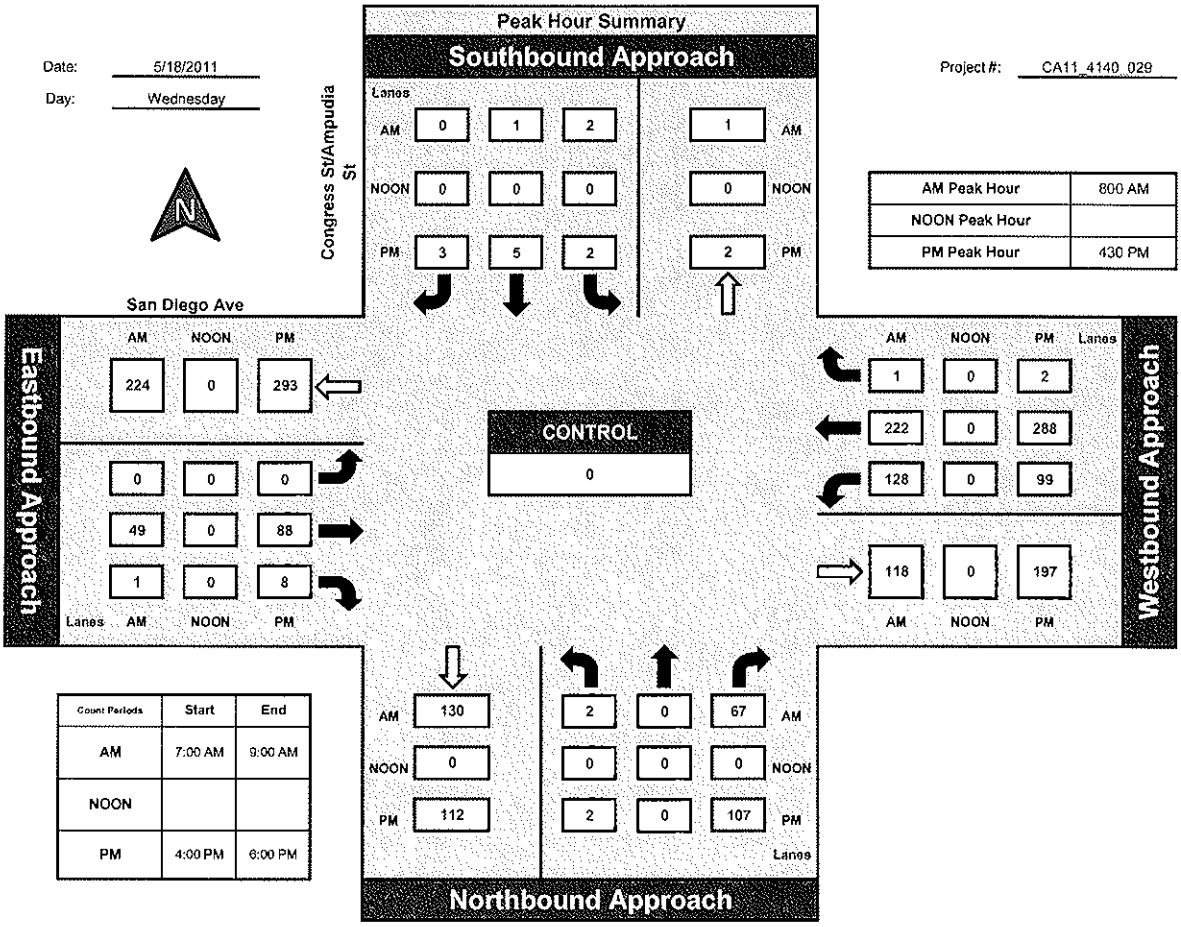
ITM Peak Hour Summary

Prepared by:

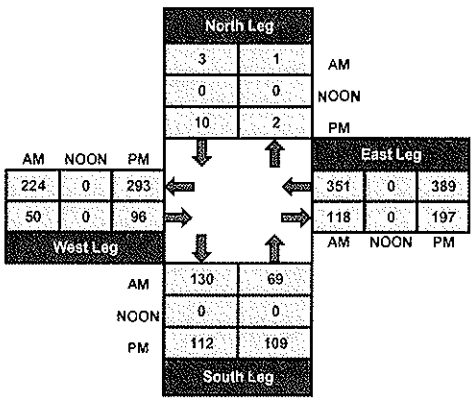
NDS

National Data & Surveying Services

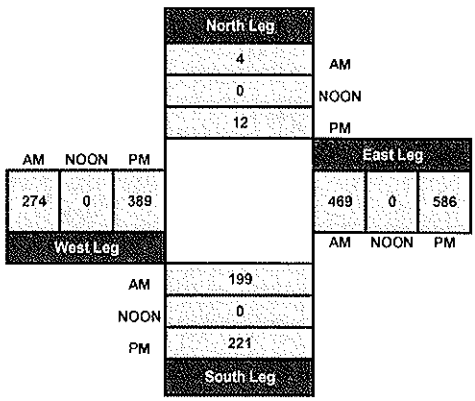
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(42)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		2	0	5	3					3		6	19
7:15 AM		3	2	4	6					2		8	25
7:30 AM		3	3	7	5					1		11	30
7:45 AM		3	3	10	4					3		19	42
8:00 AM		1	1	5	4					2		21	34
8:15 AM		4	0	3	8					2		35	52
8:30 AM		8	2	8	7					6		35	66
8:45 AM		6	1	9	10					8		37	71

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	30	12	51	47	0	0	0	0	27	0	172	339
APPROACH %'s :	0.00%	71.43%	28.57%	52.04%	47.96%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	13.57%	0.00%	86.43%	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		6	3	10	5					9		15	48
4:15 PM		9	5	12	7					8		16	57
4:30 PM		6	8	5	4					13		29	65
4:45 PM		7	6	10	2					9		21	55
5:00 PM		8	2	10	5					5		23	53
5:15 PM		9	4	14	4					8		31	70
5:30 PM		6	8	7	4					12		30	67
5:45 PM		7	6	10	2					9		20	54

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	58	42	78	33	0	0	0	0	73	0	185	469
APPROACH %'s :	0.00%	58.00%	42.00%	70.27%	29.73%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	28.29%	0.00%	71.71%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

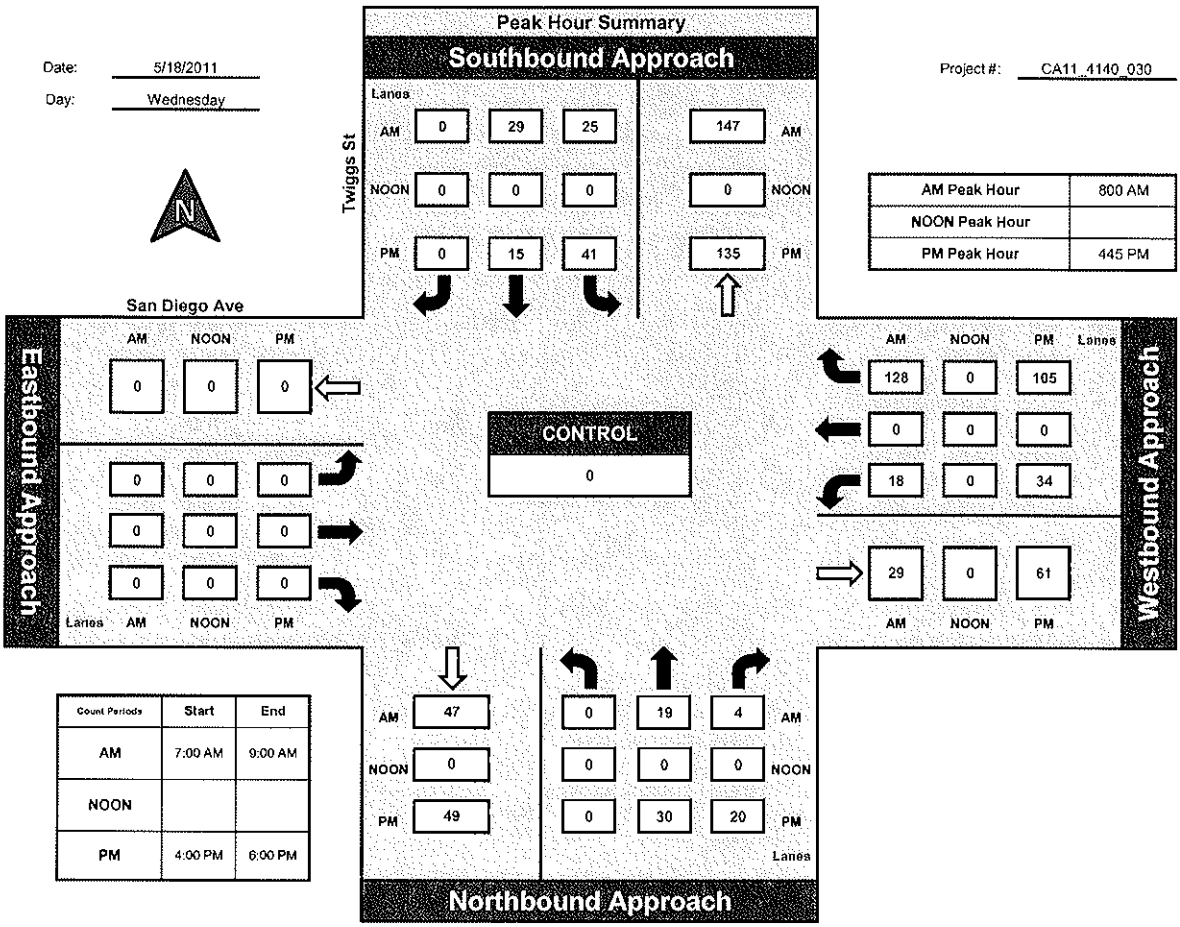
National Data & Surveying Services

Twiggs St and San Diego Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

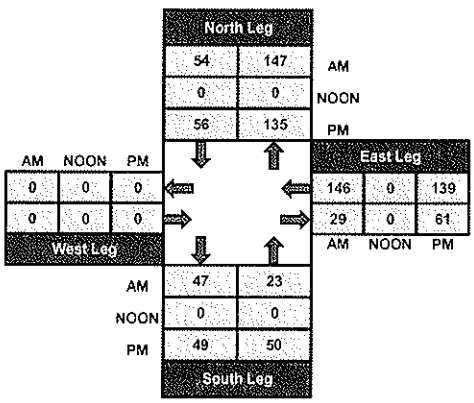
Project #: CA11_4140_030



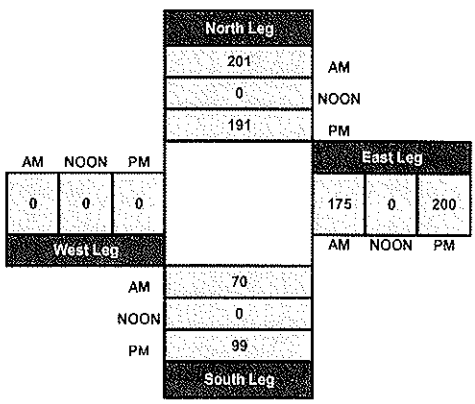
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(43)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	2	0	11	8	1	0	4	0	0	8	8	43
7:15 AM	1	0	0	8	5	1	0	6	1	1	6	9	38
7:30 AM	0	0	0	13	6	0	1	8	0	0	7	15	50
7:45 AM	1	3	0	15	6	2	1	7	1	0	26	13	75
8:00 AM	1	0	1	7	6	2	1	6	2	0	20	17	63
8:15 AM	1	3	0	14	5	2	0	1	0	2	31	26	85
8:30 AM	2	0	2	9	5	1	0	9	1	1	39	19	88
8:45 AM	1	0	0	7	2	7	0	8	1	0	35	21	82
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	8	3	84	43	16	3	49	6	4	172	128	524
APPROACH %'s :	42.11%	42.11%	15.79%	58.74%	30.07%	11.19%	5.17%	84.48%	10.34%	1.32%	56.58%	42.11%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	1	3	17	9	2	1	11	3	1	22	23	93
4:15 PM	0	4	1	15	6	1	0	15	3	3	29	22	99
4:30 PM	1	4	3	16	5	2	2	16	2	5	31	19	106
4:45 PM	0	4	2	14	1	1	1	14	0	5	29	27	98
5:00 PM	0	7	4	24	7	0	0	16	1	8	34	23	124
5:15 PM	3	3	5	21	7	1	0	19	5	6	39	25	134
5:30 PM	1	6	3	16	9	3	1	17	0	9	36	27	128
5:45 PM	1	2	1	29	5	2	2	15	2	7	28	21	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	31	22	152	49	12	7	123	16	44	248	187	897
APPROACH %'s :	10.17%	52.54%	37.29%	71.36%	23.00%	5.63%	4.79%	84.25%	10.96%	9.19%	51.77%	39.04%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

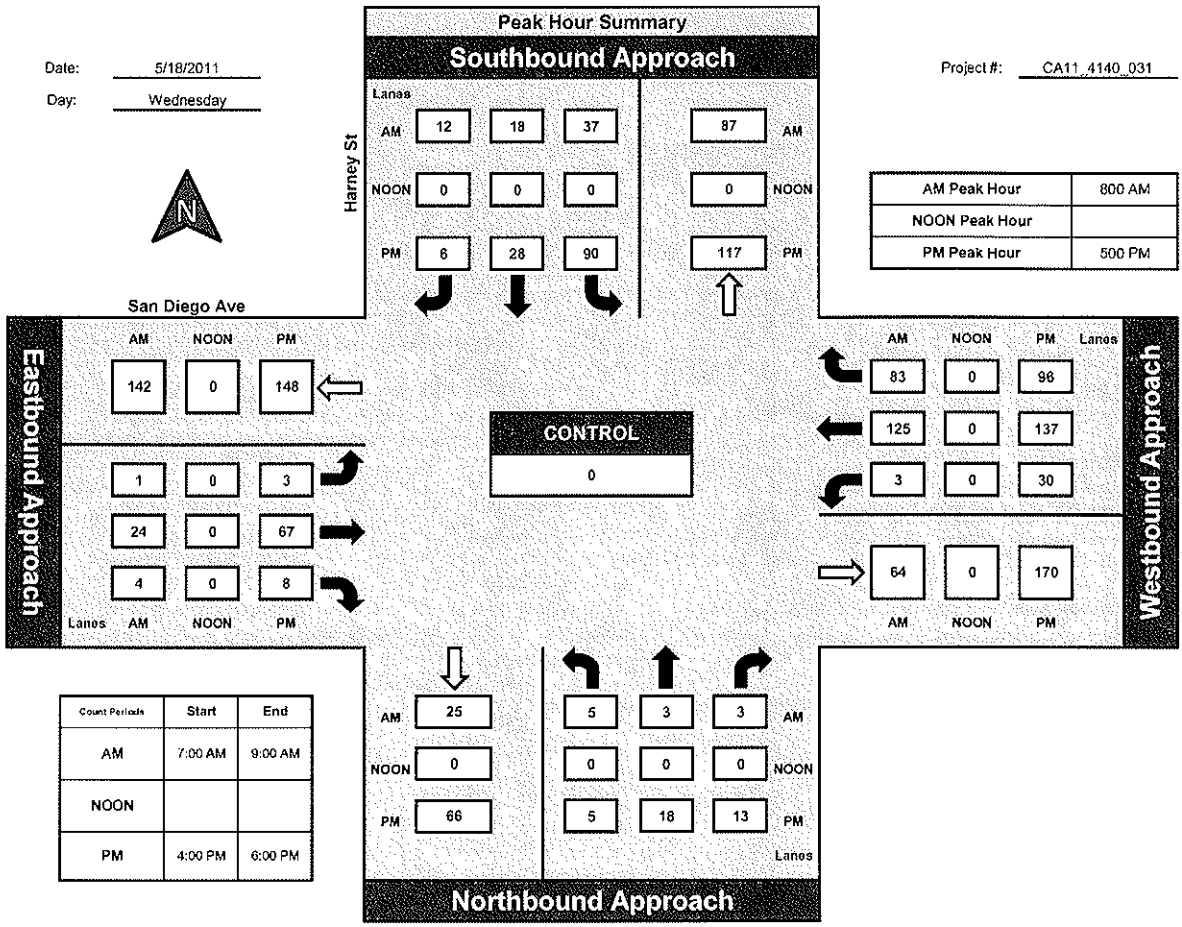
CONTROL :

ITM Peak Hour Summary

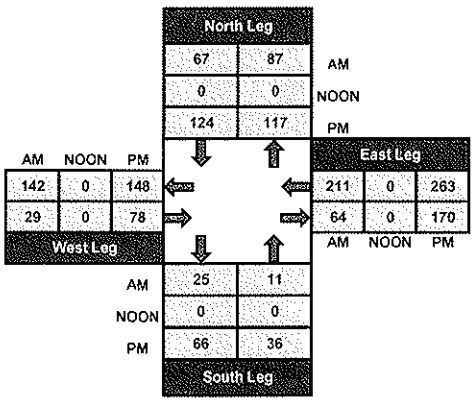
Prepared by:

National Data & Surveying Services

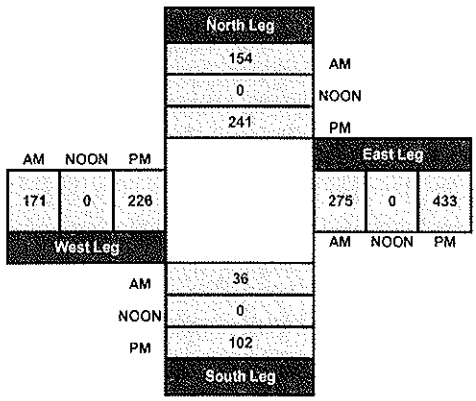
Harney St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(44)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	24	8	10	0	3	0	0	1	18	27	5	0	96
7:15 AM	31	7	11	0	8	2	0	6	14	30	9	0	118
7:30 AM	33	14	8	1	12	0	1	4	30	40	17	3	163
7:45 AM	51	4	10	1	4	1	4	5	24	38	12	0	154
8:00 AM	63	12	12	0	5	1	0	10	14	38	15	1	171
8:15 AM	53	8	7	0	5	1	2	7	22	55	42	1	203
8:30 AM	39	5	13	0	7	1	4	7	21	65	55	2	219
8:45 AM	43	2	13	0	5	1	3	16	16	63	47	2	211
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	337	60	84	2	49	7	14	56	159	356	202	9	1335
APPROACH %'s :	70.06%	12.47%	17.46%	3.45%	84.48%	12.07%	6.11%	24.45%	69.43%	62.79%	35.63%	1.59%	
[illegible]	[illegible]												TOTAL
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	46	3	15	1	18	1	2	7	63	32	28	1	217
4:15 PM	50	7	18	0	11	2	2	12	30	14	18	0	164
4:30 PM	55	7	22	1	10	3	0	15	40	24	38	4	219
4:45 PM	66	6	25	2	15	3	2	14	29	18	20	2	202
5:00 PM	62	11	18	0	12	2	0	11	44	28	30	3	221
5:15 PM	73	6	24	2	8	7	2	8	41	18	31	1	221
5:30 PM	64	2	30	3	16	5	2	13	27	21	32	0	215
5:45 PM	60	9	19	2	9	3	4	16	36	33	28	0	219
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	476	51	171	11	99	26	14	96	310	188	225	11	1678
APPROACH %'s :	68.19%	7.31%	24.50%	8.09%	72.79%	19.12%	3.33%	22.86%	73.81%	44.34%	53.07%	2.59%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

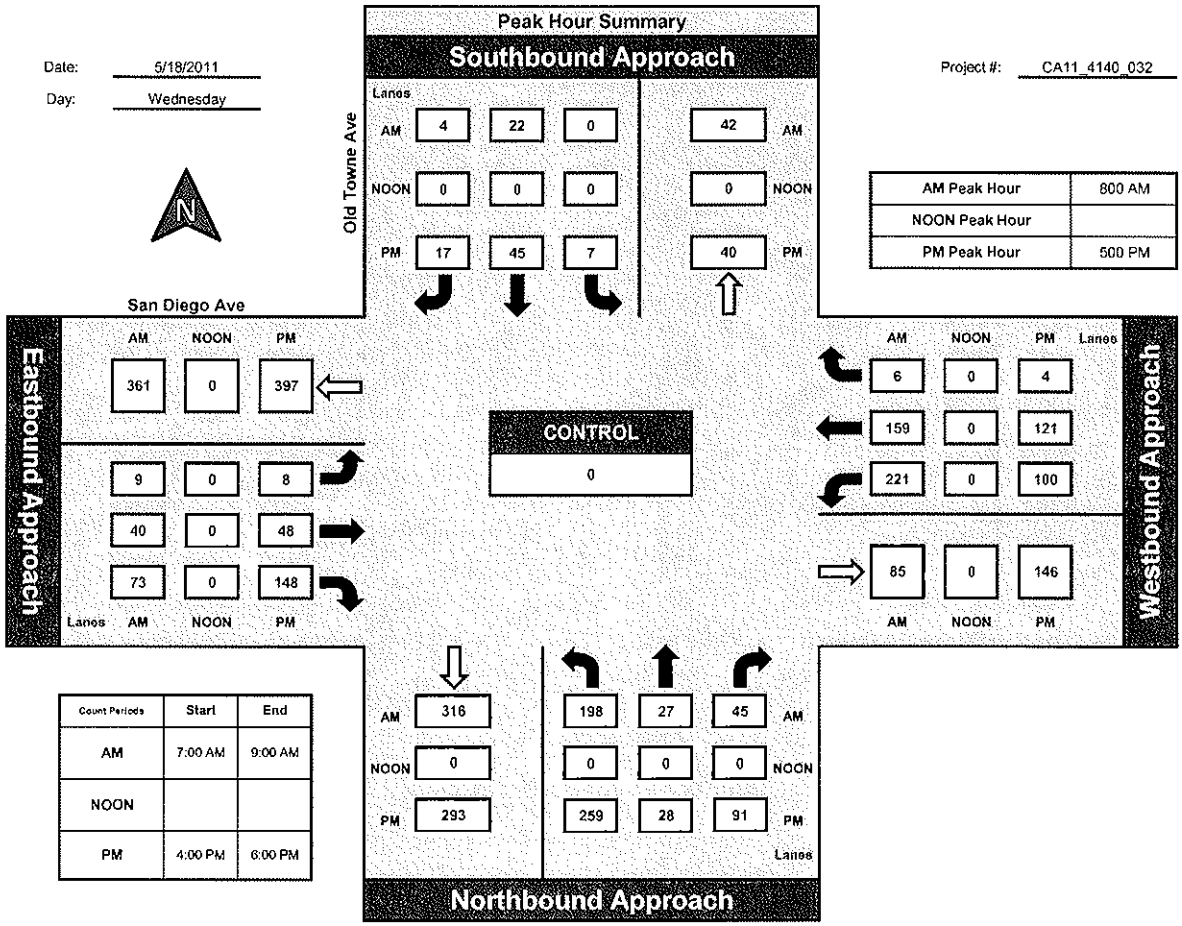
CONTROL :

ITM Peak Hour Summary

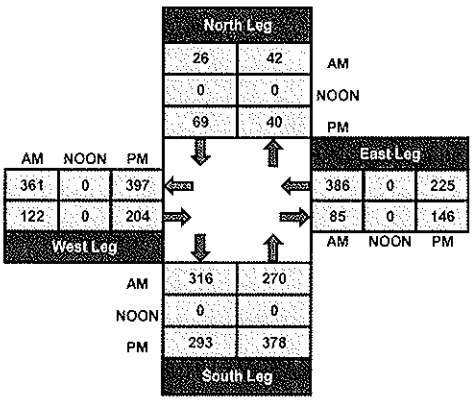
Prepared by:

National Data & Surveying Services

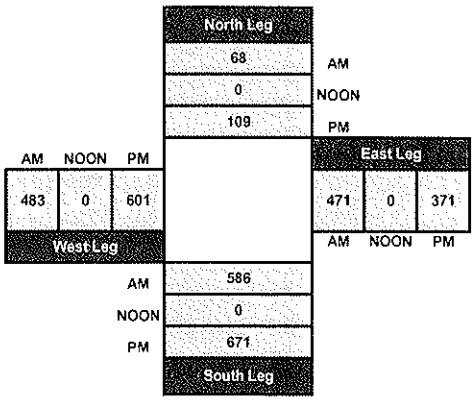
Old Towne Ave and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(45)

Intersection Turning Movement

Prepared by:

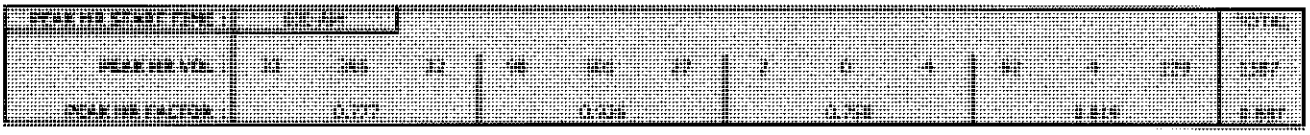
National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	5	44	6	16	108	3	1	1	2	10	2	14	212
7:15 AM	8	73	8	21	105	3	0	0	0	12	0	18	248
7:30 AM	12	81	6	18	131	3	0	0	1	14	0	38	304
7:45 AM	14	74	9	37	155	4	1	0	1	22	2	45	364
8:00 AM	15	63	11	25	134	9	0	0	2	16	2	38	315
8:15 AM	3	84	5	17	113	7	1	0	0	16	1	57	304
8:30 AM	9	128	11	23	125	4	0	0	2	11	1	63	377
8:45 AM	6	120	5	33	129	7	1	0	0	19	0	71	391
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	72	667	61	190	1000	40	4	1	8	120	8	344	2515
APPROACH %'s :	9.00%	83.38%	7.63%	15.45%	81.30%	3.25%	30.77%	7.69%	61.54%	25.42%	1.69%	72.88%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	206	24	32	66	3	5	0	3	23	0	31	394
4:15 PM	0	190	16	42	90	0	5	0	2	19	2	41	407
4:30 PM	4	211	27	49	98	2	5	0	1	20	0	38	455
4:45 PM	3	195	15	45	69	2	1	1	2	16	2	47	398
5:00 PM	5	214	22	42	84	1	3	1	1	15	0	43	431
5:15 PM	3	189	14	52	86	1	6	0	1	14	0	51	417
5:30 PM	1	175	24	39	81	2	3	0	3	17	1	31	377
5:45 PM	1	121	30	44	89	0	0	1	0	19	0	37	342
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	1501	172	345	663	11	28	3	13	143	5	319	3221
APPROACH %'s :	1.06%	88.76%	10.17%	33.86%	65.06%	1.08%	63.64%	6.82%	29.55%	30.62%	1.07%	68.31%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Taylor St and Juan St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_017

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	626	626	AM
NOON	0	0	NOON
PM	531	1003	PM

West Leg				East Leg			
AM	NOON	PM		AM	NOON	PM	
64	0	23		295	0	246	AM
6	0	22		130	0	268	NOON
							PM

	South Leg	
AM	567	460
NOON	0	0
PM	407	902

Total Volume Per Leg

	North Leg
AM	1252
NOON	0
PM	1534

West Leg			East Leg		
AM	NOON	PM			
70	0	45	425	0	514
			AM	NOON	PM

	South Leg
AM	1027
NOON	0
PM	1309

(46)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	1	1	0	0	0	0	14	5	0	19	0	47
7:15 AM	7	0	3	0	0	1	1	21	7	0	27	1	68
7:30 AM	8	0	1	0	0	0	0	20	9	1	34	1	74
7:45 AM	9	0	5	0	0	2	0	23	9	0	42	0	90
8:00 AM	6	1	0	1	1	0	0	29	18	0	24	0	80
8:15 AM	14	1	2	0	1	0	0	18	15	1	29	0	81
8:30 AM	11	1	2	1	0	1	0	20	7	0	26	0	69
8:45 AM	23	2	2	0	1	0	0	25	14	0	38	1	106
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	85	6	16	2	3	4	1	170	84	2	239	3	615
APPROACH %'s :	79.44%	5.61%	14.95%	22.22%	33.33%	44.44%	0.39%	66.67%	32.94%	0.82%	97.95%	1.23%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

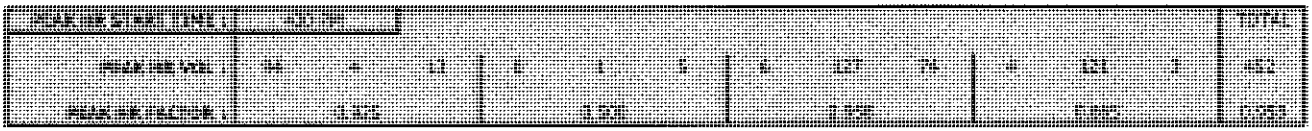
Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	23	0	3	0	0	0	1	36	15	2	23	0	103
4:15 PM	18	0	6	0	0	0	1	32	15	6	17	1	96
4:30 PM	23	3	4	0	1	2	1	37	13	1	26	1	112
4:45 PM	28	0	2	0	0	1	2	30	20	1	34	0	118
5:00 PM	22	1	3	0	0	1	0	31	23	0	26	2	109
5:15 PM	21	0	4	0	0	1	3	29	18	2	35	0	113
5:30 PM	20	1	2	1	1	1	0	33	15	1	32	0	107
5:45 PM	21	0	4	0	0	0	0	26	26	2	23	1	103

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	176	5	28	1	2	6	8	254	145	15	216	5	861
APPROACH %'s :	84.21%	2.39%	13.40%	11.11%	22.22%	66.67%	1.97%	62.41%	35.63%	6.36%	91.53%	2.12%	



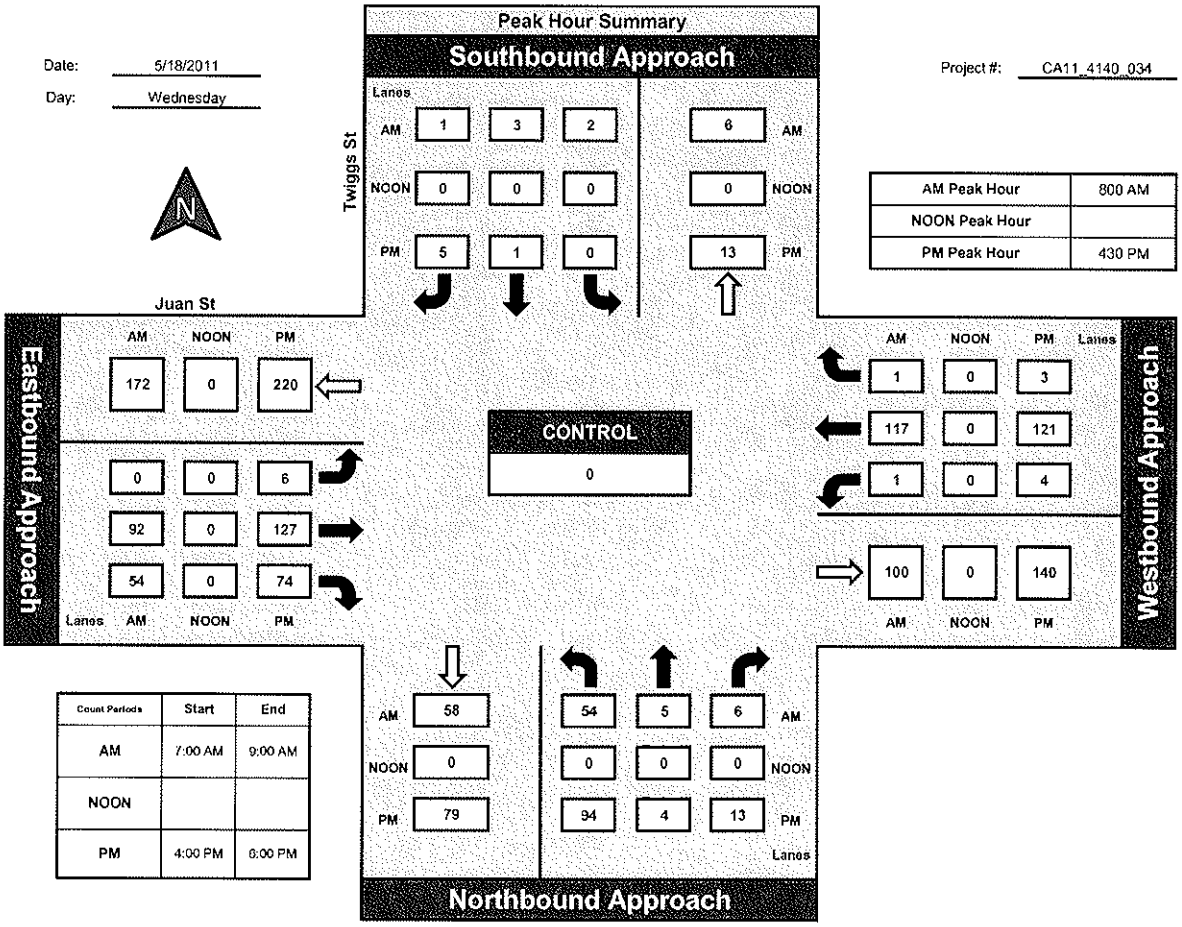
CONTROL :

ITM Peak Hour Summary

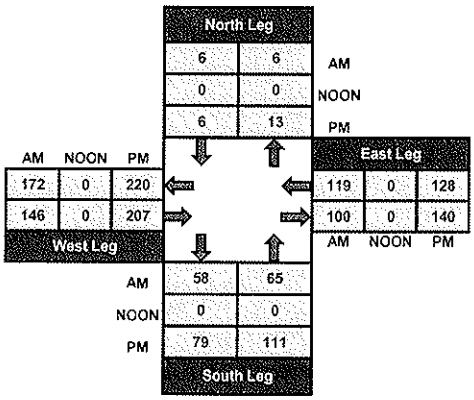
Prepared by:

National Data & Surveying Services

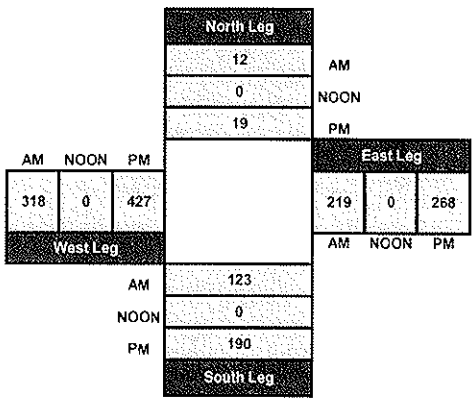
Twiggs St and Juan St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(47)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	6	1	6	0	1	1	1	10	0	9	15	0	50
7:15 AM	5	1	6	0	0	1	1	14	3	8	19	0	58
7:30 AM	8	1	6	0	0	3	1	9	6	15	38	0	87
7:45 AM	9	1	5	0	0	0	2	16	13	12	28	0	86
8:00 AM	4	1	9	0	0	1	4	15	11	6	24	0	75
8:15 AM	0	1	5	2	1	0	1	0	0	5	1	1	17
8:30 AM	13	0	4	0	0	1	0	17	8	8	23	0	74
8:45 AM	19	1	2	0	0	0	1	18	7	9	22	2	81

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	7	43	2	2	7	11	99	48	72	170	3	528
APPROACH %'s :	56.14%	6.14%	37.72%	18.18%	18.18%	63.64%	6.96%	62.66%	30.38%	29.39%	69.39%	1.22%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	11	0	3	0	0	0	0	26	10	10	23	0	83
4:15 PM	11	2	3	2	0	1	1	28	11	9	10	0	78
4:30 PM	11	1	11	0	0	2	1	30	9	4	16	1	86
4:45 PM	15	2	7	0	0	2	2	25	9	2	18	0	82
5:00 PM	14	0	13	0	0	2	1	22	13	3	16	2	86
5:15 PM	17	0	5	0	3	3	0	19	10	5	17	1	80
5:30 PM	24	2	8	0	1	0	3	18	12	4	11	0	83
5:45 PM	13	0	6	0	0	1	2	29	6	6	16	2	81
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	116	7	56	2	4	11	10	197	80	43	127	6	659
APPROACH %'s :	64.80%	3.91%	31.28%	11.76%	23.53%	64.71%	3.48%	68.64%	27.87%	24.43%	72.16%	3.41%	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harney St and Juan St , City of San Diego

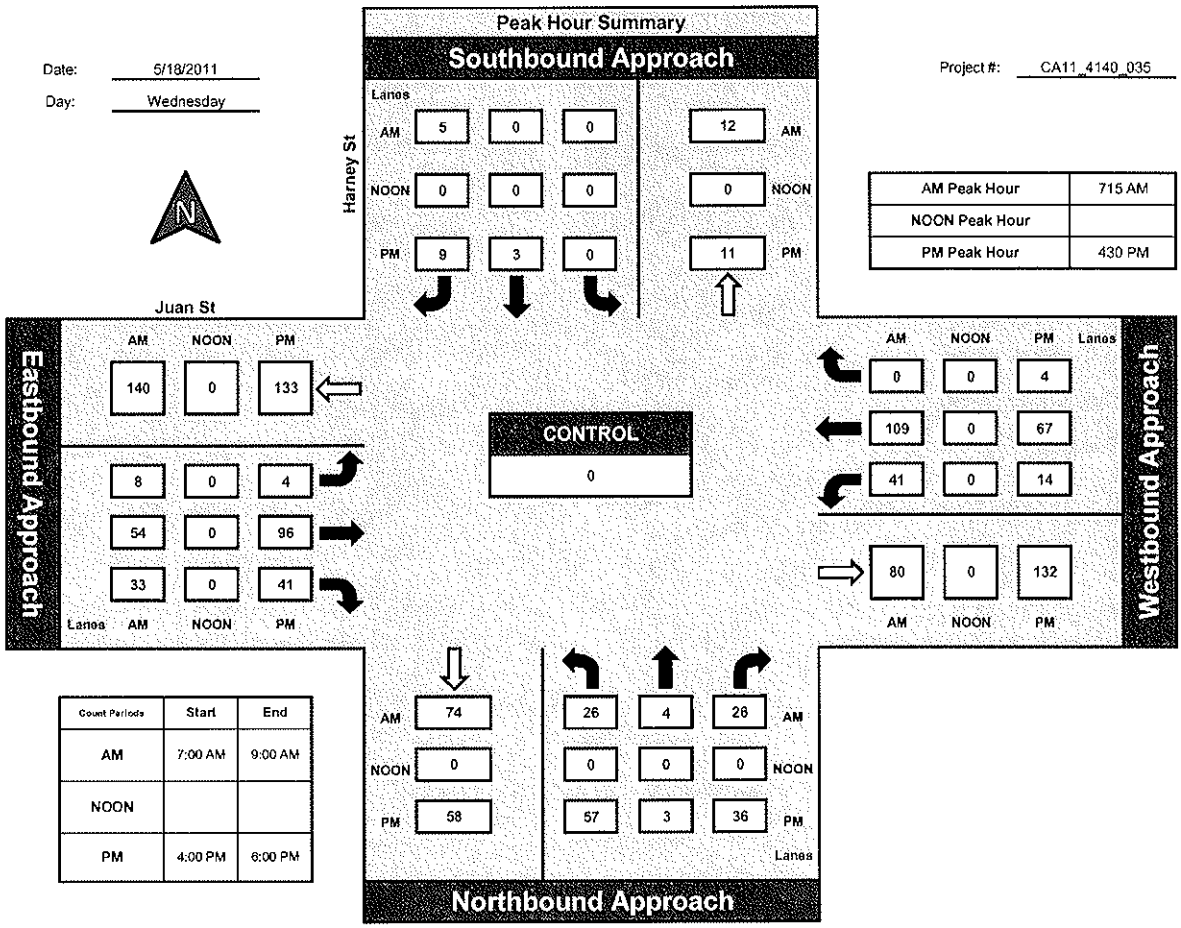
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

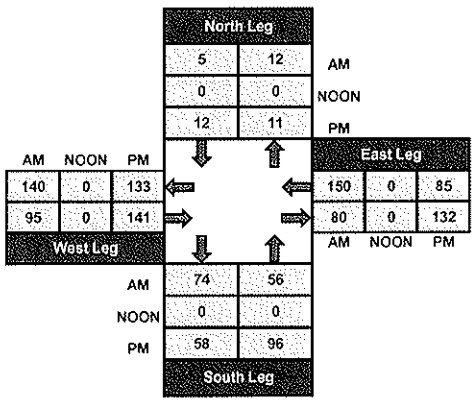
Project #: CA11_4140_035

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

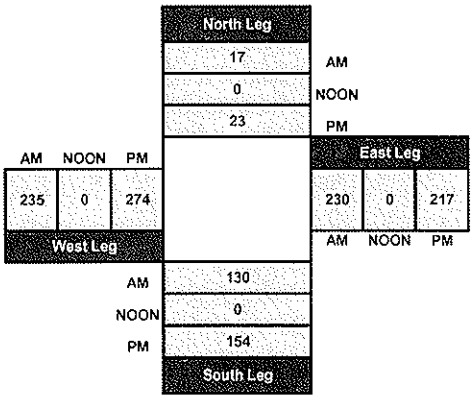


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(48)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	30	30	0	0	118	13	7	0	44			2	244
7:15 AM	49	34	0	0	100	18	9	0	46			0	256
7:30 AM	66	48	1	1	135	39	13	0	51			1	355
7:45 AM	73	38	1	0	152	64	18	0	74			2	422
8:00 AM	57	38	0	0	137	36	27	0	67			0	362
8:15 AM	77	56	0	0	119	50	17	0	36			0	355
8:30 AM	119	63	0	0	125	49	8	3	58			2	427
8:45 AM	111	76	0	0	141	57	7	2	53			2	449
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	582	383	2	1	1027	326	106	5	429	0	0	9	2870
APPROACH %'s :	60.19%	39.61%	0.21%	0.07%	75.85%	24.08%	19.63%	0.93%	79.44%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	364	233	1	1	533	199	65	3	274	0	0	5	1676
PEAK HR FACTOR :	0.788			0.250			0.778			0.000			0.945

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	104	167	2	0	57	37	16	0	36			3	422
4:15 PM	95	152	4	0	68	18	14	0	58			3	412
4:30 PM	120	164	1	2	70	32	20	4	56			4	473
4:45 PM	115	131	1	0	73	34	19	1	40			3	417
5:00 PM	120	165	4	1	68	23	23	2	48			3	457
5:15 PM	113	146	4	0	83	18	16	0	56			4	440
5:30 PM	103	114	1	0	74	16	18	0	57			1	384
5:45 PM	81	87	2	1	72	24	14	1	48			3	333
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	851	1126	19	4	565	202	140	8	399	0	0	24	3338
APPROACH %'s :	42.64%	56.41%	0.95%	0.52%	73.28%	26.20%	25.59%	1.46%	72.94%	0.00%	0.00%	100.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

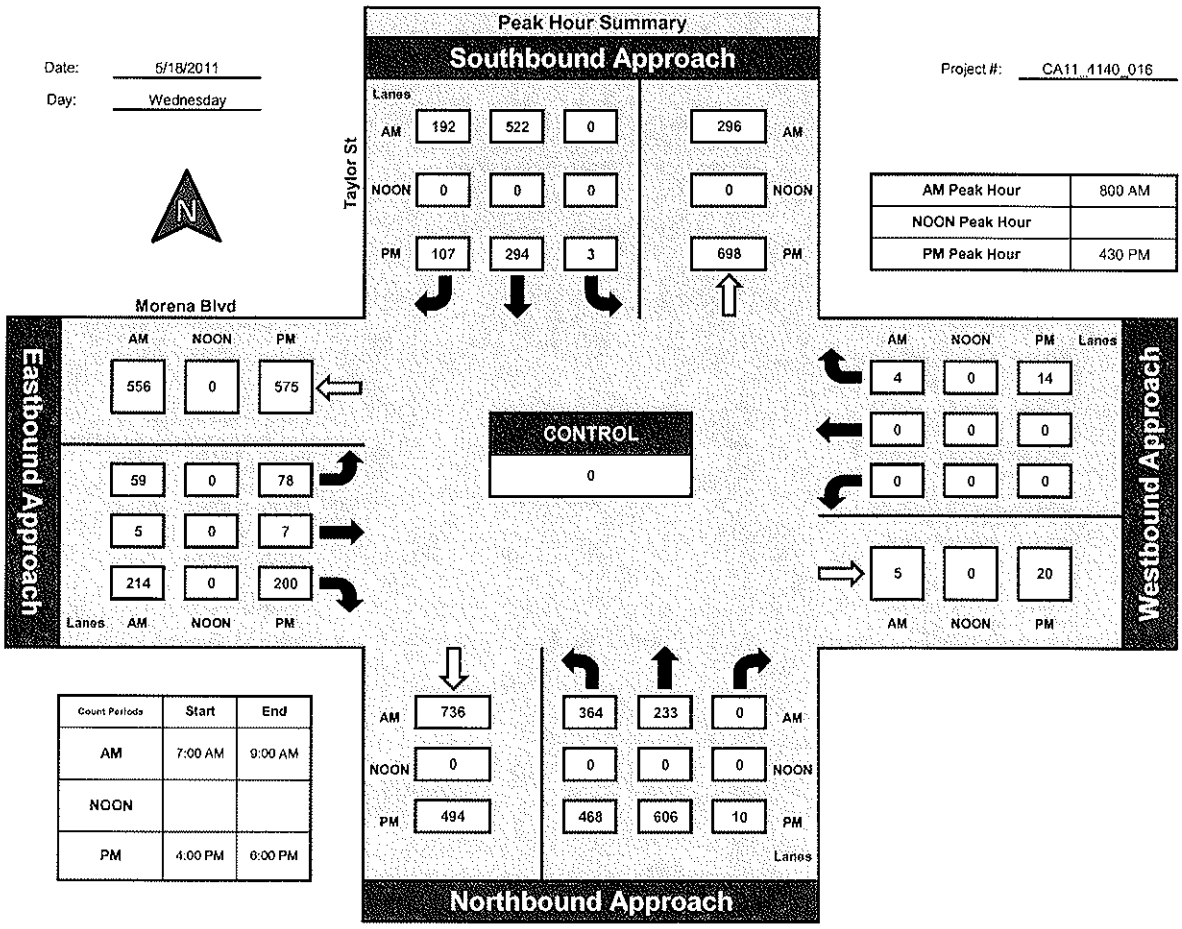
National Data & Surveying Services

Taylor St and Morena Blvd , City of San Diego

Date: 5/18/2011

Day: Wednesday

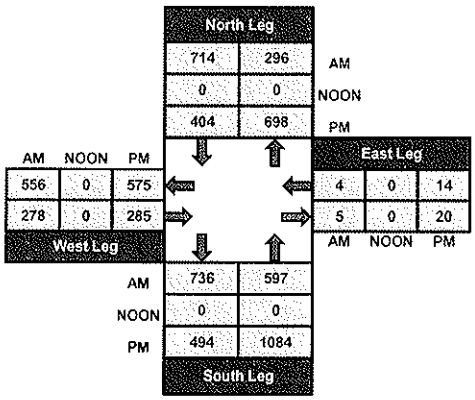
Project #: CA11_4140_016



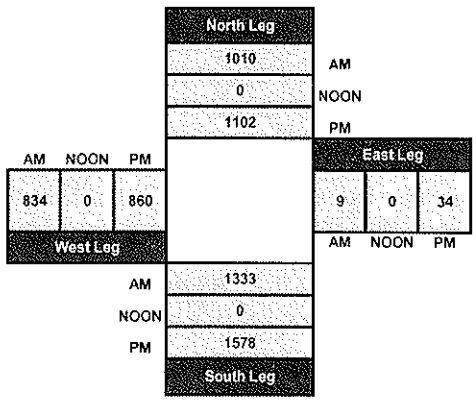
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

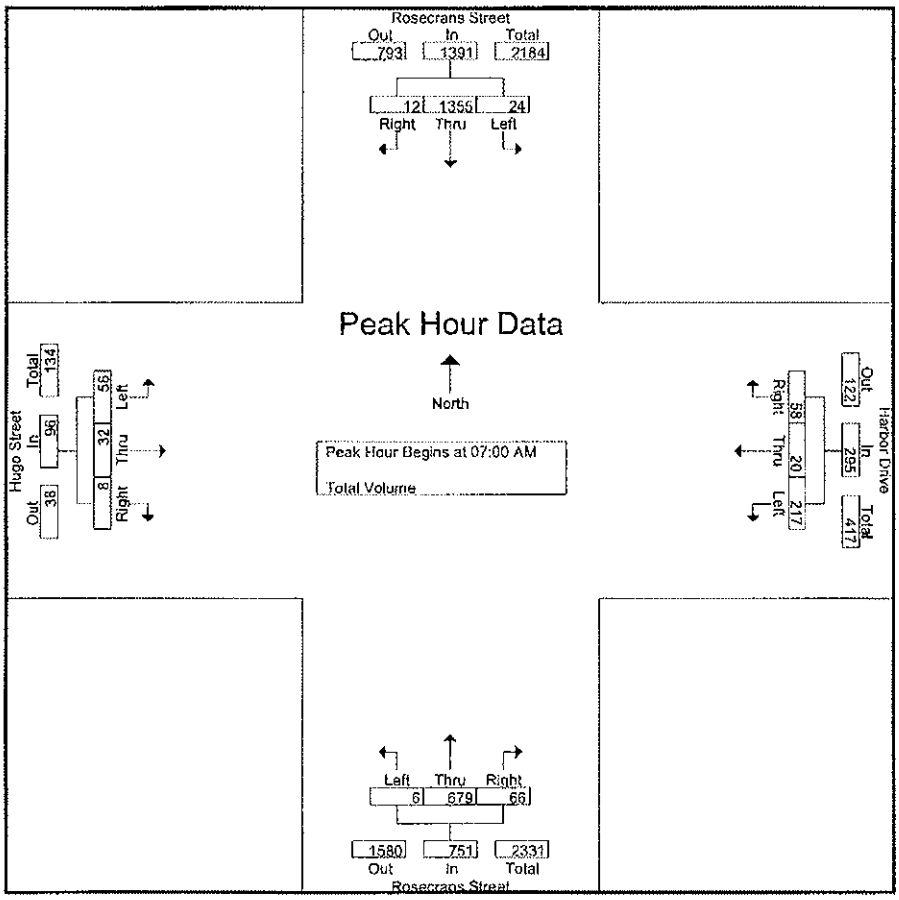
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	4	315	1	320	57	9	9	75	0	86	17	103	6	3	1	10	508
06:45 AM	3	387	5	395	43	7	9	59	0	101	9	110	10	5	3	18	582
Total	7	702	6	715	100	16	18	134	0	187	26	213	16	8	4	28	1090
07:00 AM	4	366	4	374	40	2	18	60	3	138	17	158	13	7	2	22	614
07:15 AM	4	340	1	345	74	12	15	101	1	181	21	203	14	11	2	27	676
07:30 AM	7	330	5	342	46	5	9	60	0	179	16	195	18	9	3	30	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
08:00 AM	5	277	1	283	40	16	11	67	0	183	18	201	15	14	1	30	581
08:15 AM	5	283	2	290	56	7	10	73	0	160	19	179	22	4	0	26	568
Grand Total	41	2617	21	2679	413	59	97	569	6	1209	129	1344	109	58	13	180	4772
Apprch %	1.5	97.7	0.8		72.6	10.4	17		0.4	90	9.6		60.6	32.2	7.2		
Total %	0.9	54.8	0.4	56.1	8.7	1.2	2	11.9	0.1	25.3	2.7	28.2	2.3	1.2	0.3	3.8	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	**366**	4	**374**	40	2	**18**	60	**3**	138	17	158	**13**	7	2	22	614
07:15 AM	4	340	1	345	74	**12**	15	**101**	1	**181**	**21**	**203**	14	**11**	2	27	**676**
07:30 AM	7	330	**5**	342	46	5	9	60	0	179	16	195	**18**	9	**3**	**30**	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total Volume	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
% App. Total	1.7	97.4	0.9		73.6	6.8	19.7		0.8	90.4	8.8		58.3	33.3	8.3		
PHF	.667	.926	.600	.930	.733	.417	.806	.730	.500	.938	.786	.925	.778	.727	.667	.800	.937

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	3	387	5	395	74	12	15	101	1	181	21	203	14	11	2	27
+15 mins.	4	366	4	374	46	5	9	60	0	179	16	195	18	9	3	30
+30 mins.	4	340	1	345	57	1	16	74	2	181	12	195	11	5	1	17
+45 mins.	7	330	5	342	40	16	11	67	0	183	18	201	15	14	1	30
Total Volume	18	1423	15	1456	217	34	51	302	3	724	67	794	58	39	7	104
% App. Total	1.2	97.7	1		71.9	11.3	16.9		0.4	91.2	8.4		55.8	37.5	6.7	
PHF	.643	.919	.750	.922	.733	.531	.797	.748	.375	.989	.798	.978	.806	.696	.583	.867

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

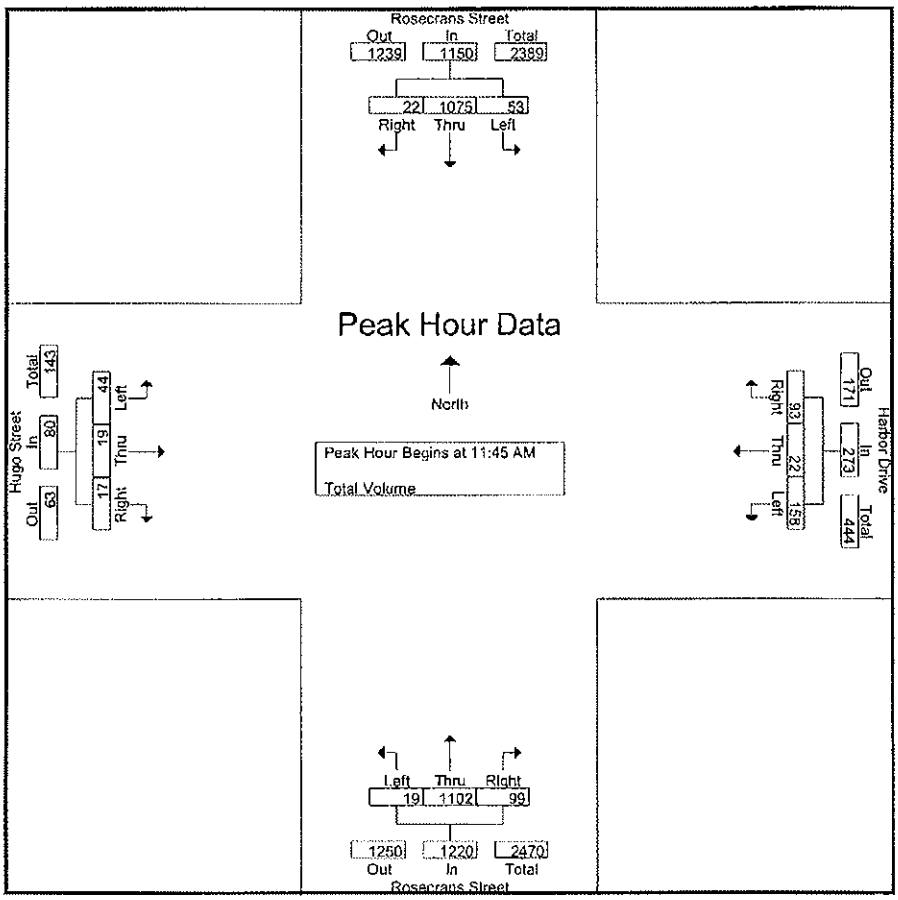
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	10	242	4	256	43	8	24	75	5	287	27	319	15	10	2	27	677
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
Total	21	521	10	552	71	12	43	126	10	597	54	661	29	14	7	50	1389
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
12:45 PM	12	280	8	300	37	7	27	71	4	264	24	292	13	9	6	28	691
Total	54	1076	24	1154	167	25	101	293	18	1056	96	1170	43	24	18	85	2702
01:00 PM	12	244	4	260	41	7	26	74	3	270	32	305	11	6	4	21	660
01:15 PM	10	214	5	229	36	5	19	60	2	280	29	311	13	6	0	19	619
Grand Total	97	2055	43	2195	315	49	189	553	33	2203	211	2447	96	50	29	175	5370
Apprch %	4.4	93.6	2		57	8.9	34.2		1.3	90	8.6		54.9	28.6	16.6		
Total %	1.8	38.3	0.8	40.9	5.9	0.9	3.5	10.3	0.6	41	3.9	45.6	1.8	0.9	0.5	3.3	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
Total Volume	53	1075	22	1150	158	22	93	273	19	1102	99	1220	44	19	17	80	2723
% App. Total	4.6	93.5	1.9		57.9	8.1	34.1		1.6	90.3	8.1		55	23.8	21.2		
PHF	.576	.873	.917	.893	.898	.786	.750	.875	.950	.889	.917	.892	.786	.679	.850	.870	.934

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				11:30 AM				12:15 PM			
+0 mins.	10	255	6	271	**44**	6	25	75	**5**	287	**27**	319	9	7	5	21
+15 mins.	**23**	233	5	261	44	**7**	18	69	5	**310**	27	**342**	11	4	4	19
+30 mins.	9	**308**	5	**322**	42	5	**31**	**78**	5	245	26	276	**13**	**9**	**6**	**28**
+45 mins.	12	280	**8**	300	37	7	27	71	5	262	25	292	11	6	4	21
Total Volume	54	1076	24	1154	167	25	101	293	20	1104	105	1229	44	26	19	89
% App. Total	4.7	93.2	2.1		57	8.5	34.5		1.6	89.8	8.5		49.4	29.2	21.3	
PHF	.587	.873	.750	.896	.949	.893	.815	.939	1.000	.890	.972	.898	.846	.722	.792	.795

Counts Unlimited Inc.
26286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

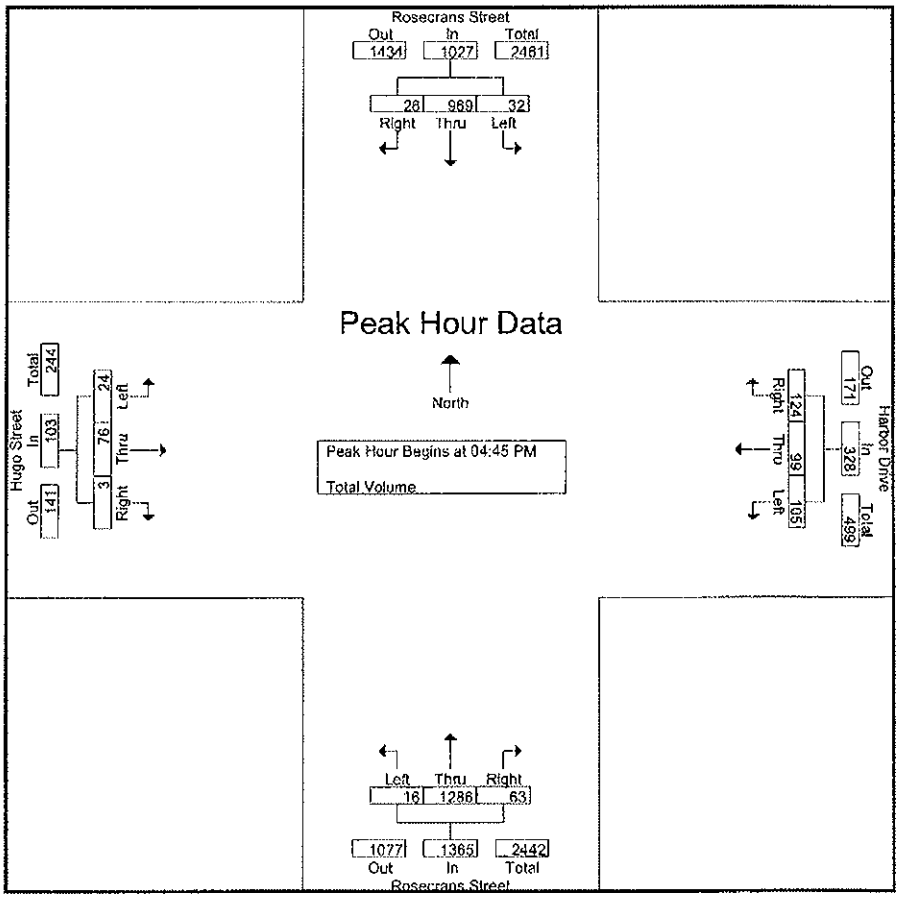
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	198	5	211	33	10	22	65	5	351	17	373	12	8	3	23	672
04:15 PM	3	200	11	214	37	12	27	76	8	319	9	336	13	9	2	24	650
04:30 PM	7	221	8	236	45	23	39	107	8	228	6	242	10	12	7	29	614
04:45 PM	9	241	4	254	28	21	37	86	7	251	12	270	9	13	0	22	632
Total	27	860	28	915	143	66	125	334	28	1149	44	1221	44	42	12	98	2568
05:00 PM	10	247	16	273	21	22	31	74	5	401	13	419	5	15	0	20	786
05:15 PM	5	251	5	261	29	27	29	85	2	322	28	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	29	27	83	2	312	10	324	2	27	2	31	677
05:45 PM	5	229	1	235	29	28	24	81	1	245	6	252	2	7	4	13	581
Total	28	957	23	1008	106	106	111	323	10	1280	57	1347	17	70	7	94	2772
Grand Total	55	1817	51	1923	249	172	236	657	38	2429	101	2568	61	112	19	192	5340
Apprch %	2.9	94.5	2.7		37.9	26.2	35.9		1.5	94.6	3.9		31.8	58.3	9.9		
Total %	1	34	1	36	4.7	3.2	4.4	12.3	0.7	45.5	1.9	48.1	1.1	2.1	0.4	3.6	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	9	241	4	254	28	21	**37**	**86**	**7**	251	12	270	9	13	0	22	632
05:00 PM	**10**	247	**16**	**273**	21	22	31	74	5	**401**	13	**419**	5	15	0	20	**786**
05:15 PM	5	**251**	5	261	**29**	27	29	85	2	322	**28**	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	**29**	27	83	2	312	10	324	2	**27**	2	**31**	677
Total Volume	32	969	26	1027	105	99	124	328	16	1286	63	1365	24	76	3	103	2823
% App. Total	3.1	94.4	2.5		32	30.2	37.8		1.2	94.2	4.6		23.3	73.8	2.9		
PHF	.800	.965	.406	.940	.905	.853	.838	.953	.571	.802	.563	.814	.667	.704	.375	.831	.898

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:45 PM				04:45 PM			
+0 mins.	9	241	4	254	**45**	23	**39**	**107**	7	251	12	270	9	13	0	22
+15 mins.	**10**	247	**16**	**273**	28	21	37	86	5	**401**	13	**419**	5	15	0	20
+30 mins.	5	**251**	5	261	21	22	31	74	2	322	28	352	8	21	1	30
+45 mins.	8	230	1	239	29	**27**	29	85	2	312	10	324	2	**27**	**2**	**31**
Total Volume	32	969	26	1027	123	93	136	352	16	1286	63	1365	24	76	3	103
% App. Total	3.1	94.4	2.5		34.9	26.4	38.6		1.2	94.2	4.6		23.3	73.8	2.9	
PHF	.800	.965	.406	.940	.683	.861	.872	.822	.571	.802	.563	.814	.667	.704	.375	.831

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

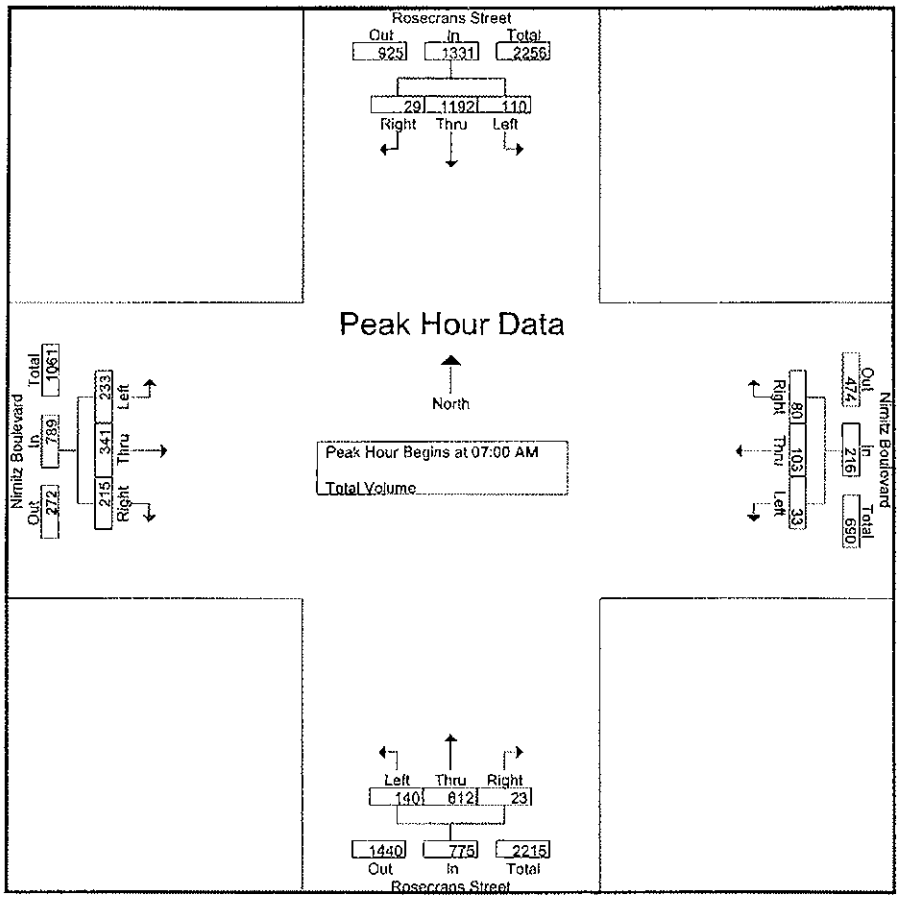
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	38	254	22	314	6	38	22	66	30	69	10	109	62	66	47	175	664
06:45 AM	28	322	19	369	5	33	24	62	45	89	3	137	62	71	60	193	761
Total	66	576	41	683	11	71	46	128	75	158	13	246	124	137	107	368	1425
07:00 AM	25	324	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	8	359	9	26	20	55	34	151	7	192	74	74	58	206	812
07:30 AM	28	272	8	308	13	29	23	65	37	158	6	201	49	103	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	39	166	8	213	66	100	49	215	782
Total	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
08:00 AM	34	230	8	272	4	27	12	43	38	161	8	207	85	54	43	182	704
08:15 AM	28	250	22	300	6	24	20	50	49	149	10	208	61	65	56	182	740
Grand Total	238	2248	100	2586	54	225	158	437	302	1080	54	1436	503	597	421	1521	5980
Apprch %	9.2	86.9	3.9		12.4	51.5	36.2		21	75.2	3.8		33.1	39.3	27.7		
Total %	4	37.6	1.7	43.2	0.9	3.8	2.6	7.3	5.1	18.1	0.9	24	8.4	10	7	25.4	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	25	**324**	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	**8**	**359**	9	26	20	55	34	151	7	192	**74**	74	**58**	206	**812**
07:30 AM	28	272	8	308	**13**	**29**	**23**	**65**	37	158	6	201	49	**103**	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	**39**	**166**	**8**	**213**	66	100	49	**215**	782
Total Volume	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
% App. Total	8.3	89.6	2.2		15.3	47.7	37		18.1	79	3		29.5	43.2	27.2		
PHF	.743	.920	.906	.927	.635	.888	.870	.831	.897	.922	.719	.910	.787	.828	.927	.917	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				07:30 AM				07:15 AM			
+0 mins.	**38**	254	**22**	314	6	**38**	22	**66**	37	158	6	201	74	74	**58**	206
+15 mins.	28	322	19	**369**	5	33	**24**	62	39	**166**	8	**213**	49	**103**	53	205
+30 mins.	25	**324**	6	355	7	23	21	51	38	161	8	207	66	100	49	**215**
+45 mins.	37	314	8	359	9	26	20	55	**49**	149	**10**	208	**85**	54	43	182
Total Volume	128	1214	55	1397	27	120	87	234	163	634	32	829	274	331	203	808
% App. Total	9.2	86.9	3.9		11.5	51.3	37.2		19.7	76.5	3.9		33.9	41	25.1	
PHF	.842	.937	.625	.946	.750	.789	.906	.886	.832	.955	.800	.973	.806	.803	.875	.940

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

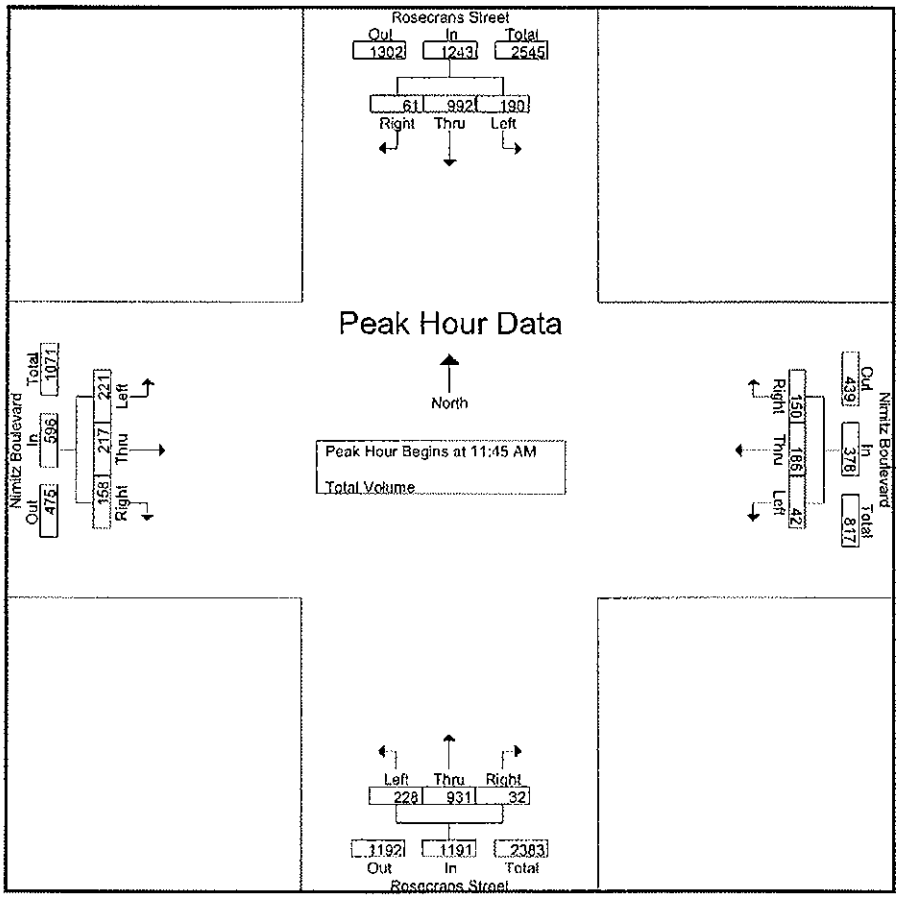
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	43	201	17	261	16	36	49	101	53	229	9	291	52	56	33	141	794
11:45 AM	43	272	15	330	13	51	43	107	62	266	11	339	64	45	37	146	922
Total	86	473	32	591	29	87	92	208	115	495	20	630	116	101	70	287	1716
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	63	46	163	766
12:15 PM	56	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	17	323	16	48	36	100	55	239	9	303	50	59	40	149	875
12:45 PM	42	249	22	313	11	41	35	87	62	258	10	330	37	45	62	144	874
Total	189	969	68	1226	40	176	142	358	228	923	31	1182	194	217	183	594	3360
01:00 PM	44	184	34	262	6	56	43	105	56	208	10	274	29	36	38	103	744
01:15 PM	35	195	25	255	6	59	36	101	69	230	11	310	36	45	34	115	781
Grand Total	354	1821	159	2334	81	378	313	772	468	1856	72	2396	375	399	325	1099	6601
Apprch %	15.2	78	6.8		10.5	49	40.5		19.5	77.5	3		34.1	36.3	29.6		
Total %	5.4	27.6	2.4	35.4	1.2	5.7	4.7	11.7	7.1	28.1	1.1	36.3	5.7	6	4.9	16.6	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	43	**272**	15	**330**	13	**51**	**43**	**107**	**62**	**266**	**11**	**339**	**64**	45	37	146	**922**
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	**63**	**46**	**163**	766
12:15 PM	**56**	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	**17**	323	**16**	48	36	100	55	239	9	303	50	59	40	149	875
Total Volume	190	992	61	1243	42	186	150	378	228	931	32	1191	221	217	158	596	3408
% App. Total	15.3	79.8	4.9		11.1	49.2	39.7		19.1	78.2	2.7		37.1	36.4	26.5		
PHF	.848	.912	.897	.942	.656	.912	.872	.883	.919	.875	.727	.878	.863	.861	.859	.914	.924

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:45 AM				12:30 PM				12:30 PM				11:45 AM			
+0 mins.	43	**272**	15	**330**	**16**	48	36	100	55	239	9	303	**64**	45	37	146
+15 mins.	45	214	13	272	11	41	35	87	62	**258**	10	**330**	54	**63**	**46**	**163**
+30 mins.	**56**	246	16	318	6	56	**43**	**105**	56	208	10	274	53	50	35	138
+45 mins.	46	260	**17**	323	6	59	36	101	69	230	**11**	310	50	59	40	149
Total Volume	190	992	61	1243	39	204	150	393	242	935	40	1217	221	217	158	596
% App. Total	15.3	79.8	4.9		9.9	51.9	38.2		19.9	76.8	3.3		37.1	36.4	26.5	
PHF	.848	.912	.897	.942	.609	.864	.872	.936	.877	.906	.909	.922	.863	.861	.859	.914

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

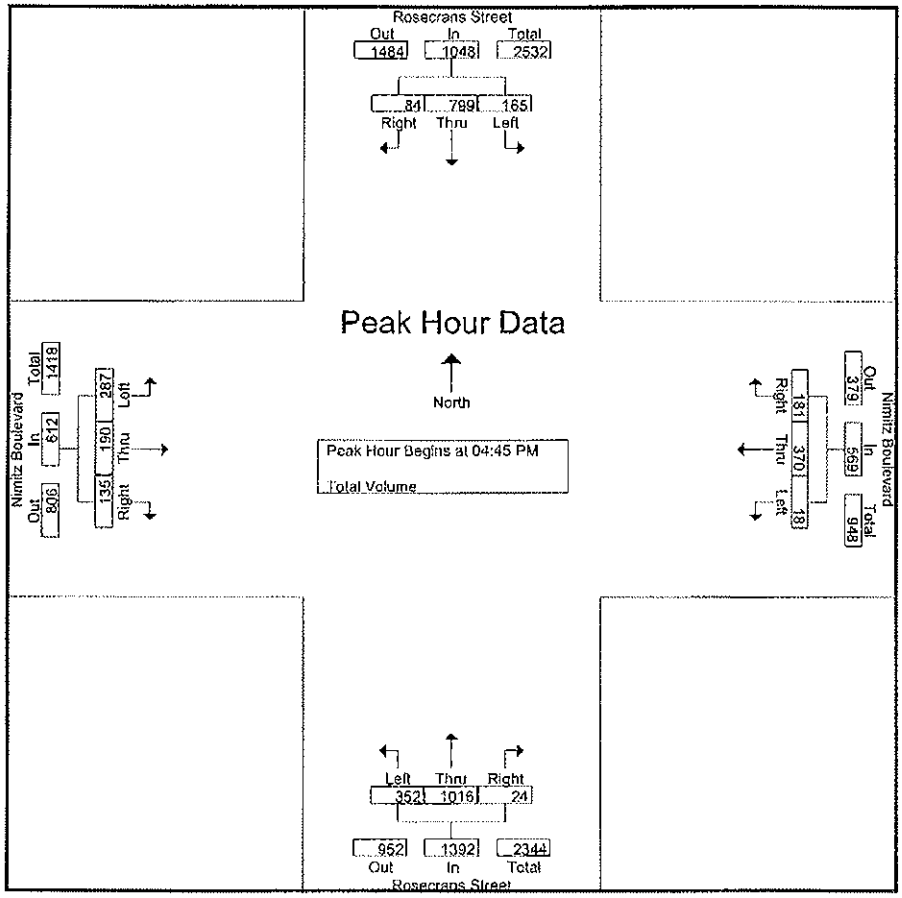
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	35	181	30	246	2	83	42	127	82	278	11	371	75	48	34	157	901
04:15 PM	45	199	25	269	3	92	42	137	67	259	7	333	61	67	37	165	904
04:30 PM	37	191	20	248	4	110	50	164	58	211	7	276	72	50	37	159	847
04:45 PM	47	216	22	285	6	92	56	154	79	205	6	290	81	51	37	169	898
Total	164	787	97	1048	15	377	190	582	286	953	31	1270	289	216	145	650	3550
05:00 PM	48	168	18	234	3	114	43	160	110	283	11	404	77	40	35	152	950
05:15 PM	38	208	23	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
05:45 PM	48	196	26	270	4	59	37	100	72	208	6	286	50	42	34	126	782
Total	166	779	88	1033	16	337	162	515	345	1019	24	1388	256	181	132	569	3505
Grand Total	330	1566	185	2081	31	714	352	1097	631	1972	55	2658	545	397	277	1219	7055
Apprch %	15.9	75.3	8.9		2.8	65.1	32.1		23.7	74.2	2.1		44.7	32.6	22.7		
Total %	4.7	22.2	2.6	29.5	0.4	10.1	5	15.5	8.9	28	0.8	37.7	7.7	5.6	3.9	17.3	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	47	**216**	22	**285**	**6**	92	**56**	154	79	205	6	290	**81**	**51**	37	**169**	898
05:00 PM	**48**	168	18	234	**3**	**114**	43	**160**	**110**	**283**	**11**	**404**	77	40	35	152	**950**
05:15 PM	38	208	**23**	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
Total Volume	165	799	84	1048	18	370	181	569	352	1016	24	1392	287	190	135	612	3621
% App. Total	15.7	76.2	8		3.2	65	31.8		25.3	73	1.7		46.9	31	22.1		
PHF	.859	.925	.913	.919	.750	.811	.808	.889	.800	.898	.545	.861	.886	.931	.912	.905	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	35	181	**30**	246	3	92	42	137	79	205	6	290	75	48	34	157
+15 mins.	45	199	25	269	4	110	50	**164**	**110**	**283**	11	**404**	61	**67**	**37**	165
+30 mins.	37	191	20	248	**6**	92	**56**	154	96	269	6	371	72	50	37	159
+45 mins.	**47**	**216**	22	**285**	3	**114**	43	160	67	259	1	327	**81**	51	37	**169**
Total Volume	164	787	97	1048	16	408	191	615	352	1016	24	1392	289	216	145	650
% App. Total	15.6	75.1	9.3		2.6	66.3	31.1		25.3	73	1.7		44.5	33.2	22.3	
PHF	.872	.911	.808	.919	.667	.895	.853	.938	.800	.898	.545	.861	.892	.806	.980	.962

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Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

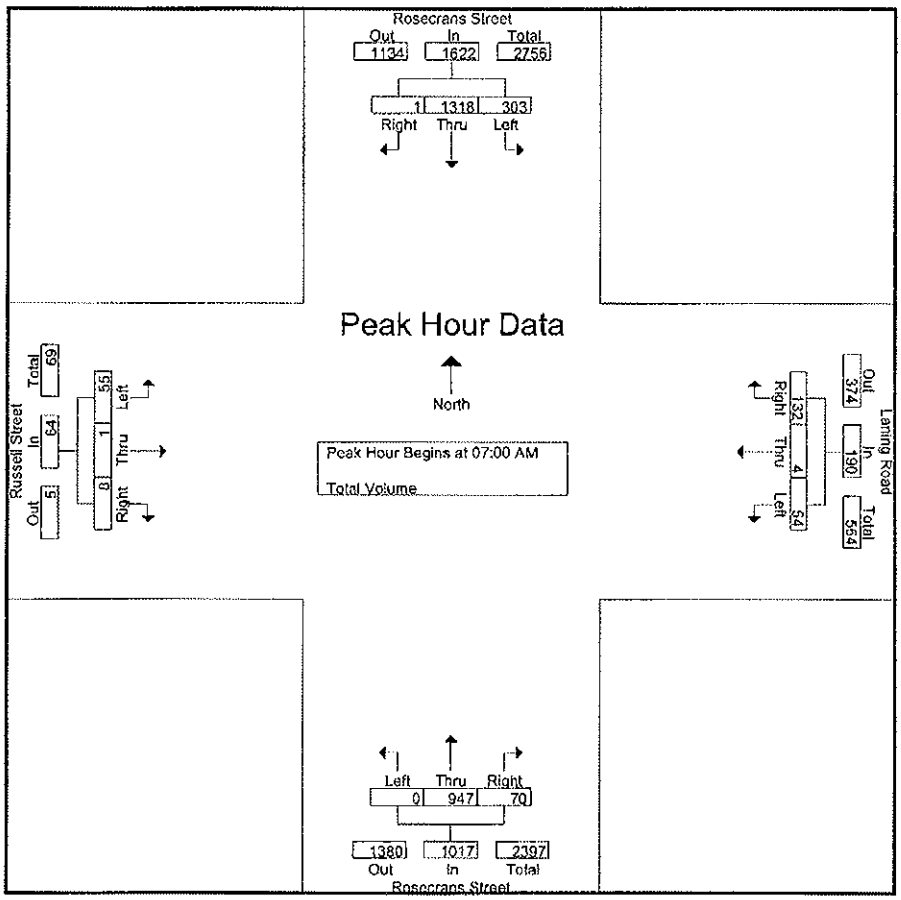
	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	46	248	0	294	15	0	34	49	0	127	1	128	14	2	0	16	487
06:45 AM	68	350	0	418	11	0	29	40	0	155	12	167	7	0	0	7	632
Total	114	598	0	712	26	0	63	89	0	282	13	295	21	2	0	23	1119
07:00 AM	58	411	1	470	13	1	42	56	0	227	10	237	16	0	7	23	786
07:15 AM	109	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	21	2	35	58	0	221	12	233	18	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	251	36	287	6	0	0	6	645
Total	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
08:00 AM	65	270	0	335	32	1	30	63	0	252	46	298	11	0	0	11	707
08:15 AM	53	371	0	424	32	0	32	64	0	243	20	263	10	2	0	12	763
Grand Total	535	2557	1	3093	144	5	257	406	0	1724	149	1873	97	5	8	110	5482
Apprch %	17.3	82.7	0		35.5	1.2	63.3		0	92	8		88.2	4.5	7.3		
Total %	9.8	46.6	0	56.4	2.6	0.1	4.7	7.4	0	31.4	2.7	34.2	1.8	0.1	0.1	2	

	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	58	**411**	**1**	**470**	13	1	**42**	56	**0**	227	10	237	16	0	**7**	**23**	**786**
07:15 AM	**109**	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	**21**	**2**	35	**58**	0	221	12	233	**18**	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	**251**	**36**	**287**	6	0	0	6	645
Total Volume	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
% App. Total	18.7	81.3	0.1		28.4	2.1	69.5		0	93.1	6.9		85.9	1.6	12.5		
PHF	.695	.802	.250	.863	.643	.500	.786	.819	.000	.943	.486	.886	.764	.250	.286	.696	.920

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
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Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:30 AM				07:30 AM				06:45 AM			
+0 mins.	68	350	0	418	21	2	35	58	0	221	12	233	7	0	0	7
+15 mins.	58	411	1	470	12	0	24	36	0	251	36	287	16	0	7	23
+30 mins.	109	356	0	465	32	1	30	63	0	252	46	298	15	1	0	16
+45 mins.	82	289	0	371	32	0	32	64	0	243	20	263	18	0	1	19
Total Volume	317	1406	1	1724	97	3	121	221	0	967	114	1081	56	1	8	65
% App. Total	18.4	81.6	0.1		43.9	1.4	54.8		0	89.5	10.5		86.2	1.5	12.3	
PHF	.727	.855	.250	.917	.758	.375	.864	.863	.000	.959	.620	.907	.778	.250	.286	.707

Counts Unlimited Inc.
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City of San Diego
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File Name : SDCRORUPM
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Groups Printed- Total Volume

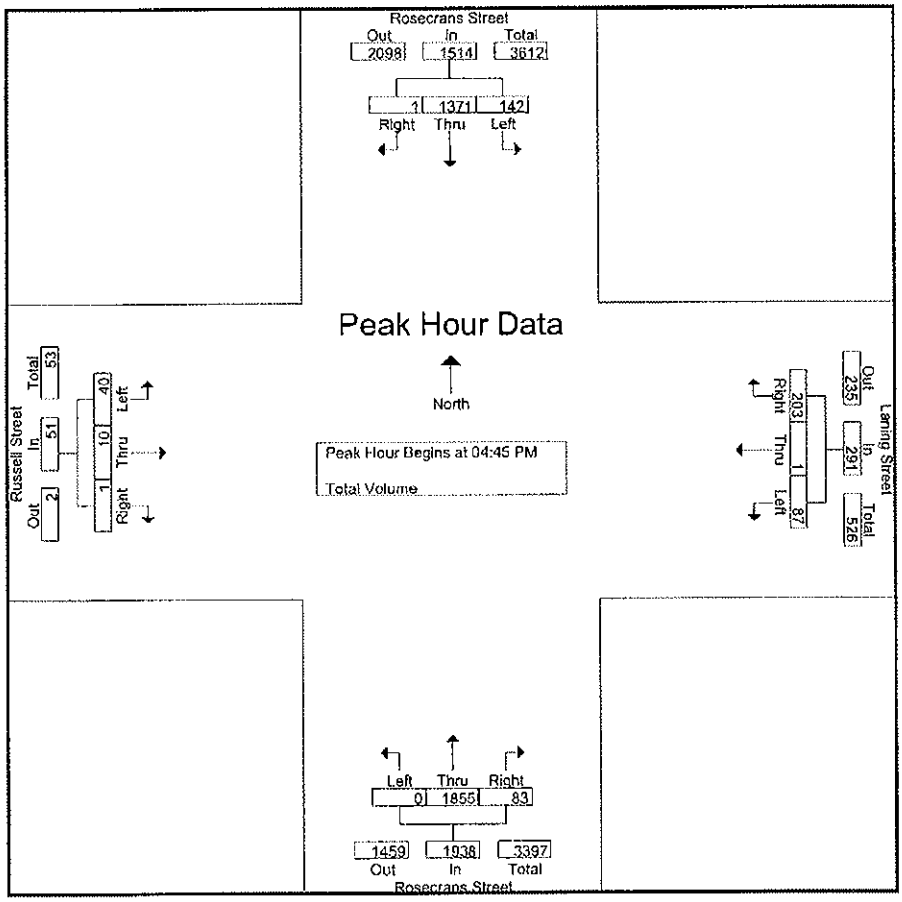
	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	280	0	308	21	4	56	81	1	374	26	401	11	0	0	11	801
04:15 PM	41	268	2	311	29	0	54	83	1	394	30	425	8	1	1	10	829
04:30 PM	38	266	1	305	22	0	63	85	0	404	14	418	8	1	1	10	818
04:45 PM	45	348	0	393	21	0	67	88	0	430	21	451	5	1	1	7	939
Total	152	1162	3	1317	93	4	240	337	2	1602	91	1695	32	3	3	38	3387
05:00 PM	39	310	1	350	15	0	71	86	0	528	22	550	8	1	0	9	995
05:15 PM	31	342	0	373	27	1	41	69	0	457	22	479	12	4	0	16	937
05:30 PM	27	371	0	398	24	0	24	48	0	440	18	458	15	4	0	19	923
05:45 PM	27	327	4	358	18	0	27	45	0	356	30	386	4	1	0	5	794
Total	124	1350	5	1479	84	1	163	248	0	1781	92	1873	39	10	0	49	3649
Grand Total	276	2512	8	2796	177	5	403	585	2	3383	183	3568	71	13	3	87	7036
Apprch %	9.9	89.8	0.3		30.3	0.9	68.9		0.1	94.8	5.1		81.6	14.9	3.4		
Total %	3.9	35.7	0.1	39.7	2.5	0.1	5.7	8.3	0	48.1	2.6	50.7	1	0.2	0	1.2	

	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**45**	348	0	393	21	0	67	**88**	0	430	21	451	5	1	**1**	7	939
05:00 PM	39	310	1	350	15	0	71	86	0	**528**	**22**	**550**	8	1	0	9	**995**
05:15 PM	31	342	0	373	**27**	1	41	69	0	457	22	479	12	**4**	0	16	937
05:30 PM	27	371	0	**398**	24	0	24	48	0	440	18	458	**15**	4	0	**19**	923
Total Volume	142	1371	1	1514	87	1	203	291	0	1855	83	1938	40	10	1	51	3794
% App. Total	9.4	90.6	0.1		29.9	0.3	69.8		0	95.7	4.3		78.4	19.6	2		
PHF	.789	.924	.250	.951	.806	.250	.715	.827	.000	.878	.943	.881	.667	.625	.250	.671	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Street
Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	**45**	348	0	393	29	0	54	83	0	430	21	451	5	1	1	7
+15 mins.	39	310	1	350	22	0	63	85	0	**528**	**22**	**550**	8	1	0	9
+30 mins.	31	342	0	373	21	0	67	**88**	0	457	22	479	12	4	0	16
+45 mins.	27	**371**	0	**398**	15	0	**71**	86	0	440	18	458	15	4	0	19
Total Volume	142	1371	1	1514	87	0	255	342	0	1855	83	1938	40	10	1	51
% App. Total	9.4	90.6	0.1		25.4	0	74.6		0	95.7	4.3		78.4	19.6	2	
PHF	.789	.924	.250	.951	.750	.000	.898	.972	.000	.878	.943	.881	.667	.625	.250	.671

(S2)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					28	20				26	447		521
7:15 AM					20	12				38	434		504
7:30 AM					30	11				42	382		465
7:45 AM					45	19				62	433		559
8:00 AM					33	20				51	378		482
8:15 AM					46	22				48	373		489
8:30 AM					42	17				66	351		476
8:45 AM					57	15				47	346		465
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	301	136	0	0	0	380	3144	0	3961
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	68.88%	31.12%	#DIV/0!	#DIV/0!	#DIV/0!	10.78%	89.22%	0.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					80	11				36	222		349
4:15 PM					82	12				39	221		354
4:30 PM					74	20				51	219		364
4:45 PM					95	17				43	256		411
5:00 PM					101	20				52	211		384
5:15 PM					97	14				50	223		384
5:30 PM					100	16				52	227		395
5:45 PM					89	20				45	250		404

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	718	130	0	0	0	368	1829	0	3045
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	84.67%	15.33%	#DIV/0!	#DIV/0!	#DIV/0!	16.75%	83.25%	0.00%	



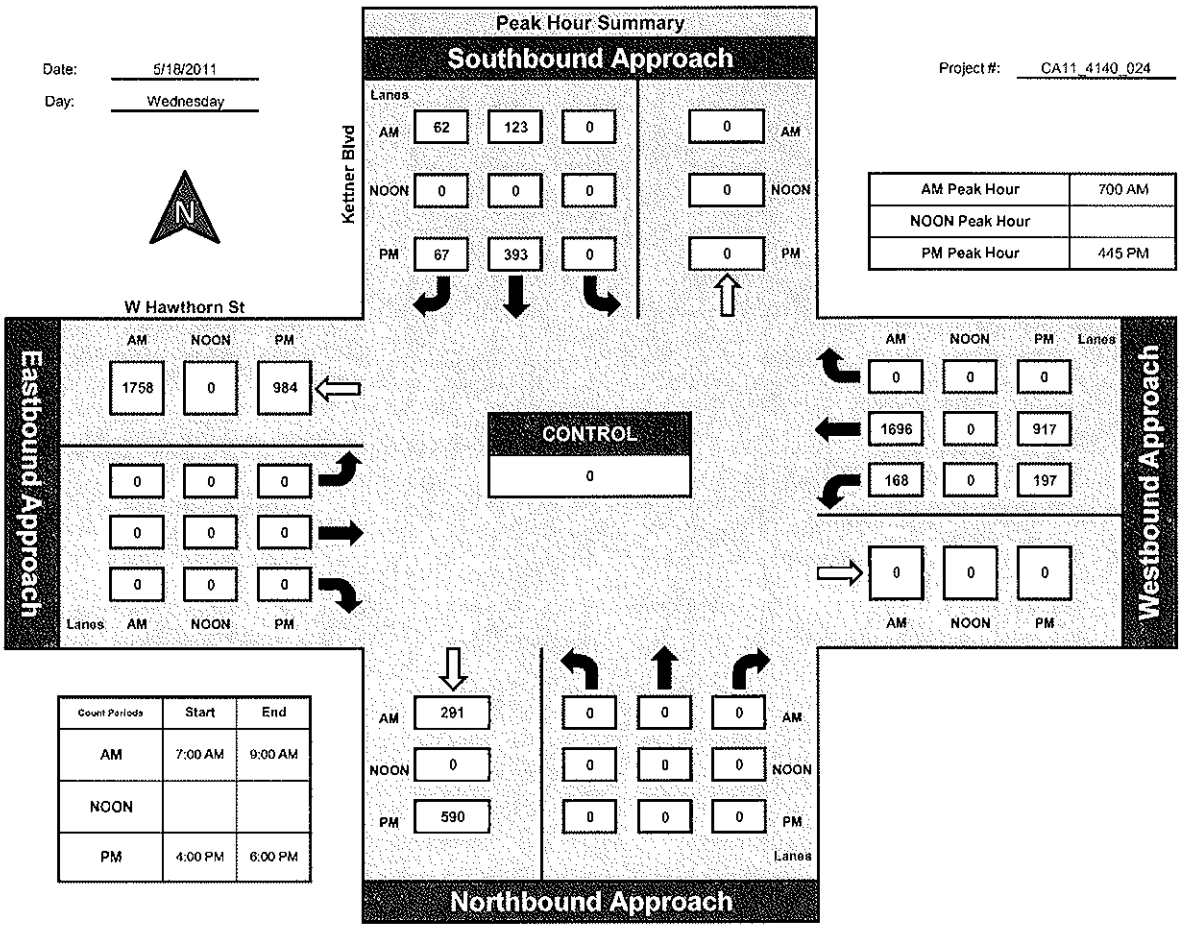
CONTROL :

ITM Peak Hour Summary

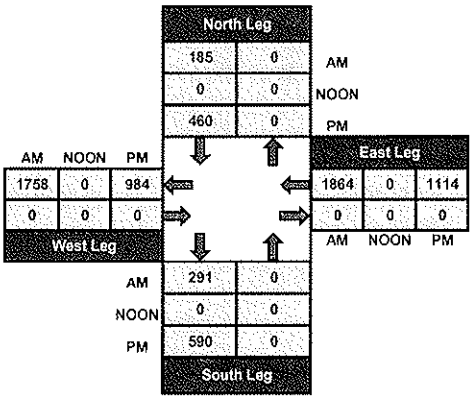
Prepared by:

National Data & Surveying Services

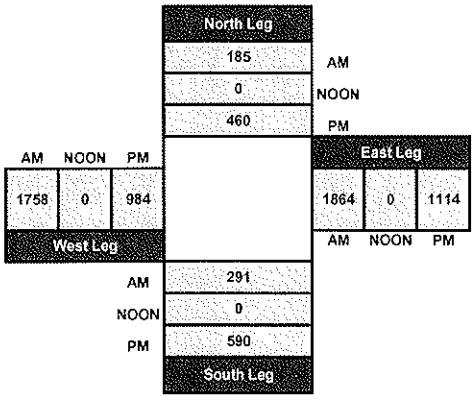
Kettner Blvd and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(53)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				20	31			201	5				257
7:15 AM				18	47			179	6				250
7:30 AM				24	47			200	5				276
7:45 AM				34	76			209	5				324
8:00 AM				24	61			199	5				289
8:15 AM				19	72			213	7				311
8:30 AM				31	77			220	8				336
8:45 AM				36	66			229	10				341
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	206	477	0	0	1650	51	0	0	0	2384
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	30.16%	69.84%	0.00%	0.00%	97.00%	3.00%	#DIV/0!	#DIV/0!	#DIV/0!	
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				54	63			362	4				483
4:15 PM				53	66			366	14				499
4:30 PM				53	74			428	4				559
4:45 PM				65	76			353	13				507
5:00 PM				70	79			385	7				541
5:15 PM				52	89			367	15				523
5:30 PM				69	85			326	14				494
5:45 PM				42	91			312	9				454
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	458	623	0	0	2899	80	0	0	0	4060
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	42.37%	57.63%	0.00%	0.00%	97.31%	2.69%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

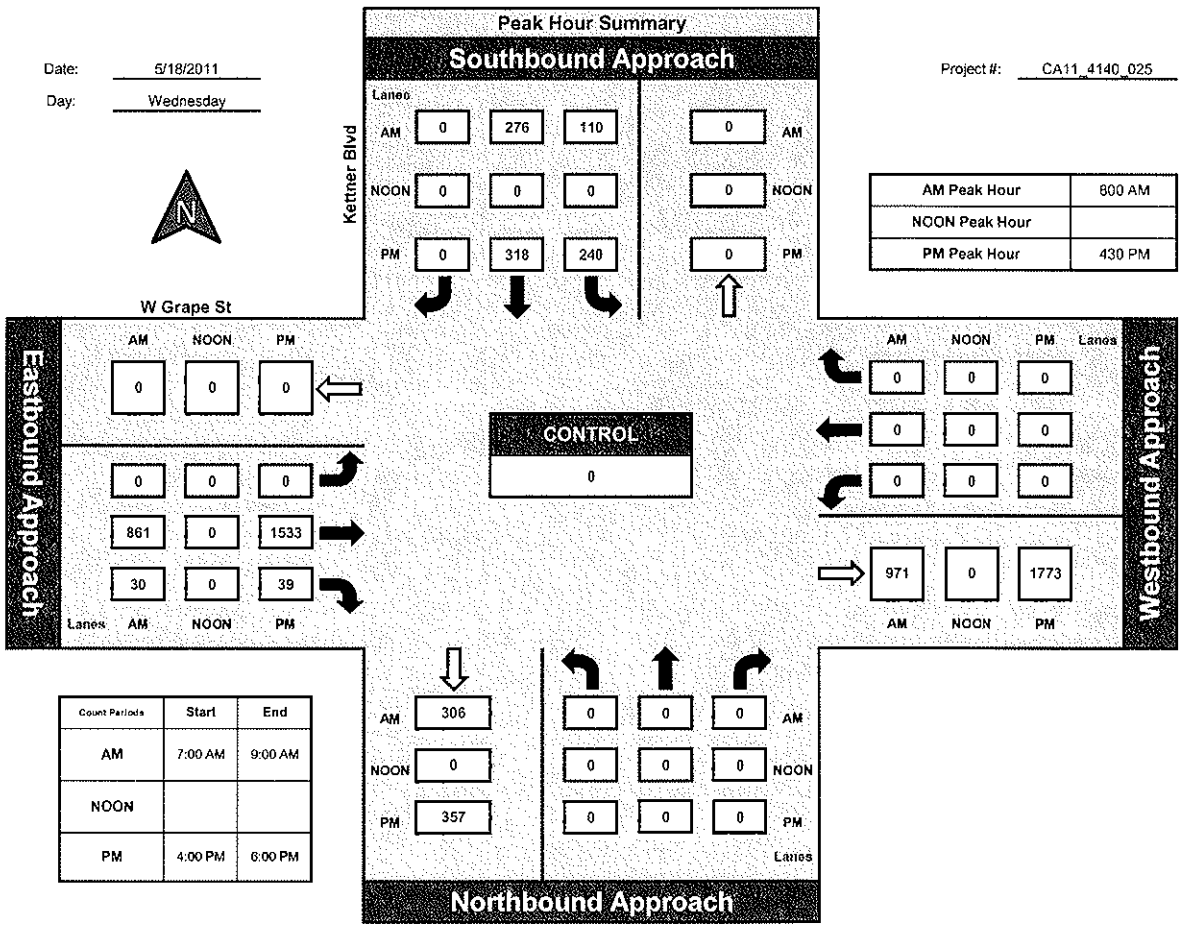
ITM Peak Hour Summary

Prepared by:

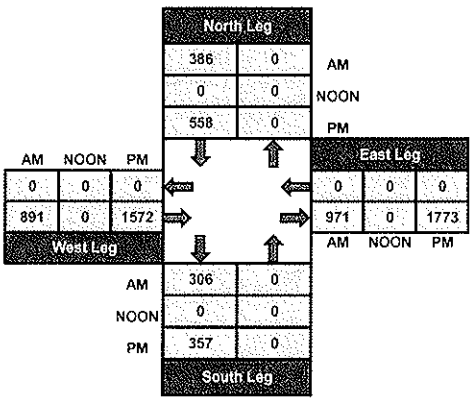
NDS

National Data & Surveying Services

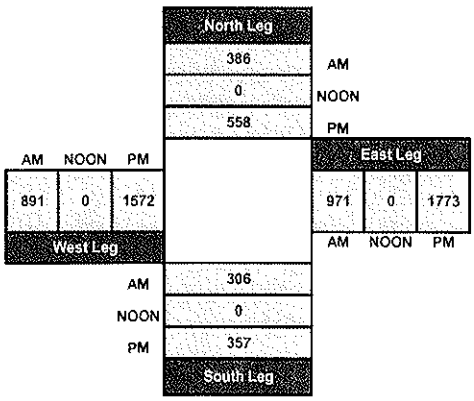
Kettner Blvd and W Grape St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(54)

Intersection Turning Movement

Prepared by:

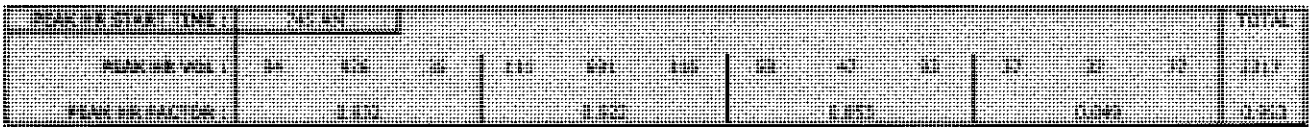
National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	189	8	29	120	16	7	8	15	4	5	8	424
7:15 AM	27	220	11	30	141	25	18	3	10	4	10	6	505
7:30 AM	21	228	15	34	167	29	12	9	15	8	5	20	563
7:45 AM	19	240	10	32	185	32	13	14	20	4	4	15	588
8:00 AM	32	209	12	28	160	31	11	11	22	11	10	19	556
8:15 AM	22	218	10	27	174	25	12	7	30	9	12	19	565
8:30 AM	21	259	3	24	172	28	22	15	21	13	6	24	608
8:45 AM	11	226	11	25	176	19	17	12	18	12	10	22	559
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	168	1789	80	229	1295	205	112	79	151	65	62	133	4368
APPRDACH %'s :	8.25%	87.83%	3.93%	13.24%	74.90%	11.86%	32.75%	23.10%	44.15%	25.00%	23.85%	51.15%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	19	291	21	28	313	3	13	13	32	19	5	21	778
4:15 PM	21	294	24	36	309	5	10	17	35	24	8	22	805
4:30 PM	28	261	36	38	327	1	10	11	38	17	8	19	794
4:45 PM	17	265	28	41	330	1	11	16	42	23	7	20	801
5:00 PM	19	267	25	26	313	2	17	25	51	34	11	43	833
5:15 PM	6	284	27	37	306	6	21	18	58	28	15	34	840
5:30 PM	17	245	36	37	301	9	11	11	39	31	14	26	777
5:45 PM	14	203	37	57	306	9	9	14	37	34	10	20	750
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	141	2110	234	300	2505	36	102	125	332	210	78	205	6378
APPROACH %'s :	5.67%	84.91%	9.42%	10.56%	88.17%	1.27%	18.25%	22.36%	59.39%	42.60%	15.82%	41.58%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]												

CONTROL :

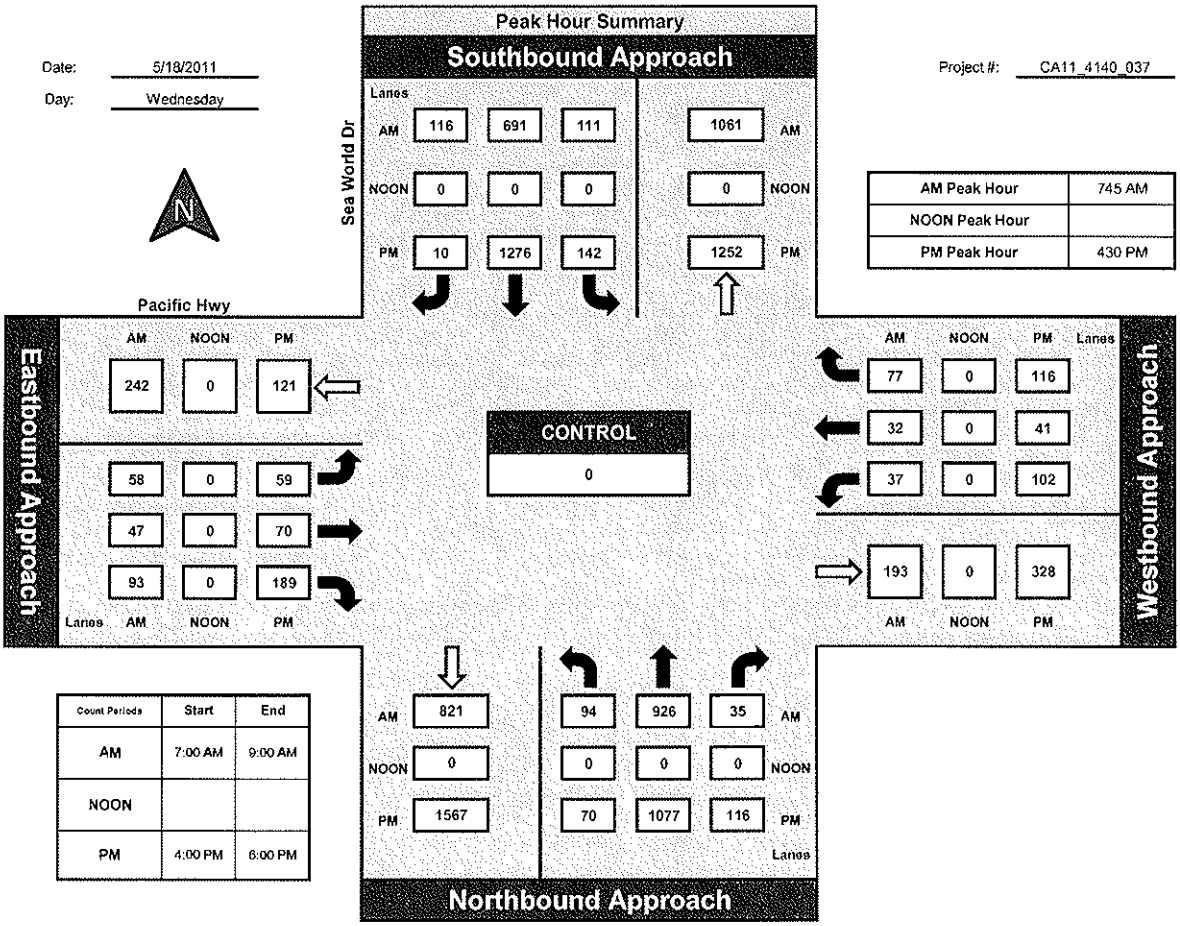
ITM Peak Hour Summary

Prepared by:

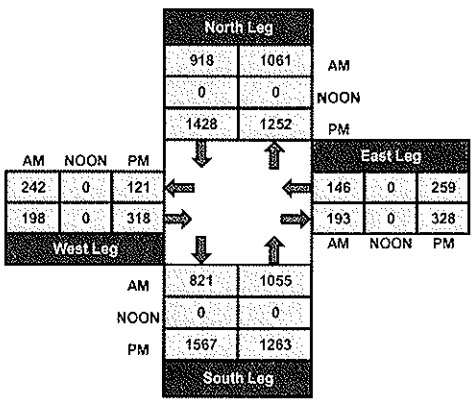
NDS

National Data & Surveying Services

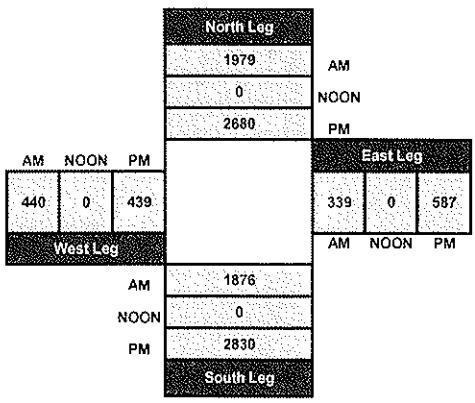
Sea World Dr and Pacific Hwy , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7												7
7:15 AM	12												12
7:30 AM	10												10
7:45 AM	15												15
8:00 AM	4												4
8:15 AM	7												7
8:30 AM	8												8
8:45 AM	13												13
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	76	0	0	0	0	0	0	0	0	0	0	0	76
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

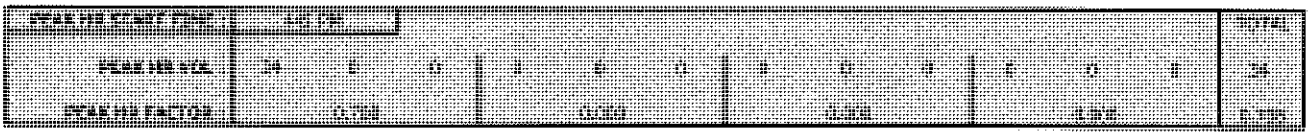
National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	9												9
4:15 PM	9												9
4:30 PM	7												7
4:45 PM	8												8
5:00 PM	7												7
5:15 PM	7												7
5:30 PM	12												12
5:45 PM	5												5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	0	0	0	0	0	0	0	0	0	0	0	64
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	



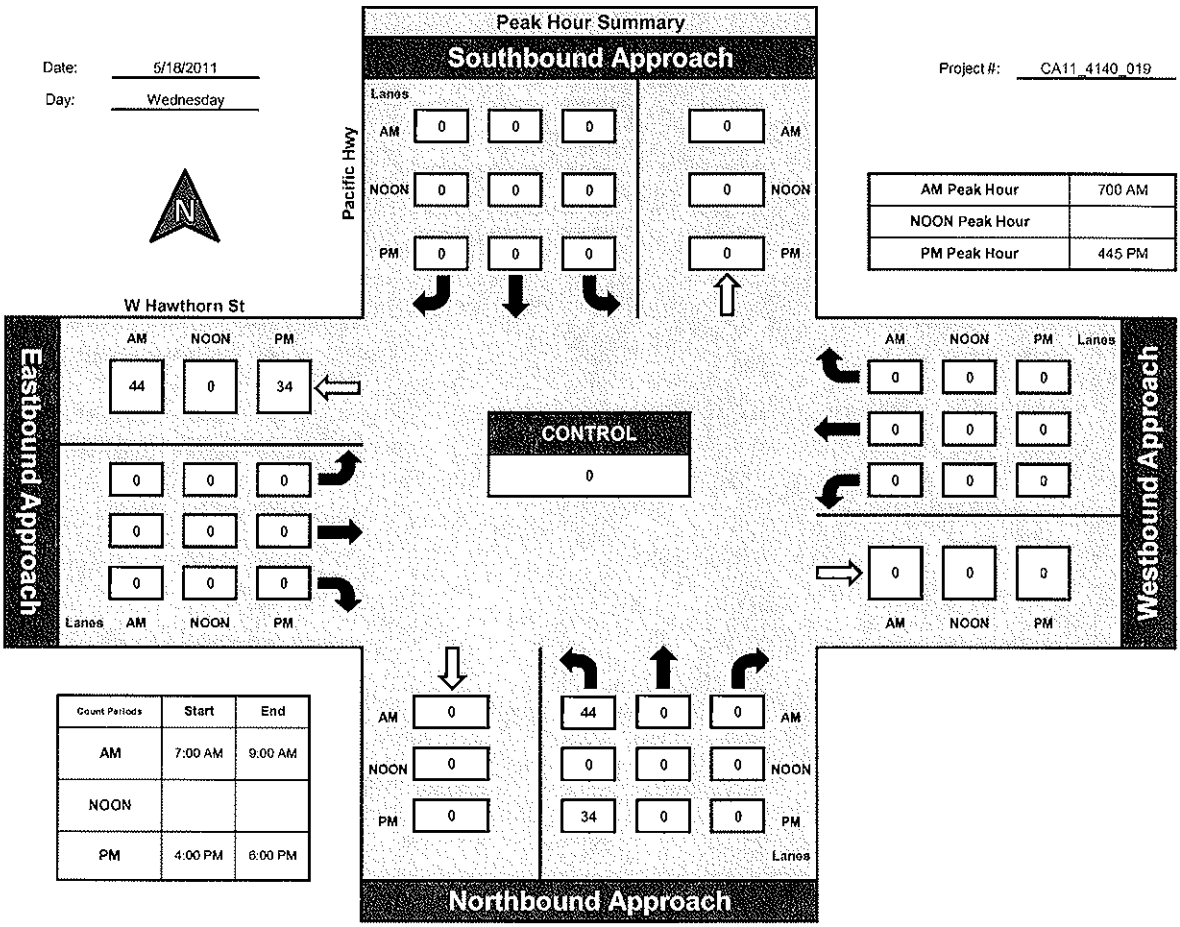
CONTROL :

ITM Peak Hour Summary

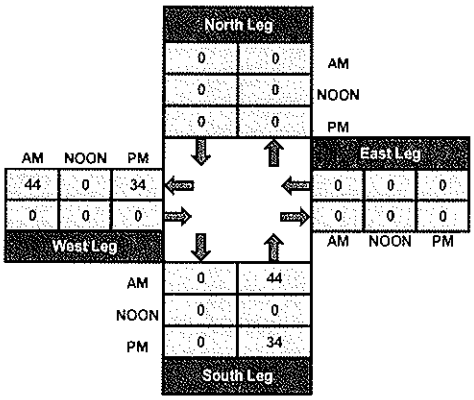
Prepared by:

National Data & Surveying Services

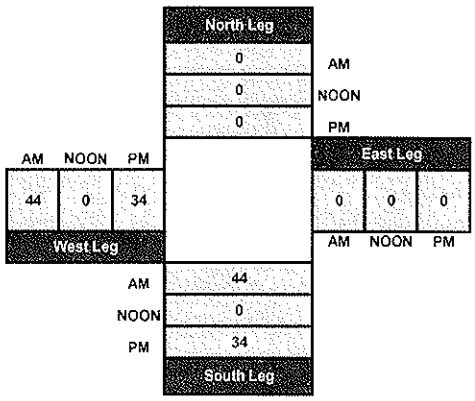
Pacific Hwy and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	36			24	7				86	360	12	545
7:15 AM	19	41			37	4				72	341	20	534
7:30 AM	13	45			35	5				90	284	18	490
7:45 AM	12	36			43	3				114	327	20	555
8:00 AM	12	41			35	7				83	294	15	487
8:15 AM	17	42			43	3				54	316	19	494
8:30 AM	13	47			52	9				70	269	16	476
8:45 AM	11	55			43	4				59	279	27	478
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	117	343	0	0	312	42	0	0	0	628	2470	147	4059
APPROACH %'s :	25.43%	74.57%	0.00%	0.00%	88.14%	11.86%	#DIV/0!	#DIV/0!	#DIV/0!	19.35%	76.12%	4.53%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	16	63			61	1				36	170	16	363
4:15 PM	23	70			61	5				34	173	22	388
4:30 PM	15	69			65	5				24	188	17	383
4:45 PM	21	70			54	5				30	222	17	419
5:00 PM	14	101			65	5				21	191	18	415
5:15 PM	13	108			51	3				26	190	20	411
5:30 PM	12	86			48	7				30	178	22	383
5:45 PM	13	80			53	3				33	216	22	420
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	127	647	0	0	458	34	0	0	0	234	1528	154	3182
APPROACH %'s :	16.41%	83.59%	0.00%	0.00%	93.09%	6.91%	#DIV/0!	#DIV/0!	#DIV/0!	12.21%	79.75%	8.04%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Hawthorn St , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_019

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Southbound Approach (Pacific Hwy)

Lanes				
AM	19	139	0	228 AM
NOON	0	0	0	0 NOON
PM	18	217	0	457 PM

Eastbound Approach (W Hawthorn St)

	AM	NOON	PM
	1395	0	845
	0	0	0
	0	0	0
	0	0	0
Lanes	AM	NOON	PM

CONTROL: 0

Westbound Approach

Lanes	AM	NOON	PM
	70	0	82
	1312	0	775
	362	0	110
	0	0	0
	AM	NOON	PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

AM	501	64	158	0 AM
NOON	0	0	0	0 NOON
PM	327	52	375	0 PM
				Lanes

Total Ins & Outs

	North Leg		
	158	228	AM
	0	0	NOON
	235	457	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
1395	0	845		1744	0	967
0	0	0		0	0	0

	South Leg	
AM	501	222
NOON	0	0
PM	327	427

Total Volume Per Leg

North Leg	
386	AM
0	NOON
692	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1395	0	845	1744	0	967

South Leg	
AM	723
NOON	0
PM	754

(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				0									
7:15 AM				4									4
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				0									
8:15 AM				1									1
8:30 AM				1									1
8:45 AM				5									5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	14	0	0	0	0	0	0	0	0	14
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				1									1
4:15 PM				3									3
4:30 PM				2									2
4:45 PM				0									
5:00 PM				3									3
5:15 PM				1									1
5:30 PM				4									4
5:45 PM				2									2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	16	0	0	0	0	0	0	0	0	16
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

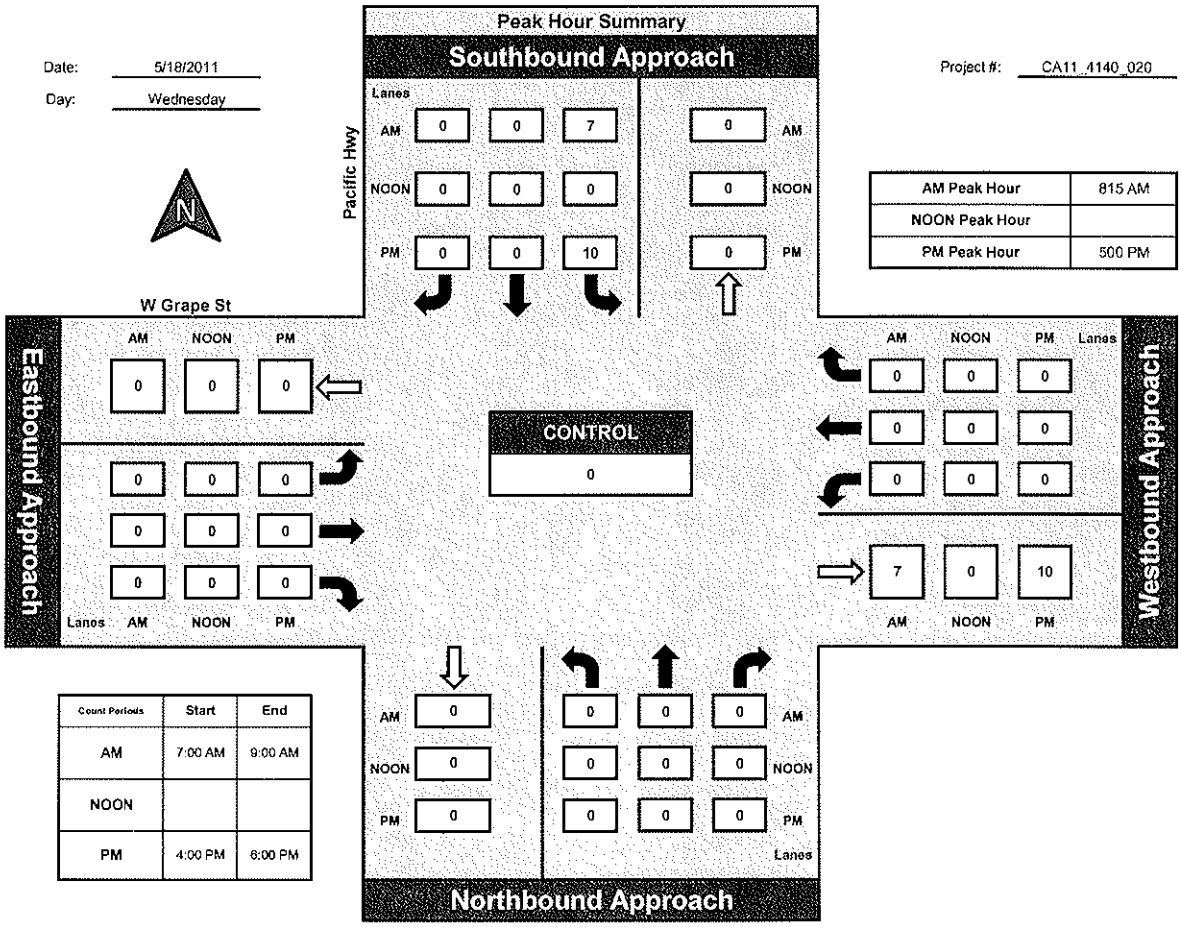
National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

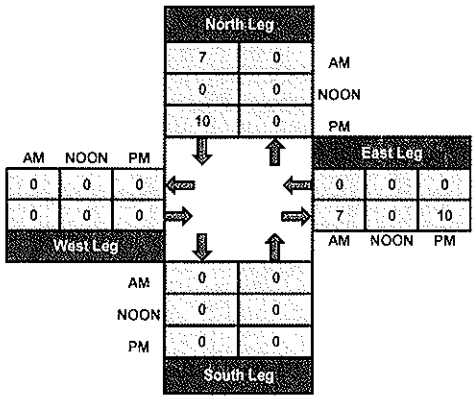
Project #: CA11_4140_020



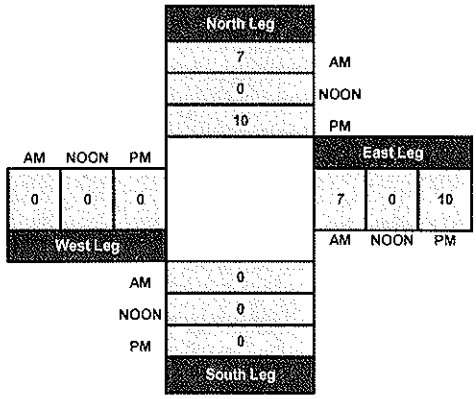
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

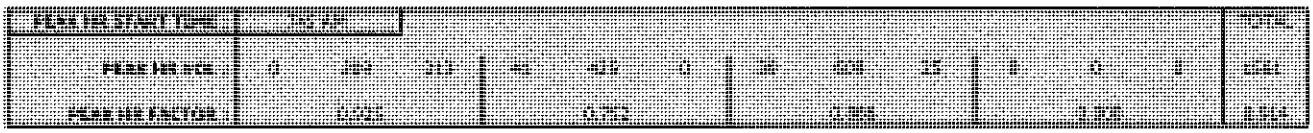
Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		51	41	6	79		15	166	7				365
7:15 AM		50	47	5	92		12	122	3				331
7:30 AM		56	51	11	112		8	137	5				380
7:45 AM		48	66	9	146		14	138	6				427
8:00 AM		55	42	8	107		8	148	8				376
8:15 AM		52	52	11	84		4	155	2				360
8:30 AM		54	53	13	88		13	168	9				398
8:45 AM		65	41	17	100		13	177	9				422

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	431	393	80	808	0	87	1211	49	0	0	0	3059
APPROACH %'s :	0.00%	52.31%	47.69%	9.01%	90.99%	0.00%	6.46%	89.90%	3.64%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		87	95	21	77		7	260	6				553
4:15 PM		95	87	29	76		5	243	9				544
4:30 PM		76	96	23	71		8	297	7				578
4:45 PM		86	79	23	69		6	257	6				526
5:00 PM		112	84	19	73		17	276	5				586
5:15 PM		113	73	17	63		12	311	6				595
5:30 PM		91	70	21	69		6	232	11				500
5:45 PM		85	57	19	69		10	242	10				492
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	745	641	172	567	0	71	2118	60	0	0	0	4374
APPROACH %'s :	0.00%	53.75%	46.25%	23.27%	76.73%	0.00%	3.16%	94.18%	2.67%	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_020

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach

Lanes					
AM	0	425	41	248	AM
NOON	0	0	0	0	NOON
PM	0	276	82	430	PM

Pacific Hwy

W Grape St

Eastbound Approach

Lanes	AM	NOON	PM
	0	0	0
	39	0	43
	609	0	1141
	25	0	24

Westbound Approach

Lanes	AM	NOON	PM
	0	0	0
	0	0	0
	0	0	0
	863	0	1555

CONTROL

0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	450	0	209	213	AM
NOON	0	0	0	0	NOON
PM	300	0	387	332	PM

Total Ins & Outs

	North Leg	
AM	466	248
NOON	0	0
PM	358	430

West Leg	AM	NOON	PM
AM	0	0	0
NOON	673	0	1208
PM			

East Leg	AM	NOON	PM
AM	0	0	0
NOON	863	0	1555
PM			

	South Leg	
AM	450	422
NOON	0	0
PM	300	719

Total Volume Per Leg

	North Leg
AM	714
NOON	0
PM	788

West Leg	AM	NOON	PM
AM	673	0	1208
NOON			
PM			

East Leg	AM	NOON	PM
AM	863	0	1555
NOON			
PM			

	South Leg
AM	872
NOON	0
PM	1019

(57)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		204	28	21	125					34		14	426
7:15 AM		234	55	33	116					38		19	495
7:30 AM		238	57	43	156					42		29	565
7:45 AM		240	74	56	145					40		25	580
8:00 AM		246	49	22	173					38		19	547
8:15 AM		211	59	29	183					59		28	569
8:30 AM		266	62	31	184					60		26	629
8:45 AM		214	67	26	171					51		25	554
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1853	451	261	1253	0	0	0	0	362	0	185	4365
APPROACH %'s :	0.00%	80.43%	19.57%	17.24%	82.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	66.18%	0.00%	33.82%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		296	82	64	304					74		36	856
4:15 PM		304	82	63	301					61		34	845
4:30 PM		295	82	67	319					72		31	866
4:45 PM		285	82	69	328					78		35	877
5:00 PM		275	122	80	316					72		25	890
5:15 PM		298	105	64	334					79		27	907
5:30 PM		256	78	63	302					74		34	807
5:45 PM		238	99	56	328					75		26	822
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2247	732	526	2532	0	0	0	0	585	0	248	6870
APPROACH %'s :	0.00%	75.43%	24.57%	17.20%	82.80%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	70.23%	0.00%	29.77%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and Friars Rd , City of San Diego

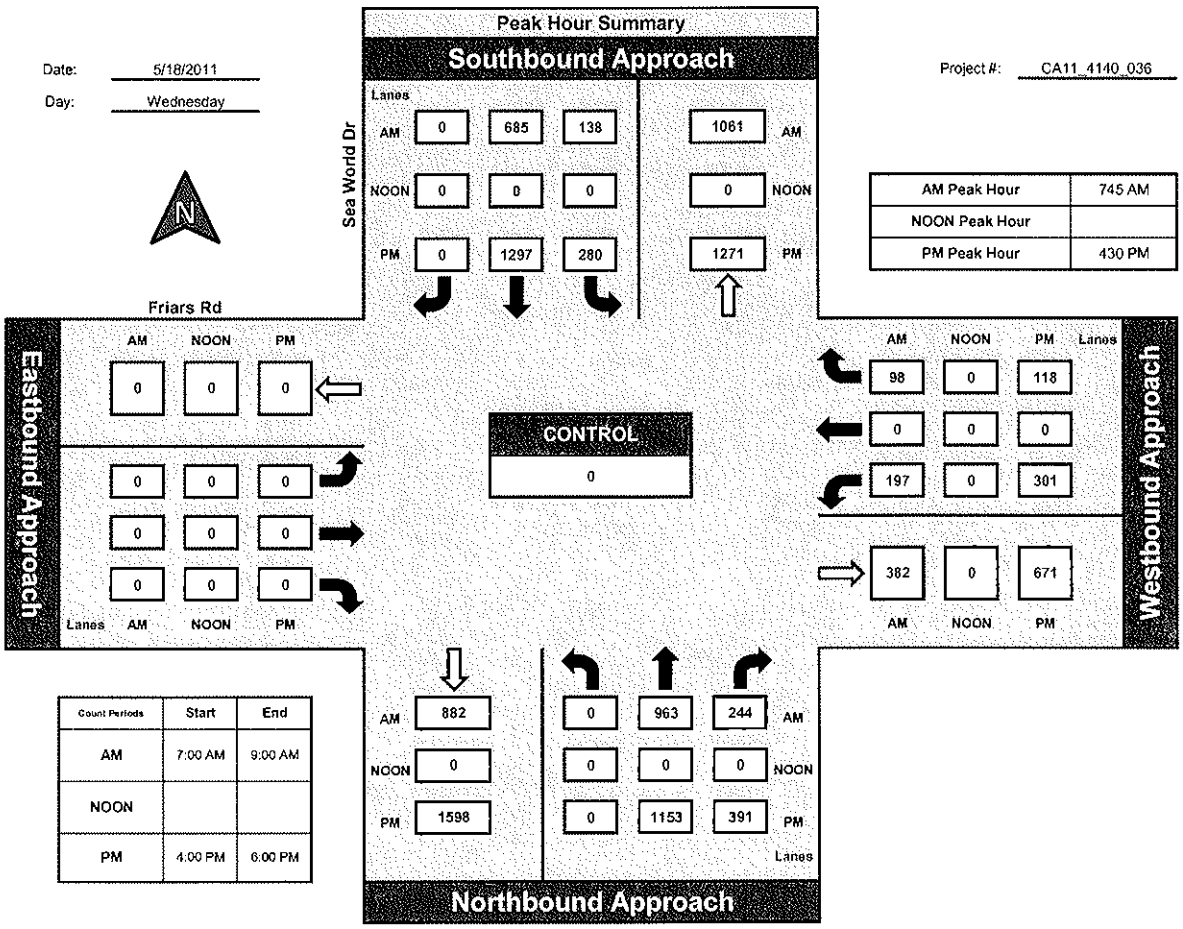
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

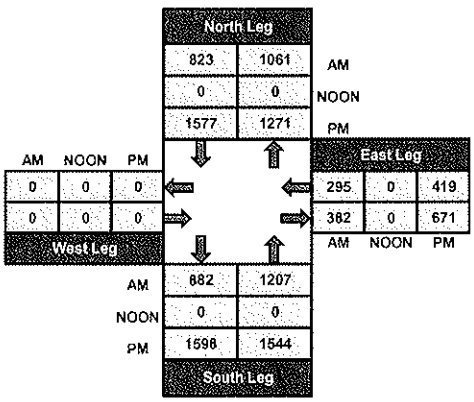
Project #: CA11_4140_036

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

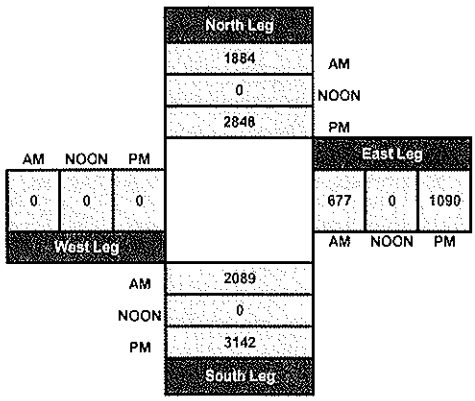


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(58)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		0	32	0	113		198	5	55	45		448
7:15 AM	0		0	48	0	153		226	19	57	50		553
7:30 AM	0		1	67	0	167		238	19	73	55		620
7:45 AM	0		0	75	1	183		258	13	78	57		665
8:00 AM	0		0	78	0	126		226	9	88	85		612
8:15 AM	0		0	68	1	178		235	18	79	57		636
8:30 AM	0		0	77	0	123		282	20	70	92		664
8:45 AM	1		0	68	0	162		249	19	61	67		627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	0	1	513	2	1205	0	1912	122	561	508	0	4825
APPROACH %'s :	50.00%	0.00%	50.00%	29.83%	0.12%	70.06%	0.00%	94.00%	6.00%	52.48%	47.52%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				65	1	257		270	51	76	76	1	797
4:15 PM				86	2	279		268	53	60	81	1	830
4:30 PM				85	0	272		239	47	90	83	1	817
4:45 PM				83	0	295		234	51	77	71	1	812
5:00 PM				76	1	279		275	63	65	69	0	828
5:15 PM				66	0	282		272	57	75	65	0	817
5:30 PM				74	0	282		239	53	53	68	0	769
5:45 PM				62	1	303		168	61	51	63	0	709
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	597	5	2249	0	1965	436	547	576	4	6379
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	20.94%	0.18%	78.88%	0.00%	81.84%	18.16%	48.54%	51.11%	0.35%	

[redacted]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 SB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_038

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach

Sea World Dr

Lanes					
AM	610	2	298	0	AM
NOON	0	0	0	0	NOON
PM	1125	3	330	3	PM

Eastbound Approach

I-5 SB Ramps

Lanes	AM	NOON	PM
	901	0	1429
	0	0	0
	1001	0	1016
	60	0	214

Westbound Approach

Lanes	AM	NOON	PM
	0	0	3
	291	0	304
	315	0	292
	1299	0	1346

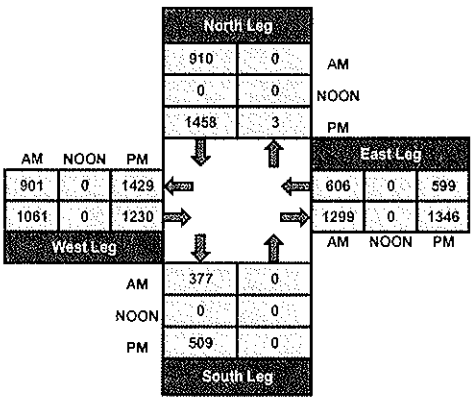
CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

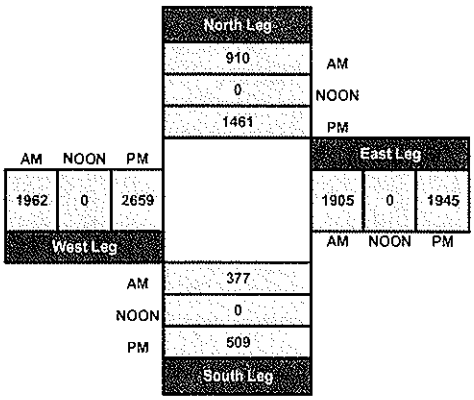
Northbound Approach

Lanes					
AM	377	0	0	0	AM
NOON	0	0	0	0	NOON
PM	509	0	0	0	PM

Total Ins & Outs



Total Volume Per Leg



(59)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

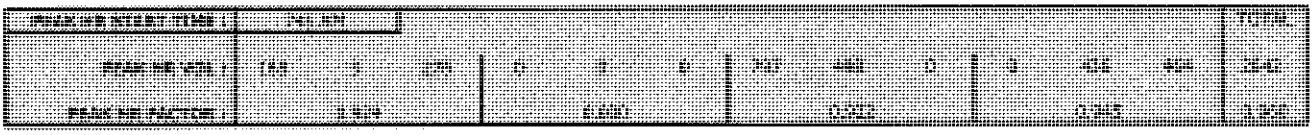
Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	21	0	45				174	50	0		72	77	439
7:15 AM	33	0	49				205	74	0		81	93	535
7:30 AM	31	0	65				193	108	0		92	117	606
7:45 AM	33	0	88				180	157	0		107	120	685
8:00 AM	44	0	67				186	113	0		122	116	648
8:15 AM	35	3	61				202	106	0		108	106	621
8:30 AM	56	0	60				229	122	0		99	122	688
8:45 AM	54	0	71				193	131	1		82	105	637

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	307	3	506	0	0	0	1562	861	1	0	763	856	4859
APPROACH %'s :	37.62%	0.37%	62.01%	#DIV/0!	#DIV/0!	#DIV/0!	64.44%	35.52%	0.04%	0.00%	47.13%	52.87%	



CONTROL :

Intersection Turning Movement

Prepared by:

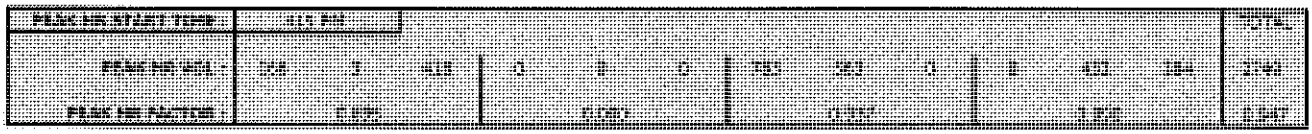
National Data & Surveying Services

Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	43	1	69				195	137			111	102	658
4:15 PM	44	0	120				208	149			100	105	726
4:30 PM	57	0	98				196	125			114	92	682
4:45 PM	31	0	96				183	126			110	96	642
5:00 PM	34	3	104				196	163			108	91	699
5:15 PM	36	0	109				210	127			99	90	671
5:30 PM	38	0	98				197	117			88	67	605
5:45 PM	37	1	69				144	79			70	61	461
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	320	5	763	0	0	0	1529	1023	0	0	800	704	5144
APPROACH %'s :	29.41%	0.46%	70.13%	#DIV/0!	#DIV/0!	#DIV/0!	59.91%	40.09%	0.00%	0.00%	53.19%	46.81%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 NB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_039

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach (Sea World Dr)

Lanes					
AM	0	0	0	1264	AM
NOON	0	0	0	0	NOON
PM	0	0	0	1170	PM

Eastbound Approach (I-5 NB Ramps)

Lanes	AM	NOON	PM
	604	0	598
	797	0	783
	498	0	563
	0	0	0

Westbound Approach

Lanes	AM	NOON	PM
	464	0	384
	436	0	432
	0	0	0
	774	0	981

CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	0	168	3	276	AM
NOON	0	0	0	0	NOON
PM	0	166	3	418	PM

Total Ins & Outs

North Leg		
0	1264	AM
0	0	NOON
0	1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
604	0	598	900	0	816
1295	0	1346	774	0	981

South Leg		
0	447	AM
0	0	NOON
0	587	PM

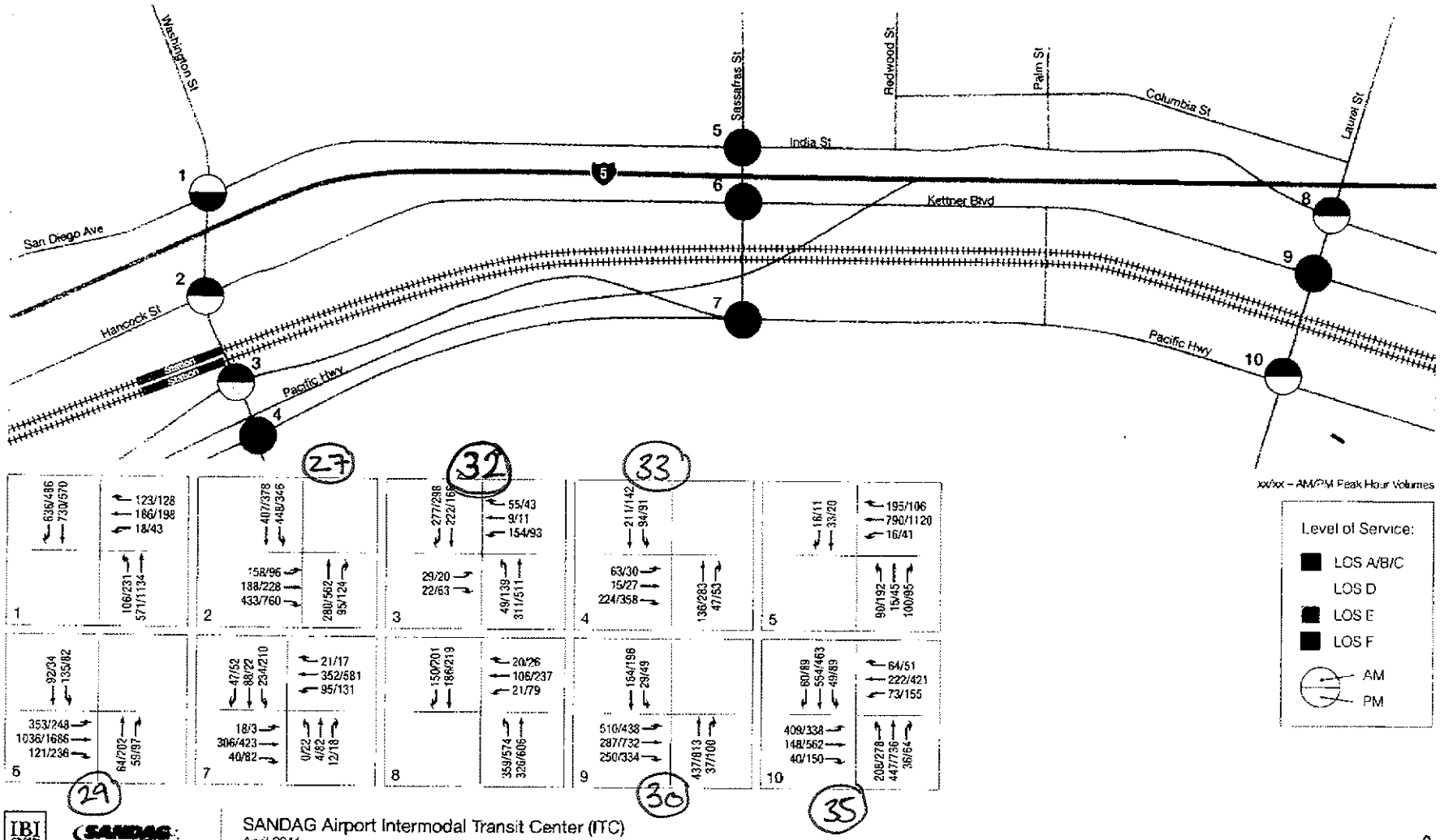
Total Volume Per Leg

North Leg	
1264	AM
0	NOON
1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1899	0	1944	1674	0	1797

South Leg	
447	AM
0	NOON
587	PM

Existing AM/PM Peak Hour Traffic Volumes and Level of Service



Cyclists and Pedestrian Counts

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

2

PROJECT#: 11-4140-001
N/S Street: W Mission Bay Dr
E/W Street: I-8 WB Off-Ramp
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	0	2	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0
7:45 AM	0	0	0	0	1	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	2	2	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	2	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4167-001
N/S Street: West Mission Bay Dr
E/W Street: Channel Way
DATE: 6/9/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0
TOTALS	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

4

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-003
N/S Street: Midway Dr
E/W Street: Sport Arena Blvd/W Point Loma Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	1	2	0	0	0
7:15 AM	4	3	0	1	0	1	1	0
7:30 AM	0	0	0	0	1	0	0	0
7:45 AM	0	0	1	1	2	0	0	1
8:00 AM	1	0	0	0	0	0	0	1
8:15 AM	2	2	3	0	0	1	1	0
8:30 AM	1	1	2	0	1	0	1	1
8:45 AM	0	1	0	0	1	0	0	0
TOTALS	**9**	**7**	**8**	**3**	**7**	**2**	**3**	**3**
	4	4	5	0	2	1	2	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	3
7:30 AM	0	0	0	1	3	0	0	2
7:45 AM	0	0	0	0	1	0	0	3
8:00 AM	0	0	2	2	0	0	0	5
8:15 AM	0	0	2	2	0	0	0	2
8:30 AM	0	0	1	2	0	0	0	6
8:45 AM	0	0	0	0	1	0	0	2
TOTALS	**0**	**1**	**5**	**7**	**5**	**0**	**0**	**23**
	0	0	5	6	1	0	0	15

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	3	0	0	0	0	2
4:15 PM	3	2	1	0	0	2	1	0
4:30 PM	0	2	2	0	0	0	1	0
4:45 PM	0	0	4	0	0	0	3	1
5:00 PM	1	2	2	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	1	2	0	0	0	0	1	1
5:45 PM	0	0	1	0	0	0	2	1
TOTALS	**5**	**9**	**13**	**0**	**0**	**2**	**9**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	3
4:15 PM	1	1	0	0	1	0	1	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	3	1	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	2	0	0	0	0	0
TOTALS	**1**	**5**	**5**	**1**	**1**	**0**	**2**	**4**

5

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-004
N/S Street: Kemper St
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	1
7:15 AM	0	0	1	0	0	1	1	2
7:30 AM	0	0	0	2	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	2	0	0	0	2
8:15 AM	0	0	0	1	0	2	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	0	1	1	5	5	3
TOTALS	**0**	**0**	**2**	**6**	**2**	**8**	**8**	**10**
	0	0	1	4	1	7	6	6

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	1	0	0	0	0
8:45 AM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**4**	**2**	**2**	**0**	**0**	**0**
	0	0	4	2	1	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	5	2	2	2	0	1	2
4:15 PM	0	5	5	5	1	1	1	1
4:30 PM	2	1	7	0	0	0	1	4
4:45 PM	0	4	2	4	3	6	0	1
5:00 PM	2	0	1	2	0	1	2	2
5:15 PM	3	2	2	3	0	2	2	0
5:30 PM	1	0	1	0	0	0	1	2
5:45 PM	0	0	2	2	0	0	1	1
TOTALS	**8**	**17**	**22**	**18**	**6**	**10**	**9**	**13**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**

6

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-005
N/S Street: East Dr
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	1	0	0	0	0
7:15 AM	0	0	1	0	0	0	2	1
7:30 AM	1	0	0	0	0	0	2	3
7:45 AM	0	0	1	0	0	0	0	1
8:00 AM	0	0	2	0	0	1	3	1
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	3	0
8:45 AM	0	0	1	0	0	0	2	1
TOTALS	**1**	**0**	**7**	**1**	**0**	**1**	**12**	**7**
	0	0	3	0	0	1	8	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**1**
	0	0	1	0	0	0	1	0

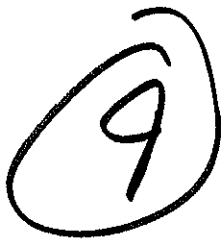
P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	9	3
4:15 PM	1	0	0	0	0	0	2	5
4:30 PM	1	0	0	0	0	0	5	3
4:45 PM	0	0	0	0	0	0	3	4
5:00 PM	1	0	0	0	0	0	7	2
5:15 PM	0	1	0	0	0	0	5	4
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	8	0	0	0	0	0	5	5
TOTALS	**11**	**1**	**0**	**0**	**0**	**1**	**38**	**28**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0
5:45 PM	0	0	1	1	0	0	0	0
TOTALS	**1**	**2**	**4**	**2**	**1**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-006
N/S Street: Midway Dr
E/W Street: Enterprise St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	3	0	0	0	0	0	0	0
TOTALS	**3**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
	3	0	0	0	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	1	1	0	0	0	0	0	0
8:15 AM	1	3	0	0	0	0	0	0
8:30 AM	0	4	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**12**	**0**	**0**	**0**	**0**	**0**	**0**
	2	8	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**3**	**1**	**0**	**0**

10

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-007
N/S Street: Midway Dr
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	2	0	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	0	0	0	0
8:30 AM	1	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**5**	**0**	**0**	**1**	**0**	**0**	**0**
	3	5	0	0	1	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	6	0	0	3	1	0	0
7:15 AM	4	2	0	0	2	2	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	2	3	0	0	0	2	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	3	5	0	0	1	3	0	0
8:30 AM	0	1	0	0	2	0	0	0
8:45 AM	1	2	0	0	1	1	0	0
TOTALS	**12**	**19**	**0**	**0**	**9**	**10**	**0**	**0**
	5	9	0	0	3	5	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	1	0	0	0	0	0	0
4:15 PM	1	2	0	0	1	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	1	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTALS	**7**	**4**	**0**	**0**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	1	0	0
4:15 PM	0	1	0	0	0	1	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	1	3	0	0	1	0	0	0
5:00 PM	2	1	0	0	1	0	0	0
5:15 PM	0	2	0	0	1	0	0	0
5:30 PM	0	1	0	0	1	1	0	0
5:45 PM	1	1	0	0	0	1	0	0
TOTALS	**5**	**10**	**0**	**0**	**4**	**4**	**0**	**0**

11

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-008
N/S Street: Hancock St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	2	0	0
7:15 AM	0	1	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	1	2
7:45 AM	2	2	1	1	0	2	1	2
8:00 AM	0	2	1	1	0	0	1	2
8:15 AM	2	2	2	5	0	1	0	3
8:30 AM	0	2	1	0	0	0	0	3
8:45 AM	0	1	1	3	0	3	2	0
TOTALS	**4**	**11**	**7**	**11**	**1**	**9**	**5**	**13**
	2	7	5	9	0	4	3	8

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0
8:00 AM	0	1	2	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**
	0	1	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	1	1	3	1	0	1
4:15 PM	1	1	1	3	1	2	2	4
4:30 PM	1	4	0	2	1	0	2	2
4:45 PM	3	1	2	1	2	2	2	3
5:00 PM	5	2	0	1	0	1	1	1
5:15 PM	0	2	0	4	1	4	0	5
5:30 PM	1	1	0	2	2	2	2	3
5:45 PM	0	4	1	3	0	1	1	1
TOTALS	**11**	**18**	**5**	**17**	**10**	**13**	**10**	**20**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**3**	**1**	**0**	**0**	**0**	**0**

12

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-009
N/S Street: Kemper St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	2	2	3	0	0	0
7:15 AM	1	0	0	0	1	2	0	0
7:30 AM	0	0	0	1	0	1	0	0
7:45 AM	3	0	1	1	3	2	0	1
8:00 AM	0	0	0	0	1	2	1	0
8:15 AM	2	0	2	1	4	2	0	1
8:30 AM	1	0	2	2	2	0	0	0
8:45 AM	1	1	2	1	2	1	0	1
TOTALS	**8**	**2**	**9**	**8**	**16**	**10**	**1**	**3**
	4	1	6	4	9	S	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	1	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0
7:30 AM	0	2	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	1	0	0
8:15 AM	0	0	2	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	3	0	1	1	0	0
TOTALS	**1**	**5**	**9**	**0**	**2**	**3**	**1**	**1**
	0	0	8	0	1	2	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	4	3	1	0	0	0	0
4:45 PM	1	2	2	2	3	0	1	0
5:00 PM	3	1	1	2	5	1	0	1
5:15 PM	2	0	3	0	0	0	1	0
5:30 PM	2	1	1	2	2	0	0	0
5:45 PM	1	0	0	1	0	0	0	0
TOTALS	**10**	**8**	**11**	**8**	**10**	**2**	**2**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	1	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**3**	**6**	**1**	**0**	**0**	**0**	**0**

13

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-010
N/S Street: Sport Arena Driveway
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	1	1	1	0	0	0
7:45 AM	1	0	0	0	1	0	0	0
8:00 AM	0	0	0	1	0	0	0	0
8:15 AM	1	0	0	2	3	0	0	0
8:30 AM	2	0	0	2	1	0	0	0
8:45 AM	1	0	2	2	1	2	0	0
TOTALS	**5**	**0**	**4**	**8**	**9**	**2**	**0**	**0**
	4	0	2	7	5	2	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	1	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**1**	**4**	**3**	**3**	**0**	**0**	**0**	**0**
	0	3	3	2	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	1	1	0	0	0
4:15 PM	3	1	1	0	0	1	0	0
4:30 PM	4	0	1	1	1	1	0	0
4:45 PM	4	1	0	0	0	2	0	0
5:00 PM	2	5	0	1	0	1	0	0
5:15 PM	1	2	3	1	0	1	0	0
5:30 PM	1	0	2	2	0	0	0	0
5:45 PM	1	0	2	1	1	0	0	0
TOTALS	**17**	**9**	**10**	**7**	**3**	**6**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	2	0	0	0	0	0
4:45 PM	0	0	3	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	3	0	0	0	0	0
5:45 PM	1	1	0	0	0	0	0	0
TOTALS	**1**	**3**	**10**	**0**	**0**	**0**	**0**	**0**

14

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-011
N/S Street: East Dr
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	3	3	0	1	1	2	0	0
7:15 AM	3	2	0	2	0	1	0	0
7:30 AM	2	1	2	0	0	1	0	0
7:45 AM	1	0	2	2	0	0	0	0
8:00 AM	0	2	1	0	1	1	0	0
8:15 AM	4	2	0	1	1	4	0	0
8:30 AM	5	3	3	4	1	4	0	0
8:45 AM	4	1	3	3	4	5	0	0
TOTALS	**22**	**14**	**11**	**13**	**8**	**18**	**0**	**0**
	13	8	7	8	7	14	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	1	0	0	0	0	0
7:15 AM	0	0	1	2	1	1	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	2	2	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	1	1	0	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**3**	**10**	**5**	**2**	**1**	**1**	**0**	**0**
	3	4	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	2	0	0	0	0	0	0
4:15 PM	3	1	3	1	0	0	0	0
4:30 PM	2	2	4	6	1	0	0	0
4:45 PM	1	2	3	2	0	0	0	0
5:00 PM	3	3	1	4	1	0	0	0
5:15 PM	2	5	0	3	0	2	0	0
5:30 PM	4	6	1	2	0	0	0	0
5:45 PM	3	2	0	5	0	0	0	0
TOTALS	**24**	**23**	**12**	**23**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	2	0	0	1	0	0	0	0
4:45 PM	3	1	0	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0
TOTALS	**7**	**1**	**1**	**6**	**0**	**0**	**0**	**0**

17

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-012
N/S Street: Pacific Hwy
E/W Street: Sports Arena Blvd
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	2	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**5**
	0	0	0	0	0	0	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	7
7:15 AM	0	0	0	0	0	0	0	8
7:30 AM	0	0	0	0	0	0	1	3
7:45 AM	0	0	0	0	0	0	1	8
8:00 AM	0	0	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	1	5
8:30 AM	0	0	0	0	0	0	1	9
8:45 AM	0	0	0	0	0	0	0	5
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**51**
	0	0	0	0	0	0	3	28

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**

18

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-013
N/S Street: Kurtz St
E/W Street: Hancock St
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**
	0	0	3	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
	0	0	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

19

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-014
N/S Street: Camino Del Rio W
E/W Street: Kurtz St
DATE: 5/19/2011
CITY: San Diego

DAY: Thursday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	2	0	0	0	0
7:15 AM	0	0	2	2	1	0	0	0	0	0
7:30 AM	0	0	2	3	2	1	1	0	1	1
7:45 AM	0	0	0	3	0	0	1	0	0	1
8:00 AM	0	0	1	3	0	0	0	0	0	0
8:15 AM	0	0	2	3	1	1	0	1	1	0
8:30 AM	0	0	0	1	1	1	1	0	1	0
8:45 AM	0	0	2	1	4	2	0	1	1	1
TOTALS	**0**	**0**	**9**	**21**	**9**	**7**	**3**	**2**	**4**	**3**
	0	0	5	8	6	4	1	2	3	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	2	1	0	0	0	0
8:15 AM	0	0	2	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	1	2	0	0	0	1
TOTALS	**0**	**0**	**8**	**3**	**1**	**0**	**0**	**2**
	0	0	6	3	0	0	0	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	1	5	0	1	0	0	0	0
4:15 PM	0	0	4	6	0	2	0	0	0	0
4:30 PM	0	0	2	2	2	0	1	5	0	0
4:45 PM	0	0	1	3	2	2	0	0	1	1
5:00 PM	0	0	3	3	7	3	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	7	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0
4:45 PM	0	0	2	2	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	2	1	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

21

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-015
N/S Street: Pacific Hwy
E/W Street: Kurtz St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
	0	0	0	0	0	0	0	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	8
7:15 AM	0	0	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	11
8:15 AM	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**51**
	0	0	0	0	0	0	1	27

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

22

PROJECT#: 11-4167-002
N/S Street: Hancock St
E/W Street: Channel Way
DATE: 6/9/2011
DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	1	0
TOTALS	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

25

PROJECT#: 11-4140-021
N/S Street: Hancock St
E/W Street: Old Towne Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
	2	1	0	0	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	2	0	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-022
N/S Street: Hancock St
E/W Street: Witherby St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	0	0	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	0	0	1	0	1	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	1	1	0	0
TOTALS	**0**	**0**	**6**	**1**	**2**	**2**	**0**	**1**
	0	0	6	0	1	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**
	0	0	0	1	0	2	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	2	0
4:30 PM	0	0	1	1	0	0	2	1
4:45 PM	0	0	0	1	0	0	2	0
5:00 PM	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	2	1	1	0	1	4
TOTALS	**0**	**0**	**4**	**3**	**2**	**0**	**9**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	2	0	2	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	2	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

28

PROJECT#: 11-4140-023
N/S Street: Kettner Blvd
E/W Street: Vine St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
	0	0	0	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
	0	0	0	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**

31

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-018
N/S Street: Pacific Hwy
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**
	0	0	0	0	0	0	2	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
	0	0	0	0	0	0	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-016
N/S Street: Taylor St
E/W Street: Morena Blvd
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	1	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	1	0	0
8:30 AM	0	0	0	0	3	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**4**	**2**	**1**	**0**
	0	0	1	0	3	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	1	5
7:30 AM	0	0	1	1	2	0	1	0
7:45 AM	0	0	2	1	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	1	1	0	1	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**5**	**3**	**3**	**0**	**5**	**11**
	0	0	1	1	1	0	1	4

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	1	0	0	1	0
4:45 PM	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	2	0	0	0
5:15 PM	0	0	0	1	1	0	2	2
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**1**	**2**	**4**	**2**	**5**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	1	2	0	1	1
4:30 PM	0	0	1	0	2	0	1	1
4:45 PM	0	0	1	0	2	0	1	0
5:00 PM	0	0	1	1	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	2	3	0	0	1
5:45 PM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**3**	**5**	**12**	**0**	**4**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

37

PROJECT#: 11-4140-033
N/S Street: Old Towne Ave
E/W Street: Moore St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	2	0	0	0	0	2	0	0
8:00 AM	2	1	0	0	0	0	0	0
8:15 AM	2	1	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**6**	**5**	**0**	**0**	**1**	**3**	**0**	**0**
	6	2	0	0	0	3	0	0

0 1.3541667

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
	0	0	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	2	0	0	0
4:15 PM	1	1	0	0	1	1	0	0
4:30 PM	0	1	0	0	2	0	0	0
4:45 PM	0	1	0	0	1	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	1	0	1	0	0	1	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**4**	**5**	**2**	**0**	**6**	**2**	**1**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-027
N/S Street: Twiggs St
E/W Street: Congress St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	2	7	0	0	0	0
7:15 AM	0	1	2	1	0	1	0	0
7:30 AM	1	1	3	1	0	0	0	0
7:45 AM	1	0	2	0	0	0	0	0
8:00 AM	0	0	5	0	0	0	0	0
8:15 AM	0	2	1	1	0	0	0	0
8:30 AM	2	1	9	3	0	0	0	0
8:45 AM	1	2	10	1	0	0	0	0
TOTALS	**6**	**8**	**34**	**14**	**0**	**1**	**0**	**0**
	3	5	25	5	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	2	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0
8:30 AM	0	3	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**3**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	3	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	8	9	7	0	0	1	8
4:15 PM	0	4	15	7	0	2	0	7
4:30 PM	1	2	6	9	5	5	0	2
4:45 PM	4	10	4	9	0	4	0	2
5:00 PM	5	3	16	5	1	1	2	0
5:15 PM	8	9	13	8	2	5	6	4
5:30 PM	7	5	12	4	4	0	2	8
5:45 PM	3	3	10	9	3	6	0	5
TOTALS	**34**	**44**	**85**	**58**	**15**	**23**	**11**	**36**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	2	1	0	0	0	0	0
4:45 PM	0	2	4	0	0	4	0	0
5:00 PM	1	2	0	0	0	0	0	0
5:15 PM	1	1	1	0	0	2	0	0
5:30 PM	1	0	1	0	0	0	0	0
5:45 PM	0	5	0	0	0	0	0	0
TOTALS	**4**	**14**	**8**	**0**	**0**	**6**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

40

PROJECT#: 11-4140-028
N/S Street: Harney St
E/W Street: Congress St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	0	0	0
7:15 AM	0	1	2	2	0	0	1	0
7:30 AM	1	0	2	2	1	1	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	4	0	0	0	0	0
8:15 AM	0	2	2	1	2	0	0	1
8:30 AM	2	1	5	2	0	0	0	0
8:45 AM	3	0	3	1	0	0	1	0
TOTALS	**6**	**4**	**20**	**13**	**3**	**1**	**2**	**1**
	5	3	14	4	2	0	1	1 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0
7:45 AM	0	3	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	2	0	0	0	0	0
8:30 AM	1	3	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	2	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	4	0	2	0	0	6	1
4:15 PM	0	0	6	4	4	3	2	1
4:30 PM	0	2	2	1	0	0	4	2
4:45 PM	2	4	5	3	1	3	4	0
5:00 PM	0	4	3	4	0	0	4	0
5:15 PM	0	0	6	2	0	0	3	2
5:30 PM	3	5	3	5	1	1	2	1
5:45 PM	2	1	3	2	0	0	3	0
TOTALS	**8**	**20**	**28**	**23**	**6**	**7**	**28**	**7**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	0	2	1	0	0	0	0	0
4:45 PM	0	1	3	0	0	0	0	0
5:00 PM	0	2	1	0	0	0	0	0
5:15 PM	0	1	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	3	0	0	0	0	0	0
TOTALS	**0**	**11**	**8**	**0**	**0**	**0**	**0**	**0**

41

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-029
N/S Street: Congress St/Ampudia St
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	2	0	0	1	0	1	0	0	0
7:45 AM	0	0	1	0	2	0	0	1	0	0
8:00 AM	2	0	0	0	3	2	0	0	0	0
8:15 AM	2	1	0	0	1	2	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0
TOTALS	**4**	**3**	**1**	**0**	**8**	**4**	**1**	**3**	**1**	**0**
	4	1	0	0	5	4	0	1	1	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	1	0
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	3	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**2**	**0**	**0**	**2**	**0**
	0	0	3	0	0	0	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	1	2	0	2
4:15 PM	0	0	0	0	3	0	1	4	0	3
4:30 PM	0	1	0	0	4	1	3	5	1	4
4:45 PM	0	0	0	0	3	2	2	3	2	2
5:00 PM	2	4	0	0	3	1	1	0	4	0
5:15 PM	1	0	0	0	2	2	2	0	2	0
5:30 PM	2	1	1	0	3	0	2	3	2	3
5:45 PM	0	2	0	0	0	1	1	2	0	1
TOTALS	**5**	**8**	**1**	**0**	**19**	**7**	**13**	**19**	**11**	**15**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	1	0
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	1	0	1	0	1	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0
TOTALS	**0**	**0**	**7**	**1**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

42

PROJECT#: 11-4140-030
N/S Street: Twiggs St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	3	0	1	0	0	0
7:15 AM	3	6	5	3	1	1	0	0
7:30 AM	4	8	9	5	0	4	0	0
7:45 AM	10	15	13	13	2	0	0	0
8:00 AM	12	22	12	8	5	9	0	0
8:15 AM	15	10	11	7	6	6	0	0
8:30 AM	18	11	9	15	3	11	0	0
8:45 AM	25	21	15	11	8	14	0	0
TOTALS	**88**	**94**	**77**	**62**	**26**	**45**	**0**	**0**
	70	64	47	41	22	40	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	22	26	25	8	5	8	0	0
4:15 PM	12	12	25	29	5	11	0	0
4:30 PM	33	16	22	8	4	11	0	0
4:45 PM	15	26	37	19	11	21	0	0
5:00 PM	25	29	21	16	3	10	0	0
5:15 PM	15	12	29	27	3	11	0	0
5:30 PM	34	13	17	10	4	10	0	0
5:45 PM	19	23	41	29	8	19	0	0
TOTALS	**175**	**157**	**217**	**146**	**43**	**101**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-031
N/S Street: Harney St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

43

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	5	1	2	3	0	1	0
7:15 AM	7	12	9	2	2	2	1	2
7:30 AM	14	8	12	10	10	13	11	6
7:45 AM	14	21	15	17	7	9	10	10
8:00 AM	13	29	14	11	12	10	8	7
8:15 AM	21	18	14	10	10	7	12	4
8:30 AM	18	15	12	19	2	11	2	9
8:45 AM	31	25	13	11	14	16	12	11
TOTALS	**118**	**133**	**90**	**82**	**60**	**68**	**57**	**49**
	83	87	53	51	38	44	34	31

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0
8:30 AM	2	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**4**	**0**	**2**	**2**	**0**	**0**	**0**	**0**
	3	0	2	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	52	28	36	28	17	9	0	9
4:15 PM	48	32	24	17	7	3	5	12
4:30 PM	48	28	24	16	7	10	14	5
4:45 PM	40	25	30	23	13	5	7	2
5:00 PM	30	26	37	25	5	7	15	4
5:15 PM	31	26	26	16	14	6	6	23
5:30 PM	36	39	17	35	7	12	1	16
5:45 PM	46	58	16	33	11	9	7	12
TOTALS	**331**	**262**	**210**	**193**	**81**	**61**	**55**	**83**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	3	1	0	1	0	0	0	0
4:30 PM	3	3	0	3	1	0	0	0
4:45 PM	0	1	2	0	0	0	0	0
5:00 PM	3	0	2	0	2	0	0	0
5:15 PM	0	1	0	2	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0
5:45 PM	0	3	1	0	0	1	0	0
TOTALS	**9**	**10**	**6**	**6**	**3**	**1**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

44

PROJECT#: 11-4140-032
N/S Street: Old Towne Ave
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	2	1	0	0	0	1	0
8:00 AM	0	4	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	1	0	0	1	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**4**	**7**	**4**	**1**	**0**	**0**	**4**	**2**
	0	4	2	1	0	0	3	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**
	0	1	2	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	1	0	0
4:15 PM	0	2	3	2	2	0	0	1
4:30 PM	2	2	2	3	0	1	2	0
4:45 PM	1	0	2	1	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	1	2	1	0	0	0	0	0
5:30 PM	1	4	1	1	0	2	2	3
5:45 PM	2	0	1	1	0	1	0	0
TOTALS	**10**	**10**	**10**	**9**	**2**	**5**	**4**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0
TOTALS	**1**	**10**	**2**	**0**	**0**	**0**	**0**	**1**

45

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-017
N/S Street: Taylor St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	1	1	2	0
7:30 AM	1	0	0	0	1	1	0	0
7:45 AM	1	1	0	0	3	1	0	0
8:00 AM	0	1	0	0	1	2	0	0
8:15 AM	1	0	0	0	2	1	0	0
8:30 AM	0	0	0	0	5	2	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**14**	**8**	**2**	**0**
	1	1	0	0	8	5	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	1
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	1
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**0**	**3**	**0**	**1**	**0**	**2**	**5**
	0	0	2	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	1	2	1	0	0
4:15 PM	1	1	0	1	1	4	0	0
4:30 PM	0	0	0	0	0	3	1	0
4:45 PM	0	0	1	4	2	0	0	1
5:00 PM	0	0	0	1	1	2	2	0
5:15 PM	0	2	0	0	0	4	9	0
5:30 PM	0	0	0	1	0	3	0	0
5:45 PM	1	0	0	2	1	0	4	0
TOTALS	**2**	**4**	**1**	**10**	**7**	**17**	**16**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	1	0
4:30 PM	2	0	0	0	0	0	1	2
4:45 PM	0	0	1	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**2**	**0**	**1**	**0**	**4**	**6**

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PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-034
N/S Street: Twiggs St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	4	2	0	0	2	0	0
7:30 AM	0	1	0	1	0	0	0	0
7:45 AM	1	0	1	1	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0
8:45 AM	0	5	2	2	1	1	0	0
TOTALS	**1**	**12**	**5**	**6**	**1**	**3**	**0**	**0**
	0	7	2	3	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1
7:45 AM	2	0	0	0	1	0	0	0
8:00 AM	1	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**6**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
	3	0	0	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	0
4:45 PM	0	0	2	6	0	18	2	0
5:00 PM	0	0	1	0	1	11	0	0
5:15 PM	0	0	2	0	2	4	0	0
5:30 PM	0	0	1	0	0	0	1	1
5:45 PM	0	0	6	0	6	1	8	0
TOTALS	**0**	**0**	**14**	**6**	**9**	**37**	**11**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

47

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-035
N/S Street: Harney St
E/W Street: Juan St
DATE: 5/18/2011
DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	7	0	0	0	0	1	3
7:15 AM	0	1	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	4
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0
TOTALS	**3**	**8**	**2**	**1**	**0**	**2**	**1**	**7**
	1	1	1	1	0	2	0	4

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**
	0	2	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	3	0	2	2	2
4:15 PM	0	0	2	1	2	0	2	1
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	1	2	0	0	1	0	5	0
5:00 PM	2	4	2	1	3	4	3	0
5:15 PM	3	1	2	4	0	2	2	2
5:30 PM	0	0	0	2	0	1	0	0
5:45 PM	0	2	1	0	2	0	3	4
TOTALS	**7**	**10**	**7**	**11**	**8**	**9**	**19**	**9**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0
TOTALS	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**1**

Table 3.1
Rosecrans Corridor 2-Hour AM Peak Period Pedestrian Counts

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Taylor Street / Congress Street	61	82 (Taylor St.)	29 (Congress St.)	15 (Taylor St.)	187
Rosecrans Street-Taylor Street / Pacific Highway	34 (PCH)	129 (Taylor St.)	21 (PCH)	61 (Rosecrans St.)	245
Rosecrans Street / Jefferson Street	69 (Jefferson St.)	1 (Rosecrans St.)	0 (Jefferson St.)	0 (Rosecrans St.)	70
Rosecrans Street / Moore Street	37 (Moore St.)	4 (Rosecrans St.)	0 (Moore St.)	4 (Rosecrans St.)	45
Rosecrans Street / Hancock Street	30 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	30
Rosecrans Street / Kurtz Street	47 (Kurtz St.)	4 (Rosecrans St.)	21 (Kurtz St.)	2 (Rosecrans St.)	74
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	9 (Sports Arena Blvd.)	9 (Rosecrans St.)	45 (Sports Arena Blvd.)	18 (Rosecrans St.)	100
Rosecrans Street / Midway Drive	18 (Midway Dr.)	14 (Rosecrans St.)	27 (Midway Dr.)	25 (Rosecrans St.)	84
Rosecrans Street / N. Evergreen Street	8 (Evergreen St.)	6 (Rosecrans St.)	5 (Evergreen St.)	0 (Rosecrans St.)	19
Rosecrans Street / Lytton Street	8 (Lytton St.)	0 (Rosecrans St.)	0 (Lytton St.)	3 (Rosecrans St.)	11
Rosecrans Street / Roosevelt Road	0	15 (Rosecrans St.)	11 (Roosevelt Rd.)	2 (Rosecrans St.)	28
Rosecrans Street / Curtis Street	9 (Curtis St.)	0 (Rosecrans St.)	0	0 (Rosecrans St.)	9
Rosecrans Street / Womble Road		82 (Rosecrans St.)	12 (Womble Rd.)	0 (Rosecrans St.)	94
Rosecrans Street / Xenophon Street	17 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	17
Rosecrans Street / Farragut Road-Voltaire Street	4 (Voltaire St.)	5 (Rosecrans St.)	17 (Farragut Rd.)	12 (Rosecrans St.)	38
Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	1 (Laning Rd.)	1 (Rosecrans St.)	2
Rosecrans Street / Oliphant Street	8 (Oliphant St.)	0 (Rosecrans St.)	8	0 (Rosecrans St.)	16
Rosecrans Street / Macualay Street	18 (Macualay St.)	1 (Rosecrans St.)	5 (DW)	3 (Rosecrans St.)	27
Rosecrans Street / Nimitz Boulevard	23 (Nimitz Blvd.)	14 (Rosecrans St.)	24 (Nimitz Blvd.)	19 (Rosecrans St.)	80
Rosecrans Street / Jarvis Street	23 (Jarvis St.)	8 (Rosecrans St.)	9 (Jarvis St.)	11 (Rosecrans St.)	51
Rosecrans Street / N. Harbor Drive-Hugo Street	14 (Hugo St.)	13 (Rosecrans St.)	16 (Harbor Dr.)	13 (Rosecrans St.)	56
Rosecrans Street / Garrison Street	11 (Garrison St.)	0 (Rosecrans St.)	0 (Garrison St.)	0 (Rosecrans St.)	11
Rosecrans Street / Carleton Street	25 (Carleton St.)	16 (Rosecrans St.)	11 (Carleton St.)	13 (Rosecrans St.)	65
Rosecrans Street / Shelter Island Drive-Byron Street	10 (Byron St.)	11 (Rosecrans St.)	14 (Shelter Island Dr.)	13 (Rosecrans St.)	48

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	15 (Canon St.)	23 (Rosecrans St.)	24 (Canon St.)	10 (Rosecrans St.)	72
Rosecrans Street / Talbot Street	10 (Talbot St.)	14 (Rosecrans St.)	5 (Talbot St.)	13 (Rosecrans St.)	42
Camino del Rio W. / Moore Street	1 (Moore St.)	0 (Camino del Rio)	0 (Moore St.)	3 (Camino del Rio)	4
#23 Camino del Rio W. / Hancock Street	0 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	0
#19 Camino del Rio W. / Kurtz Street	0 (Kurtz St.)	0 (Rosecrans St.)	0 (Kurtz St.)	0 (Rosecrans St.)	0
TOTAL	509	451	305	241	1,525

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 4 pedestrians along the northwest leg of the intersection (Camino del Rio) and 15 pedestrians along the south leg (Rosecrans St.).

Table 3.2
Rosecrans Corridor 2-Hour PM Peak Period Pedestrian Counts

	Intersection	West Leg	North Leg	East Leg	South Leg	Total
#38	Taylor Street / Congress Street	46	26 (Taylor St.)	81 (Congress St.)	53 (Taylor St.)	206
#36	Rosecrans Street-Taylor Street / Pacific Highway	23 (PCH)	170 (Taylor St.)	15 (PCH)	27 (Rosecrans St.)	235
	Rosecrans Street / Jefferson Street	86 (Jefferson St.)	0 (Rosecrans St.)	0 (Jefferson St.)	2 (Rosecrans St.)	88
	Rosecrans Street / Moore Street	57 (Moore St.)	7 (Rosecrans St.)	2 (Moore St.)	0 (Rosecrans St.)	66
#24	Rosecrans Street / Hancock Street	66 (Hancock St.)	0 (Rosecrans St.)	145 (Hancock St.)	0 (Rosecrans St.)	211
#20	Rosecrans Street / Kurtz Street	51 (Kurtz St.)	17 (Rosecrans St.)	43 (Kurtz St.)	3 (Rosecrans St.)	114
#15	Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	31 (Sports Arena Blvd.)	10 (Rosecrans St.)	29 (Sports Arena Blvd.)	63 (Rosecrans St.)	156
#7	Rosecrans Street / Midway Drive	48 (Midway Dr.)	40 (Rosecrans St.)	65 (Midway Dr.)	42 (Rosecrans St.)	195
	Rosecrans Street / N. Evergreen Street	11 (Evergreen St.)	11 (Rosecrans St.)	8 (Evergreen St.)	1 (Rosecrans St.)	31
#1	Rosecrans Street / Lytton Street	6 (Lytton St.)	6 (Rosecrans St.)	1 (Lytton St.)	0 (Rosecrans St.)	13
	Rosecrans Street / Roosevelt Road	0	7 (Rosecrans St.)	4 (Roosevelt Rd.)	0 (Rosecrans St.)	11
	Rosecrans Street / Curtis Street	5 (Curtis St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	5
	Rosecrans Street / Womble Road		32 (Rosecrans St.)	7 (Womble Rd.)	0 (Rosecrans St.)	39
	Rosecrans Street / Xenophon Street	6 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	6
	Rosecrans Street / Farragut Road-Voltaire Street	1 (Voltaire St.)	5 (Rosecrans St.)	13 (Farragut Rd.)	20 (Rosecrans St.)	39
#51	Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	3 (Laning Rd.)	0 (Rosecrans St.)	3
	Rosecrans Street / Oliphant Street	34 (Oliphant St.)	0 (Rosecrans St.)	47	0 (Rosecrans St.)	81
	Rosecrans Street / Macualay Street	8 (Macualay St.)	0 (Rosecrans St.)	12 (DW)	1 (Rosecrans St.)	21
#50	Rosecrans Street / Nimitz Boulevard	26 (Nimitz Blvd.)	25 (Rosecrans St.)	26 (Nimitz Blvd.)	41 (Rosecrans St.)	118
	Rosecrans Street / Jarvis Street	19 (Jarvis St.)	2 (Rosecrans St.)	20 (Jarvis St.)	5 (Rosecrans St.)	46
#49	Rosecrans Street / N. Harbor Drive-Hugo Street	4 (Hugo St.)	5 (Rosecrans St.)	3 (Harbor Dr.)	6 (Rosecrans St.)	18
	Rosecrans Street / Garrison Street	34 (Garrison St.)	0 (Rosecrans St.)	47 (Garrison St.)	0 (Rosecrans St.)	81
	Rosecrans Street / Carleton Street	15 (Carleton St.)	22 (Rosecrans St.)	10 (Carleton St.)	11 (Rosecrans St.)	58
	Rosecrans Street / Shelter Island Drive-Byron Street	9 (Byron St.)	8 (Rosecrans St.)	15 (Shelter Island Dr.)	19 (Rosecrans St.)	51

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	11 (Canon St.)	25 (Rosecrans St.)	28 (Canon St.)	11 (Rosecrans St.)	75
Rosecrans Street / Talbot Street	9 (Talbot St.)	20 (Rosecrans St.)	13 (Talbot St.)	19 (Rosecrans St.)	61
Camino del Rio W. / Moore Street	0 (Moore St.)	0 (Camino del Rio)	1 (Moore St.)	0 (Camino del Rio)	1
#23 Camino del Rio W. / Hancock Street	15 (Hancock St.)	20 (Rosecrans St.)	2 (Hancock St.)	1 (Rosecrans St.)	38
#19 Camino del Rio W. / Kurtz Street	15 (Kurtz St.)	20 (Rosecrans St.)	2 (Kurtz St.)	1 (Rosecrans St.)	38
TOTAL	636	478	642	326	2,105

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 9 pedestrians along the northwest leg of the intersection (Camino del Rio) and 14 pedestrians along the south leg (Rosecrans St.).

Table 5.1
Rosecrans Corridor 2-Hour AM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	3/9	0/0 (Taylor St.)	7/0 (Congress St.)	0/0 (Taylor St.)	19
Rosecrans Street - Taylor Street / Pacific Coast Highway	3/10 (PCH)	5/0 (Taylor St.)	7/0 (PCH)	0/5 (Rosecrans St.)	30
Rosecrans Street / Jefferson Street	2/13 (Jefferson St.)	0/0 (Rosecrans St.)	0/0 (Jefferson St.)	0/0 (Rosecrans St.)	15
Rosecrans Street / Moore Street	4/12 (Moore St.)	0/0 (Rosecrans St.)	10/2 (Moore St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Hancock Street	4/12 (Hancock St.)	0/0 (Rosecrans St.)	10/2 (Hancock St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Kurtz Street	1/8 (Kurtz St.)	2/0 (Rosecrans St.)	14/0 (Kurtz St.)	0/1 (Rosecrans St.)	26
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	0/0 (Sports Arena Blvd.)	0/1 (Rosecrans St.)	7/3 (Sports Arena Blvd.)	0/6 (Rosecrans St.)	20
Rosecrans Street / Midway Drive	0/7 (Midway Dr.)	3/1 (Rosecrans St.)	6/3 (Midway Dr.)	2/3 (Rosecrans St.)	25
Rosecrans Street / N. Evergreen Street	0/6 (Evergreen St.)	1/2 (Rosecrans St.)	6/2 (Evergreen St.)	0/0 (Rosecrans St.)	17
Rosecrans Street / Lytton Street	0/5 (Lytton St.)	2/1 (Rosecrans St.)	1/0 (Lytton St.)	0/0 (Rosecrans St.)	9
Rosecrans Street / Roosevelt Road	1/6	0/1 (Rosecrans St.)	7/1 (Roosevelt Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Curtis Street	1/6 (Curtis St.)	3/0 (Rosecrans St.)	0/0	1/3 (Rosecrans St.)	14
Rosecrans Street / Womble Road		2/4 (Rosecrans St.)	9/1 (Womble Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Xenophon Street	0/2 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	2
Rosecrans Street / Farragut Road-Voltaire Street	0/5 (Voltaire St.)	0/0 (Rosecrans St.)	3/0 (Farragut Rd.)	0/0 (Rosecrans St.)	8
Rosecrans Street / Russell Street-Laning Road	0/4 (Russell St.)	5/0 (Rosecrans St.)	17/0 (Laning Rd.)	0/12 (Rosecrans St.)	38
Rosecrans Street / Oliphant Street	0/4 (Oliphant St.)	0/0 (Rosecrans St.)	8/0	0/0 (Rosecrans St.)	12
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	7/1 (DW)	0/0 (Rosecrans St.)	13
Rosecrans Street / Nimitz Boulevard	1/4 (Nimitz Blvd.)	12/0 (Rosecrans St.)	8/1 (Nimitz Blvd.)	0/6 (Rosecrans St.)	32
Rosecrans Street / Jarvis Street	0/13 (Jarvis St.)	0/0 (Rosecrans St.)	5/0 (Jarvis St.)	1/0 (Rosecrans St.)	19
Rosecrans Street / N. Harbor Drive-Hugo Street	0/3 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/1 (Rosecrans St.)	7
Rosecrans Street / Garrison Street	0/4 (Garrison St.)	0/0	8/0 (Garrison St.)	0/0 (Rosecrans St.)	12
Rosecrans Street / Carleton Street	1/3 (Carleton St.)	1/0 (Rosecrans St.)	3/0 (Carleton St.)	1/0 (Rosecrans St.)	9

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/4 *(Byron St.)*	2/1 *(Rosecrans St.)*	2/0 *(Shelter Island Dr.)*	0/0 *(Rosecrans St.)*	9
Rosecrans Street / Canon Street	0/5 *(Canon St.)*	10/0 *(Rosecrans St.)*	2/0 *(Canon St.)*	0/12 *(Rosecrans St.)*	29
Rosecrans Street / Talbot Street	0/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	2/0 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6
Camino del Rio W. / Moore Street	0/6 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	3/0 *(Camino del Rio)*	9
#23 Camino del Rio W. / Hancock Street	0/1 *(Hancock St.)*	2/0 *(Rosecrans St.)*	1/0 *(Hancock St.)*	0/0 *(Rosecrans St.)*	4
#19 Camino del Rio W. / Kurtz Street	0/1 *(Kurtz St.)*	2/0 *(Rosecrans St.)*	1/0 *(Kurtz St.)*	0/0 *(Rosecrans St.)*	4
TOTAL	183	63	170	57	476

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 1 bicyclist southwest bound along the northwest leg of the intersection (Camino del Rio) and 0 west bound and 2 east bound along the south leg (Rosecrans St.).

Table 5.2
Rosecrans Corridor 2-Hour PM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	9/12	4/0 (Taylor St.)	18/2 (Congress St.)	1/1 (Taylor St.)	47
Rosecrans Street-Taylor Street / Pacific Coast Highway	9/12 (PCH)	21/2 (Taylor St.)	15/3 (PCH)	1/9 (Rosecrans St.)	72
Rosecrans Street / Jefferson Street	7/28 (Jefferson St.)	0/0 (Rosecrans St.)	4/1 (Jefferson St.)	0/0 (Rosecrans St.)	40
Rosecrans Street / Moore Street	4/20 (Moore St.)	0/0 (Rosecrans St.)	20/2 (Moore St.)	0/0 (Rosecrans St.)	46
Rosecrans Street / Hancock Street	1/1 (Hancock St.)	0/0 (Rosecrans St.)	20/5 (Hancock St.)	0/0 (Rosecrans St.)	27
Rosecrans Street / Kurtz Street	2/3 (Kurtz St.)	29/1 (Rosecrans St.)	3/0 (Kurtz St.)	3/15 (Rosecrans St.)	56
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	2/3 (Sports Arena Blvd.)	2/2 (Rosecrans St.)	6/4 (Sports Arena Blvd.)	6/13 (Rosecrans St.)	43
Rosecrans Street / Midway Drive	3/7 (Midway Dr.)	5/4 (Rosecrans St.)	8/3 (Midway Dr.)	0/7 (Rosecrans St.)	37
Rosecrans Street / N. Evergreen Street	2/5 (Evergreen St.)	0/2 (Rosecrans St.)	3/1 (Evergreen St.)	0/1 (Rosecrans St.)	14
Rosecrans Street / Lytton Street	0/3 (Lytton St.)	1/0 (Rosecrans St.)	2/0 (Lytton St.)	1/3 (Rosecrans St.)	10
Rosecrans Street / Roosevelt Road	2/1	0/2 (Rosecrans St.)	7/2 (Roosevelt Rd.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Curtis Street	0/1 (Curtis St.)	0/0 (Rosecrans St.)	0/0	0/0 (Rosecrans St.)	1
Rosecrans Street / Womble Road		2/2 (Rosecrans St.)	6/1 (Womble Rd.)	0/0 (Rosecrans St.)	11
Rosecrans Street / Xenophon Street	0/6 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	6
Rosecrans Street / Farragut Road-Voltaire Street	0/9 (Voltaire St.)	0/0 (Rosecrans St.)	10/0 (Farragut Rd.)	0/0 (Rosecrans St.)	19
Rosecrans Street / Russell Street-Laning Road	0/1 (Russell St.)	5/0 (Rosecrans St.)	11/0 (Laning Rd.)	0/20 (Rosecrans St.)	37
Rosecrans Street / Oliphant Street	0/3 (Oliphant St.)	0/0 (Rosecrans St.)	11/0	0/0 (Rosecrans St.)	14
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	6/2 (DW)	0/1 (Rosecrans St.)	14
Rosecrans Street / Nimitz Boulevard	0/2 (Nimitz Blvd.)	12/1 (Rosecrans St.)	6/2 (Nimitz Blvd.)	0/8 (Rosecrans St.)	31
Rosecrans Street / Jarvis Street	0/0 (Jarvis St.)	9/0 (Rosecrans St.)	0/0 (Jarvis St.)	0/1 (Rosecrans St.)	10
Rosecrans Street / N. Harbor Drive-Hugo Street	0/2 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/4 (Rosecrans St.)	9
Rosecrans Street / Garrison Street	0/3 (Garrison St.)	0/0 (Rosecrans St.)	11/0 (Garrison St.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Carleton Street	1/1 (Carleton St.)	1/0 (Rosecrans St.)	5/4 (Carleton St.)	1/0 (Rosecrans St.)	13

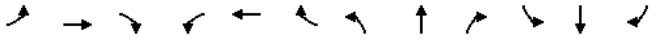
Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/2 *(Byron St.)*	5/0 *(Rosecrans St.)*	4/1 *(Shelter Island Dr.)*	1/0 *(Rosecrans St.)*	13
Rosecrans Street / Canon Street	1/5 *(Canon St.)*	12/0 *(Rosecrans St.)*	8/1 *(Canon St.)*	0/6 *(Rosecrans St.)*	33
Rosecrans Street / Talbot Street	1/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6/1 *(Talbot St.)*	0/0 *(Rosecrans St.)*	12
Camino del Rio W. / Moore Street	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0
Camino del Rio W. / Hancock Street	0/12 *(Hancock St.)*	8/0 *(Rosecrans St.)*	0/0 *(Hancock St.)*	0/2 *(Rosecrans St.)*	22
Camino del Rio W. / Kurtz Street	0/12 *(Kurtz St.)*	8/0 *(Rosecrans St.)*	0/0 *(Kurtz St.)*	0/2 *(Rosecrans St.)*	22
TOTAL	207	140	228	107	687

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:
*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 2 bicyclists southwest bound along the northwest leg of the intersection (Camino del Rio) and 2 bicyclists west bound and 1 bicyclist east bound along the south leg (Rosecrans St.).

Appendix E
Peak Hour Intersection Worksheets – Existing Conditions

Existing AM
1: Rosecrans St. & Lytton St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Volume (vph)	3	1019	308	142	1311	161	349	285	15	546	254	77
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	1084	328	151	1395	171	371	303	16	581	270	82
RTOR Reduction (vph)	0	0	227	0	0	68	0	0	12	0	8	0
Lane Group Flow (vph)	3	1084	101	151	1395	103	371	303	4	581	344	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	0.8	38.9	38.9	7.6	45.6	45.6	17.6	28.6	28.6	37.4	46.6	
Effective Green, g (s)	1.2	40.2	40.2	8.0	47.0	47.0	18.0	29.4	29.4	36.4	47.8	
Actuated g/C Ratio	0.01	0.31	0.31	0.06	0.36	0.36	0.14	0.23	0.23	0.28	0.37	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	16	1572	483	211	1279	542	475	421	353	496	659	
v/s Ratio Prot	0.00	0.21		c0.04	c0.39		c0.11	c0.16		c0.33	0.19	
v/s Ratio Perm			0.06			0.07			0.00			
v/c Ratio	0.19	0.69	0.21	0.72	1.09	0.19	0.78	0.72	0.01	1.17	0.52	
Uniform Delay, d1	63.9	39.4	33.2	59.9	41.5	28.4	54.1	46.5	39.0	46.8	32.2	
Progression Factor	1.00	1.00	1.00	1.39	0.60	0.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	2.5	1.0	5.9	49.6	0.5	7.5	6.1	0.0	96.9	0.3	
Delay (s)	66.0	41.9	34.2	89.4	74.3	15.1	61.6	52.6	39.0	143.7	32.5	
Level of Service	E	D	C	F	E	B	E	D	D	F	C	
Approach Delay (s)		40.2			69.7			57.2			101.7	
Approach LOS		D			E			E			F	

Intersection Summary				
HCM Average Control Delay	65.4	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/5/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	452	1054	306	0	0	428
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	1158	333	0	0	465
RTOR Reduction (vph)	0	540	0	0	0	0
Lane Group Flow (vph)	497	618	333	0	0	465
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	10.7	10.7	13.9			13.9
Effective Green, g (s)	10.7	10.7	13.9			13.9
Actuated g/C Ratio	0.28	0.28	0.36			0.36
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	952	773	1274			671
v/s Ratio Prot	0.14		0.09			c0.25
v/s Ratio Perm		c0.22				
v/c Ratio	0.52	0.80	0.26			0.69
Uniform Delay, d1	11.8	13.0	8.7			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.2	5.4	0.0			2.5
Delay (s)	12.0	18.4	8.8			13.0
Level of Service	B	B	A			B
Approach Delay (s)	16.5		8.8			13.0
Approach LOS	B		A			B

Intersection Summary				
HCM Average Control Delay	14.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	57.0%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
3: Channel Way & W Mission Bay Dr 4/5/2012

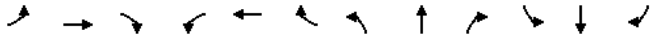


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	34	921	41	0	897
Peak Hour Factor	0.65	0.65	0.92	0.92	0.91	0.91
Hourly flow rate (vph)	0	52	1001	45	0	986
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked						
vC, conflicting volume	1352	359			1046	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1352	359			1046	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	141	636			661	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	52	400	400	245	329	329	329
Volume Left	0	0	0	0	0	0	0
Volume Right	52	0	0	45	0	0	0
cSH	636	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.24	0.24	0.14	0.19	0.19	0.19
Queue Length 95th (ft)	7	0	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	11.2	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	29.7%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
4: Sports Arena & W Mission Bay Dr 4/5/2012

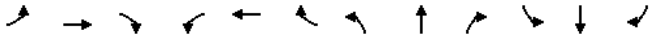


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Volume (vph)	412	277	244	16	125	223	149	327	19	298	428	171
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.79	0.79	0.79	0.94	0.94	0.94
Adj. Flow (vph)	438	295	260	19	147	262	189	414	24	317	455	182
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	357	376	122	19	147	262	189	414	24	249	523	182
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Split		pm+ov	Split		Free	Split		Free	Split		Free
Protected Phases	2	2	3	1	1		3	3		4	4	
Permitted Phases			2			Free			Free			Free
Actuated Green, G (s)	32.2	32.2	54.0	19.4	19.4	119.4	21.8	21.8	119.4	26.3	26.3	119.4
Effective Green, g (s)	33.1	33.1	55.8	20.4	20.4	119.4	22.7	22.7	119.4	27.2	27.2	119.4
Actuated g/C Ratio	0.28	0.28	0.47	0.17	0.17	1.00	0.19	0.19	1.00	0.23	0.23	1.00
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0		3.1	3.1		5.5	5.5	
Lane Grp Cap (vph)	466	485	785	302	605	1563	337	673	1562	367	767	1561
v/s Ratio Prot	0.21	c0.21	0.03	0.01	c0.04		0.11	c0.12		0.15	c0.16	
v/s Ratio Perm			0.05			0.17			0.02			0.12
v/c Ratio	0.77	0.78	0.15	0.06	0.24	0.17	0.56	0.62	0.02	0.68	0.68	0.12
Uniform Delay, d1	39.6	39.7	18.3	41.5	42.8	0.0	43.8	44.3	0.0	42.1	42.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	6.9	0.1	0.4	0.9	0.2	2.2	1.7	0.0	7.0	3.5	0.2
Delay (s)	46.3	46.7	18.4	41.9	43.7	0.2	46.0	46.0	0.0	49.1	45.7	0.2
Level of Service	D	D	B	D	D	A	D	D	A	D	D	A
Approach Delay (s)		39.1			17.0			44.3			37.9	
Approach LOS		D			B			D			D	

Intersection Summary					
HCM Average Control Delay	36.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.61				
Actuated Cycle Length (s)	119.4	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	69.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Existing AM
5: Kemper St & Midway Dr 4/5/2012

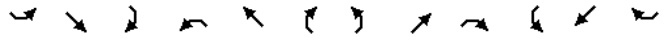


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Volume (vph)	97	95	91	25	89	53	64	309	35	62	390	70
Peak-hour factor, PHF	0.80	0.80	0.80	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Adj. Flow (vph)	121	119	114	27	98	58	73	351	40	67	419	75
RTOR Reduction (vph)	0	0	88	0	0	49	0	5	0	0	0	44
Lane Group Flow (vph)	121	119	26	27	98	9	73	386	0	67	419	31
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	12.9	12.9	17.6	11.9	11.9	11.9	4.7	33.1		4.7	33.1	33.1
Effective Green, g (s)	13.8	13.8	18.9	12.8	12.8	12.8	5.1	34.0		5.1	34.0	34.0
Actuated g/C Ratio	0.17	0.17	0.23	0.16	0.16	0.16	0.06	0.42		0.06	0.42	0.42
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	284	299	437	277	292	244	214	1448		110	1473	659
v/s Ratio Prot	c0.07	0.07	0.00	0.02	c0.05		0.02	0.11		c0.04	c0.12	
v/s Ratio Perm			0.01			0.01						0.02
v/c Ratio	0.43	0.40	0.06	0.10	0.34	0.04	0.34	0.27		0.61	0.28	0.05
Uniform Delay, d1	30.4	30.2	24.5	29.5	30.7	29.2	36.7	15.7		37.3	15.8	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.9	0.0	0.2	0.7	0.1	0.3	0.2		6.4	0.2	0.1
Delay (s)	31.4	31.1	24.5	29.7	31.3	29.3	37.0	15.8		43.7	16.0	14.3
Level of Service	C	C	C	C	C	C	D	B		D	B	B
Approach Delay (s)		29.1			30.4			19.2			19.1	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	22.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
6: Midway Dr & East Dr 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.98			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	3528		1770	3487			1750			1691	
Flt Permitted	0.33	1.00		0.42	1.00			0.76			0.83	
Satd. Flow (perm)	612	3528		791	3487			1382			1430	
Volume (vph)	16	537	10	25	629	68	19	3	5	16	2	15
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.61	0.61	0.61	0.75	0.75	0.75
Adj. Flow (vph)	18	590	11	29	740	80	31	5	8	21	3	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	7	0	0	18	0
Lane Group Flow (vph)	18	600	0	29	813	0	0	37	0	0	26	0
Confl. Peds. (#/hr)			3						1			10
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.4	41.6		42.4	41.6			4.1			4.1	
Effective Green, g (s)	43.7	42.5		43.7	42.5			5.0			5.0	
Actuated g/C Ratio	0.72	0.70		0.72	0.70			0.08			0.08	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	463	2470		589	2441			114			118	
v/s Ratio Prot	0.00	0.17		c0.00	c0.23							
v/s Ratio Perm	0.03			0.03				c0.03			0.02	
v/c Ratio	0.04	0.24		0.05	0.33			0.32			0.22	
Uniform Delay, d1	2.4	3.3		2.4	3.6			26.3			26.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.6			0.3	
Delay (s)	2.4	3.3		2.4	3.6			26.8			26.4	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		3.3			3.6			26.8			26.4	
Approach LOS		A			A			C			C	

Intersection Summary				
HCM Average Control Delay	4.8	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.33			
Actuated Cycle Length (s)	60.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	35.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
7: Rosecrans St. & Midway Dr 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Volume (vph)	156	1299	67	204	1658	246	207	255	152	64	297	169
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	1367	71	215	1745	259	218	268	160	67	313	178
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	125	0	0	144
Lane Group Flow (vph)	164	1433	0	215	1990	0	218	268	35	67	313	34
Confl. Peds. (#/hr)	14		25	25		14	27		14	18		27
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	13.9	50.4		25.8	62.4		11.0	27.6	27.6	7.4	24.0	24.0
Effective Green, g (s)	14.3	51.5		26.2	63.4		11.4	28.5	28.5	7.8	24.9	24.9
Actuated g/C Ratio	0.11	0.40		0.20	0.49		0.09	0.22	0.22	0.06	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	195	1995		692	2421		301	776	337	106	678	290
v/s Ratio Prot	c0.09	0.28		0.06	c0.40		c0.06	0.08		c0.04	c0.09	
v/s Ratio Perm									0.02			0.02
v/c Ratio	0.84	0.72		0.31	0.82		0.72	0.35	0.10	0.63	0.46	0.12
Uniform Delay, d1	56.7	33.1		44.2	28.5		57.8	42.9	40.5	59.7	46.6	43.5
Progression Factor	0.81	0.69		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	1.1		0.1	2.5		7.1	0.1	0.0	8.7	0.2	0.1
Delay (s)	60.2	24.1		44.3	30.9		64.9	43.0	40.6	68.4	46.8	43.5
Level of Service	E	C		D	C		E	D	D	E	D	D
Approach Delay (s)		27.8			32.2			49.8			48.3	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM Average Control Delay	34.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	84.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

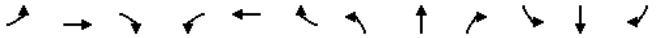
Existing AM
9: Enterprise St & Midway Dr 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	82	502	25	0	492
Peak Hour Factor	0.85	0.85	0.89	0.89	0.85	0.85
Hourly flow rate (vph)	0	96	564	28	0	579
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	870	301			594	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	870	301			594	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			100	
cM capacity (veh/h)	291	692			976	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	96	376	216	289	289
Volume Left	0	0	0	0	0
Volume Right	96	0	28	0	0
cSH	692	1700	1700	1700	1700
Volume to Capacity	0.14	0.22	0.13	0.17	0.17
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	11.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
10: Barnett Ave & Midway Dr 4/5/2012

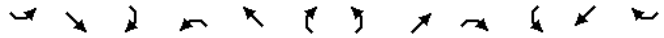


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	784	0	0	1211	527	0	0	0	397	0	95
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.81	0.92	0.81
Adj. Flow (vph)	0	852	0	0	1302	567	0	0	0	490	0	117
RTOR Reduction (vph)	0	0	0	0	0	267	0	0	0	0	0	90
Lane Group Flow (vph)	0	852	0	0	1302	300	0	0	0	490	0	27
Confl. Peds. (#/hr)						8				8		
Turn Type						custom				Prot		custom
Protected Phases		2			2	8				1		
Permitted Phases												1
Actuated Green, G (s)		26.8			26.8	22.3				12.9		12.9
Effective Green, g (s)		26.8			26.8	21.8				12.9		12.9
Actuated g/C Ratio		0.48			0.48	0.39				0.23		0.23
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	3.0				2.5		2.5
Lane Grp Cap (vph)		1688			1688	1081				788		363
v/s Ratio Prot		0.24			c0.37	0.11				c0.14		
v/s Ratio Perm												0.02
v/c Ratio		0.50			0.77	0.28				0.62		0.07
Uniform Delay, d1		10.1			12.2	11.8				19.5		17.0
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		0.2			2.2	0.1				1.3		0.1
Delay (s)		10.4			14.4	11.9				20.8		17.0
Level of Service		B			B	B				C		B
Approach Delay (s)		10.4			13.6			0.0			20.1	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	14.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	52.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
11: Sports Arena & Hancock 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9					4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91					1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes	1.00	1.00		0.78	1.00					1.00		1.00
Frt	1.00	1.00		1.00	0.98					1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)	1770	3532		1384	4970					1770		1583
Flt Permitted	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (perm)	1770	3532		1384	4970					1770		1583
Volume (vph)	104	484	6	1	331	52	0	0	0	18	0	33
Peak-hour factor, PHF	0.96	0.96	0.96	0.80	0.80	0.80	0.92	0.92	0.92	0.63	0.63	0.63
Adj. Flow (vph)	108	504	6	1	414	65	0	0	0	29	0	52
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	0	44
Lane Group Flow (vph)	108	510	0	1	462	0	0	0	0	29	0	8
Confl. Peds. (#/hr)	9		14	14		9			4	4		11
Turn Type	Prot			Prot					Free	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases									Free			
Actuated Green, G (s)	7.1	42.6		0.6	36.1					9.4		9.4
Effective Green, g (s)	7.1	42.6		0.6	36.1					9.4		10.3
Actuated g/C Ratio	0.11	0.64		0.01	0.54					0.14		0.15
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	188	2252		12	2686					249		244
v/s Ratio Prot	c0.06	c0.14		0.00	0.09					c0.02		0.01
v/s Ratio Perm												
v/c Ratio	0.57	0.23		0.08	0.17					0.12		0.03
Uniform Delay, d1	28.4	5.1		32.8	7.8					25.1		24.0
Progression Factor	1.00	1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2	2.6	0.1		1.1	0.1					0.1		0.0
Delay (s)	31.0	5.2		33.9	7.8					25.1		24.0
Level of Service	C	A		C	A					C		C
Approach Delay (s)		9.7			7.9			0.0			24.4	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	10.0	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.24			
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	9.3	
Intersection Capacity Utilization	33.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
12: Kemper Street & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Volume (vph)	62	40	90	46	23	100	68	481	76	117	327	80
Peak-hour factor, PHF	0.80	0.80	0.80	0.78	0.78	0.78	0.94	0.94	0.94	0.83	0.83	0.83
Adj. Flow (vph)	78	50	112	59	29	128	72	512	81	141	394	96
RTOR Reduction (vph)	0	94	0	0	0	117	0	13	0	0	38	0
Lane Group Flow (vph)	78	68	0	59	29	11	72	580	0	141	452	0
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	9.9	9.9		5.0	5.0	5.0	2.8	24.1		8.8	30.1	
Effective Green, g (s)	10.8	10.8		5.9	5.9	5.9	3.2	25.0		9.2	31.0	
Actuated g/C Ratio	0.16	0.16		0.09	0.09	0.09	0.05	0.37		0.14	0.46	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	286	270		156	164	140	164	1296		243	2287	
v/s Ratio Prot	c0.04	0.04		c0.03	0.02		0.02	c0.17		c0.08	0.09	
v/s Ratio Perm						0.01						
v/c Ratio	0.27	0.25		0.38	0.18	0.08	0.44	0.45		0.58	0.20	
Uniform Delay, d1	24.6	24.5		28.8	28.3	28.0	31.0	15.8		27.0	10.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.5		0.6	0.2	0.1	0.7	0.3		2.3	0.0	
Delay (s)	25.1	25.0		29.3	28.4	28.1	31.7	16.1		29.3	10.6	
Level of Service	C	C		C	C	C	C	B		C	B	
Approach Delay (s)		25.0			28.5			17.8			14.8	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	19.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
13: Sports Arena & 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99			0.97		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	3433	3464		1759	5042			1747		1770	1602	
Flt Permitted	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (perm)	3433	3464		1759	5042			1747		1770	1602	
Volume (vph)	72	482	63	20	458	25	26	5	8	25	3	40
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.71	0.71	0.71
Adj. Flow (vph)	77	513	67	24	539	29	35	7	11	35	4	56
RTOR Reduction (vph)	0	5	0	0	3	0	0	10	0	0	54	0
Lane Group Flow (vph)	77	575	0	24	565	0	0	43	0	35	6	0
Confl. Peds. (#/hr)	4		9	9		4			7	7		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Effective Green, g (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Actuated g/C Ratio	0.03	0.58		0.01	0.56			0.09		0.04	0.04	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	118	2021		20	2825			161		69	62	
v/s Ratio Prot	c0.02	c0.17		0.01	0.11			c0.02		c0.02	0.00	
v/s Ratio Perm												
v/c Ratio	0.65	0.28		1.20	0.20			0.27		0.51	0.10	
Uniform Delay, d1	33.2	7.2		34.4	7.6			29.4		32.8	32.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	9.5	0.0		270.0	0.0			0.3		2.1	0.3	
Delay (s)	42.6	7.3		304.4	7.6			29.7		34.9	32.5	
Level of Service	D	A		F	A			C		C	C	
Approach Delay (s)		11.4			19.6			29.7			33.4	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	17.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
14: Sports Arena & East Dr 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (prot)	1770	5037		1770	5024			1770	1542			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (perm)	1770	5037		1770	5024			1770	1542			1611
Volume (vph)	30	524	26	41	544	36	13	0	34	0	0	2
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.78	0.78	0.78	0.50	0.50	0.50
Adj. Flow (vph)	33	576	29	44	579	38	17	0	44	0	0	4
RTOR Reduction (vph)	0	4	0	0	5	0	0	0	39	0	0	0
Lane Group Flow (vph)	33	601	0	44	612	0	0	17	5	0	0	4
Confl. Peds. (#/hr)	21		15	15		21			21	21		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Effective Green, g (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Actuated g/C Ratio	0.02	0.65		0.02	0.65			0.11	0.11			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	27	3288		27	3280			199	174			1611
v/s Ratio Prot	0.02	0.12		c0.02	c0.12							
v/s Ratio Perm								0.01	0.00			0.00
v/c Ratio	1.22	0.18		1.63	0.19			0.09	0.03			0.00
Uniform Delay, d1	31.9	4.4		31.9	4.4			25.8	25.6			0.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	247.9	0.0		404.3	0.0			0.1	0.0			0.0
Delay (s)	279.8	4.5		436.2	4.5			25.8	25.6			0.0
Level of Service	F	A		F	A			C	C			A
Approach Delay (s)		18.7			33.2			25.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary				
HCM Average Control Delay	26.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.20			
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
15: Rosecrans St. & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (prot)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (perm)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Volume (vph)	171	1325	179	0	1887	296	155	154	10	242	215	101
Peak-hour factor, PHF	0.86	0.95	0.90	1.00	0.95	0.90	0.82	0.80	0.62	0.76	0.81	0.92
Adj. Flow (vph)	199	1395	199	0	1986	329	189	192	16	318	265	110
RTOR Reduction (vph)	0	13	0	0	0	0	0	4	0	0	0	87
Lane Group Flow (vph)	199	1581	0	0	1986	329	128	265	0	195	388	23
Confl. Peds. (#/hr)				45			18		9	9		45
Confl. Bikes (#/hr)									1			10
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	11.1	71.0			54.7	125.0	10.1	10.1		26.0	26.0	26.0
Effective Green, g (s)	12.5	73.1			56.6	125.0	10.1	10.1		26.0	26.0	26.0
Actuated g/C Ratio	0.10	0.58			0.45	1.00	0.08	0.08		0.21	0.21	0.21
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	343	2918			2302	1583	130	268		335	656	300
v/s Ratio Prot	0.06	c0.32			c0.39		0.08	c0.08		0.12	c0.12	0.02
v/s Ratio Perm						0.21						
v/c Ratio	0.58	0.54			0.86	0.21	0.98	0.99		0.58	0.59	0.08
Uniform Delay, d1	53.7	15.8			30.7	0.0	57.4	57.4		44.6	44.7	39.8
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.7			4.6	0.3	73.7	52.1		3.1	1.7	0.2
Delay (s)	55.4	16.5			35.3	0.3	131.1	109.5		47.7	46.4	40.0
Level of Service	E	B			D	A	F	F		D	D	D
Approach Delay (s)		20.8			30.3			116.4			45.8	
Approach LOS		C			C			F			D	

Intersection Summary				
HCM Average Control Delay	35.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	88.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	678	568	24
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	737	598	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	979	312	623			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	979	312	623			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	247	684	954			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	368	368	399	225
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	25
cSH	684	1700	1700	1700	1700
Volume to Capacity	0.06	0.22	0.22	0.23	0.13
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Existing AM
19: Kurtz & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1681	1752	1583		5085		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1681	1752	1583		5085		1770	6408	
Volume (vph)	0	0	0	112	78	45	0	1577	0	83	2142	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	122	85	47	0	1660	0	86	2208	0
RTOR Reduction (vph)	0	0	0	0	0	6	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	101	106	41	0	1660	0	86	2208	0
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				22.3	22.3	22.3		84.2		9.0	97.9	
Effective Green, g (s)				23.2	23.2	23.2		85.4		9.4	98.8	
Actuated g/C Ratio				0.18	0.18	0.18		0.66		0.07	0.76	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				300	313	283		3340		128	4870	
v/s Ratio Prot								c0.33		c0.05	0.34	
v/s Ratio Perm				0.06	0.06	0.03						
v/c Ratio				0.34	0.34	0.15		0.50		0.67	0.45	
Uniform Delay, d1				46.7	46.7	45.0		11.4		58.8	5.7	
Progression Factor				1.00	1.00	1.00		1.00		1.10	0.16	
Incremental Delay, d2				0.2	0.2	0.1		0.5		3.9	0.1	
Delay (s)				46.9	46.9	45.1		11.9		68.8	1.0	
Level of Service				D	D	D		B		E	A	
Approach Delay (s)		0.0			46.6			11.9			3.5	
Approach LOS		A			D			B			A	

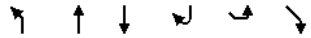
Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
20: Rosecrans St & Kurtz 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3364		1744	3539		1770		1548	1770	1863	
Flt Permitted		1.00		0.44	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3364		804	3539		1770		1548	1770	1863	
Volume (vph)	0	349	84	87	294	0	103	0	142	41	125	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.97	0.97	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	367	88	90	303	0	112	0	154	44	133	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	65	0	0	0
Lane Group Flow (vph)	0	446	0	90	303	0	112	0	89	44	133	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		74.3		85.7	85.7		13.1		74.3	17.0	17.0	
Effective Green, g (s)		75.2		86.6	86.6		13.5		75.2	17.9	17.9	
Actuated g/C Ratio		0.58		0.67	0.67		0.10		0.58	0.14	0.14	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1946		589	2358		184		895	244	257	
v/s Ratio Prot		c0.13		c0.01	0.09		c0.06			0.02	c0.07	
v/s Ratio Perm				0.09					0.06			
v/c Ratio		0.23		0.15	0.13		0.61		0.10	0.18	0.52	
Uniform Delay, d1		13.3		7.9	7.9		55.7		12.3	49.6	52.0	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.82	0.81	
Incremental Delay, d2		0.3		0.0	0.1		5.6		0.2	0.3	1.6	
Delay (s)		13.6		8.0	8.0		61.3		12.5	41.1	44.0	
Level of Service		B		A	A		E		B	D	D	
Approach Delay (s)		13.6			8.0			33.0			43.2	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
21: Pacific Highway & Kurtz St 4/5/2012

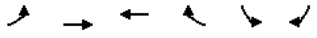


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	294	391	444	7	0	247
Peak Hour Factor	0.91	0.91	0.94	0.94	0.92	0.92
Hourly flow rate (vph)	323	430	472	7	0	268
Pedestrians		2				
Lane Width (ft)		12.0				
Walking Speed (ft/s)		4.0				
Percent Blockage		0				
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	480				1265	163
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	480				1265	163
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	65				100	68
cM capacity (veh/h)	918				104	851

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	323	143	143	143	189	189	102	268
Volume Left	323	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	7	268
cSH	918	1700	1700	1700	1700	1700	1700	851
Volume to Capacity	0.35	0.08	0.08	0.08	0.11	0.11	0.06	0.32
Queue Length 95th (ft)	40	0	0	0	0	0	0	34
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Lane LOS	B							B
Approach Delay (s)	4.7				0.0			11.2
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
22: Hancock & Channel Way 4/5/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	31	125	67	26	4	14
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	38	154	84	32	5	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1157				
pX, platoon unblocked						
vC, conflicting volume	116				331	100
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	116				331	100
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	98
cM capacity (veh/h)	1472				647	956

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	38	154	116	24
Volume Left	38	0	0	5
Volume Right	0	0	32	19
cSH	1472	1700	1700	864
Volume to Capacity	0.03	0.09	0.07	0.03
Queue Length 95th (ft)	2	0	0	2
Control Delay (s)	7.5	0.0	0.0	9.3
Lane LOS	A			A
Approach Delay (s)	1.5		0.0	9.3
Approach LOS				A

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
23: Hancock St & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frt		0.98					1.00	1.00			1.00	0.85
Flt Protected		1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3475					1770	5078			5085	1583
Flt Permitted		1.00					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3475					1770	5078			5085	1583
Volume (vph)	10	184	23	0	0	0	75	1594	15	0	2215	286
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	194	24	0	0	0	82	1752	16	0	2434	314
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	224	0	0	0	0	82	1768	0	0	2434	241
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		30.1					19.8	90.1			65.9	65.9
Effective Green, g (s)		31.0					20.2	91.0			66.8	66.8
Actuated g/C Ratio		0.24					0.16	0.70			0.51	0.51
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		829					275	3555			2613	813
v/s Ratio Prot		c0.06					0.05	c0.35			c0.48	
v/s Ratio Perm												0.15
v/c Ratio		0.27					0.30	0.50			0.93	0.30
Uniform Delay, d1		40.3					48.6	9.0			29.5	18.1
Progression Factor		0.90					0.89	0.52			1.00	1.00
Incremental Delay, d2		0.1					0.2	0.5			7.5	0.9
Delay (s)		36.4					43.3	5.1			37.0	19.1
Level of Service		D					D	A			D	B
Approach Delay (s)		36.4			0.0			6.8			34.9	
Approach LOS		D			A			A			C	

Intersection Summary				
HCM Average Control Delay	24.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
25: Old Town St & Hancock St 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	157	0	0	113	250	489
Peak Hour Factor	0.88	0.88	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	178	0	0	131	275	537

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	178	131	275	537
Volume Left (vph)	178	0	275	0
Volume Right (vph)	0	131	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.0	4.8	5.7	5.2
Degree Utilization, x	0.30	0.18	0.44	0.78
Capacity (veh/h)	566	707	615	674
Control Delay (s)	11.5	8.9	12.0	23.3
Approach Delay (s)	11.5	8.9	19.4	
Approach LOS	B	A	C	

Intersection Summary			
Delay	16.9		
HCM Level of Service	C		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
26: Witherby St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	93	2	35	0	1	1	7	19	3	9	166	471
Peak Hour Factor	0.84	0.84	0.84	0.76	0.76	0.76	0.91	0.91	0.91	0.91	0.72	0.72
Hourly flow rate (vph)	111	2	42	0	1	1	8	21	3	10	231	654

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	155	3	32	240	654
Volume Left (vph)	111	0	8	10	0
Volume Right (vph)	42	1	3	0	654
Hadj (s)	0.02	-0.27	0.02	0.05	-0.67
Departure Headway (s)	5.6	5.6	5.3	5.1	4.3
Degree Utilization, x	0.24	0.00	0.05	0.34	0.79
Capacity (veh/h)	609	592	646	697	816
Control Delay (s)	10.4	8.6	8.5	9.4	20.2
Approach Delay (s)	10.4	8.6	8.5	17.3	
Approach LOS	B	A	A	C	

Intersection Summary				
Delay		16.0		
HCM Level of Service		C		
Intersection Capacity Utilization		45.8%	ICU Level of Service	A
Analysis Period (min)		15		

Existing AM
27: Washington St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	1583
Volume (vph)	0	256	95	448	396	0	0	0	0	158	188	233
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	278	103	487	430	0	0	0	0	172	204	253
RTOR Reduction (vph)	0	0	54	0	0	0	0	0	0	0	0	207
Lane Group Flow (vph)	0	278	49	487	430	0	0	0	0	121	255	46
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		41.8	41.8	18.4	64.6					15.6	15.6	15.6
Effective Green, g (s)		42.7	42.7	18.8	65.5					16.5	16.5	16.5
Actuated g/C Ratio		0.47	0.47	0.21	0.73					0.18	0.18	0.18
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1679	751	717	2576					295	615	290
v/s Ratio Prot		0.08		c0.14	c0.12							
v/s Ratio Perm			0.03							0.08	0.08	0.03
v/c Ratio		0.17	0.07	0.68	0.17					0.41	0.41	0.16
Uniform Delay, d1		13.5	12.8	32.8	3.8					32.5	32.5	30.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	2.0	0.1					0.3	0.2	0.1
Delay (s)		13.7	13.0	34.8	3.9					32.8	32.6	31.0
Level of Service		B	B	C	A					C	C	C
Approach Delay (s)		13.5			20.4			0.0			32.0	
Approach LOS		B			C			A			C	

Intersection Summary						
HCM Average Control Delay		22.8	HCM Level of Service		C	
HCM Volume to Capacity ratio		0.35				
Actuated Cycle Length (s)		90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization		37.6%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

Existing AM
28: Vine St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	10	28	0	0	0	0	0	0	1404	14
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	20	40	0	0	0	0	0	0	1478	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1485	1485	500	513	1493	0	1493			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1485	1485	500	513	1493	0	1493			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	91	100	100	100			100		
cM capacity (veh/h)	86	124	516	427	122	1084	446			1622		

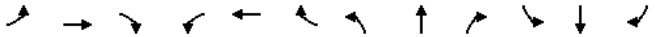
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	20	40	591	591	310
Volume Left	0	40	0	0	0
Volume Right	20	0	0	0	15
cSH	516	427	1700	1700	1700
Volume to Capacity	0.04	0.09	0.35	0.35	0.18
Queue Length 95th (ft)	3	8	0	0	0
Control Delay (s)	12.3	14.3	0.0	0.0	0.0
Lane LOS	B	B			
Approach Delay (s)	12.3	14.3	0.0		
Approach LOS	B	B			

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
29: Sassafras St & Kettner Bl 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3468					1770	4951	
Flt Permitted		1.00	1.00		0.81					0.95	1.00	
Satd. Flow (perm)		1863	1583		2850					1770	4951	
Volume (vph)	0	64	59	135	192	0	0	0	0	353	1036	221
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	70	64	147	209	0	0	0	0	384	1126	240
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	60	0
Lane Group Flow (vph)	0	70	40	0	356	0	0	0	0	384	1306	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		19.0	19.0		19.0					23.0	23.0	
Effective Green, g (s)		21.7	21.7		21.7					25.3	25.3	
Actuated g/C Ratio		0.39	0.39		0.39					0.46	0.46	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		735	625		1124					814	2277	
v/s Ratio Prot		0.04									c0.26	
v/s Ratio Perm			0.03		c0.12					0.22		
v/c Ratio		0.10	0.06		0.32					0.47	0.57	
Uniform Delay, d1		10.5	10.3		11.5					10.2	10.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.3	0.2		0.7					2.0	1.1	
Delay (s)		10.7	10.5		12.3					12.2	11.9	
Level of Service		B	B		B					B	B	
Approach Delay (s)		10.6			12.3			0.0			12.0	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM Average Control Delay	12.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	47.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3510		1770	3539						4657	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3510		1770	3539						4657	1362
Volume (vph)	0	637	37	29	178	0	0	0	0	510	287	250
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	692	40	32	193	0	0	0	0	554	312	272
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	728	0	32	193	0	0	0	0	0	866	90
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		37.3		3.0	43.0						25.0	25.0
Effective Green, g (s)		35.5		3.4	42.9						24.1	26.4
Actuated g/C Ratio		0.44		0.04	0.54						0.30	0.33
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1558		75	1898						1403	449
v/s Ratio Prot		c0.21		c0.02	0.05							
v/s Ratio Perm											0.19	0.07
v/c Ratio		0.47		0.43	0.10						1.09dl	0.20
Uniform Delay, d1		15.6		37.3	9.1						24.0	19.2
Progression Factor		1.00		1.33	0.85						1.00	1.00
Incremental Delay, d2		1.0		1.4	0.1						0.6	0.1
Delay (s)		16.6		50.9	7.9						24.6	19.3
Level of Service		B		D	A						C	B
Approach Delay (s)		16.6			14.0			0.0			23.3	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	20.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.5%	ICU Level of Service	C	
Analysis Period (min)	15			

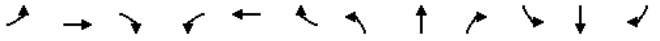
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Existing AM

32: Washington St & Pacific Highway NB Frontage Road

4/5/2012



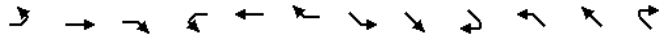
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.94			0.94	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97			0.97	
Satd. Flow (prot)	1770	3539			3539	1583	1610	3106			1702	
Flt Permitted	0.95	1.00			1.00	1.00	0.72	0.78			0.49	
Satd. Flow (perm)	1770	3539			3539	1583	1218	2502			856	
Volume (vph)	49	267	0	0	352	277	154	9	55	29	0	22
Peak-hour factor, PHF	0.95	0.92	0.95	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.83	0.83
Adj. Flow (vph)	52	290	0	0	383	301	164	10	60	32	0	27
RTOR Reduction (vph)	0	0	0	0	0	150	0	48	0	0	25	0
Lane Group Flow (vph)	52	290	0	0	383	151	82	104	0	0	34	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	2.3	48.7			41.5	41.5	14.0	14.0			6.3	
Effective Green, g (s)	2.8	48.7			41.9	41.9	16.4	16.4			6.3	
Actuated g/C Ratio	0.03	0.58			0.50	0.50	0.20	0.20			0.08	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	59	2067			1778	795	240	492			65	
v/s Ratio Prot	c0.03	0.08			c0.11							
v/s Ratio Perm						0.10	c0.07	0.04			c0.04	
v/c Ratio	0.88	0.14			0.22	0.19	0.34	0.21			0.52	
Uniform Delay, d1	40.1	7.9			11.6	11.4	28.9	28.1			37.1	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	76.9	0.0			0.3	0.5	0.3	0.1			3.5	
Delay (s)	117.0	7.9			11.9	11.9	29.2	28.2			40.6	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		24.5			11.9			28.5			40.6	
Approach LOS		C			B			C			D	

Intersection Summary				
HCM Average Control Delay	19.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	83.4	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

33: Washington St & Pacific Highway SB

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.97		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3411		1756	1863		1681	1701	1583			
Flt Permitted		1.00		0.60	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3411		1100	1863		1681	1701	1583			
Volume (vph)	0	186	47	131	397	0	130	15	224	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	202	51	142	432	0	141	16	243	0	0	0
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	69	0	0	0
Lane Group Flow (vph)	0	224	0	142	432	0	76	81	174	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		9.2		22.6	22.6		16.5	16.5	25.7			
Effective Green, g (s)		9.2		22.9	22.9		18.7	18.7	27.9			
Actuated g/C Ratio		0.15		0.36	0.36		0.30	0.30	0.44			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		500		401	679		501	507	804			
v/s Ratio Prot		c0.07			c0.23				c0.06			
v/s Ratio Perm				0.13			0.05	0.05	0.05			
v/c Ratio		0.45		0.35	0.64		0.15	0.16	0.22			
Uniform Delay, d1		24.5		14.6	16.5		16.2	16.3	10.7			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.2		2.4	4.5		0.1	0.1	0.0			
Delay (s)		24.7		17.0	21.0		16.3	16.3	10.8			
Level of Service		C		B	C		B	B	B			
Approach Delay (s)		24.7			20.0			12.9			0.0	
Approach LOS		C			C			B			A	

Intersection Summary				
HCM Average Control Delay	18.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	62.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	41.4%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
34: Sassafras St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.94		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1715		1766	1746		1770	4908		1770	5025	
Flt Permitted	0.65	1.00		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1207	1715		1368	1746		1770	4908		1770	5025	
Volume (vph)	2	16	15	276	93	66	27	231	70	26	258	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	17	16	300	101	72	29	251	76	28	280	21
RTOR Reduction (vph)	0	11	0	0	45	0	0	43	0	0	10	0
Lane Group Flow (vph)	2	22	0	300	128	0	29	284	0	28	291	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	17.2	17.2		16.5	16.5		1.6	22.0		1.3	21.5	
Effective Green, g (s)	17.2	17.2		16.9	16.9		1.6	23.4		1.8	23.6	
Actuated g/C Ratio	0.32	0.32		0.31	0.31		0.03	0.43		0.03	0.43	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	382	542		425	542		52	2111		59	2180	
v/s Ratio Prot		0.01			0.07		c0.02	0.06		0.02	c0.06	
v/s Ratio Perm	0.00			c0.22								
v/c Ratio	0.01	0.04		0.71	0.24		0.56	0.13		0.47	0.13	
Uniform Delay, d1	12.7	12.9		16.6	13.9		26.1	9.4		25.8	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		5.3	0.2		7.2	0.1		5.9	0.1	
Delay (s)	12.7	12.9		21.8	14.2		33.2	9.5		31.7	9.4	
Level of Service	B	B		C	B		C	A		C	A	
Approach Delay (s)		12.9			19.0			11.4			11.3	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM Average Control Delay	14.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	54.4	Sum of lost time (s)	8.3	
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
35: W Laurel St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Volume (vph)	208	401	36	49	319	60	73	222	64	209	148	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	226	436	39	53	347	65	79	241	70	227	161	43
RTOR Reduction (vph)	0	9	0	0	20	0	0	48	0	0	0	38
Lane Group Flow (vph)	226	466	0	53	392	0	79	263	0	227	161	5
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	8.7	20.9		6.6	18.2		6.2	23.7		8.7	26.1	8.7
Effective Green, g (s)	9.1	22.1		7.0	20.0		6.6	24.6		9.1	27.1	9.1
Actuated g/C Ratio	0.12	0.28		0.09	0.25		0.08	0.31		0.12	0.34	0.12
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	204	980		157	875		148	1529		204	1749	178
v/s Ratio Prot	c0.13	c0.13		0.03	0.11		0.04	c0.05		c0.13	0.03	
v/s Ratio Perm												0.00
v/c Ratio	1.11	0.48		0.34	0.45		0.53	0.17		1.11	0.09	0.03
Uniform Delay, d1	34.9	23.5		33.7	24.8		34.6	19.7		34.9	17.5	30.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	94.9	0.5		5.7	0.3		1.8	0.2		96.5	0.1	0.0
Delay (s)	129.7	24.0		39.5	25.1		36.5	19.9		131.4	17.6	30.9
Level of Service	F	C		D	C		D	B		F	B	C
Approach Delay (s)		58.1			26.7			23.3			78.9	
Approach LOS		E			C			C			E	

Intersection Summary				
HCM Average Control Delay	48.4	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.9%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
36: Rosecrans St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Volume (vph)	81	204	90	230	270	91	127	85	161	63	138	44
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	89	224	99	253	297	100	137	91	173	68	150	48
RTOR Reduction (vph)	0	0	47	0	0	54	0	0	132	0	0	38
Lane Group Flow (vph)	89	224	52	253	297	46	137	91	41	68	150	10
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	4.1	35.5	39.7	4.2	35.6	35.6	4.2	16.0	20.2	4.4	16.2	16.2
Effective Green, g (s)	4.5	36.4	41.0	4.6	36.5	36.5	4.6	15.4	18.5	4.8	15.7	15.7
Actuated g/C Ratio	0.06	0.46	0.52	0.06	0.46	0.46	0.06	0.20	0.24	0.06	0.20	0.20
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	101	1637	905	201	864	734	103	693	483	108	706	316
v/s Ratio Prot	0.05	0.06	0.00	c0.07	c0.16		c0.08	0.03	0.00	0.04	c0.04	
v/s Ratio Perm			0.03			0.03			0.02			0.01
v/c Ratio	0.88	0.14	0.06	1.26	0.34	0.06	1.33	0.13	0.08	0.63	0.21	0.03
Uniform Delay, d1	36.8	12.1	9.3	37.1	13.5	11.7	37.1	26.1	23.5	36.1	26.3	25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	52.4	0.2	0.0	150.2	1.1	0.2	200.7	0.1	0.0	8.0	0.3	0.1
Delay (s)	89.2	12.3	9.3	187.2	14.5	11.8	237.7	26.3	23.5	44.1	26.6	25.4
Level of Service	F	B	A	F	B	B	F	C	C	D	C	C
Approach Delay (s)		28.2			81.3			97.3			30.9	
Approach LOS		C			F			F			C	

Intersection Summary				
HCM Average Control Delay	64.6	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	46.1%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
37: Old Town St & Moore St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.91			0.93			0.88	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1807			1699			1703			1638	
Flt Permitted		0.80			1.00			0.97			0.97	
Satd. Flow (perm)		1465			1698			1663			1594	
Volume (vph)	109	219	35	2	105	196	36	161	185	2	1	16
Peak-hour factor, PHF	0.88	0.88	0.88	0.84	0.84	0.84	0.87	0.87	0.87	0.68	0.68	0.68
Adj. Flow (vph)	124	249	40	2	125	233	41	185	213	3	1	24
RTOR Reduction (vph)	0	5	0	0	53	0	0	51	0	0	17	0
Lane Group Flow (vph)	0	408	0	0	307	0	0	388	0	0	11	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		38.3			38.3			17.9			17.9	
Effective Green, g (s)		39.2			39.2			18.8			18.8	
Actuated g/C Ratio		0.59			0.59			0.28			0.28	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		870			1009			474			454	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.18			c0.23			0.01	
v/c Ratio		0.47			0.30			0.82			0.02	
Uniform Delay, d1		7.5			6.6			22.0			17.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.8			10.0			0.0	
Delay (s)		7.7			7.4			32.0			17.0	
Level of Service		A			A			C			B	
Approach Delay (s)		7.7			7.4			32.0			17.0	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	75.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
38: Taylor St & Congress St 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4974		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4974		1770	3539	1770	1583
Volume (vph)	376	52	124	517	74	84
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.86	0.86
Adj. Flow (vph)	409	57	141	588	86	98
RTOR Reduction (vph)	21	0	0	0	0	77
Lane Group Flow (vph)	445	0	141	588	86	21
Confl. Peds. (#/hr)		7	7		30	15
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.8		5.9	40.1	12.5	12.5
Effective Green, g (s)	31.7		6.3	40.1	13.4	13.4
Actuated g/C Ratio	0.51		0.10	0.64	0.21	0.21
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2527		179	2274	380	340
v/s Ratio Prot	0.09		c0.08	c0.17	c0.05	0.01
v/s Ratio Perm						
v/c Ratio	0.18		0.79	0.26	0.23	0.06
Uniform Delay, d1	8.3		27.4	4.8	20.2	19.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2		18.7	0.3	0.1	0.0
Delay (s)	8.4		46.1	5.1	20.3	19.5
Level of Service	A		D	A	C	B
Approach Delay (s)	8.4			13.0	19.9	
Approach LOS	A			B	B	

Intersection Summary				
HCM Average Control Delay	12.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

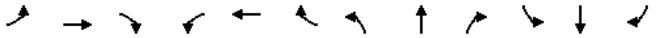
Existing AM
39: Twiggs St & Congress St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	0	1	22	0	25	5	122	7	20	91	1
Peak Hour Factor	0.63	0.63	0.63	0.73	0.73	0.73	0.88	0.88	0.88	0.72	0.72	0.72
Hourly flow rate (vph)	6	0	2	30	0	34	6	139	8	28	126	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	8	64	152	156
Volume Left (vph)	6	30	6	28
Volume Right (vph)	2	34	8	1
Hadj (s)	0.07	-0.19	0.01	0.06
Departure Headway (s)	4.7	4.4	4.2	4.3
Degree Utilization, x	0.01	0.08	0.18	0.19
Capacity (veh/h)	697	755	823	819
Control Delay (s)	7.8	7.8	8.2	8.3
Approach Delay (s)	7.8	7.8	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
HCM Level of Service	A			
Intersection Capacity Utilization	24.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
40: Harney St & Congress St 4/5/2012

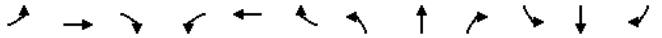


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	2	3	10	14	5	5	116	8	5	91	18
Peak Hour Factor	0.54	0.54	0.54	0.81	0.81	0.81	0.85	0.85	0.85	0.71	0.71	0.71
Hourly flow rate (vph)	24	4	6	12	17	6	6	136	9	7	128	25

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	33	36	152	161
Volume Left (vph)	24	12	6	7
Volume Right (vph)	6	6	9	25
Hadj (s)	0.08	0.00	0.00	-0.05
Departure Headway (s)	4.7	4.6	4.2	4.2
Degree Utilization, x	0.04	0.05	0.18	0.19
Capacity (veh/h)	704	717	824	842
Control Delay (s)	7.9	7.9	8.2	8.1
Approach Delay (s)	7.9	7.9	8.2	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.1		
HCM Level of Service		A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
41: Ampudia St & Congress St 4/5/2012

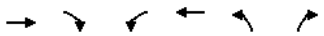


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	10	9	90	8	8	15	128	223	0	67	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	2	11	10	145	13	13	16	138	240	0	75	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								376				
pX, platoon unblocked												
vC, conflicting volume	273	497	78	271	258	152	80			386		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273	497	78	271	258	152	80			386		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	78	98	99	99			100		
cM capacity (veh/h)	646	465	981	648	633	884	1516			1163		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	23	171	154	240	78
Volume Left	2	145	16	0	0
Volume Right	10	13	0	240	2
cSH	622	660	1516	1700	1163
Volume to Capacity	0.04	0.26	0.01	0.14	0.00
Queue Length 95th (ft)	3	26	1	0	0
Control Delay (s)	11.0	12.3	0.9	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.0	12.3	0.3		0.0
Approach LOS	B	B			

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization	33.6%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
42: Twiggs St & San Diego Ave 4/5/2012

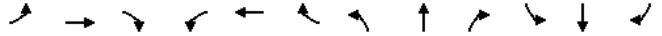


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	18	9	29	29	18	124
Peak Hour Factor	0.58	0.58	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	31	16	41	41	22	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	47	82	175
Volume Left (vph)	0	41	22
Volume Right (vph)	16	0	153
Hadj (s)	-0.17	0.13	-0.46
Departure Headway (s)	4.2	4.4	3.7
Degree Utilization, x	0.05	0.10	0.18
Capacity (veh/h)	821	779	931
Control Delay (s)	7.4	7.9	7.5
Approach Delay (s)	7.4	7.9	7.5
Approach LOS	A	A	A

Intersection Summary			
Delay		7.6	
HCM Level of Service		A	
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
43: Harney St & San Diego Ave 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	5	7	3	37	18	12	3	125	83	3	27	8
Peak Hour Factor	0.69	0.69	0.69	0.80	0.80	0.80	0.89	0.89	0.89	0.73	0.73	0.73
Hourly flow rate (vph)	7	10	4	46	22	15	3	140	93	4	37	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	22	84	237	52
Volume Left (vph)	7	46	3	4
Volume Right (vph)	4	15	93	11
Hadj (s)	-0.02	0.04	-0.20	-0.08
Departure Headway (s)	4.6	4.6	4.0	4.3
Degree Utilization, x	0.03	0.11	0.26	0.06
Capacity (veh/h)	718	731	871	792
Control Delay (s)	7.7	8.1	8.4	7.6
Approach Delay (s)	7.7	8.1	8.4	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
44: San Diego Ave & Old Town St 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.91			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1764	1850		1763	1668			1763			1819	
Flt Permitted	0.68	1.00		0.63	1.00			0.79			1.00	
Satd. Flow (perm)	1265	1850		1164	1668			1438			1819	
Volume (vph)	218	159	6	9	40	63	254	87	65	0	22	4
Peak-hour factor, PHF	0.79	0.79	0.79	0.87	0.87	0.87	0.78	0.78	0.78	0.81	0.81	0.81
Adj. Flow (vph)	276	201	8	10	46	72	326	112	83	0	27	5
RTOR Reduction (vph)	0	2	0	0	41	0	0	14	0	0	3	0
Lane Group Flow (vph)	276	207	0	10	78	0	0	507	0	0	29	0
Confl. Peds. (#/hr)	3		4	4		3	5					5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Effective Green, g (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Actuated g/C Ratio	0.44	0.44		0.44	0.44			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	4.4	4.4		2.1	2.1			2.0			2.0	
Lane Grp Cap (vph)	553	809		509	730			577			730	
v/s Ratio Prot		0.11			0.05						0.02	
v/s Ratio Perm	c0.22			0.01				c0.35				
v/c Ratio	0.50	0.26		0.02	0.11			0.88			0.04	
Uniform Delay, d1	10.0	8.8		7.9	8.2			13.7			9.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	3.2	0.8		0.1	0.3			13.8			0.0	
Delay (s)	13.2	9.6		8.0	8.5			27.6			9.0	
Level of Service	B	A		A	A			C			A	
Approach Delay (s)		11.7			8.5			27.6			9.0	
Approach LOS		B			A			C			A	

Intersection Summary				
HCM Average Control Delay	18.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	54.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

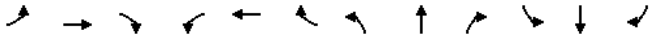
Existing AM
45: Taylor St & 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.90			0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1769	3499		1770	3467			1623			1632	
Flt Permitted	0.39	1.00		0.38	1.00			0.92			0.94	
Satd. Flow (perm)	728	3499		716	3467			1511			1535	
Volume (vph)	33	395	32	98	563	75	62	4	229	2	0	16
Peak-hour factor, PHF	0.78	0.77	0.77	0.93	0.93	0.93	0.82	0.82	0.82	0.75	0.75	0.75
Adj. Flow (vph)	42	513	42	105	605	81	76	5	279	3	0	21
RTOR Reduction (vph)	0	6	0	0	11	0	0	222	0	0	17	0
Lane Group Flow (vph)	42	549	0	105	675	0	0	138	0	0	7	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	29.7	27.9		35.2	30.7			10.9			10.9	
Effective Green, g (s)	31.1	28.9		36.5	31.6			11.8			11.8	
Actuated g/C Ratio	0.54	0.50		0.63	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	433	1756		543	1902			310			314	
v/s Ratio Prot	0.00	0.16		c0.02	c0.19							
v/s Ratio Perm	0.05			0.11				c0.09			0.00	
v/c Ratio	0.10	0.31		0.19	0.35			0.45			0.02	
Uniform Delay, d1	6.2	8.5		4.3	7.3			20.0			18.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.5		0.1	0.5			0.4			0.0	
Delay (s)	6.3	8.9		4.4	7.8			20.4			18.3	
Level of Service	A	A		A	A			C			B	
Approach Delay (s)		8.8			7.3			20.4			18.3	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	10.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
46: Twiggs St & Juan St 4/5/2012

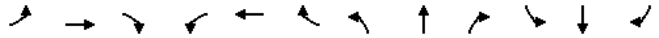


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	54	5	6	2	3	1	5	130	5	30	92	54
Peak Hour Factor	0.60	0.60	0.60	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77
Hourly flow rate (vph)	90	8	10	3	4	1	7	171	7	39	119	70

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	8	184	229
Volume Left (vph)	90	3	7	39
Volume Right (vph)	10	1	7	70
Hadj (s)	0.14	0.00	0.02	-0.12
Departure Headway (s)	5.0	5.0	4.5	4.3
Degree Utilization, x	0.15	0.01	0.23	0.27
Capacity (veh/h)	665	645	774	803
Control Delay (s)	8.9	8.0	8.8	8.9
Approach Delay (s)	8.9	8.0	8.8	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.8		
HCM Level of Service		A		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
47: Harney St & Juan St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	26	9	26	0	0	5	41	109	0	13	54	33
Peak Hour Factor	0.93	0.93	0.93	0.42	0.42	0.42	0.71	0.71	0.71	0.77	0.77	0.77
Hourly flow rate (vph)	28	10	28	0	0	12	58	154	0	17	70	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	12	211	130
Volume Left (vph)	28	0	58	17
Volume Right (vph)	28	12	0	43
Hadj (s)	-0.14	-0.57	0.09	-0.14
Departure Headway (s)	4.5	4.2	4.3	4.2
Degree Utilization, x	0.08	0.01	0.25	0.15
Capacity (veh/h)	730	780	814	829
Control Delay (s)	7.9	7.2	8.8	7.9
Approach Delay (s)	7.9	7.2	8.8	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.3		
HCM Level of Service		A		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
48: Taylor St & Morena Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95			0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00			1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Frt	1.00	1.00			0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3528			3397				1590	1681	1698	1583
Flt Permitted	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3528			3397				1590	1681	1698	1583
Volume (vph)	368	253	5	0	522	192	0	0	4	59	5	214
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.50	0.50	0.50	0.74	0.74	0.74
Adj. Flow (vph)	460	316	6	0	580	213	0	0	8	80	7	289
RTOR Reduction (vph)	0	1	0	0	42	0	0	0	0	0	0	190
Lane Group Flow (vph)	460	321	0	0	751	0	0	0	8	42	45	99
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	7.7	35.5			23.4				57.6	11.9	11.9	11.9
Effective Green, g (s)	8.1	36.4			24.3				57.6	13.2	13.2	13.2
Actuated g/C Ratio	0.14	0.63			0.42				1.00	0.23	0.23	0.23
Clearance Time (s)	4.4	4.9			4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3			3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	483	2230			1433				1590	385	389	363
v/s Ratio Prot	c0.13	0.09			c0.22					0.02	0.03	
v/s Ratio Perm									0.01			c0.06
v/c Ratio	0.95	0.14			0.52				0.01	0.11	0.12	0.27
Uniform Delay, d1	24.6	4.3			12.4				0.0	17.6	17.6	18.2
Progression Factor	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	28.9	0.1			1.4				0.0	0.2	0.2	0.7
Delay (s)	53.4	4.4			13.7				0.0	17.8	17.8	18.9
Level of Service	D	A			B				A	B	B	B
Approach Delay (s)		33.3			13.7			0.0			18.7	
Approach LOS		C			B			A			B	

Intersection Summary				
HCM Average Control Delay	22.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
49: Rosecrans St. & Hugo St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.99		1.00	1.00		1.00	0.89			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1678	3382		1671	3434		1633	1515			1675	
Flt Permitted	0.95	1.00		0.95	1.00		0.68	1.00			0.80	
Satd. Flow (perm)	1678	3382		1671	3434		1175	1515			1381	
Volume (vph)	6	679	66	24	1355	12	217	20	58	56	32	8
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	6	730	71	26	1457	13	233	22	62	60	34	9
RTOR Reduction (vph)	0	6	0	0	0	0	0	47	0	0	3	0
Lane Group Flow (vph)	6	795	0	26	1470	0	233	37	0	0	100	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.2	69.8		4.3	72.9		27.7	27.7			27.7	
Effective Green, g (s)	1.6	70.7		4.7	73.8		28.6	28.6			28.6	
Actuated g/C Ratio	0.01	0.61		0.04	0.64		0.25	0.25			0.25	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	23	2061		68	2185		290	374			340	
v/s Ratio Prot	0.00	0.24		c0.02	c0.43			0.02				
v/s Ratio Perm							c0.20				0.07	
v/c Ratio	0.26	0.39		0.38	0.67		0.80	0.10			0.29	
Uniform Delay, d1	56.6	11.6		54.2	13.4		41.1	33.8			35.5	
Progression Factor	1.00	1.00		1.38	0.37		1.00	1.00			1.00	
Incremental Delay, d2	2.2	0.5		0.7	0.9		14.0	0.0			0.2	
Delay (s)	58.8	12.1		75.7	5.9		55.1	33.8			35.7	
Level of Service	E	B		E	A		E	C			D	
Approach Delay (s)		12.5			7.1			49.4			35.7	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	14.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
50: Rosecrans St. & Lowell St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Volume (vph)	140	612	23	110	1192	29	33	103	80	233	341	215
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	644	24	116	1255	31	35	108	84	245	359	226
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	56	0	87	0
Lane Group Flow (vph)	147	666	0	116	1285	0	35	108	28	245	498	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	11.2	44.5		11.6	44.4		3.7	21.4	33.0	19.8	37.6	
Effective Green, g (s)	11.6	45.4		12.0	45.8		4.1	22.4	34.4	20.2	38.5	
Actuated g/C Ratio	0.10	0.39		0.10	0.39		0.04	0.19	0.30	0.17	0.33	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	177	1375		183	1391		63	683	458	308	1087	
v/s Ratio Prot	c0.08	0.19		0.07	c0.36		c0.02	0.03	0.01	c0.14	c0.15	
v/s Ratio Perm									0.01			
v/c Ratio	0.83	0.48		0.63	0.92		0.56	0.16	0.06	0.80	0.46	
Uniform Delay, d1	51.2	26.5		49.9	33.4		55.1	39.0	29.2	45.9	30.5	
Progression Factor	0.87	1.52		1.23	0.82		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.8	1.2		4.5	10.4		5.9	0.1	0.0	12.4	0.2	
Delay (s)	69.6	41.3		66.1	37.7		61.0	39.1	29.2	58.3	30.8	
Level of Service	E	D		E	D		E	D	C	E	C	
Approach Delay (s)		46.4			40.0			38.8			38.9	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	41.2	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	79.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
51: Rosecrans St. & Laning Rd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected		1.00		0.95	1.00			0.96	1.00		0.96	
Satd. Flow (prot)		5021		1770	3539			1778	1552		1747	
Flt Permitted		1.00		0.95	1.00			0.74	1.00		0.73	
Satd. Flow (perm)		5021		1770	3539			1377	1552		1329	
Volume (vph)	0	947	70	303	1318	1	54	4	132	55	1	8
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	76	329	1433	1	59	4	143	60	1	9
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	118	0	5	0
Lane Group Flow (vph)	0	1100	0	329	1434	0	0	63	25	0	65	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		57.5		24.8	86.7			19.1	19.1		19.1	
Effective Green, g (s)		58.8		25.2	88.0			20.0	20.0		20.0	
Actuated g/C Ratio		0.51		0.22	0.76			0.17	0.17		0.17	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		2545		385	2685			237	268		229	
v/s Ratio Prot		0.22		c0.19	c0.41							
v/s Ratio Perm								0.05	0.02		c0.05	
v/c Ratio		0.43		0.85	0.53			0.27	0.09		0.28	
Uniform Delay, d1		18.1		43.6	5.7			41.6	40.4		41.8	
Progression Factor		0.40		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		16.1	0.8			0.2	0.1		0.2	
Delay (s)		7.7		59.7	6.4			41.9	40.4		42.0	
Level of Service		A		E	A			D	D		D	
Approach Delay (s)		7.7			16.4			40.9			42.0	
Approach LOS		A			B			D			D	

Intersection Summary				
HCM Average Control Delay	15.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	60.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
52: Hawthorne St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.97	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5058						4892	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5058						4892	
Volume (vph)	0	0	0	168	1696	0	0	0	0	0	218	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	179	1804	0	0	0	0	0	303	86
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	0	0	0	1974	0	0	0	0	0	380	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3546						1027	
v/s Ratio Prot											c0.08	
v/s Ratio Perm					0.39							
v/c Ratio					0.56						0.37	
Uniform Delay, d1					6.6						30.4	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.6						0.1	
Delay (s)					7.2						30.5	
Level of Service					A						C	
Approach Delay (s)		0.0			7.2			0.0			30.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	11.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

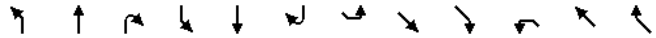
Existing AM
53: Grape St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5055									4985	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5055									4985	
Volume (vph)	0	833	30	0	0	0	0	0	0	110	276	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	896	32	0	0	0	0	0	0	124	310	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	926	0	0	0	0	0	0	0	0	364	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		62.0									19.0	
Effective Green, g (s)		62.0									20.0	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3482									1108	
v/s Ratio Prot		c0.18										
v/s Ratio Perm											0.07	
v/c Ratio		0.27									0.33	
Uniform Delay, d1		5.3									29.4	
Progression Factor		0.54									0.57	
Incremental Delay, d2		0.2									0.2	
Delay (s)		3.1									16.8	
Level of Service		A									B	
Approach Delay (s)		3.1			0.0			0.0			16.8	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	7.4	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.28			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
54: Seaworld Dr & E Mission Bay Dr 4/5/2012

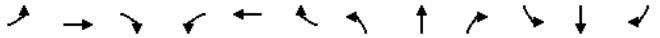


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Volume (vph)	100	926	35	111	691	116	59	70	189	37	32	77
Peak-hour factor, PHF	0.93	0.93	0.93	0.85	0.85	0.85	0.92	0.92	0.92	0.85	0.85	0.85
Adj. Flow (vph)	108	996	38	131	813	136	64	76	205	44	38	91
RTOR Reduction (vph)	0	0	37	0	0	130	0	0	170	0	0	77
Lane Group Flow (vph)	108	996	1	131	813	6	64	76	35	44	38	14
Confl. Peds. (#/hr)	2								2			
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	4.0	29.9	2.3	6.9	32.9	3.2	3.2	10.6	10.6	2.3	8.8	8.8
Effective Green, g (s)	4.0	31.4	2.3	6.9	34.3	3.2	3.2	11.5	11.5	2.3	10.6	10.6
Actuated g/C Ratio	0.06	0.46	0.03	0.10	0.50	0.05	0.05	0.17	0.17	0.03	0.16	0.16
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	202	1632	53	179	1782	74	161	315	264	60	290	246
v/s Ratio Prot	0.03	c0.28		c0.07	c0.23		0.02	c0.04		c0.02	0.02	
v/s Ratio Perm			0.00			0.00			0.02			0.01
v/c Ratio	0.53	0.61	0.02	0.73	0.46	0.09	0.40	0.24	0.13	0.73	0.13	0.06
Uniform Delay, d1	31.1	13.8	31.8	29.7	10.9	31.1	31.5	24.5	24.1	32.6	24.8	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	1.7	0.1	12.4	0.8	0.2	0.6	0.4	0.2	32.5	0.1	0.0
Delay (s)	32.5	15.5	31.9	42.1	11.7	31.2	32.1	24.9	24.3	65.1	24.9	24.5
Level of Service	C	B	C	D	B	C	C	C	C	E	C	C
Approach Delay (s)		17.6			17.9			25.9			34.9	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	19.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
55: Hawthorne St & Pacific Highway 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	5.0
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes				0.94	1.00		1.00	1.00			1.00	1.00
Frt				1.00	0.99		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1665	3509		1770	5085			5085	1545
Flt Permitted				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)				1665	3509		1770	5085			5085	1545
Volume (vph)	0	0	0	362	1326	70	64	158	0	0	139	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	381	1396	74	69	170	0	0	162	22
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	0	0	381	1466	0	69	170	0	0	162	3
Confl. Peds. (#/hr)				68		10	8					8
Turn Type				Perm			Prot					Perm
Protected Phases					6		3	8			4	
Permitted Phases				6								4
Actuated Green, G (s)				35.1	35.1		29.3	45.1			11.4	11.4
Effective Green, g (s)				35.6	34.2		29.3	45.1			11.3	11.3
Actuated g/C Ratio				0.40	0.38		0.33	0.50			0.13	0.13
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	4.9
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	3.3
Lane Grp Cap (vph)				659	1333		576	2548			638	194
v/s Ratio Prot					c0.42		c0.04	0.03			c0.03	
v/s Ratio Perm				0.23								0.00
v/c Ratio				0.58	1.10		0.12	0.07			0.25	0.01
Uniform Delay, d1				21.3	27.9		21.3	11.6			35.5	34.5
Progression Factor				0.77	0.82		0.78	0.85			1.00	1.00
Incremental Delay, d2				3.1	55.1		0.4	0.0			0.2	0.0
Delay (s)				19.6	78.1		17.0	9.9			35.8	34.5
Level of Service				B	E		B	A			D	C
Approach Delay (s)		0.0			66.0			12.0			35.6	
Approach LOS		A			E			B			D	

Intersection Summary				
HCM Average Control Delay	57.9	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
56: Grape St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.92		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5069	1549					4632		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5069	1549					4632		1770	5085	
Volume (vph)	39	609	25	0	0	0	0	209	213	41	460	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.93	0.93	0.93	0.75	0.75	0.75
Adj. Flow (vph)	44	684	28	0	0	0	0	225	229	55	613	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	160	0	0	0	0
Lane Group Flow (vph)	0	728	12	0	0	0	0	294	0	55	613	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		37.8	37.8					27.0		11.0	42.4	
Effective Green, g (s)		38.7	38.7					27.0		11.4	42.4	
Actuated g/C Ratio		0.43	0.43					0.30		0.13	0.47	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2180	666					1390		224	2396	
v/s Ratio Prot								0.06		0.03	c0.12	
v/s Ratio Perm		0.14	0.01									
v/c Ratio		0.33	0.02					0.21		0.25	0.26	
Uniform Delay, d1		17.1	14.7					23.5		35.4	14.3	
Progression Factor		1.00	1.00					1.00		0.89	0.81	
Incremental Delay, d2		0.4	0.0					0.3		2.5	0.2	
Delay (s)		17.5	14.8					23.9		34.2	11.9	
Level of Service		B	B					C		C	B	
Approach Delay (s)		17.4			0.0			23.9			13.7	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	17.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.9	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
57: Seaworld Dr & Friars Rd 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.97	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3360	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3360	1421
Volume (vph)	963	244	138	779	197	98
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.85	0.50
Adj. Flow (vph)	1047	265	144	811	232	196
RTOR Reduction (vph)	0	28	0	0	36	109
Lane Group Flow (vph)	1047	237	144	811	255	28
Confl. Peds. (#/hr)						2
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.5	43.9	5.1	42.8	11.4	11.4
Effective Green, g (s)	34.7	48.3	5.0	44.2	13.6	13.6
Actuated g/C Ratio	0.53	0.73	0.08	0.67	0.21	0.21
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1866	1258	261	2377	694	294
v/s Ratio Prot	c0.30	0.04	c0.04	0.23	c0.08	
v/s Ratio Perm		0.11				0.02
v/c Ratio	0.56	0.19	0.55	0.34	0.37	0.10
Uniform Delay, d1	10.4	2.7	29.3	4.6	22.4	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	1.4	0.4	0.1	0.1
Delay (s)	11.7	2.7	30.8	5.0	22.5	21.2
Level of Service	B	A	C	A	C	C
Approach Delay (s)	9.9			8.9	22.1	
Approach LOS	A			A	C	

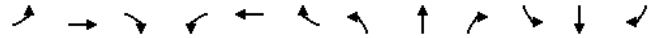
Intersection Summary				
HCM Average Control Delay	11.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM

58: I-5 SB On/I-5 SB Off & Seaworld Dr

12/07/2017



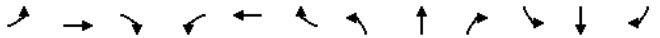
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Future Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1139	68	358	331	0	0	0	0	341	0	712
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1139	29	358	331	0	0	0	0	341	0	713
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		23.6	23.6	7.7	35.5					12.8		57.9
Effective Green, g (s)		24.6	24.6	7.9	36.5					13.4		57.9
Actuated g/C Ratio		0.42	0.42	0.14	0.63					0.23		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1503	663	468	2230					409		1583
v/s Ratio Prot		c0.32		c0.10	0.09					c0.19		
v/s Ratio Perm			0.02									0.45
v/c Ratio		0.76	0.04	0.76	0.15					0.83		0.45
Uniform Delay, d1		14.1	9.8	24.1	4.4					21.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.6	0.1	6.6	0.1					13.0		0.9
Delay (s)		17.7	9.9	30.7	4.5					34.2		0.9
Level of Service		B	A	C	A					C		A
Approach Delay (s)		17.3			18.1			0.0			11.7	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

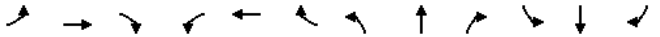
59: Seaworld Dr & I-5 NB On

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.92			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3266			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3266			1770	1583			
Volume (vph)	797	505	0	0	438	464	168	0	276	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88
Adj. Flow (vph)	866	549	0	0	461	488	183	0	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	162	0	0	0	268	0	0	0
Lane Group Flow (vph)	866	549	0	0	787	0	0	183	32	0	0	0
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	15.5	37.8			18.1			5.0	5.0			
Effective Green, g (s)	15.7	38.3			18.6			5.6	5.6			
Actuated g/C Ratio	0.30	0.72			0.35			0.11	0.11			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1019	2562			1148			187	168			
v/s Ratio Prot	c0.25	0.16			c0.24			c0.10				
v/s Ratio Perm									0.02			
v/c Ratio	0.85	0.21			0.69			0.98	0.19			
Uniform Delay, d1	17.5	2.4			14.7			23.6	21.6			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	6.5	0.2			3.3			58.7	0.2			
Delay (s)	24.0	2.6			18.0			82.3	21.8			
Level of Service	C	A			B			F	C			
Approach Delay (s)		15.7			18.0			44.7			0.0	
Approach LOS		B			B			D			A	

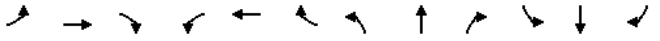
Intersection Summary				
HCM Average Control Delay	21.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	3433	1863			3302			3510	1583			
Flt Permitted	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	3433	1863			3302			3510	1583			
Volume (vph)	359	788	0	0	186	150	21	106	20	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	390	857	0	0	202	163	23	115	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	73	0	0	0	20	0	0	0
Lane Group Flow (vph)	390	857	0	0	292	0	0	138	2	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	15.7	64.1			44.0			6.1	6.1			
Effective Green, g (s)	15.7	64.1			44.0			6.1	6.1			
Actuated g/C Ratio	0.20	0.80			0.55			0.08	0.08			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	674	1493			1816			268	121			
v/s Ratio Prot	0.11	c0.46			0.09							
v/s Ratio Perm								0.04	0.00			
v/c Ratio	0.58	0.57			0.16			0.51	0.01			
Uniform Delay, d1	29.2	2.9			8.9			35.5	34.2			
Progression Factor	1.04	1.61			1.00			1.00	1.00			
Incremental Delay, d2	1.1	1.4			0.2			0.7	0.0			
Delay (s)	31.5	6.2			9.1			36.2	34.2			
Level of Service	C	A			A			D	C			
Approach Delay (s)		14.1			9.1			35.9			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Exisitng PM
1: Rosecrans St. & Lytton St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Volume (vph)	15	1495	429	102	1142	346	414	329	144	279	238	11
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	16	1557	447	106	1190	360	431	343	150	291	248	11
RTOR Reduction (vph)	0	0	173	0	0	123	0	0	93	0	1	0
Lane Group Flow (vph)	16	1557	274	106	1190	237	431	343	57	291	258	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.4	71.6	71.6	8.2	76.3	76.3	23.7	33.3	33.3	29.4	37.2	
Effective Green, g (s)	3.8	72.9	72.9	8.6	77.7	77.7	24.1	34.1	34.1	28.4	38.4	
Actuated g/C Ratio	0.02	0.46	0.46	0.05	0.49	0.49	0.15	0.21	0.21	0.18	0.24	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	42	2317	711	185	1719	730	517	397	331	314	444	
v/s Ratio Prot	0.01	0.31		c0.03	c0.34		0.13	c0.18		c0.16	0.14	
v/s Ratio Perm			0.18			0.16			0.04			
v/c Ratio	0.38	0.67	0.39	0.57	0.69	0.32	0.83	0.86	0.17	0.93	0.58	
Uniform Delay, d1	76.9	34.2	28.8	73.9	31.9	25.1	66.0	60.7	51.4	64.8	53.7	
Progression Factor	1.00	1.00	1.00	0.94	0.77	1.09	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	1.6	1.6	1.7	1.5	0.7	10.6	17.9	0.3	31.7	1.3	
Delay (s)	79.0	35.7	30.3	70.9	26.1	28.1	76.6	78.6	51.7	96.4	55.0	
Level of Service	E	D	C	E	C	C	E	E	D	F	D	
Approach Delay (s)		34.9			29.4			73.3			76.9	
Approach LOS		C			C			E			E	

Intersection Summary				
HCM Average Control Delay	44.5	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/9/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	689	1585	603	0	0	573
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	757	1742	655	0	0	623
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	757	1674	655	0	0	623
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	65.0	65.0	40.5			40.5
Effective Green, g (s)	65.0	65.0	40.5			40.5
Actuated g/C Ratio	0.54	0.54	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1867	1516	1199			631
v/s Ratio Prot	0.22		0.19			c0.33
v/s Ratio Perm		c0.60				
v/c Ratio	0.41	1.10	0.55			0.99
Uniform Delay, d1	15.9	27.2	32.0			39.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	57.1	0.3			32.2
Delay (s)	16.0	84.4	32.3			71.5
Level of Service	B	F	C			E
Approach Delay (s)	63.6		32.3			71.5
Approach LOS	E		C			E

Intersection Summary				
HCM Average Control Delay	59.5	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.06			
Actuated Cycle Length (s)	119.5	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	83.8%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
3: Channel Way & W Mission Bay Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	136	1380	25	0	1200
Peak Hour Factor	0.65	0.87	0.98	0.98	0.90	0.90
Hourly flow rate (vph)	0	156	1408	26	0	1333
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.98	0.98			0.98	
vC, conflicting volume	1865	485			1434	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1847	444			1408	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	72			100	
cM capacity (veh/h)	65	551			473	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	156	563	563	307	444	444	444
Volume Left	0	0	0	0	0	0	0
Volume Right	156	0	0	26	0	0	0
cSH	551	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.33	0.33	0.18	0.26	0.26	0.26
Queue Length 95th (ft)	29	0	0	0	0	0	0
Control Delay (s)	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	14.1	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Exisitng PM
4: Midway Dr & W Point Loma Blvd 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Volume (vph)	359	445	30	312	594	294	350	206	287	39	503	610
Peak-hour factor, PHF	0.88	0.88	0.88	0.90	0.90	0.90	0.99	0.99	0.99	0.84	0.84	0.84
Adj. Flow (vph)	408	506	34	347	660	327	354	208	290	46	599	726
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	159	0	0	0
Lane Group Flow (vph)	408	506	34	324	683	327	274	288	131	46	599	726
Confl. Peds. (#/hr)	6					6	6		3	3		6
Turn Type	Split		Free	Split		Free	Split		pm+ov	Split		Free
Protected Phases	3	3		4	4		2	2	3	1	1	
Permitted Phases			Free			Free			2			Free
Actuated Green, G (s)	39.9	39.9	150.0	34.0	34.0	150.0	25.9	25.9	65.8	30.5	30.5	150.0
Effective Green, g (s)	40.8	40.8	150.0	34.9	34.9	150.0	26.8	26.8	67.6	31.5	31.5	150.0
Actuated g/C Ratio	0.27	0.27	1.00	0.23	0.23	1.00	0.18	0.18	0.45	0.21	0.21	1.00
Clearance Time (s)	4.9	4.9		4.9	4.9		4.9	4.9	4.9	5.0	5.0	
Vehicle Extension (s)	3.1	3.1		5.5	5.5		0.2	0.2	3.1	8.0	8.0	
Lane Grp Cap (vph)	481	963	1583	375	787	1562	300	312	751	372	743	1562
v/s Ratio Prot	c0.23	0.14		0.20	c0.20		0.16	c0.17	0.05	0.03	c0.17	
v/s Ratio Perm			0.02			0.21			0.04			0.46
v/c Ratio	0.85	0.53	0.02	0.86	0.87	0.21	0.91	0.92	0.17	0.12	0.81	0.46
Uniform Delay, d1	51.7	46.4	0.0	55.3	55.3	0.0	60.5	60.6	24.6	48.1	56.3	0.0
Progression Factor	0.90	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.6	1.9	0.0	20.0	11.0	0.3	30.0	31.2	0.0	0.6	8.3	1.0
Delay (s)	61.9	41.5	0.0	75.3	66.4	0.3	90.4	91.8	24.6	48.7	64.6	1.0
Level of Service	E	D	A	E	E	A	F	F	C	D	E	A
Approach Delay (s)		48.8			52.4			68.5			30.4	
Approach LOS		D			D			E			C	

Intersection Summary				
HCM Average Control Delay	48.0	HCM Level of Service		D
HCM Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		16.0
Intersection Capacity Utilization	84.6%	ICU Level of Service		E
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
5: Kemper St & Midway Dr 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Volume (vph)	186	122	157	53	141	74	225	621	59	122	500	140
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	209	137	176	57	152	80	247	682	65	136	556	156
RTOR Reduction (vph)	0	0	126	0	0	70	0	3	0	0	0	81
Lane Group Flow (vph)	168	178	50	57	152	10	247	744	0	136	556	75
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	41.7	18.4	18.4	18.4	17.8	65.8		22.8	70.8	70.8
Effective Green, g (s)	24.8	24.8	43.0	19.3	19.3	19.3	18.2	66.7		23.2	71.7	71.7
Actuated g/C Ratio	0.17	0.17	0.29	0.13	0.13	0.13	0.12	0.44		0.15	0.48	0.48
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	278	289	488	228	240	199	417	1549		274	1692	729
v/s Ratio Prot	0.10	c0.10	0.01	0.03	c0.08		c0.07	c0.21		c0.08	0.16	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.60	0.62	0.10	0.25	0.63	0.05	0.59	0.48		0.50	0.33	0.10
Uniform Delay, d1	58.1	58.2	39.3	58.8	62.0	57.3	62.4	29.4		58.1	24.2	21.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.81		1.13	0.56	0.79
Incremental Delay, d2	3.7	3.9	0.0	0.6	5.4	0.1	1.3	0.9		0.4	0.4	0.2
Delay (s)	61.7	62.0	39.4	59.4	67.4	57.4	59.4	24.6		65.8	13.9	17.2
Level of Service	E	E	D	E	E	E	E	C		E	B	B
Approach Delay (s)		54.3			63.0			33.2			22.8	
Approach LOS		D			E			C			C	

Intersection Summary				
HCM Average Control Delay	37.3	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	70.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
6: Midway Dr & East Dr 4/9/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	1.00		1.00	0.98			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	3530		1770	3452			1682			1676	
Flt Permitted	0.14	1.00		0.23	1.00			0.86			0.82	
Satd. Flow (perm)	269	3530		431	3452			1479			1406	
Volume (vph)	46	943	16	27	1008	164	24	6	34	69	4	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.79	0.79	0.79	0.74	0.74	0.74
Adj. Flow (vph)	51	1036	18	29	1096	178	30	8	43	93	5	70
RTOR Reduction (vph)	0	1	0	0	10	0	0	35	0	0	46	0
Lane Group Flow (vph)	51	1053	0	29	1264	0	0	46	0	0	122	0
Confl. Peds. (#/hr)	3					3	33					33
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.0	45.9		46.2	44.0			12.7			12.7	
Effective Green, g (s)	51.3	46.8		47.5	44.9			13.6			13.6	
Actuated g/C Ratio	0.68	0.62		0.63	0.60			0.18			0.18	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	274	2203		319	2067			268			255	
v/s Ratio Prot	c0.01	0.30		0.00	c0.37							
v/s Ratio Perm	0.12			0.05				0.03			c0.09	
v/c Ratio	0.19	0.48		0.09	0.61			0.17			0.48	
Uniform Delay, d1	5.8	7.6		5.4	9.5			25.9			27.5	
Progression Factor	1.14	1.63		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.7		0.0	1.4			0.1			0.5	
Delay (s)	6.6	13.1		5.5	10.9			26.0			28.0	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		12.8			10.8			26.0			28.0	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	13.2	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
7: Rosecrans St. & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.92	1.00	1.00	0.93
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Volume (vph)	290	1688	63	425	1298	332	312	490	244	130	577	328
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	293	1705	64	429	1311	335	315	495	246	131	583	331
RTOR Reduction (vph)	0	2	0	0	27	0	0	0	195	0	0	202
Lane Group Flow (vph)	293	1767	0	429	1619	0	315	495	51	131	583	129
Confl. Peds. (#/hr)	48		65	65		48	40		42	42		40
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	29.1	68.0		26.5	65.5		17.0	32.3	32.3	14.4	29.7	29.7
Effective Green, g (s)	29.5	69.1		26.9	66.5		17.4	33.2	33.2	14.8	30.6	30.6
Actuated g/C Ratio	0.18	0.43		0.17	0.42		0.11	0.21	0.21	0.09	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	326	2174		577	2005		373	734	304	164	677	281
v/s Ratio Prot	c0.17	c0.35		0.12	c0.34		c0.09	0.14		0.07	c0.16	
v/s Ratio Perm									0.03			0.09
v/c Ratio	0.90	0.81		0.74	0.81		0.84	0.67	0.17	0.80	0.86	0.46
Uniform Delay, d1	63.8	39.8		63.3	41.1		70.0	58.4	52.1	71.1	62.6	57.4
Progression Factor	1.06	0.44		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.8	2.7		4.5	2.6		15.3	1.9	0.1	21.8	10.6	0.4
Delay (s)	88.3	20.2		67.8	43.7		85.3	60.4	52.2	92.9	73.2	57.8
Level of Service	F	C		E	D		F	E	D	F	E	E
Approach Delay (s)		29.8			48.7			65.9			70.8	
Approach LOS		C			D			E			E	

Intersection Summary				
HCM Average Control Delay	49.1	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
9: Enterprise St & Midway Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	228	763	6	0	863
Peak Hour Factor	0.80	0.80	0.87	0.87	0.93	0.93
Hourly flow rate (vph)	0	285	877	7	0	928
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	1346	447			886	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1346	447			886	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	49			100	
cM capacity (veh/h)	142	557			759	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	285	585	299	464	464
Volume Left	0	0	0	0	0
Volume Right	285	0	7	0	0
cSH	557	1700	1700	1700	1700
Volume to Capacity	0.51	0.34	0.18	0.27	0.27
Queue Length 95th (ft)	72	0	0	0	0
Control Delay (s)	18.1	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	18.1	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	42.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
10: Barnett Ave & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	1232	0	0	891	769	0	0	0	739	0	124
Peak-hour factor, PHF	0.86	0.86	0.86	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1433	0	0	938	809	0	0	0	803	0	135
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	0	97
Lane Group Flow (vph)	0	1433	0	0	938	408	0	0	0	803	0	38
Confl. Peds. (#/hr)						6				3		
Turn Type						custom				Prot		custom
Protected Phases		2			2	2				1		
Permitted Phases						8						1
Actuated Green, G (s)		43.0			43.0	43.0				24.0		24.0
Effective Green, g (s)		43.0			43.0	42.5				24.0		24.0
Actuated g/C Ratio		0.51			0.51	0.50				0.29		0.29
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	2.9				2.5		2.5
Lane Grp Cap (vph)		1807			1807	1407				979		451
v/s Ratio Prot		c0.40			0.27	0.15				c0.23		
v/s Ratio Perm												0.02
v/c Ratio		0.79			0.52	0.29				0.82		0.09
Uniform Delay, d1		16.9			13.7	12.1				28.1		22.1
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		2.5			0.2	0.1				5.5		0.1
Delay (s)		19.4			14.0	12.2				33.6		22.1
Level of Service		B			B	B				C		C
Approach Delay (s)		19.4			13.1			0.0			31.9	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	19.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	84.2	Sum of lost time (s)	17.2	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
11: Sport Arena Blvd & Hancock 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9				4.0	4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91				1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99				0.86	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (prot)	1770	3529		1770	5041				1611	1770		1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (perm)	1770	3529		1770	5041				1611	1770		1583
Volume (vph)	86	905	14	20	996	51	0	0	10	56	0	185
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	90	943	15	24	1172	60	0	0	11	62	0	206
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	11	0	0	166
Lane Group Flow (vph)	90	957	0	24	1229	0	0	0	0	62	0	40
Confl. Peds. (#/hr)	18		10	10		18				11		16
Turn Type	Prot			Prot					NA	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases												
Actuated Green, G (s)	8.5	67.0		4.1	62.6				0.0	19.7		19.7
Effective Green, g (s)	8.5	67.0		4.1	62.6				0.0	19.7		20.6
Actuated g/C Ratio	0.08	0.64		0.04	0.60				0.00	0.19		0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	143	2252		69	3005				0	332		311
v/s Ratio Prot	c0.05	c0.27		0.01	0.24					c0.04		0.03
v/s Ratio Perm												
v/c Ratio	0.63	0.43		0.35	0.41				0.00	0.19		0.13
Uniform Delay, d1	46.7	9.4		49.1	11.3				52.5	35.9		34.8
Progression Factor	1.00	1.00		1.50	0.58				1.00	1.00		1.00
Incremental Delay, d2	6.1	0.6		1.0	0.4				0.0	0.1		0.1
Delay (s)	52.8	10.0		74.5	6.9				52.5	36.0		34.9
Level of Service	D	B		E	A				D	D		C
Approach Delay (s)		13.7			8.2			52.5			35.1	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	13.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.40			
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	53.8%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
12: Kemper Street & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Volume (vph)	27	14	40	102	21	102	136	806	19	56	938	108
Peak-hour factor, PHF	0.92	0.92	0.92	0.78	0.78	0.78	0.95	0.95	0.95	0.91	0.91	0.91
Adj. Flow (vph)	29	15	43	131	27	131	143	848	20	62	1031	119
RTOR Reduction (vph)	0	37	0	0	0	115	0	1	0	0	9	0
Lane Group Flow (vph)	29	21	0	131	27	16	143	867	0	62	1141	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	14.8	14.8		11.9	11.9	11.9	8.7	50.1		9.1	50.5	
Effective Green, g (s)	15.7	15.7		12.8	12.8	12.8	9.1	51.0		9.5	51.4	
Actuated g/C Ratio	0.15	0.15		0.12	0.12	0.12	0.09	0.49		0.09	0.49	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	265	244		216	227	189	298	1712		160	2443	
v/s Ratio Prot	c0.02	0.01		c0.07	0.01		0.04	c0.25		0.04	c0.23	
v/s Ratio Perm						0.01						
v/c Ratio	0.11	0.09		0.61	0.12	0.08	0.48	0.51		0.39	0.47	
Uniform Delay, d1	38.6	38.5		43.7	41.1	40.9	45.7	18.4		45.0	17.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.74	0.99		0.59	0.35	
Incremental Delay, d2	0.2	0.2		3.3	0.1	0.1	0.4	1.0		0.5	0.6	
Delay (s)	38.8	38.6		47.0	41.2	41.0	34.2	19.2		27.0	6.9	
Level of Service	D	D		D	D	D	C	B		C	A	
Approach Delay (s)		38.7			43.7			21.3			7.9	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
13: Sport Arena Blvd & 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.94		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	3433	3492		1770	5034			1694		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (perm)	3433	3492		1770	5034			1694		1770	1610	
Volume (vph)	101	786	61	34	931	53	50	11	54	129	13	121
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.79	0.79	0.79	0.93	0.93	0.93
Adj. Flow (vph)	107	836	65	36	990	56	63	14	68	139	14	130
RTOR Reduction (vph)	0	4	0	0	4	0	0	38	0	0	115	0
Lane Group Flow (vph)	107	897	0	36	1042	0	0	107	0	139	29	0
Confl. Peds. (#/hr)	18		7	7		18			6	6		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Effective Green, g (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Actuated g/C Ratio	0.09	0.48		0.08	0.48			0.14		0.12	0.12	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	314	1686		148	2392			231		204	186	
v/s Ratio Prot	c0.03	c0.26		0.02	0.21			c0.06		c0.08	0.02	
v/s Ratio Perm												
v/c Ratio	0.34	0.53		0.24	0.44			0.46		0.68	0.16	
Uniform Delay, d1	44.7	18.9		45.0	18.2			41.8		44.6	41.8	
Progression Factor	1.10	1.07		1.23	0.77			1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.1		0.3	0.6			0.5		7.3	0.1	
Delay (s)	49.6	21.4		55.6	14.6			42.3		51.9	42.0	
Level of Service	D	C		E	B			D		D	D	
Approach Delay (s)		24.4			15.9			42.3			46.8	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
14: Sport Arena Blvd & East Dr 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00	0.99			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.98		1.00	1.00			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (prot)	1770	4954		1770	5074			1788	1563			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (perm)	1770	4954		1770	5074			1788	1563			1611
Volume (vph)	22	837	110	123	989	11	24	5	56	0	0	5
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.78	0.78	0.78	0.30	0.30	0.30
Adj. Flow (vph)	23	890	117	135	1087	12	31	6	72	0	0	17
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	23	999	0	135	1098	0	0	37	6	0	0	17
Confl. Peds. (#/hr)	19		19	19		19			1	1		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Effective Green, g (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Actuated g/C Ratio	0.03	0.66		0.11	0.75			0.09	0.09			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	49	3274		202	3793			160	140			1611
v/s Ratio Prot	0.01	c0.20		c0.08	0.22							
v/s Ratio Perm								0.02	0.00			0.01
v/c Ratio	0.47	0.31		0.67	0.29			0.23	0.05			0.01
Uniform Delay, d1	50.3	7.6		44.6	4.3			44.4	43.7			0.0
Progression Factor	0.81	1.40		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	2.3	0.2		6.3	0.2			0.3	0.0			0.0
Delay (s)	42.9	10.8		50.9	4.5			44.7	43.8			0.0
Level of Service	D	B		D	A			D	D			A
Approach Delay (s)		11.5			9.5			44.1			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
15: Rosecrans St. & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	0.99			1.00	0.98	1.00	0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Volume (vph)	274	1612	442	0	1621	587	251	262	26	372	338	183
Peak-hour factor, PHF	0.86	0.95	0.90	0.25	0.95	0.89	0.85	0.82	0.81	0.93	0.94	0.93
Adj. Flow (vph)	319	1697	491	0	1706	660	295	320	32	400	360	197
RTOR Reduction (vph)	0	33	0	0	0	0	0	3	0	0	0	159
Lane Group Flow (vph)	319	2155	0	0	1706	660	210	434	0	254	506	38
Confl. Peds. (#/hr)	29		31	31		29	63		31	10		63
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	15.6	79.9			59.1	150.0	23.0	23.0		29.2	29.2	29.2
Effective Green, g (s)	17.0	82.0			61.0	150.0	23.0	23.0		29.2	29.2	29.2
Actuated g/C Ratio	0.11	0.55			0.41	1.00	0.15	0.15		0.19	0.19	0.19
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	389	2652			2068	1551	247	506		313	615	281
v/s Ratio Prot	0.09	c0.44			0.34		0.13	c0.13		0.16	c0.16	0.03
v/s Ratio Perm						0.43						
v/c Ratio	0.82	0.81			0.82	0.43	0.85	0.86		0.81	0.82	0.14
Uniform Delay, d1	65.0	27.7			39.7	0.0	61.8	61.9		57.8	57.9	50.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.4	2.8			3.9	0.9	23.3	13.4		15.5	9.2	0.3
Delay (s)	77.4	30.6			43.6	0.9	85.1	75.3		73.3	67.1	50.3
Level of Service	E	C			D	A	F	E		E	E	D
Approach Delay (s)		36.5			31.7			78.5			65.3	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.8
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	852	844	19
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	926	888	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1361	454	908			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1361	454	908			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	100			
cM capacity (veh/h)	139	553	745			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	463	463	592	316
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	20
cSH	553	1700	1700	1700	1700
Volume to Capacity	0.07	0.27	0.27	0.35	0.19
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.0	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM
19: Kurtz & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frpb, ped/bikes				1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes				0.98	1.00	1.00		1.00		1.00	1.00	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1654	1738	1559		5080		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1654	1738	1559		5080		1770	6408	
Volume (vph)	0	0	0	295	177	75	0	1996	14	85	2133	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	311	186	79	0	2101	15	88	2199	0
RTOR Reduction (vph)	0	0	0	0	0	10	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	240	257	69	0	2116	0	88	2199	0
Confl. Peds. (#/hr)				14		3				13		
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				30.4	30.4	30.4		104.1		11.0	119.8	
Effective Green, g (s)				31.3	31.3	31.3		105.3		11.4	120.7	
Actuated g/C Ratio				0.20	0.20	0.20		0.66		0.07	0.75	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				324	340	305		3343		126	4834	
v/s Ratio Prot								c0.42		c0.05	0.34	
v/s Ratio Perm				0.15	0.15	0.04						
v/c Ratio				0.74	0.76	0.22		0.63		0.70	0.45	
Uniform Delay, d1				60.5	60.7	54.1		16.0		72.6	7.3	
Progression Factor				1.00	1.00	1.00		1.00		0.89	1.20	
Incremental Delay, d2				7.7	8.2	0.1		0.9		8.7	0.2	
Delay (s)				68.3	69.0	54.3		16.9		73.3	9.0	
Level of Service				E	E	D		B		E	A	
Approach Delay (s)		0.0			66.7			16.9			11.5	
Approach LOS		A			E			B			B	

Intersection Summary				
HCM Average Control Delay	20.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	68.5%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

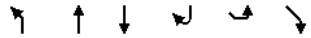
Exisitng PM
20: Rosecrans St & Kurtz 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.94		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3227		1770	3539		1770		1549	1770	1863	
Flt Permitted		1.00		0.23	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3227		435	3539		1770		1549	1770	1863	
Volume (vph)	0	672	199	80	464	0	167	0	124	67	209	0
Peak-hour factor, PHF	1.00	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Adj. Flow (vph)	0	693	205	82	478	0	172	0	128	73	227	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	56	0	0	0
Lane Group Flow (vph)	0	888	0	82	478	0	172	0	72	73	227	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		89.4		101.3	101.3		19.8		89.4	24.7	24.7	
Effective Green, g (s)		90.3		102.2	102.2		20.2		90.3	25.6	25.6	
Actuated g/C Ratio		0.56		0.64	0.64		0.13		0.56	0.16	0.16	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1821		344	2261		223		874	283	298	
v/s Ratio Prot		c0.28		0.01	c0.14		c0.10			0.04	c0.12	
v/s Ratio Perm				0.14					0.05			
v/c Ratio		0.49		0.24	0.21		0.77		0.08	0.26	0.76	
Uniform Delay, d1		20.9		13.2	12.1		67.7		15.9	58.9	64.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.95	0.99	
Incremental Delay, d2		0.9		0.1	0.2		15.1		0.2	0.4	9.1	
Delay (s)		21.9		13.3	12.3		82.8		16.1	56.1	72.6	
Level of Service		C		B	B		F		B	E	E	
Approach Delay (s)		21.9			12.4			54.3			68.6	
Approach LOS		C			B			D			E	

Intersection Summary				
HCM Average Control Delay	30.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	66.6%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
21: Pacific Highway & Kurtz St 4/9/2012

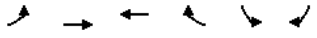


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	214	656	444	7	0	423
Peak Hour Factor	0.92	0.92	0.87	0.87	0.99	0.99
Hourly flow rate (vph)	233	713	510	8	0	427
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	520				1219	176
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	520				1219	176
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	74				100	49
cM capacity (veh/h)	905				128	835

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	233	238	238	238	204	204	110	427
Volume Left	233	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	427
cSH	905	1700	1700	1700	1700	1700	1700	835
Volume to Capacity	0.26	0.14	0.14	0.14	0.12	0.12	0.06	0.51
Queue Length 95th (ft)	26	0	0	0	0	0	0	74
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Lane LOS	B							B
Approach Delay (s)	2.5				0.0			13.7
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
22: Hancock & Channel Way 4/9/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	51	72	159	59	10	70
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	63	89	199	74	13	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1226				
pX, platoon unblocked						
vC, conflicting volume	272				450	236
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				450	236
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	88
cM capacity (veh/h)	1291				539	803

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	63	89	272	107
Volume Left	63	0	0	13
Volume Right	0	0	74	93
cSH	1291	1700	1700	757
Volume to Capacity	0.05	0.05	0.16	0.14
Queue Length 95th (ft)	4	0	0	12
Control Delay (s)	7.9	0.0	0.0	10.5
Lane LOS	A			B
Approach Delay (s)	3.3		0.0	10.5
Approach LOS				B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
23: Hancock St & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frpb, ped/bikes		0.98					1.00	1.00			1.00	0.96
Flpb, ped/bikes		1.00					1.00	1.00			1.00	1.00
Frt		0.92					1.00	1.00			1.00	0.85
Flt Protected		0.99					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3165					1770	5073			5085	1516
Flt Permitted		0.99					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3165					1770	5073			5085	1516
Volume (vph)	40	81	146	0	0	0	87	2175	29	0	2178	83
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	88	159	0	0	0	95	2364	32	0	2367	90
RTOR Reduction (vph)	0	6	0	0	0	0	0	1	0	0	0	21
Lane Group Flow (vph)	0	284	0	0	0	0	95	2395	0	0	2367	69
Confl. Peds. (#/hr)	1		20				15		2			15
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		32.1					13.6	118.1			100.1	100.1
Effective Green, g (s)		33.0					14.0	119.0			101.0	101.0
Actuated g/C Ratio		0.21					0.09	0.74			0.63	0.63
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		653					155	3773			3210	957
v/s Ratio Prot		c0.09					0.05	c0.47			c0.47	
v/s Ratio Perm												0.05
v/c Ratio		0.43					0.61	0.63			0.74	0.07
Uniform Delay, d1		55.4					70.4	10.0			20.4	11.4
Progression Factor		0.81					1.08	1.20			1.00	1.00
Incremental Delay, d2		0.2					4.0	0.7			1.6	0.1
Delay (s)		44.9					79.8	12.6			21.9	11.5
Level of Service		D					E	B			C	B
Approach Delay (s)		44.9			0.0			15.2			21.5	
Approach LOS		D			A			B			C	

Intersection Summary				
HCM Average Control Delay	19.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	79.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

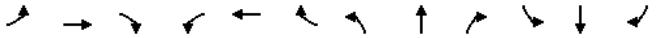
Exisitng PM
25: Old Town St & Hancock St 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	242	0	0	304	294	258
Peak Hour Factor	0.85	0.85	0.93	0.93	0.84	0.84
Hourly flow rate (vph)	285	0	0	327	350	307

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	285	327	350	307
Volume Left (vph)	285	0	350	0
Volume Right (vph)	0	327	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.3	5.3	6.5	5.9
Degree Utilization, x	0.50	0.48	0.63	0.51
Capacity (veh/h)	530	658	547	593
Control Delay (s)	15.5	13.0	18.5	13.7
Approach Delay (s)	15.5	13.0	16.3	
Approach LOS	C	B	C	

Intersection Summary				
Delay	15.2			
HCM Level of Service	C			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
26: Witherby St & Hancock St 4/9/2012

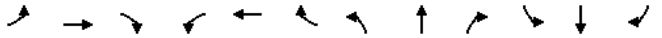


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	87	154	172	10	75	0	422	217	50	15	270	215
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.91	0.91	0.91	0.72	0.72	0.72
Hourly flow rate (vph)	104	183	205	12	94	0	464	238	55	21	375	299

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	492	106	757	396	299
Volume Left (vph)	104	13	464	21	0
Volume Right (vph)	205	0	55	0	299
Hadj (s)	-0.17	0.06	0.11	0.06	-0.67
Departure Headway (s)	7.4	9.5	7.8	8.2	7.5
Degree Utilization, x	1.02	0.28	1.64	0.90	0.62
Capacity (veh/h)	492	371	465	427	469
Control Delay (s)	72.3	16.1	319.6	50.2	20.9
Approach Delay (s)	72.3	16.1	319.6	37.6	
Approach LOS	F	C	F	E	

Intersection Summary				
Delay	149.0			
HCM Level of Service	F			
Intersection Capacity Utilization	93.1%	ICU Level of Service	F	
Analysis Period (min)	15			

Exisitng PM
27: Washington St & Hancock St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Volume (vph)	0	547	124	346	378	0	0	0	0	96	228	760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	595	135	376	411	0	0	0	0	104	248	826
RTOR Reduction (vph)	0	0	99	0	0	0	0	0	0	0	0	253
Lane Group Flow (vph)	0	595	36	376	411	0	0	0	0	104	248	573
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		20.5	20.5	12.7	37.6					32.6	32.6	32.6
Effective Green, g (s)		21.4	21.4	13.1	38.5					33.5	33.5	33.5
Actuated g/C Ratio		0.27	0.27	0.16	0.48					0.42	0.42	0.42
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		947	423	562	1703					674	1420	663
v/s Ratio Prot		c0.17		c0.11	0.12						0.07	
v/s Ratio Perm			0.02							0.06		c0.36
v/c Ratio		0.63	0.09	0.67	0.24					0.15	0.17	0.86
Uniform Delay, d1		25.8	22.0	31.4	12.2					14.4	14.6	21.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2	0.4	2.3	0.3					0.0	0.0	11.0
Delay (s)		29.0	22.4	33.8	12.5					14.5	14.6	32.2
Level of Service		C	C	C	B					B	B	C
Approach Delay (s)		27.7			22.7			0.0			26.9	
Approach LOS		C			C			A			C	

Intersection Summary						
HCM Average Control Delay	25.9	HCM Level of Service		C		
HCM Volume to Capacity ratio	0.75					
Actuated Cycle Length (s)	80.0	Sum of lost time (s)		12.0		
Intersection Capacity Utilization	64.2%	ICU Level of Service		C		
Analysis Period (min)	15					
c Critical Lane Group						

Exisitng PM
28: Vine St & Hancock St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	18	51	0	0	0	0	0	0	2034	4
Peak Hour Factor	0.56	0.56	0.56	0.75	0.75	0.75	0.95	0.95	0.95	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	32	68	0	0	0	0	0	0	2211	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	2213	2213	739	769	2215	0	2215			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2213	2213	739	769	2215	0	2215			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	91	74	100	100	100			100		
cM capacity (veh/h)	24	43	360	265	43	1084	233			1622		

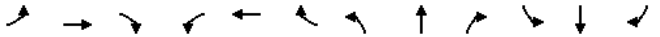
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	32	68	884	884	447
Volume Left	0	68	0	0	0
Volume Right	32	0	0	0	4
cSH	360	265	1700	1700	1700
Volume to Capacity	0.09	0.26	0.52	0.52	0.26
Queue Length 95th (ft)	7	25	0	0	0
Control Delay (s)	16.0	23.2	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	16.0	23.2	0.0		
Approach LOS	C	C			

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Exisitng PM
29: Sassafras St & Kettner Bl 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.96	
Flt Protected		1.00	1.00		0.97					0.95	1.00	
Satd. Flow (prot)		1863	1583		3418					1770	4887	
Flt Permitted		1.00	1.00		0.72					0.95	1.00	
Satd. Flow (perm)		1863	1583		2557					1770	4887	
Volume (vph)	0	202	97	82	34	0	0	0	0	248	686	241
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	220	105	89	37	0	0	0	0	270	746	262
RTOR Reduction (vph)	0	0	52	0	0	0	0	0	0	0	115	0
Lane Group Flow (vph)	0	220	53	0	126	0	0	0	0	270	893	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		22.0	22.0		22.0					20.0	20.0	
Effective Green, g (s)		24.7	24.7		24.7					22.3	22.3	
Actuated g/C Ratio		0.45	0.45		0.45					0.41	0.41	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		837	711		1148					718	1981	
v/s Ratio Prot		c0.12									c0.18	
v/s Ratio Perm			0.03		0.05					0.15		
v/c Ratio		0.26	0.07		0.11					0.38	0.45	
Uniform Delay, d1		9.5	8.6		8.8					11.5	11.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.8	0.2		0.2					1.5	0.7	
Delay (s)		10.2	8.8		9.0					13.0	12.6	
Level of Service		B	A		A					B	B	
Approach Delay (s)		9.8			9.0			0.0			12.7	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	11.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3481		1770	3539						4718	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3481		1770	3539						4718	1362
Volume (vph)	0	813	100	49	196	0	0	0	0	438	732	334
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	884	109	53	213	0	0	0	0	476	796	363
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	0	241
Lane Group Flow (vph)	0	985	0	53	213	0	0	0	0	0	1272	122
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		49.6		6.2	58.5						33.5	33.5
Effective Green, g (s)		47.8		6.6	58.4						32.6	34.9
Actuated g/C Ratio		0.46		0.06	0.56						0.31	0.34
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1600		112	1987						1479	457
v/s Ratio Prot		c0.28		c0.03	0.06							
v/s Ratio Perm											0.27	0.09
v/c Ratio		0.62		0.47	0.11						0.90dl	0.27
Uniform Delay, d1		21.2		47.0	10.6						33.6	25.2
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		1.8		1.1	0.1						5.2	0.1
Delay (s)		23.0		48.2	10.7						38.7	25.3
Level of Service		C		D	B						D	C
Approach Delay (s)		23.0			18.2			0.0			35.8	
Approach LOS		C			B			A			D	

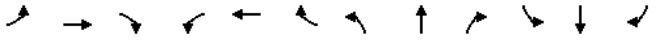
Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM

32: Washington St & Pacific Highway NB Frontage Road 4/9/2012

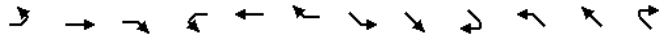


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.88			0.90	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99			0.99	
Satd. Flow (prot)	1770	3539			3539	1583	1610	2969			1653	
Flt Permitted	0.95	1.00			1.00	1.00	0.70	0.90			0.31	
Satd. Flow (perm)	1770	3539			3539	1583	1184	2690			514	
Volume (vph)	139	511	0	0	766	372	93	11	140	20	0	63
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	151	555	0	0	833	404	101	12	152	22	0	68
RTOR Reduction (vph)	0	0	0	0	0	228	0	121	0	0	61	0
Lane Group Flow (vph)	151	555	0	0	833	176	71	73	0	0	29	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	4.0	42.9			34.0	34.0	13.5	13.5			8.1	
Effective Green, g (s)	4.5	42.9			34.4	34.4	15.9	15.9			8.1	
Actuated g/C Ratio	0.06	0.54			0.44	0.44	0.20	0.20			0.10	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	101	1924			1543	690	239	542			53	
v/s Ratio Prot	c0.09	0.16			c0.24							
v/s Ratio Perm						0.11	c0.06	0.03			c0.06	
v/c Ratio	1.50	0.29			0.54	0.26	0.30	0.13			0.55	
Uniform Delay, d1	37.2	9.7			16.4	14.1	26.8	25.9			33.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	267.6	0.0			1.4	0.9	0.3	0.0			6.0	
Delay (s)	304.8	9.8			17.8	15.0	27.0	25.9			39.7	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		72.9			16.9			26.2			39.7	
Approach LOS		E			B			C			D	

Intersection Summary				
HCM Average Control Delay	36.0	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	52.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM

33: Washington St & Pacific Highway SB 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.98		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3457		1757	1863		1681	1699	1583			
Flt Permitted		1.00		0.49	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3457		904	1863		1681	1699	1583			
Volume (vph)	0	367	53	270	652	0	283	27	358	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	399	58	293	709	0	308	29	389	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	0	444	0	293	709	0	164	173	348	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		12.7		32.2	32.2		18.3	18.3	31.0			
Effective Green, g (s)		12.7		32.5	32.5		20.5	20.5	33.2			
Actuated g/C Ratio		0.16		0.42	0.42		0.26	0.26	0.43			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		565		378	779		444	448	758			
v/s Ratio Prot		c0.13			c0.38				c0.12			
v/s Ratio Perm				0.32			0.10	0.10	0.10			
v/c Ratio		0.79		0.78	0.91		0.37	0.39	0.46			
Uniform Delay, d1		31.2		19.5	21.2		23.3	23.4	15.9			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		6.6		14.4	16.6		0.2	0.2	0.2			
Delay (s)		37.8		33.8	37.8		23.5	23.6	16.0			
Level of Service		D		C	D		C	C	B			
Approach Delay (s)		37.8			36.7			19.5			0.0	
Approach LOS		D			D			B			A	

Intersection Summary				
HCM Average Control Delay	31.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
34: Sassafras St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.89		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1833		1763	1665		1767	4984		1770	5083	
Flt Permitted	0.69	1.00		0.64	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1278	1833		1182	1665		1767	4984		1770	5083	
Volume (vph)	23	139	15	174	29	72	19	549	84	76	404	1
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	151	16	189	32	78	21	597	91	83	439	1
RTOR Reduction (vph)	0	7	0	0	58	0	0	23	0	0	0	0
Lane Group Flow (vph)	25	160	0	189	52	0	21	665	0	83	440	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	15.3	15.3		14.6	14.6		0.8	24.8		4.1	27.4	
Effective Green, g (s)	15.3	15.3		15.0	15.0		0.8	26.2		1.9	29.5	
Actuated g/C Ratio	0.27	0.27		0.26	0.26		0.01	0.45		0.03	0.51	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	339	487		308	434		25	2267		58	2603	
v/s Ratio Prot		0.09			0.03		0.01	c0.13		c0.05	c0.09	
v/s Ratio Perm	0.02			c0.16								
v/c Ratio	0.07	0.33		0.61	0.12		0.84	0.29		1.43	0.17	
Uniform Delay, d1	15.8	17.0		18.7	16.3		28.3	9.9		27.9	7.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1		3.6	0.1		106.1	0.3		268.4	0.1	
Delay (s)	15.9	17.2		22.4	16.4		134.4	10.2		296.3	7.6	
Level of Service	B	B		C	B		F	B		F	A	
Approach Delay (s)		17.0			20.2			13.9			53.4	
Approach LOS		B			C			B			D	

Intersection Summary				
HCM Average Control Delay	27.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	18.5	
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
35: W Laurel St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Volume (vph)	278	524	64	89	352	89	155	421	51	338	562	150
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	302	570	70	97	383	97	168	458	55	367	611	163
RTOR Reduction (vph)	0	9	0	0	22	0	0	13	0	0	0	134
Lane Group Flow (vph)	302	631	0	97	458	0	168	500	0	367	611	29
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	17.7	27.0		12.3	21.0		13.2	20.9		21.2	28.8	17.7
Effective Green, g (s)	18.1	28.2		12.7	22.8		13.6	21.8		21.6	29.8	18.1
Actuated g/C Ratio	0.18	0.28		0.13	0.23		0.14	0.22		0.22	0.30	0.18
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	319	979		224	778		240	1086		381	1511	280
v/s Ratio Prot	c0.17	c0.18		0.05	0.13		0.09	c0.10		c0.21	0.12	
v/s Ratio Perm												0.02
v/c Ratio	0.95	0.64		0.43	0.59		0.70	0.46		0.96	0.40	0.11
Uniform Delay, d1	40.6	31.6		40.5	34.6		41.4	34.1		39.0	28.2	34.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	35.8	1.6		6.0	1.0		7.0	1.4		36.1	0.8	0.1
Delay (s)	76.5	33.3		46.5	35.6		48.4	35.5		75.1	29.0	34.4
Level of Service	E	C		D	D		D	D		E	C	C
Approach Delay (s)		47.1			37.4			38.7			44.6	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	42.9	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	90.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
36: Rosecrans St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.84	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Volume (vph)	100	685	78	143	257	80	235	206	456	57	97	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	753	86	157	282	88	258	226	501	63	107	57
RTOR Reduction (vph)	0	0	39	0	0	54	0	0	88	0	0	47
Lane Group Flow (vph)	110	753	47	157	282	34	258	226	413	63	107	10
Confl. Peds. (#/hr)	170		27	27		170	23		15	15		23
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	7.2	34.4	46.4	5.8	33.0	33.0	12.0	21.9	27.7	5.8	15.7	15.7
Effective Green, g (s)	7.6	35.3	47.7	6.2	33.9	33.9	12.4	21.3	26.0	6.2	15.2	15.2
Actuated g/C Ratio	0.09	0.41	0.55	0.07	0.39	0.39	0.14	0.25	0.30	0.07	0.18	0.18
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	156	1444	923	246	730	520	254	871	565	127	622	270
v/s Ratio Prot	c0.06	c0.21	0.01	0.05	0.15		c0.15	0.06	c0.04	0.04	0.03	
v/s Ratio Perm			0.02			0.03			0.23			0.01
v/c Ratio	0.71	0.52	0.05	0.64	0.39	0.07	1.02	0.26	0.73	0.50	0.17	0.04
Uniform Delay, d1	38.4	19.2	9.0	39.1	18.8	16.4	37.0	26.2	27.1	38.6	30.3	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	1.3	0.0	4.0	1.5	0.2	60.6	0.3	4.2	1.1	0.2	0.1
Delay (s)	49.6	20.6	9.0	43.0	20.4	16.7	97.6	26.5	31.3	39.8	30.5	29.7
Level of Service	D	C	A	D	C	B	F	C	C	D	C	C
Approach Delay (s)		22.9			26.5			47.6			32.9	
Approach LOS		C			C			D			C	

Intersection Summary				
HCM Average Control Delay	33.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	86.5	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	77.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
37: Old Town St & Moore St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.94			0.95			0.88	
Flt Protected		0.97			1.00			0.99			1.00	
Satd. Flow (prot)		1796			1726			1725			1605	
Flt Permitted		0.62			0.99			0.90			0.99	
Satd. Flow (perm)		1147			1714			1570			1596	
Volume (vph)	406	183	9	5	150	137	71	88	95	1	2	21
Peak-hour factor, PHF	0.98	0.98	0.98	0.86	0.86	0.86	0.89	0.89	0.89	0.67	0.67	0.67
Adj. Flow (vph)	414	187	9	6	174	159	80	99	107	1	3	31
RTOR Reduction (vph)	0	1	0	0	21	0	0	29	0	0	24	0
Lane Group Flow (vph)	0	609	0	0	318	0	0	257	0	0	11	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		49.4			49.4			15.4			15.4	
Effective Green, g (s)		50.3			50.3			16.3			16.3	
Actuated g/C Ratio		0.67			0.67			0.22			0.22	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		773			1156			343			349	
v/s Ratio Prot												
v/s Ratio Perm		c0.53			0.19			c0.16			0.01	
v/c Ratio		0.79			0.27			0.75			0.03	
Uniform Delay, d1		8.4			4.9			27.2			22.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.9			0.6			7.6			0.0	
Delay (s)		13.4			5.4			34.9			22.9	
Level of Service		B			A			C			C	
Approach Delay (s)		13.4			5.4			34.9			22.9	
Approach LOS		B			A			C			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	74.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
38: Taylor St & Congress St 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4770		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4770		1770	3539	1770	1583
Volume (vph)	902	296	132	392	88	157
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.90	0.90
Adj. Flow (vph)	1013	333	148	440	98	174
RTOR Reduction (vph)	67	0	0	0	0	136
Lane Group Flow (vph)	1279	0	148	440	98	38
Confl. Peds. (#/hr)		53	53		46	81
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	33.8		6.3	44.5	14.0	14.0
Effective Green, g (s)	35.7		6.7	44.5	14.9	14.9
Actuated g/C Ratio	0.52		0.10	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2493		174	2306	386	345
v/s Ratio Prot	c0.27		c0.08	0.12	c0.06	0.02
v/s Ratio Perm						
v/c Ratio	0.51		0.85	0.19	0.25	0.11
Uniform Delay, d1	10.6		30.3	4.7	22.1	21.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		29.8	0.2	0.1	0.1
Delay (s)	11.4		60.1	4.9	22.2	21.4
Level of Service	B		E	A	C	C
Approach Delay (s)	11.4			18.8	21.7	
Approach LOS	B			B	C	

Intersection Summary				
HCM Average Control Delay	14.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	55.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

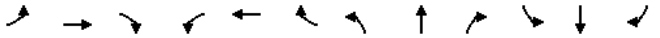
Exisitng PM
39: Twiggs St & Congress St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	2	3	17	5	47	12	106	13	43	136	9
Peak Hour Factor	0.80	0.80	0.80	0.66	0.66	0.66	0.82	0.82	0.82	0.90	0.90	0.90
Hourly flow rate (vph)	10	2	4	26	8	71	15	129	16	48	151	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	105	160	209
Volume Left (vph)	10	26	15	48
Volume Right (vph)	4	71	16	10
Hadj (s)	0.02	-0.33	-0.01	0.05
Departure Headway (s)	4.9	4.4	4.4	4.4
Degree Utilization, x	0.02	0.13	0.20	0.26
Capacity (veh/h)	666	744	783	782
Control Delay (s)	8.0	8.1	8.5	8.9
Approach Delay (s)	8.0	8.1	8.5	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
HCM Level of Service	A			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
40: Harney St & Congress St 4/9/2012

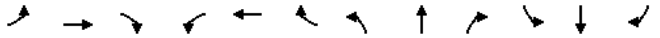


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	10	5	19	29	8	5	102	15	20	96	40
Peak Hour Factor	0.75	0.75	0.75	0.73	0.73	0.73	0.87	0.87	0.87	0.92	0.92	0.92
Hourly flow rate (vph)	28	13	7	26	40	11	6	117	17	22	104	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	48	77	140	170
Volume Left (vph)	28	26	6	22
Volume Right (vph)	7	11	17	43
Hadj (s)	0.07	0.02	-0.03	-0.09
Departure Headway (s)	4.8	4.7	4.4	4.3
Degree Utilization, x	0.06	0.10	0.17	0.20
Capacity (veh/h)	695	712	791	805
Control Delay (s)	8.1	8.2	8.2	8.3
Approach Delay (s)	8.1	8.2	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.3	
HCM Level of Service			A	
Intersection Capacity Utilization			30.3%	ICU Level of Service
Analysis Period (min)			15	A

Exisitng PM
41: Ampudia St & Congress St 4/9/2012

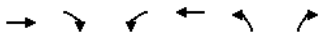


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	5	6	51	18	11	9	99	290	0	107	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	7	5	7	82	29	18	10	106	312	0	120	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								320				
pX, platoon unblocked												
vC, conflicting volume	286	570	123	265	259	120	124			427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	286	570	123	265	259	120	124			427		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	88	95	98	99			100		
cM capacity (veh/h)	619	425	926	662	635	920	1460			1124		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	19	129	116	312	122
Volume Left	7	82	10	0	0
Volume Right	7	18	0	312	2
cSH	608	682	1460	1700	1124
Volume to Capacity	0.03	0.19	0.01	0.18	0.00
Queue Length 95th (ft)	2	17	1	0	0
Control Delay (s)	11.1	11.5	0.7	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.1	11.5	0.2		0.0
Approach LOS	B	B			

Intersection Summary					
Average Delay			2.5		
Intersection Capacity Utilization			38.5%	ICU Level of Service	
Analysis Period (min)			15		A

Exisitng PM
42: Twiggs St & San Diego Ave 4/9/2012

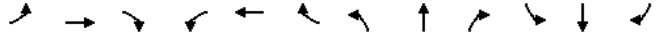


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	30	28	41	35	34	85
Peak Hour Factor	0.89	0.89	0.78	0.78	0.83	0.83
Hourly flow rate (vph)	34	31	53	45	41	102

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	65	97	143
Volume Left (vph)	0	53	41
Volume Right (vph)	31	0	102
Hadj (s)	-0.26	0.14	-0.34
Departure Headway (s)	4.0	4.4	3.9
Degree Utilization, x	0.07	0.12	0.16
Capacity (veh/h)	851	787	877
Control Delay (s)	7.4	8.0	7.6
Approach Delay (s)	7.4	8.0	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay		7.7	
HCM Level of Service		A	
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
43: Harney St & San Diego Ave 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	18	13	40	18	6	30	99	46	3	58	8
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.91	0.91	0.91	0.81	0.81	0.81
Hourly flow rate (vph)	17	22	16	47	21	7	33	109	51	4	72	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	74	192	85
Volume Left (vph)	17	47	33	4
Volume Right (vph)	16	7	51	10
Hadj (s)	-0.08	0.10	-0.09	-0.03
Departure Headway (s)	4.5	4.7	4.2	4.4
Degree Utilization, x	0.07	0.10	0.23	0.10
Capacity (veh/h)	732	713	822	777
Control Delay (s)	7.9	8.2	8.4	7.9
Approach Delay (s)	7.9	8.2	8.4	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
44: Old Town St & San Diego Ave 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.97		1.00	1.00		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1728			1785		1765	1852		1763	1623	
Flt Permitted		0.77			0.95		0.62	1.00		0.66	1.00	
Satd. Flow (perm)		1377			1713		1149	1852		1219	1623	
Volume (vph)	160	28	91	7	45	17	100	121	4	8	48	147
Peak-hour factor, PHF	0.78	0.78	0.78	0.81	0.81	0.81	0.79	0.79	0.79	0.87	0.87	0.87
Adj. Flow (vph)	205	36	117	9	56	21	127	153	5	9	55	169
RTOR Reduction (vph)	0	41	0	0	14	0	0	2	0	0	83	0
Lane Group Flow (vph)	0	317	0	0	72	0	127	156	0	9	141	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Effective Green, g (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.31			0.31		0.51	0.51		0.51	0.51	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		431			536		582	939		618	822	
v/s Ratio Prot								0.08			0.09	
v/s Ratio Perm		c0.23			0.04		c0.11			0.01		
v/c Ratio		0.73			0.13		0.22	0.17		0.01	0.17	
Uniform Delay, d1		13.6			10.9		6.1	5.9		5.4	5.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.5			0.0		0.9	0.4		0.0	0.5	
Delay (s)		19.1			11.0		6.9	6.3		5.5	6.4	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		19.1			11.0			6.6			6.3	
Approach LOS		B			B			A			A	

Intersection Summary				
HCM Average Control Delay	11.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	44.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	55.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

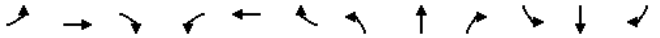
Exisitng PM
45: Taylor St & 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.90			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1764	3473		1769	3530			1640			1742	
Flt Permitted	0.46	1.00		0.14	1.00			0.90			0.73	
Satd. Flow (perm)	856	3473		264	3530			1500			1315	
Volume (vph)	52	909	98	188	454	6	65	2	179	15	2	5
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.95	0.95	0.95	0.79	0.79	0.79
Adj. Flow (vph)	56	977	105	211	510	7	68	2	188	19	3	6
RTOR Reduction (vph)	0	10	0	0	1	0	0	148	0	0	5	0
Lane Group Flow (vph)	56	1072	0	211	516	0	0	110	0	0	23	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.1	25.8		37.3	30.6			10.5			10.5	
Effective Green, g (s)	29.5	26.8		38.2	31.5			11.4			11.4	
Actuated g/C Ratio	0.51	0.47		0.66	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	481	1616		368	1930			297			260	
v/s Ratio Prot	0.01	c0.31		c0.07	0.15							
v/s Ratio Perm	0.05			0.31				c0.07			0.02	
v/c Ratio	0.12	0.66		0.57	0.27			0.37			0.09	
Uniform Delay, d1	7.1	11.9		6.8	6.9			20.0			18.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	2.2		1.3	0.3			0.3			0.1	
Delay (s)	7.1	14.1		8.1	7.3			20.3			18.9	
Level of Service	A	B		A	A			C			B	
Approach Delay (s)		13.7			7.5			20.3			18.9	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	12.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
46: Twiggs St & Juan St 4/9/2012

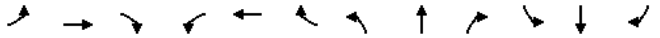


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	98	4	13	0	1	5	4	91	3	6	127	71
Peak Hour Factor	0.93	0.93	0.93	0.50	0.50	0.50	0.87	0.87	0.87	0.96	0.96	0.96
Hourly flow rate (vph)	105	4	14	0	2	10	5	105	3	6	132	74

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	124	12	113	213
Volume Left (vph)	105	0	5	6
Volume Right (vph)	14	10	3	74
Hadj (s)	0.14	-0.47	0.02	-0.17
Departure Headway (s)	4.8	4.3	4.5	4.2
Degree Utilization, x	0.16	0.01	0.14	0.25
Capacity (veh/h)	701	753	765	819
Control Delay (s)	8.7	7.4	8.2	8.6
Approach Delay (s)	8.7	7.4	8.2	8.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.5		
HCM Level of Service		A		
Intersection Capacity Utilization		33.9%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
47: Harney St & Juan St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	22	3	42	0	3	9	21	67	4	4	96	40
Peak Hour Factor	0.90	0.90	0.90	0.50	0.50	0.50	0.92	0.92	0.92	0.88	0.88	0.80
Hourly flow rate (vph)	24	3	47	0	6	18	23	73	4	5	109	50

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	74	24	100	164
Volume Left (vph)	24	0	23	5
Volume Right (vph)	47	18	4	50
Hadj (s)	-0.28	-0.42	0.05	-0.14
Departure Headway (s)	4.2	4.1	4.3	4.1
Degree Utilization, x	0.09	0.03	0.12	0.19
Capacity (veh/h)	790	799	798	858
Control Delay (s)	7.6	7.3	7.9	8.0
Approach Delay (s)	7.6	7.3	7.9	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.9		
HCM Level of Service		A		
Intersection Capacity Utilization		33.2%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
48: Taylor St & Morena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3510		1770	3426				1611	1681	1699	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3510		1770	3426				1611	1681	1699	1561
Volume (vph)	468	606	29	3	448	107	0	0	14	78	7	200
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	498	645	31	3	477	114	0	0	16	88	8	225
RTOR Reduction (vph)	0	3	0	0	21	0	0	0	0	0	0	181
Lane Group Flow (vph)	498	673	0	3	570	0	0	0	16	47	49	44
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	12.0	38.5		0.6	27.1				65.3	11.6	11.6	11.6
Effective Green, g (s)	12.4	39.4		1.0	28.0				65.3	12.9	12.9	12.9
Actuated g/C Ratio	0.19	0.60		0.02	0.43				1.00	0.20	0.20	0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	652	2118		27	1469				1611	332	336	308
v/s Ratio Prot	c0.15	0.19		0.00	c0.17					0.03	c0.03	
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.76	0.32		0.11	0.39				0.01	0.14	0.15	0.14
Uniform Delay, d1	25.1	6.4		31.7	12.8				0.0	21.6	21.6	21.6
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	0.4		0.7	0.8				0.0	0.3	0.3	0.4
Delay (s)	29.8	6.8		32.4	13.6				0.0	22.0	22.0	22.0
Level of Service	C	A		C	B				A	C	C	C
Approach Delay (s)		16.5			13.6			0.0			22.0	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
49: Rosecrans St. & Hugo St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.92			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3420		1671	3423		1644	1575			1736	
Flt Permitted	0.95	1.00		0.95	1.00		0.55	1.00			0.51	
Satd. Flow (perm)	1678	3420		1671	3423		949	1575			900	
Volume (vph)	16	1386	63	32	969	26	105	99	124	24	76	3
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	1540	70	36	1077	29	117	110	138	27	84	3
RTOR Reduction (vph)	0	1	0	0	1	0	0	34	0	0	1	0
Lane Group Flow (vph)	18	1609	0	36	1105	0	117	214	0	0	113	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	105.3		6.8	109.0		23.7	23.7			23.7	
Effective Green, g (s)	3.5	106.2		7.2	109.9		24.6	24.6			24.6	
Actuated g/C Ratio	0.02	0.71		0.05	0.73		0.16	0.16			0.16	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	39	2421		80	2508		156	258			148	
v/s Ratio Prot	0.01	c0.47		c0.02	c0.32			c0.14				
v/s Ratio Perm							0.12				0.13	
v/c Ratio	0.46	0.66		0.45	0.44		0.75	0.83			0.76	
Uniform Delay, d1	72.3	12.1		69.5	7.9		59.8	60.7			59.9	
Progression Factor	1.00	1.00		0.91	0.44		1.00	1.00			1.00	
Incremental Delay, d2	3.1	1.5		1.0	0.4		16.3	18.4			18.8	
Delay (s)	75.4	13.5		64.3	3.8		76.1	79.0			78.7	
Level of Service	E	B		E	A		E	E			E	
Approach Delay (s)		14.2			5.8			78.1			78.7	
Approach LOS		B			A			E			E	

Intersection Summary				
HCM Average Control Delay	20.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	72.2%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
50: Rosecrans St. & Lowell St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Volume (vph)	352	1316	24	165	799	184	18	370	181	287	190	135
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	371	1385	25	174	841	194	19	389	191	302	200	142
RTOR Reduction (vph)	0	1	0	0	13	0	0	0	31	0	85	0
Lane Group Flow (vph)	371	1409	0	174	1022	0	19	389	160	302	257	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	33.0	60.9		16.7	44.1		3.6	24.8	41.5	28.9	50.2	
Effective Green, g (s)	33.4	61.8		17.1	45.5		4.0	25.8	42.9	29.3	51.1	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.03	0.17	0.29	0.20	0.34	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	394	1453		202	1030		47	609	437	346	1084	
v/s Ratio Prot	c0.21	c0.40		0.10	0.30		0.01	c0.11	0.04	c0.17	0.08	
v/s Ratio Perm									0.06			
v/c Ratio	0.94	0.97		0.86	0.99		0.40	0.64	0.37	0.87	0.24	
Uniform Delay, d1	57.3	43.2		65.3	52.1		71.8	57.8	42.7	58.5	35.5	
Progression Factor	1.19	0.83		1.16	0.91		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.0	15.0		26.6	25.0		2.1	2.5	0.2	20.2	0.1	
Delay (s)	94.0	50.7		102.4	72.3		73.9	60.2	42.9	78.8	35.6	
Level of Service	F	D		F	E		E	E	D	E	D	
Approach Delay (s)		59.7			76.7			55.1			55.8	
Approach LOS		E			E			E			E	

Intersection Summary				
HCM Average Control Delay	63.3	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.3%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
51: Rosecrans St. & Laning Rd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (prot)		5045		1770	3539			1775	1552		1787	
Flt Permitted		1.00		0.95	1.00			0.71	1.00		0.70	
Satd. Flow (perm)		5045		1770	3539			1329	1552		1302	
Volume (vph)	0	1855	83	142	1217	1	87	1	203	40	10	1
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1953	87	149	1281	1	92	1	214	42	11	1
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	184	0	1	0
Lane Group Flow (vph)	0	2038	0	149	1282	0	0	93	30	0	53	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		98.8		16.5	119.7			20.1	20.1		20.1	
Effective Green, g (s)		100.1		16.9	121.0			21.0	21.0		21.0	
Actuated g/C Ratio		0.67		0.11	0.81			0.14	0.14		0.14	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		3367		199	2855			186	217		182	
v/s Ratio Prot		c0.40		c0.08	0.36							
v/s Ratio Perm								c0.07	0.02		0.04	
v/c Ratio		0.61		0.75	0.45			0.50	0.14		0.29	
Uniform Delay, d1		13.9		64.5	4.4			59.6	56.6		57.8	
Progression Factor		0.35		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		12.6	0.5			0.8	0.1		0.3	
Delay (s)		5.4		77.1	4.9			60.4	56.7		58.2	
Level of Service		A		E	A			E	E		E	
Approach Delay (s)		5.4			12.4			57.8			58.2	
Approach LOS		A			B			E			E	

Intersection Summary				
HCM Average Control Delay	12.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
52: Hawthorne St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.98	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5031						4958	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5031						4958	
Volume (vph)	0	0	0	197	900	0	0	0	0	0	393	67
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	210	957	0	0	0	0	0	546	93
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	0	0	0	1141	0	0	0	0	0	607	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3527						1041	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.23							
v/c Ratio					0.32						0.58	
Uniform Delay, d1					5.2						32.0	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.2						0.5	
Delay (s)					5.4						32.5	
Level of Service					A						C	
Approach Delay (s)		0.0			5.4			0.0			32.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	15.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

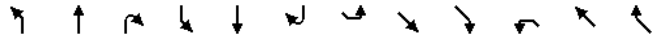
Exisitng PM
53: Grape St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		1.00									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5063									4943	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5063									4943	
Volume (vph)	0	1526	39	0	0	0	0	0	0	240	350	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	1641	42	0	0	0	0	0	0	270	393	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	1681	0	0	0	0	0	0	0	0	655	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		61.8									19.2	
Effective Green, g (s)		61.8									20.2	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3477									1109	
v/s Ratio Prot		c0.33										
v/s Ratio Perm											0.13	
v/c Ratio		0.48									0.59	
Uniform Delay, d1		6.6									31.2	
Progression Factor		0.40									0.72	
Incremental Delay, d2		0.4									0.8	
Delay (s)		3.0									23.3	
Level of Service		A									C	
Approach Delay (s)		3.0			0.0			0.0			23.3	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	8.7	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
54: Seaworld Dr & E Mission Bay Dr 4/9/2012

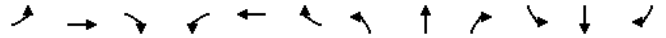


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Volume (vph)	78	1077	116	142	1276	13	59	70	189	102	41	116
Peak-hour factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96	0.82	0.82	0.82	0.74	0.74	0.74
Adj. Flow (vph)	80	1110	120	148	1329	14	72	85	230	138	55	157
RTOR Reduction (vph)	0	0	89	0	0	9	0	0	115	0	0	116
Lane Group Flow (vph)	80	1110	31	148	1329	5	72	85	115	138	55	41
Confl. Peds. (#/hr)	1					1			1	1		
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	3.1	31.6	8.0	8.1	36.7	3.9	3.9	11.8	11.8	8.0	15.0	15.0
Effective Green, g (s)	3.1	33.1	8.0	8.1	38.1	3.9	3.9	12.7	12.7	8.0	16.8	16.8
Actuated g/C Ratio	0.04	0.42	0.10	0.10	0.49	0.05	0.05	0.16	0.16	0.10	0.22	0.22
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	137	1504	163	184	1731	78	172	304	255	182	402	341
v/s Ratio Prot	0.02	0.31		c0.08	c0.38		0.02	0.05		c0.08	0.03	
v/s Ratio Perm			0.02			0.00			c0.07			0.03
v/c Ratio	0.58	0.74	0.19	0.80	0.77	0.07	0.42	0.28	0.45	0.76	0.14	0.12
Uniform Delay, d1	36.8	18.8	32.0	34.1	16.3	35.3	35.9	28.6	29.5	34.0	24.7	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	3.3	0.2	20.8	3.3	0.1	0.6	0.5	1.3	14.8	0.1	0.1
Delay (s)	40.8	22.0	32.2	54.9	19.6	35.4	36.5	29.1	30.7	48.8	24.7	24.7
Level of Service	D	C	C	D	B	D	D	C	C	D	C	C
Approach Delay (s)		24.1			23.3			31.4			34.2	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM Average Control Delay	25.6	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	77.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
55: Hawthorne St & Pacific Highway 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				0.97	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			0.99	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1716	3482		1770	5085			5029	
Flt Permitted				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)				1716	3482		1770	5085			5029	
Volume (vph)	0	0	0	110	775	82	52	375	0	0	258	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.88	0.88	0.88	0.84	0.84	0.84
Adj. Flow (vph)	0	0	0	124	871	92	59	426	0	0	307	21
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	124	954	0	59	426	0	0	318	0
Confl. Peds. (#/hr)				35		10	7					7
Turn Type				Perm			Prot					
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)				40.5	40.5		23.3	39.7			12.0	
Effective Green, g (s)				41.0	39.6		23.3	39.7			11.9	
Actuated g/C Ratio				0.46	0.44		0.26	0.44			0.13	
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	
Lane Grp Cap (vph)				782	1532		458	2243			665	
v/s Ratio Prot					c0.27		0.03	c0.08			c0.06	
v/s Ratio Perm				0.07								
v/c Ratio				0.16	0.62		0.13	0.19			0.48	
Uniform Delay, d1				14.4	19.4		25.6	15.3			36.2	
Progression Factor				1.07	1.09		0.47	0.53			1.00	
Incremental Delay, d2				0.4	1.8		0.5	0.2			0.6	
Delay (s)				15.8	23.1		12.4	8.2			36.8	
Level of Service				B	C		B	A			D	
Approach Delay (s)		0.0			22.3			8.7			36.8	
Approach LOS		A			C			A			D	

Intersection Summary				
HCM Average Control Delay	21.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.44			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.8	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
56: Grape St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5075	1532					4668		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5075	1532					4668		1770	5085	
Volume (vph)	43	1141	24	0	0	0	0	384	332	92	276	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.92	0.92	0.92	0.95	0.95
Adj. Flow (vph)	47	1240	26	0	0	0	0	417	361	100	291	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	119	0	0	0	0
Lane Group Flow (vph)	0	1287	10	0	0	0	0	659	0	100	291	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		34.6	34.6					26.0		15.2	45.6	
Effective Green, g (s)		35.5	35.5					26.0		15.6	45.6	
Actuated g/C Ratio		0.39	0.39					0.29		0.17	0.51	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2002	604					1349		307	2576	
v/s Ratio Prot								c0.14		c0.06	0.06	
v/s Ratio Perm		0.25	0.01									
v/c Ratio		0.64	0.02					0.49		0.33	0.11	
Uniform Delay, d1		22.1	16.6					26.5		32.6	11.6	
Progression Factor		1.00	1.00					1.00		1.77	0.56	
Incremental Delay, d2		1.6	0.1					1.3		2.8	0.1	
Delay (s)		23.7	16.7					27.8		60.3	6.6	
Level of Service		C	B					C		E	A	
Approach Delay (s)		23.6			0.0			27.8			20.4	
Approach LOS		C			A			C			C	

Intersection Summary				
HCM Average Control Delay	24.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

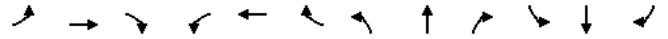
Exisitng PM
57: Seaworld Dr & Friars Rd 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1568	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1568	3433	3539	3433	1418
Volume (vph)	1153	391	270	1297	301	118
Peak-hour factor, PHF	0.96	0.96	0.99	0.99	0.93	0.93
Adj. Flow (vph)	1201	407	273	1310	324	127
RTOR Reduction (vph)	0	7	0	0	0	98
Lane Group Flow (vph)	1201	400	273	1310	324	29
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.8	41.6	7.8	41.8	12.8	12.8
Effective Green, g (s)	31.0	46.0	7.7	43.2	15.0	15.0
Actuated g/C Ratio	0.47	0.69	0.12	0.65	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1657	1184	399	2309	778	321
v/s Ratio Prot	c0.34	0.08	0.08	c0.37	c0.09	
v/s Ratio Perm		0.18				0.02
v/c Ratio	0.72	0.34	0.68	0.57	0.42	0.09
Uniform Delay, d1	14.2	4.0	28.1	6.3	21.9	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	3.8	1.0	0.1	0.0
Delay (s)	17.0	4.1	31.9	7.4	22.0	20.3
Level of Service	B	A	C	A	C	C
Approach Delay (s)	13.7			11.6	21.5	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Existing PM
58: I-5 SB On/I-5 SB Off & Seaworld Dr 12/07/2017

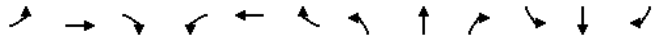


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Future Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.86	0.86	0.86	0.25	0.25	0.25	0.96	0.96	0.96
Adj. Flow (vph)	0	1116	259	340	356	0	0	0	0	347	0	1172
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1116	131	340	356	0	0	0	0	347	0	1172
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		36.8	36.8	9.4	50.4					15.0		75.0
Effective Green, g (s)		37.8	37.8	9.6	51.4					15.6		75.0
Actuated g/C Ratio		0.50	0.50	0.13	0.69					0.21		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1783	786	439	2425					368		1583
v/s Ratio Prot		0.32		0.10	0.10					c0.20		
v/s Ratio Perm			0.08									c0.74
v/c Ratio		0.63	0.17	0.77	0.15					0.94		0.74
Uniform Delay, d1		13.5	10.1	31.7	4.1					29.3		0.0
Progression Factor		1.00	1.00	0.91	1.16					1.00		1.00
Incremental Delay, d2		1.7	0.5	6.7	0.1					32.1		3.2
Delay (s)		15.1	10.5	35.5	4.9					61.3		3.2
Level of Service		B	B	D	A					E		A
Approach Delay (s)		14.3			19.9			0.0			16.4	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
59: Seaworld Dr & I-5 NB On 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3265			1775	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3265			1775	1583			
Volume (vph)	783	566	0	0	432	384	166	3	418	0	0	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.90	0.90	0.90	0.25	0.25	0.25
Adj. Flow (vph)	833	602	0	0	436	388	184	3	464	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	328	0	0	0
Lane Group Flow (vph)	833	602	0	0	622	0	0	187	136	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	19.5	55.7			32.0			9.2	9.2			
Effective Green, g (s)	19.7	56.2			32.5			9.8	9.8			
Actuated g/C Ratio	0.26	0.75			0.43			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	902	2652			1415			232	207			
v/s Ratio Prot	c0.24	0.17			c0.19			c0.11				
v/s Ratio Perm									0.09			
v/c Ratio	0.92	0.23			0.44			0.81	0.66			
Uniform Delay, d1	26.9	2.8			14.9			31.7	31.0			
Progression Factor	1.47	0.76			1.00			1.00	1.00			
Incremental Delay, d2	11.1	0.1			1.0			17.2	5.7			
Delay (s)	50.6	2.3			15.9			48.9	36.7			
Level of Service	D	A			B			D	D			
Approach Delay (s)		30.3			15.9			40.2			0.0	
Approach LOS		C			B			D			A	

Intersection Summary				
HCM Average Control Delay	28.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	87.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Appendix F
Caltrans Freeway Count Worksheets

Dist	Rte		Description	CO		Poast Mile	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak hour	Ahead Peak Month	Ahead AADT	Peak Hour
	11	8	NIMITZ BLVD	SD	T	0.466	740	11,000	10,500	4,050	48,500	46,500	8.7%
	11	8	MIDWAY DRIVE	SD	L	1.213	4,050	48,500	46,500	8,800	113,000	102,000	8.6%
	11	8	JCT RTE 5 LT LANES	SD	L	2.379	8,800	113,000	102,000	11,100	144,000	132,000	8.4%
	11	8	SAN DIEGO, MORENA BLVD	SD	R	0.364	11,100	144,000	132,000	15,700	194,000	191,000	8.2%
	11	5	CLAIREMONT DRIVE	SD	R	22.262	Ahead Peak hour 18,300	Ahead Peak Month 230,000	Ahead AADT 220,000	Back Peak Hour 16,800	Back Peak Month 208,000	Back AADT 203,000	8.3%
	11	5	MISSION BAY/SEA WORLD	SD	R	20.818	16,700	212,000	199,000	18,300	230,000	220,000	8.4%
	11	5	JCT. RTE. 8/CAMINO DEL RIO	SD	R	20.056	16,300	212,000	199,000	16,700	212,000	199,000	8.2%
	11	5	SAN DIEGO, OLD TOWN AVE	SD	R	19.033	15,400	205,000	192,000	16,300	212,000	199,000	8.0%
	11	5	SAN DIEGO, WASHINGTON ST	SD	R	18.283	11,500	152,000	142,000	15,400	205,000	192,000	8.1%
	11	5	SAN DIEGO, SASSAFRAS ST	SD	R	17.77	12,400	157,000	147,000	11,500	152,000	142,000	8.4%
	11	5	PACIFIC HIGHWAY VIADUCT	SD	R	17.53	14,400	200,000	183,000	12,400	157,000	147,000	7.9%

Location (I.D.)	Route	Dir	Period	Cars per green	Fast. rate (cyc./min.)	Slow. rate (cyc./min.)	Rate Delta	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV	Flow/lane			Total Flow
												High	Low	Average	Average
W. Mission Bay Dr (251)	8	EB	1500 - 1900	2	8.3	5.8	0.18	7.2 - 10.4	996 - 694	2	No	996	694	845	1690
Sports Arena Blvd (252)	8	EB	1500 - 1900	2	6.6	4.1	0.18	9.1 - 14.7	396 - 245	3	Lt	396	245	320.5	641
Sea World Dr (97)	5	SB	0530 - 0930	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
Sea World Dr (223)	5	NB	0530 - 0930	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555
			1500 - 1900	2	8.3	5.5	0.20	7.2 - 10.9	996 - 660	2	No	996	660	828	1656
Old Town Ave (187)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	1	No	570	352	461	461
Old Town Ave (188)	5	NB	0530 - 0930	1	9.5	5.6	0.28	6.3 - 10.8	570 - 335	2	No	570	335	452.5	905
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	No	570	318	444	888
Washington St (184)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Washington St (186)	5	NB	0530 - 0930	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Hawthorne St (181)	5	NB	0530 - 0930	2	8.3	4.8	0.25	7.2 - 12.5	996 - 576	2	No	996	576	786	1572
			1500 - 1900	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555

There are 15 separate rates or steps that depend on the mainlane volumes. The Cycles/min. have a definite rate delta whereas the seconds/cycle from one rate to another can vary from 0.1 - 0.4 sec.

RTE	DIST	CNTY	POST MILE	LEG	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
008	11	SD	T.407	A	SAN DIEGO, SUNSET CLIFFS BOULEVARD	10500	105	1	86	8	3	8	82.3	7.4	2.9	7.4	7	78E
008	11	SD	L2.379	B	JCT RTE 5 LT LANES	102000	1224	1.2	1038	87	9	91	84.8	7.1	.7	7.4	77	78V
008	11	SD	L2.379	A	JCT RTE 5 LT LANES	129000	3612	2.8	2416	520	155	520	66.9	14.4	4.3	14.4	335	83V
008	11	SD	2.41	B	SAN DIEGO, JCT. RTE. 163	201000	5427	2.7	4200	586	136	505	77.4	10.8	2.5	9.3	395	83E
008	11	SD	2.41	A	SAN DIEGO, JCT. RTE. 163	205000	5740	2.8	4483	574	138	545	78.1	10	2.4	9.5	418	83E
008	11	SD	4.378	B	SAN DIEGO, JCT. RTE. 805	194000	6208	3.2	4662	615	211	720	75.1	9.9	3.4	11.6	499	83E
008	11	SD	5.638	B	JCT. RTE. 15	241000	7230	3	4230	918	304	1779	58.5	12.7	4.2	24.6	891	83V
008	11	SD	5.638	A	JCT. RTE. 15	214000	7490	3.5	4794	861	337	1498	64	11.5	4.5	20	813	84E
008	11	SD	10.57	B	FLETCHER PARKWAY	190000	7030	3.7	4204	893	246	1687	59.8	12.7	3.5	24	847	84V
008	11	SD	10.57	A	FLETCHER PARKWAY	174000	7656	4.4	4326	1179	390	1761	56.5	15.4	5.1	23	925	78V
008	11	SD	15.8	B	EL CAJON, JCT. RTE. 67 NORTH	166000	7802	4.7	4205	1022	359	2216	53.9	13.1	4.6	28.4	1058	78V
008	11	SD	15.8	A	EL CAJON, JCT. RTE. 67 NORTH	134000	3886	2.9	2153	439	136	1158	55.4	11.3	3.5	29.8	535	78V
008	11	SD	R18.727	A	GREENFIELD DRIVE	80000	5520	6.9	2909	431	132	2048	52.7	7.8	2.4	37.1	867	86V
008	11	SD	R37.831	B	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	24900	2988	12	1174	176	90	1548	39.3	5.9	3	51.8	605	86E
008	11	SD	R37.831	A	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	19300	2625	13.6	853	205	76	1491	32.5	7.8	2.9	56.8	574	00E
008	11	SD	R51.98	B	CAMERON ROAD	15700	2013	12.82	843	94	40	1036	41.89	4.67	1.99	51.46	401	09V

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
005	11	SD	R.09	A	SAN DIEGO, MEXICAN BORDER, TIE OFF	74000	1628	2.2	1014	62	46	506	62.3	3.8	2.8	31.1	223	83E
005	11	SD	R.878	A	SOUTH JCT. RTE. 805	40000	1520	3.8	800	195	15	511	52.6	12.8	1	33.6	224	83V
005	11	SD	4.632	B	JCT. RTE. 75 WEST	117000	4914	4.2	3155	595	147	1017	64.2	12.1	3	20.7	538	78V
005	11	SD	4.632	A	JCT. RTE. 75 WEST	143000	5291	3.7	2974	857	254	1206	56.2	16.2	4.8	22.8	636	83V
005	11	SD	R11.129	B	8TH STREET	168000	8400	5	4259	1344	445	2352	50.7	16	5.3	28	1150	85V
005	11	SD	R12.647	B	JCT. RTE. 15 NORTH	187000	9350	5	4740	1496	496	2618	50.7	16	5.3	28	1280	85E
005	11	SD	R12.647	A	JCT. RTE. 15 NORTH	152000	6232	4.1	3509	897	287	1539	56.3	14.4	4.6	24.7	778	85V
005	11	SD	R14.077	B	SAN DIEGO, JCT. RTE. 75 SOUTH	159000	6519	4.1	3670	939	300	1610	56.3	14.4	4.6	24.7	814	85E
005	11	SD	R14.077	A	SAN DIEGO, JCT. RTE. 75 SOUTH	163000	6520	4	3984	782	254	1500	61.1	12	3.9	23	766	78E
005	11	SD	R15.036	B	SAN DIEGO, JCT. RTE. 94	163000	6194	3.8	3785	743	242	1425	61.1	12	3.9	23	728	78V
005	11	SD	R15.036	A	SAN DIEGO, JCT. RTE. 94	209000	8360	4	5827	920	242	1371	69.7	11	2.9	16.4	797	87V
005	11	SD	R16.069	B	SAN DIEGO, JCT. RTE. 163	209000	7733	3.7	5119	773	286	1554	66.2	10	3.7	20.1	828	78E
005	11	SD	R16.069	A	SAN DIEGO, JCT. RTE. 163	200000	8200	4.1	5150	730	230	2091	62.8	8.9	2.8	25.5	1003	85V
005	11	SD	R20.056	B	JCT. RTE. 8/CAMINO DEL RIO	197000	8077	4.1	5072	719	226	2060	62.8	8.9	2.8	25.5	988	85V
005	11	SD	R20.056	A	JCT. RTE. 8/CAMINO DEL RIO	198000	6732	3.4	4443	673	289	1326	66	10	4.3	19.7	717	84V
005	11	SD	R23.476	B	SAN DIEGO, BALBOA	162000	7290	4.5	4811	729	313	1436	66	10	4.3	19.7	777	84E

PeMS 12.1

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Mainline VDS 1111514 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM T.68 (Abs PM 0.3)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	60.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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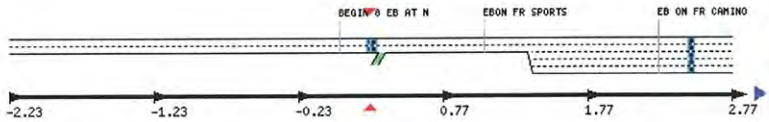
Performance > Planning Analysis > AADT ABOUT THIS REPORT

From Sep 2010 *Max Range:*10 years

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,292	23,244		23,357	23,356	23,244	23,255	23,357	67	2,3
10/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,251	23,190		23,335	23,329	23,190	23,200	23,335	68	2,3
11/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,242	23,238		23,349	23,342	23,238	23,247	23,349	71	2,2
12/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,170	23,207		23,295	23,302	23,207	23,212	23,295	75	2,2
01/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,265	23,289		23,346	23,346	23,289	23,295	23,346	74	2,2
02/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,202	23,274		23,343	23,346	23,274	23,281	23,343	75	2,2
03/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,212	23,290		23,333	23,343	23,290	23,297	23,333	76	2,2
04/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,182	23,261		23,312	23,322	23,261	23,268	23,312	76	2,2
05/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,144	23,262		23,301	23,315	23,262	23,269	23,301	76	2,2
06/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,211	23,285		23,343	23,384	23,285	23,292	23,343	79	2,2
07/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,188	23,266		23,343	23,380	23,266	23,273	23,343	78	2,2
08/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,073	23,218		23,312	23,349	23,218	22,994	23,312	73	2,2



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Used for D Factor

$$\frac{23,300}{23,300 + 21,700} = .52$$

(EB) (WB)

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Mainline VDS 1111515 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM T.54 (Abs PM 0.1)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	40.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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09/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,684	21,626		21,708	21,722	21,626	21,630	21,708	65	2,(
10/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,627	21,547		21,675	21,686	21,547	21,550	21,675	67	2,(
11/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,616	21,598		21,686	21,694	21,598	21,601	21,686	70	2,(
12/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,535	21,566		21,637	21,654	21,566	21,566	21,637	74	2,(
01/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,637	21,649		21,685	21,701	21,649	21,651	21,685	73	2,(
02/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,576	21,631		21,682	21,697	21,631	21,633	21,682	74	2,(
03/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,594	21,658		21,685	21,703	21,658	21,660	21,685	76	2,(
04/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,557	21,624		21,658	21,678	21,624	21,626	21,658	75	2,(
05/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,505	21,606		21,633	21,653	21,606	21,607	21,633	75	2,(
06/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,551	21,610		21,649	21,691	21,610	21,611	21,649	78	2,(
07/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,516	21,589		21,646	21,682	21,589	21,589	21,646	77	2,(
08/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,391	21,548		21,621	21,647	21,548	21,358	21,621	72	2,(



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Mainline VDS 1115528 - E/O MORENA BLVD

Current Location



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I8-W @ CA PM R.589 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10308
LDS	1115522
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	134.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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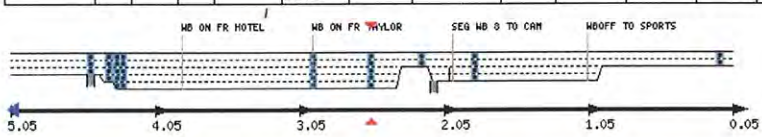
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09/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,314	84,891		85,180	85,215	84,891	84,899	85,180	68
10/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,083	84,566		85,019	85,059	84,566	84,567	85,019	69
11/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,957	84,644		84,970	84,986	84,644	84,643	84,970	72
12/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,605	84,457		84,760	84,820	84,457	84,439	84,760	76
01/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,819	84,729		84,830	84,875	84,729	84,712	84,830	77
02/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,468	84,564		84,723	84,761	84,564	84,547	84,723	78
03/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,364	84,581		84,710	84,748	84,581	84,564	84,710	80
04/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,178	84,392		84,544	84,629	84,392	84,372	84,544	79
05/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,035	84,357		84,470	84,526	84,357	84,336	84,470	79
06/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,277	84,502		84,584	84,727	84,502	84,481	84,584	80
07/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,234	84,471		84,647	84,795	84,471	84,448	84,647	79
08/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	83,631	84,381		84,609	84,681	84,381	83,667	84,609	74



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$$\frac{85{,}000}{85000 + 92{,}000} = .48$$

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Mainline VDS 1115356 - EB 8 E/O Morena

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM R.535 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10307
LDS	1115357
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	150.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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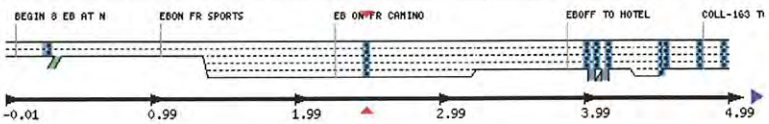
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,802				92,959				45	8,2
10/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
11/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
12/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	93,070				92,984				39	8,2
01/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	94,431				94,074				33	8,2
02/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,379				95,149				28	8,1
03/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	96,142				95,919				22	8,1
04/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,987				95,888				15	8,0
05/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,805				95,761				8	7,9
06/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	98,871				97,707				2	7,1



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Mainline VDS 1108457 - SEA WORLD DR

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R20.719 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 97
LDS	1108113
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	148.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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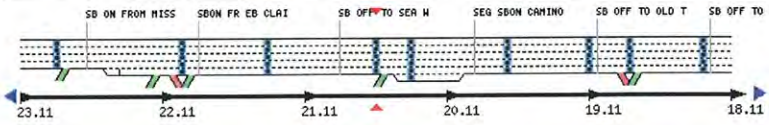
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09/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,407	90,808		89,922	89,853	90,808		89,922	3
10/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,017	90,111		89,788	89,630	90,111		89,788	3
11/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,990	89,582		88,612	89,628	89,582		88,612	3
12/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,517	88,234			89,867	88,234		86,475	2
01/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,253	89,079			90,438	89,079		86,658	2
02/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,388				91,039	89,267		81,735	1
03/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,567				91,403				1
04/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,971				91,538				1
05/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,395				91,660				
06/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,053				92,054				
07/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,811				91,310				
08/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,847				90,103				



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$$\frac{88{,}000}{88{,}000 + 97{,}000} = .48$$

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Mainline VDS 1118496 - 5 NB S/O Sea World

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R20.7 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 16202
LDS	1118490
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	159.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	ISS RTMS	Mainline
2	2	ISS RTMS	Mainline
3	3	ISS RTMS	Mainline
4	4	ISS RTMS	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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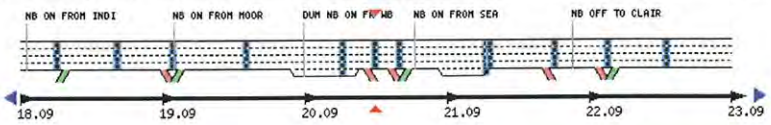
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09/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,464	97,291		97,753	97,684	97,291	97,355	97,753	67	8,
10/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,301	97,106		97,606	97,542	97,106	97,167	97,606	68	8,
11/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,304	97,277		97,735	97,653	97,277	97,338	97,735	71	8,
12/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,174	97,282		97,589	97,553	97,282	97,330	97,589	75	8,
01/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,496	97,618		97,746	97,678	97,618	97,669	97,746	76	8,
02/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,533		97,692	97,637	97,533	97,585	97,692	77	8,
03/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,134	97,553		97,694	97,657	97,553	97,603	97,694	79	8,
04/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,079	97,521		97,661	97,638	97,521	97,573	97,661	78	8,
05/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,086	97,619		97,729	97,696	97,619	97,673	97,729	78	8,
06/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,621		97,812	97,873	97,621	97,674	97,812	79	8,
07/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,115	97,517		97,782	97,821	97,517	97,569	97,782	78	8,
08/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	96,570	97,463		97,751	97,682	97,463	96,393	97,751	73	8,



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Mainline VDS 1115355 - SB 5 S/O 8

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From Sep 2010 *Max Range:*10 years

To Sep 2011

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Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10304
LDS	1115349
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	157.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

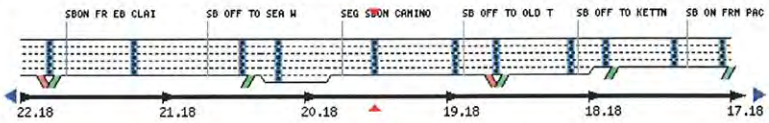
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,377	98,871		99,305	99,501	98,871	98,912	99,305	63
10/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,035	98,563		99,132	99,345	98,563	98,601	99,132	64
11/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,002	98,719		99,174	99,354	98,719	98,756	99,174	67
12/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,709	98,645		98,988	99,215	98,645	98,666	98,988	70
01/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,723	98,892		99,035	99,155	98,892	98,916	99,035	73
02/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,093	98,626		98,807	98,817	98,626	98,648	98,807	75
03/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,842	98,594		98,805	98,822	98,594	98,614	98,805	77
04/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,975	98,466		98,733	98,819	98,466	98,487	98,733	76
05/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,980	98,523		98,700	98,748	98,523	98,545	98,700	76
06/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,259	98,667		98,831	99,000	98,667	98,689	98,831	77
07/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,137	98,572		98,858	99,033	98,572	98,591	98,858	76
08/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,278	98,480		98,805	98,893	98,480	97,276	98,805	71



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

$$\frac{99{,}000}{99{,}000 + 64{,}700} = .61$$

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Mainline VDS 1115269 - NB 5 @ I-8

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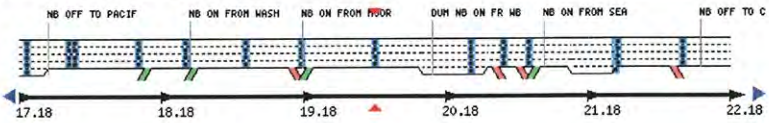
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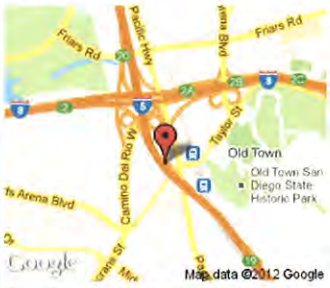
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,282				64,658				50
10/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,182				64,373				46
11/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,245				64,467				42
12/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,053				64,370				43
01/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,160				64,347				45
02/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,760				64,156				48
03/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,710				64,228				50
04/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,727				64,238				49
05/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,742				64,273				48
06/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,135				64,575				50
07/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,355				64,892				51
08/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,704				65,656				54



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10303
LDS	1115262
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	111.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1108615 - OLD TOWN AVE

Current Location



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I5-S @ CA PM R18.931 (Abs PM 18.8)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10411
LDS	1108200
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	145.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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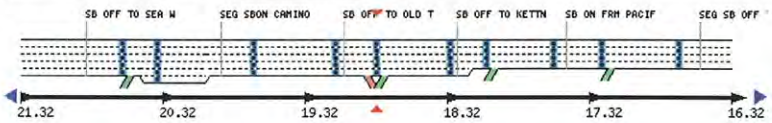
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From Sep 2010 To Sep 2011
*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,546	87,579		88,554	88,360	87,579	86,924	88,554	60
10/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,512				88,153	87,233		88,401	57
11/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,518				88,236	87,295		88,315	54
12/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,164				88,067	87,241		88,120	58
01/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,556				88,195	87,507		88,247	57
02/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,881				88,010	87,329		88,093	59
03/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,902				88,074	87,161		87,935	57
04/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,820				88,010				50
05/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,494				87,789				43
06/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,638				87,966				42
07/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	86,430				86,950				36
08/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	84,971				86,227				32



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{88{,}500}{88{,}500 + 91{,}500} = .49$$

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Mainline VDS 1114050 - OLD TOWN AVE

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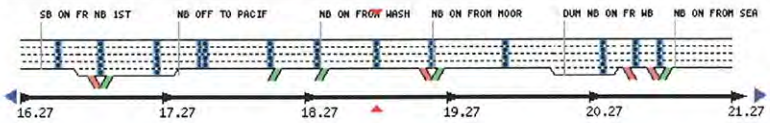
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To Sep 2011

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,821	90,949			91,722	90,949	90,139	91,630	63
10/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,665	90,808			91,614	90,808	89,973	91,529	64
11/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,719	91,038			91,725	91,038	90,243	91,653	67
12/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,472	91,079			91,657	91,079	90,480	91,544	71
01/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,792	91,334			91,789	91,334	90,777	91,687	70
02/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,388	91,213			91,664	91,213	90,607	91,594	71
03/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,447	91,104			91,758	91,104	90,512	91,485	69
04/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,396				91,703	91,018			62
05/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,107				91,505				55
06/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,203				91,623				54
07/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	90,387				90,837				48
08/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	89,232				90,428				44



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R18.874 (Abs PM 18.8)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10412
LDS	1114045
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	138.8 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1117724 - SB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.681 (Abs PM 17.6)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10406
LDS	1117700
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	181.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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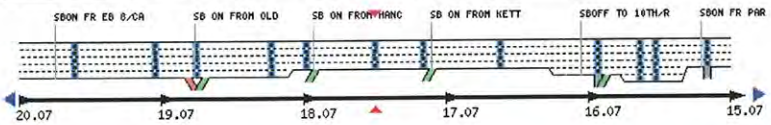
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	D. Us
09/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	147,017	146,263		146,781	146,818	146,263	146,432	146,781	
10/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	146,711	145,795		146,583	146,622	145,795	145,259	146,583	
11/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	144,957	144,852		144,969	144,760	144,852	143,905	144,969	
12/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	136,029	137,637		137,478	136,968	137,637	136,817	137,478	
01/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	127,132	130,565		130,273	129,050	130,565	129,832	130,273	
02/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	119,356	122,914		122,738	121,367	122,914	122,160	122,738	
03/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	111,112	115,457		115,296	113,899	115,457	114,729	115,296	
04/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	101,795	107,589		107,418	105,619	107,589	106,848	107,418	
05/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	94,870	99,619		99,395	98,300	99,619	98,839	99,395	
06/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	86,902	91,837		91,628	90,213	91,837	91,049	91,628	
07/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	80,939	83,787		83,655	82,609	83,787	82,961	83,655	
08/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	71,906	75,617		75,543	73,989	75,617	75,108	75,543	



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$$\frac{115000}{115{,}000 + 75{,}000} = .62$$

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Mainline VDS 1117717 - NB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.68 (Abs PM 17.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10405
LDS	1117710
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	126.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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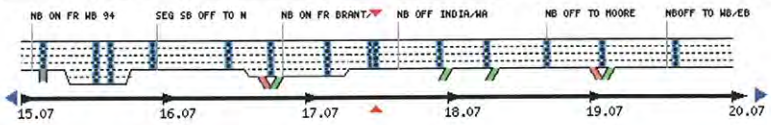
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,877	75,545		75,830	75,835	75,545	75,539	75,830	68
10/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,720	75,304		75,693	75,713	75,304	75,298	75,693	69
11/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,721	75,474		75,789	75,792	75,474	75,468	75,789	72
12/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,471	75,450		75,664	75,710	75,450	75,434	75,664	76
01/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,717	75,729		75,810	75,840	75,729	75,715	75,810	76
02/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,408	75,604		75,713	75,744	75,604	75,592	75,713	77
03/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,291	75,597		75,693	75,731	75,597	75,584	75,693	79
04/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,190	75,513		75,618	75,678	75,513	75,499	75,618	78
05/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,100	75,523		75,566	75,603	75,523	75,512	75,566	78
06/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,334	75,667		75,686	75,795	75,667	75,657	75,686	80
07/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,248	75,574		75,707	75,808	75,574	75,562	75,707	79
08/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	74,658	75,568		75,701	75,736	75,568	74,731	75,701	74



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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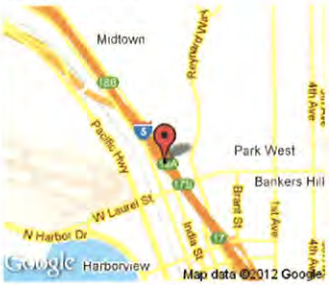
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Mainline VDS 1108605 - KETTNER BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.339 (Abs PM 17.2)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10403
LDS	1108195
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	156.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

Quick Links

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Tools

Holidays
Data Clearinghouse
PeMS Forum (External Site)

Change Log | Performance | Data Quality | Events

Performance > Planning Analysis > AADT

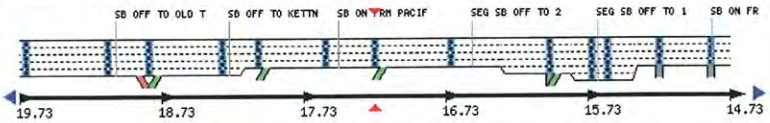
ABOUT THIS REPORT

From Sep 2010 *Max Range:10 years*

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	Da Us
09/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,935	88,657		88,989	88,883	88,657	88,698	88,989	
10/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,770	88,297		88,601	88,560	88,297	88,337	88,601	
11/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,698	88,451		88,643	88,572	88,451	88,491	88,643	
12/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,907	88,734		88,795	88,811	88,734	88,781	88,795	
01/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,772				89,521	89,594	88,303	89,515	
02/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,291				90,119				
03/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,581				90,490				
04/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,757				90,590				
05/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,722				90,572				
06/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,972				90,943				
07/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,255				90,332				
08/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,112				90,024				



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

90,000

90,000 + 86,000
(SB) (NB)

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Mainline VDS 1117835 - NB S/O Pacific

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.34 (Abs PM 17.2)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10404
LDS	1117827
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	160.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

Quick Links

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Holidays
Data Clearinghouse
PeMS Forum (External Site)

Change Log | Performance | Data Quality | Events

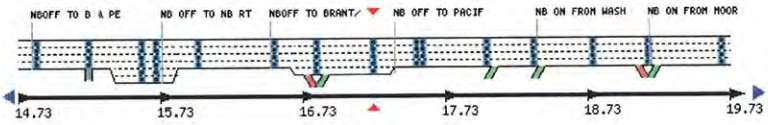
Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 To Sep 2011
Max Range: 10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,750	94,616		94,964	94,829	94,616	94,624	94,964	67
10/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,691				94,636	94,308	92,994	94,810	64
11/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,479				94,520	93,820		94,105	61
12/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	92,229				92,636	92,158		92,315	65
01/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	90,594				90,959	90,917		90,874	66
02/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	88,426				89,009	89,103		89,084	67
03/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	86,468				87,218	87,380		87,341	69
04/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	84,180				85,145	85,461		85,439	68
05/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	82,279				83,228	83,703		83,640	68
06/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	80,653				81,496	82,041		81,976	69
07/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	78,905				79,563	80,181		80,200	68
08/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	76,079				77,390	78,272		78,313	64

Average = 86,000



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Appendix G
VMT Analysis Worksheet – Preferred Plan

2035E - Alt 3 land uses with updated network

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	E-E
CARLSBAD TOTAL	4,343,030	3,037	-	3,037	4,339,993
CHULA VISTA TOTAL	5,605,428	7,512	-	7,512	5,597,916
CORONADO TOTAL	467,131	1,349	-	1,349	465,782
DEL MAR TOTAL	101,800	56	-	56	101,744
EL CAJON TOTAL	2,444,783	3,811	-	3,811	2,440,972
ENCINITAS TOTAL	2,559,351	3,724	-	3,724	2,555,627
ESCONDIDO TOTAL	3,480,709	1,946	-	1,946	3,478,763
External TOTAL	526,764	415	-	415	526,349
IMPERIAL BEACH TOTAL	131,504	27	-	27	131,477
LA MESA TOTAL	2,095,027	6,043	-	6,043	2,088,984
LEMON GROVE TOTAL	960,322	1,722	-	1,722	958,600
NATIONAL CITY TOTAL	1,962,507	6,329	-	6,329	1,956,178
OCEANSIDE TOTAL	4,088,587	1,001	-	1,001	4,087,586
POWAY TOTAL	1,307,453	589	-	589	1,306,864
OLD TOWN	47,203,643	274,947	18,120	256,827	46,928,696
SAN MARCOS TOTAL	2,645,913	278	-	278	2,645,635
SANTEE TOTAL	1,347,792	789	-	789	1,347,003
SOLANA BEACH TOTAL	716,075	1,363	-	1,363	714,712
Unincorporated TOTAL	24,626,999	12,745	-	12,745	24,614,254
VISTA TOTAL	2,206,811	111	-	111	2,206,700
REGIONWIDE TOTAL	108,821,629	327,794	18,120	309,674	108,493,835

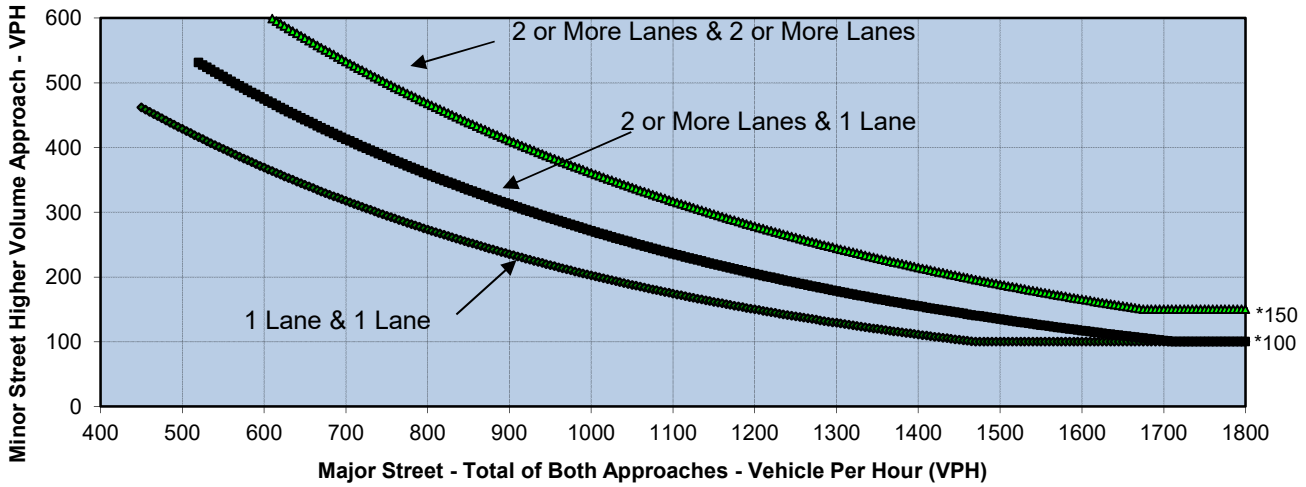
2035E - Alt 3 land uses with updated network

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	E-E
CARLSBAD TOTAL	4,343,030	13,014	-	13,014	4,330,016
CHULA VISTA TOTAL	5,605,428	28,904	-	28,904	5,576,524
CORONADO TOTAL	467,131	5,579	-	5,579	461,552
DEL MAR TOTAL	101,800	214	-	214	101,586
EL CAJON TOTAL	2,444,783	13,953	-	13,953	2,430,830
ENCINITAS TOTAL	2,559,351	15,208	-	15,208	2,544,143
ESCONDIDO TOTAL	3,480,709	7,752	-	7,752	3,472,957
External TOTAL	526,764	2,093	-	2,093	524,671
IMPERIAL BEACH TOTAL	131,504	252	-	252	131,252
LA MESA TOTAL	2,095,027	22,448	-	22,448	2,072,579
LEMON GROVE TOTAL	960,322	6,140	-	6,140	954,182
NATIONAL CITY TOTAL	1,962,507	24,204	-	24,204	1,938,303
OCEANSIDE TOTAL	4,088,587	4,721	-	4,721	4,083,866
POWAY TOTAL	1,307,453	2,303	-	2,303	1,305,150
MIDWAY TOTAL	47,203,643	1,143,213	184,098	959,115	46,060,430
SAN MARCOS TOTAL	2,645,913	1,129	-	1,129	2,644,784
SANTEE TOTAL	1,347,792	3,166	-	3,166	1,344,626
SOLANA BEACH TOTAL	716,075	5,466	-	5,466	710,609
Unincorporated TOTAL	24,626,999	55,103	-	55,103	24,571,896
VISTA TOTAL	2,206,811	642	-	642	2,206,169
REGIONWIDE TOTAL	108,821,629	1,355,504 769,800.88	184,098	1,171,406	107,466,125

Appendix H
Signal Warrant Worksheets

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	140	0	110
Through	595	1,110	0	0
Right	80	0	0	20
Total	675	1,250	0	130

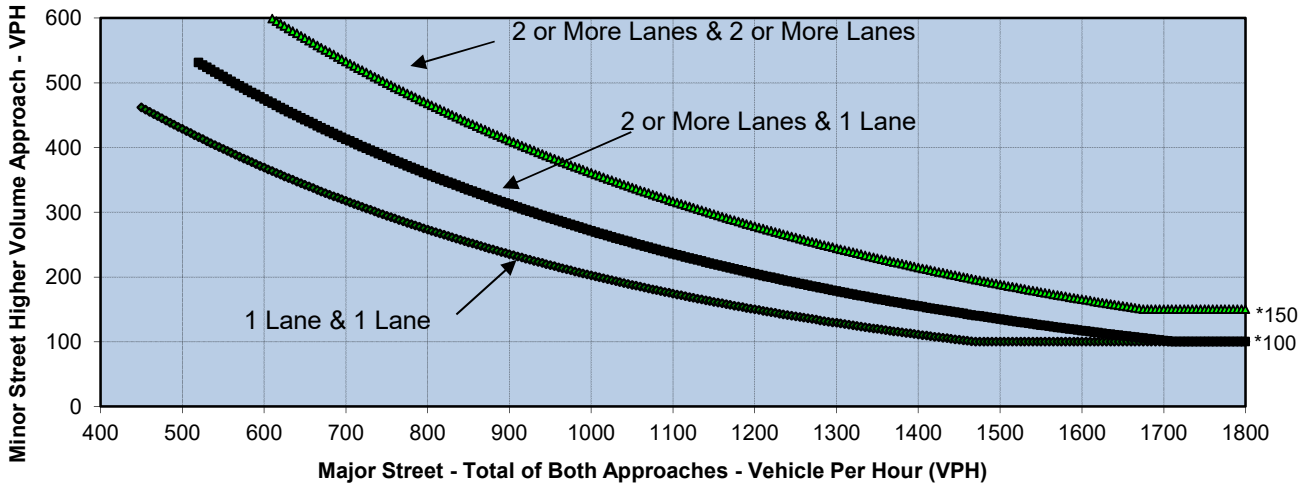
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,925**	**130**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	390	0	110
Through	700	1,445	0	0
Right	110	0	0	240
Total	810	1,835	0	350

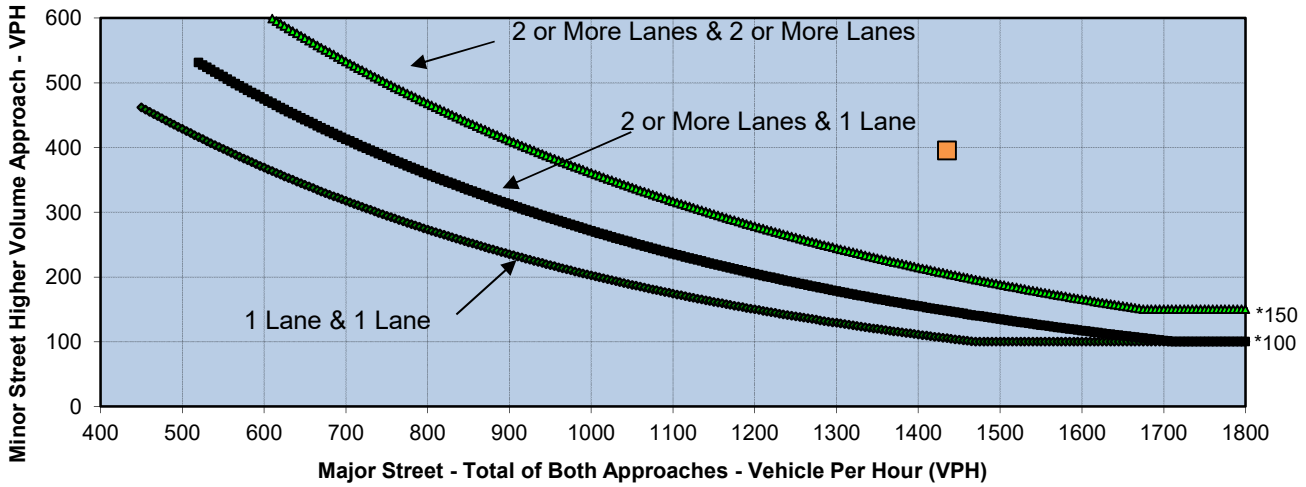
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,645	350	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	205	70	70	155
Through	420	535	45	130
Right	85	120	100	110
Total	710	725	215	395

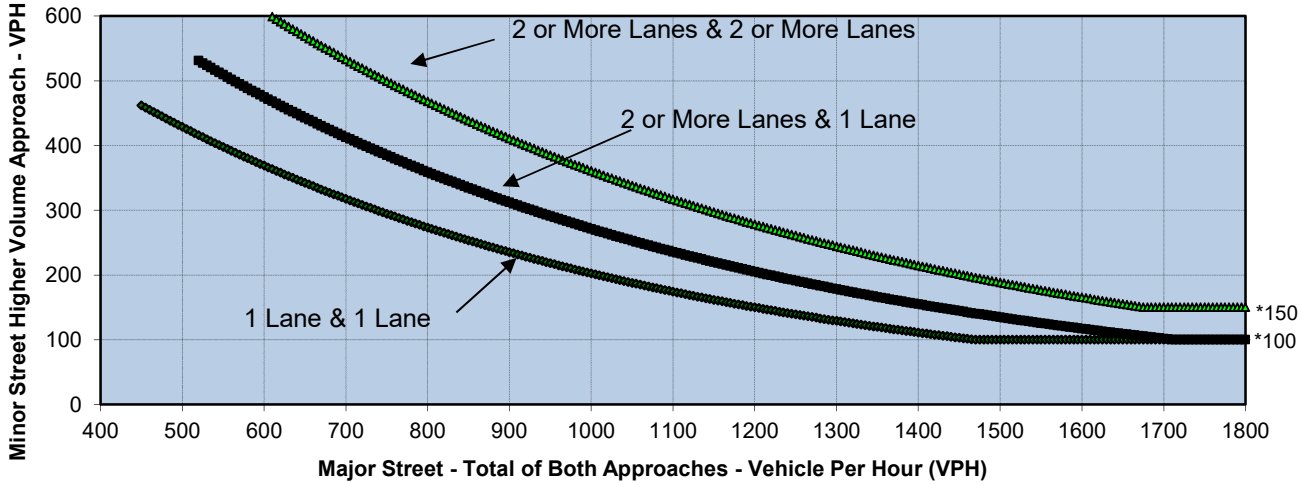
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,435**	**395**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	235	140	60	115
Through	1,125	885	115	30
Right	110	85	145	110
Total	1,470	1,110	320	255

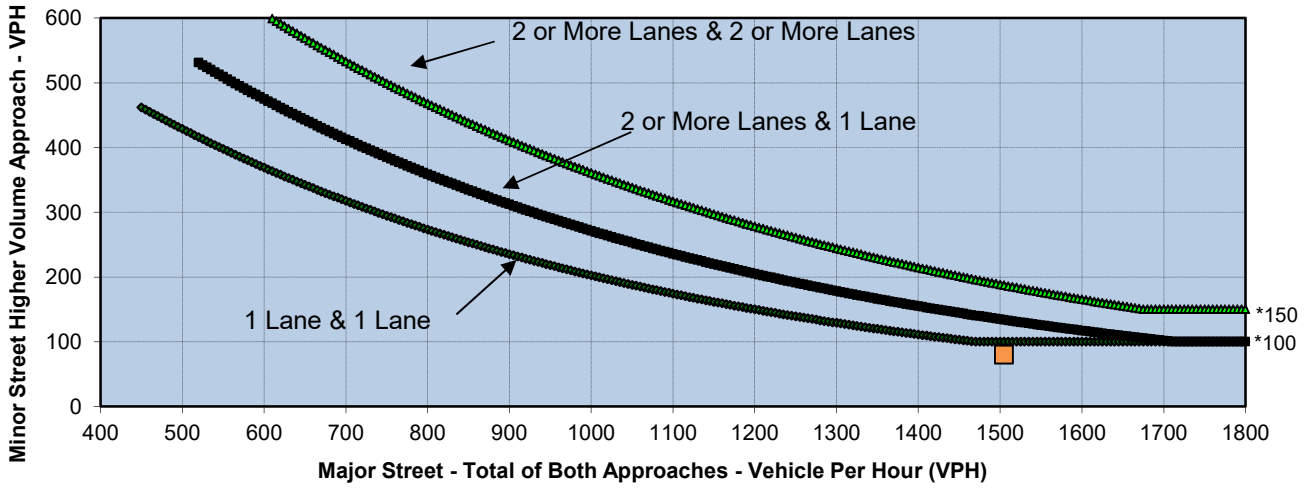
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,580	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	25	75	30	30
Through	625	685	10	5
Right	30	65	10	45
Total	680	825	50	80

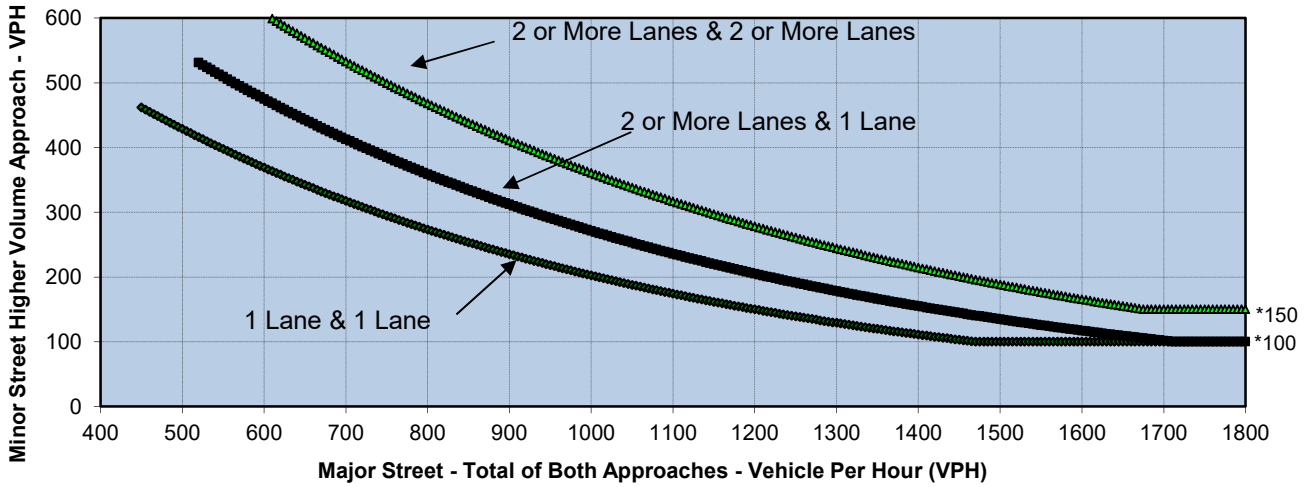
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**1,505**	**80**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	35	105	60	145
Through	1,270	1,100	15	15
Right	55	65	60	135
Total	1,360	1,270	135	295

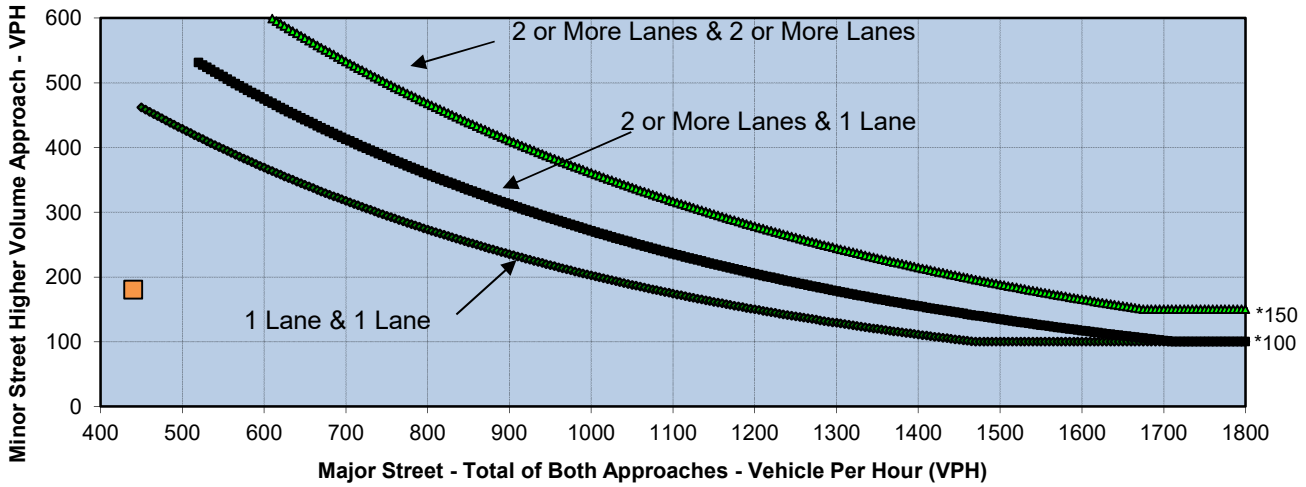
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,630	295	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	AM

Turn Movement Volumes

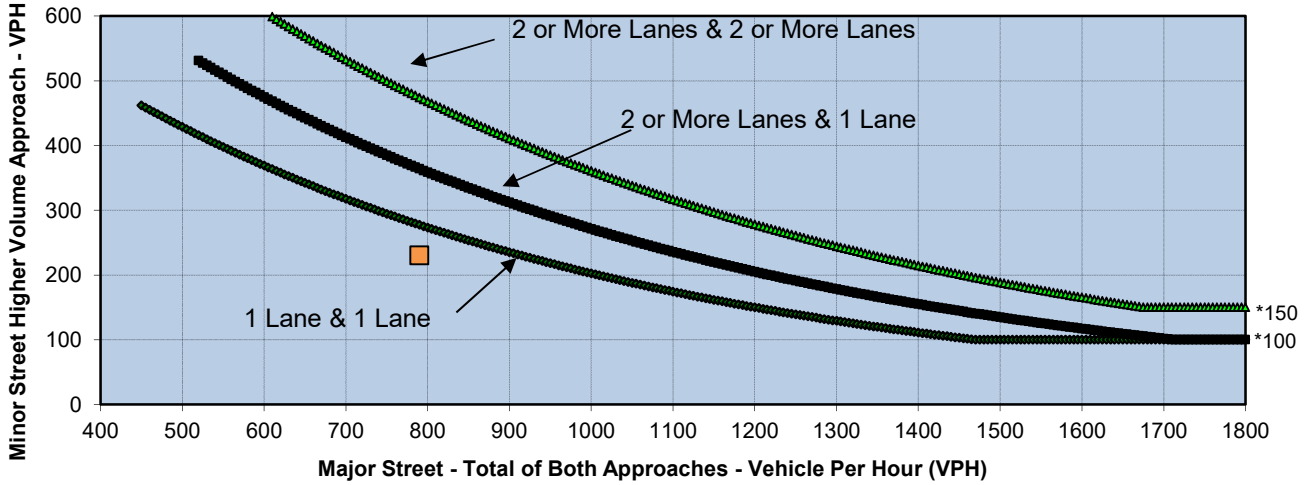
	NB	SB	EB	WB
Left	60	10	40	80
Through	40	20	90	70
Right	80	20	90	70
Total	180	50	220	220

Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**440**	**180**	

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	60	40	70	90
Through	60	30	110	190
Right	110	40	290	40
Total	230	110	470	320

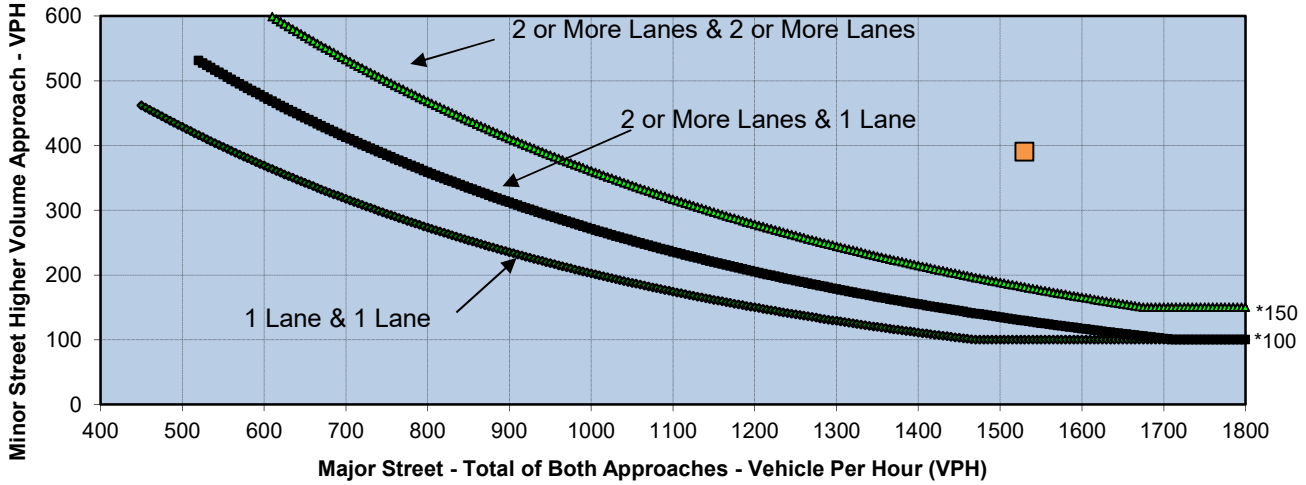
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	1	1	NO
Traffic Volume (VPH) *	790	230	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway	Project	Midway & Old Town CPU
Minor Street	Sports Arena Blvd	Scenario	1B
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	290	0	200	0
Through	600	585	0	0
Right	0	55	190	0
Total	890	640	390	0

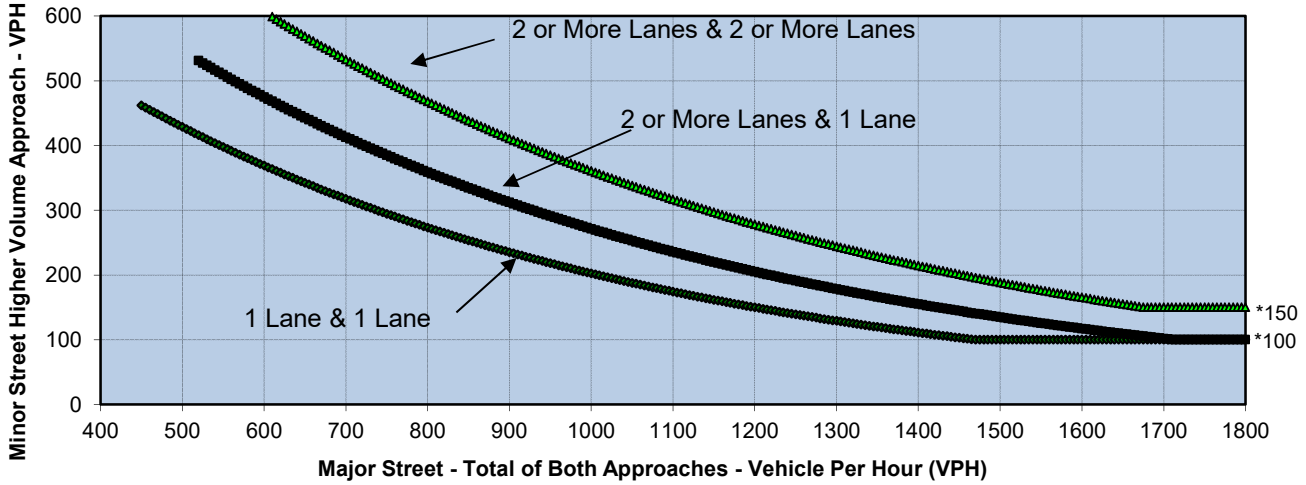
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,530**	**390**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	280	0	50	0
Through	1,440	845	0	0
Right	0	25	450	0
Total	1,720	870	500	0

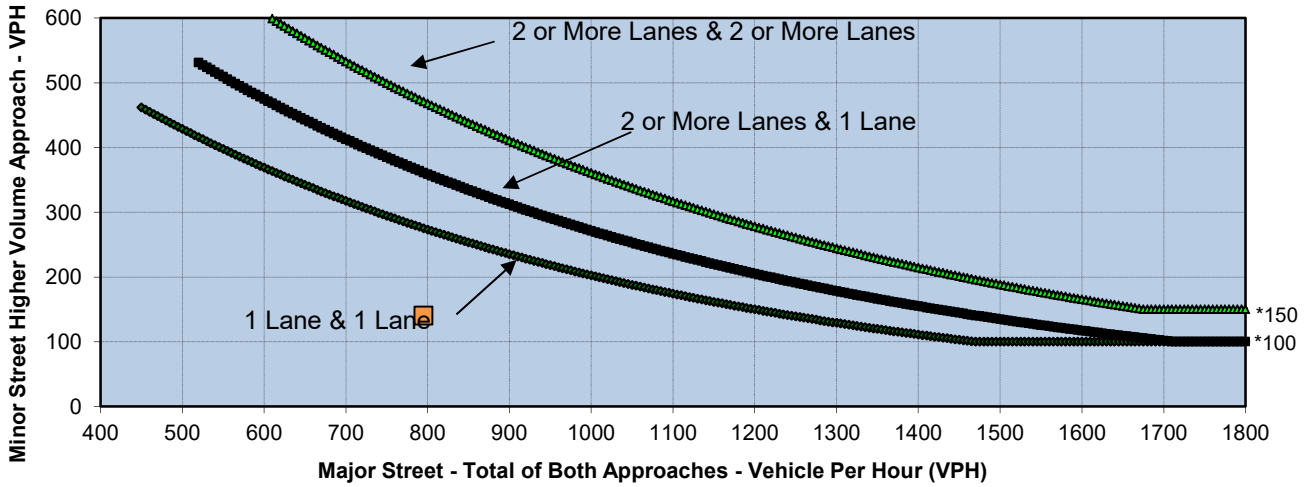
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,590	500	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	1B
Minor Street	Hancock Street	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	20	300
Through	0	60	0	295
Right	0	80	90	90
Total	0	140	110	685

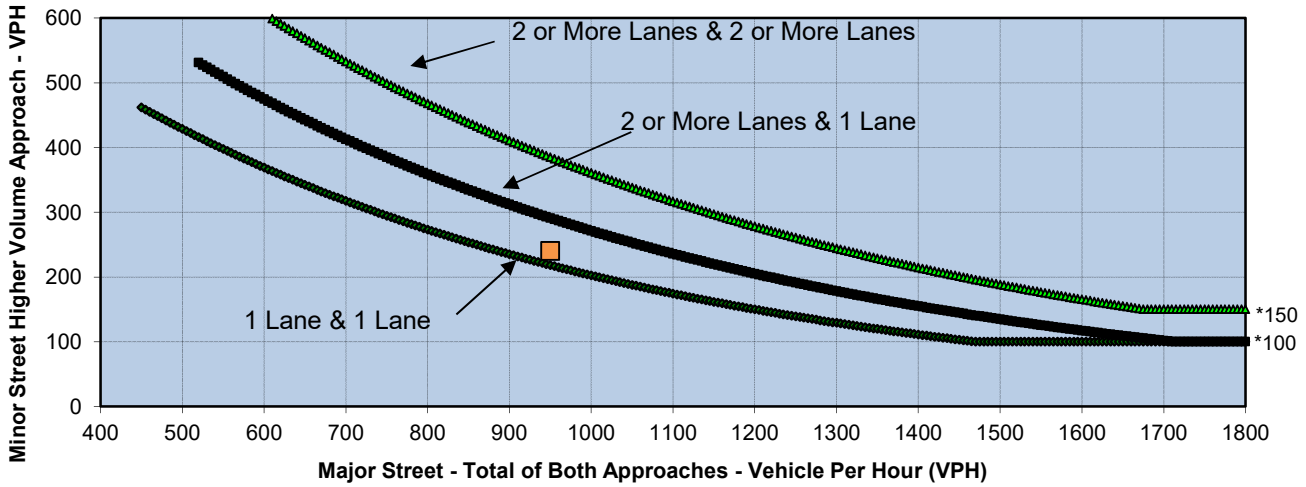
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Hancock Street	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**795**	**140**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18

Major Street	Kurtz Street
Minor Street	Hancock Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	90	400
Through	0	160	0	190
Right	0	80	130	140
Total	0	240	220	730

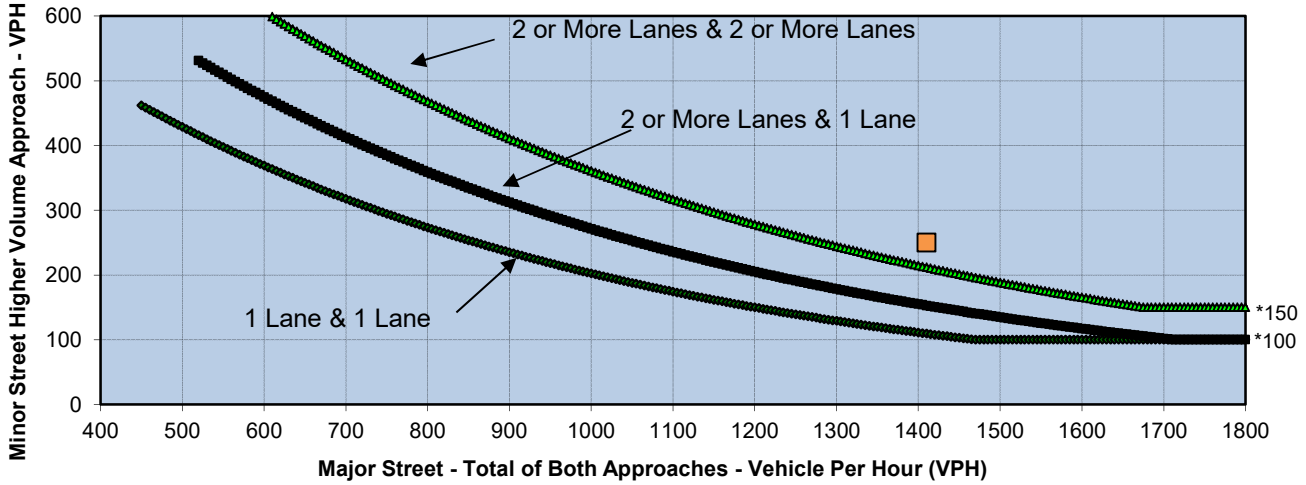
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Hancock Street	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	950	240	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	335	0	70	0
Through	465	460	0	0
Right	0	150	180	0
Total	800	610	250	0

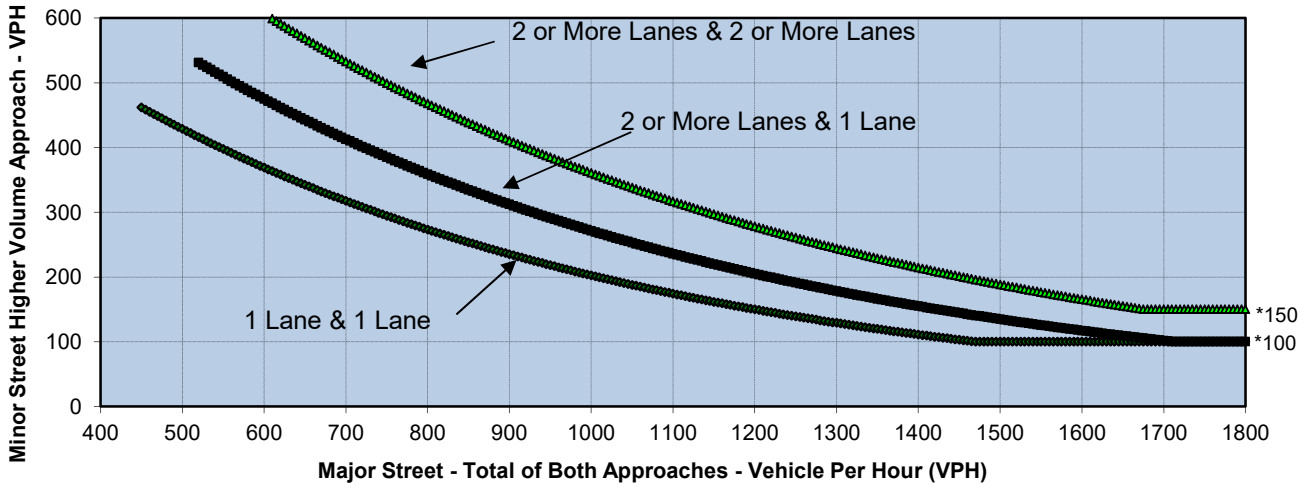
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,410**	**250**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	465	0	220	0
Through	865	430	0	0
Right	0	100	430	0
Total	1,330	530	650	0

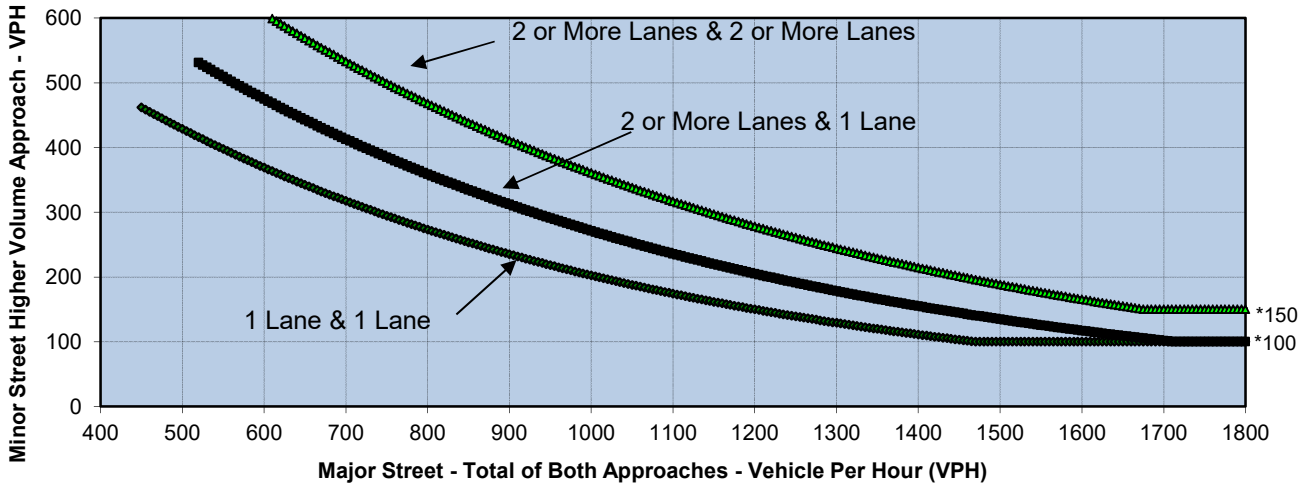
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	1,860	650	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	0	60
Through	0	220	20	90
Right	0	10	100	0
Total	0	270	120	150

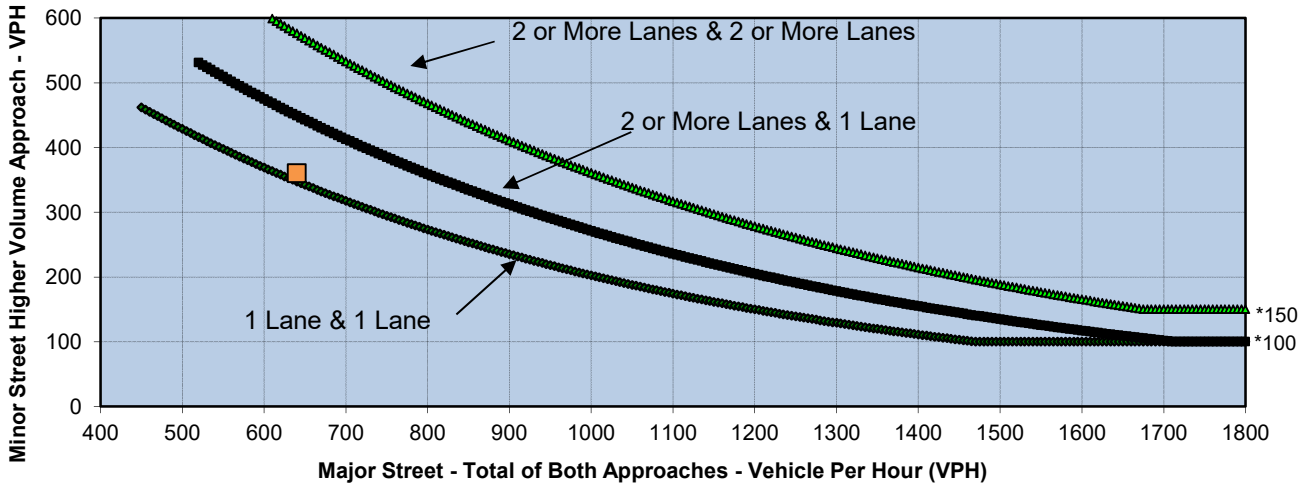
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**270**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	50	0	120
Through	0	520	30	240
Right	0	70	110	0
Total	0	640	140	360

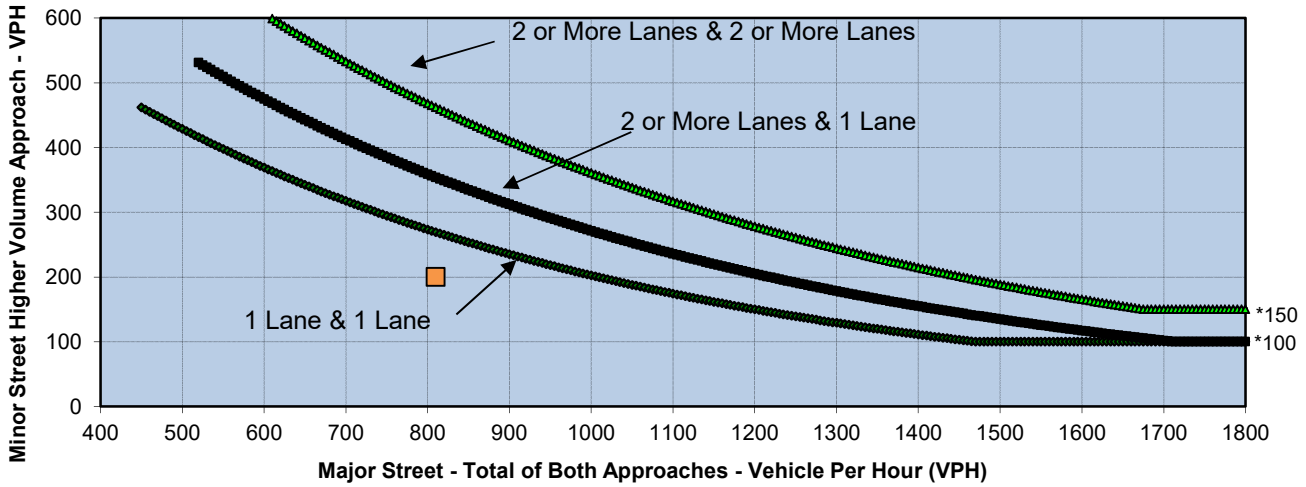
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	2	1	NO
Traffic Volume (VPH) *	640	360	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	1B
Minor Street	Charles Lindbergh Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	140	0	50	0
Through	330	310	0	0
Right	0	30	150	0
Total	470	340	200	0

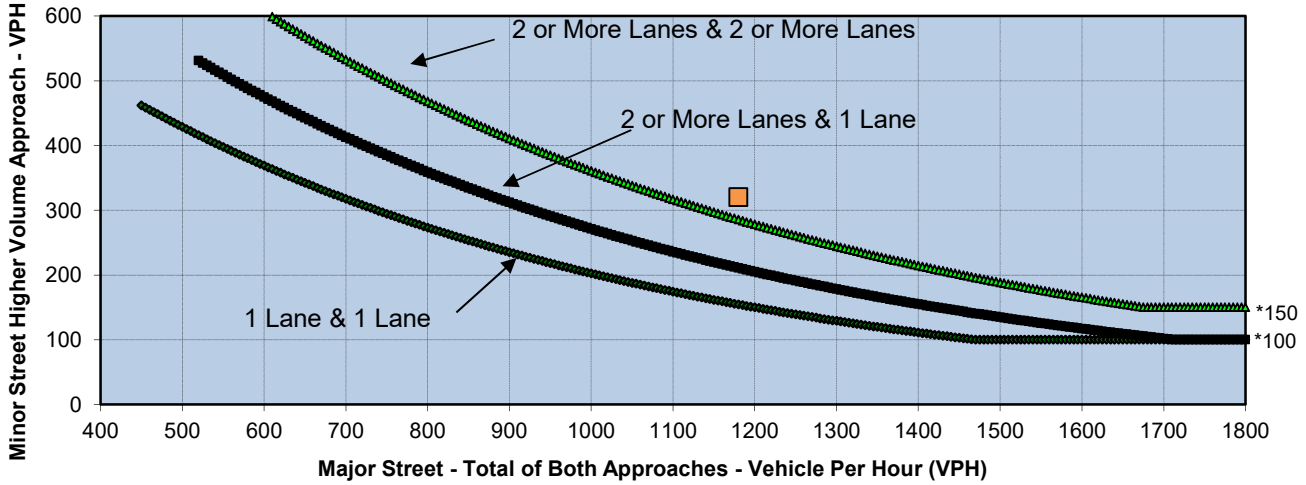
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**810**	**200**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	180	0	120	0
Through	370	480	0	0
Right	0	150	200	0
Total	550	630	320	0

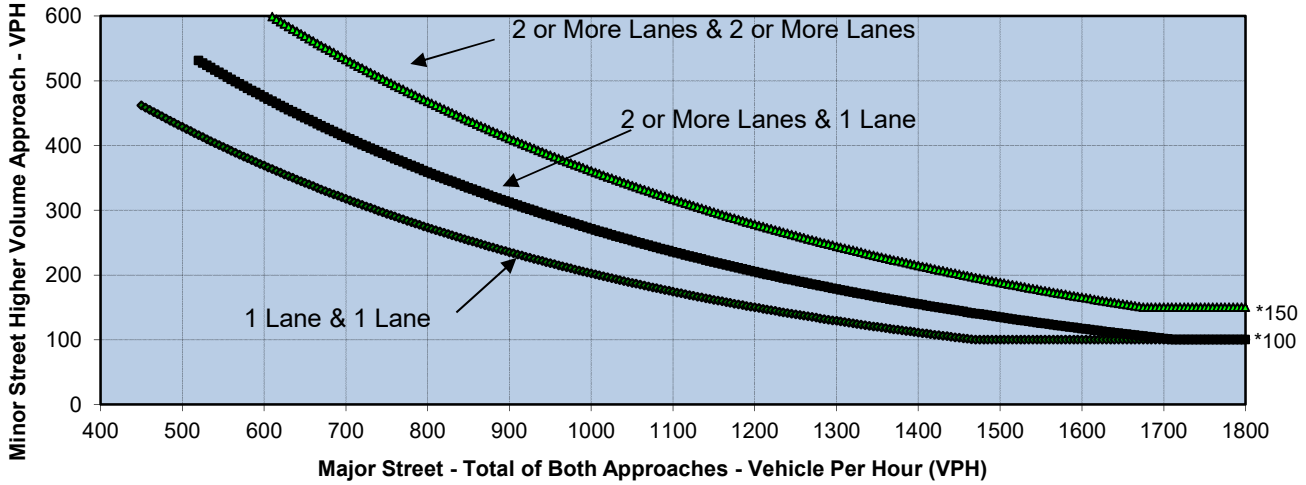
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,180	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	1B
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	150	50	0
Through	0	0	670	1,420
Right	0	250	0	40
Total	0	400	720	1,460

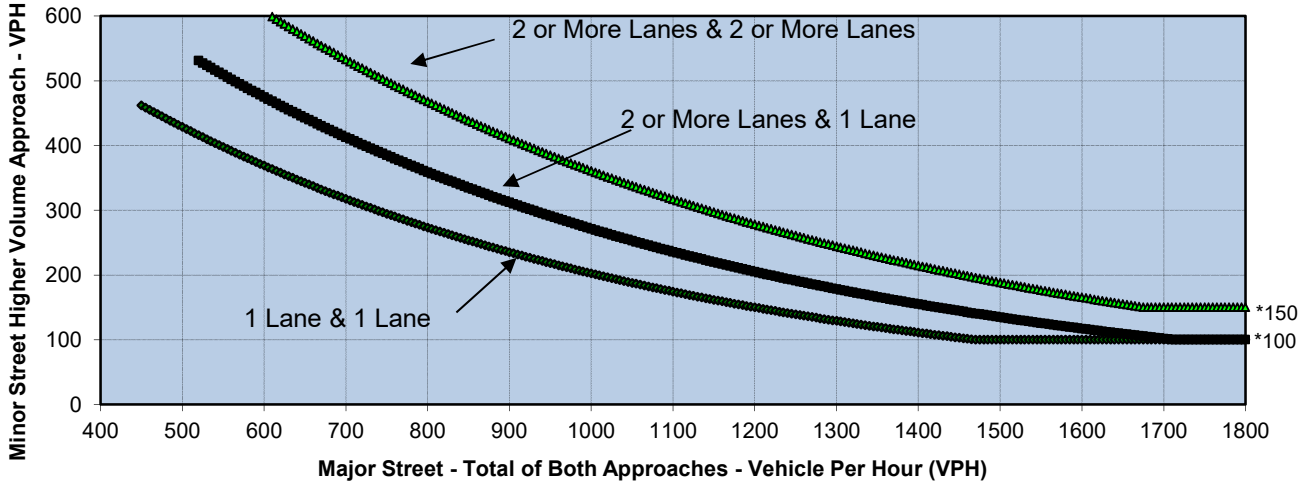
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**2,180**	**400**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	1B
Minor Street	Dutch Flats Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	160	60	0
Through	0	0	1,090	1,200
Right	0	240	0	40
Total	0	400	1,150	1,240

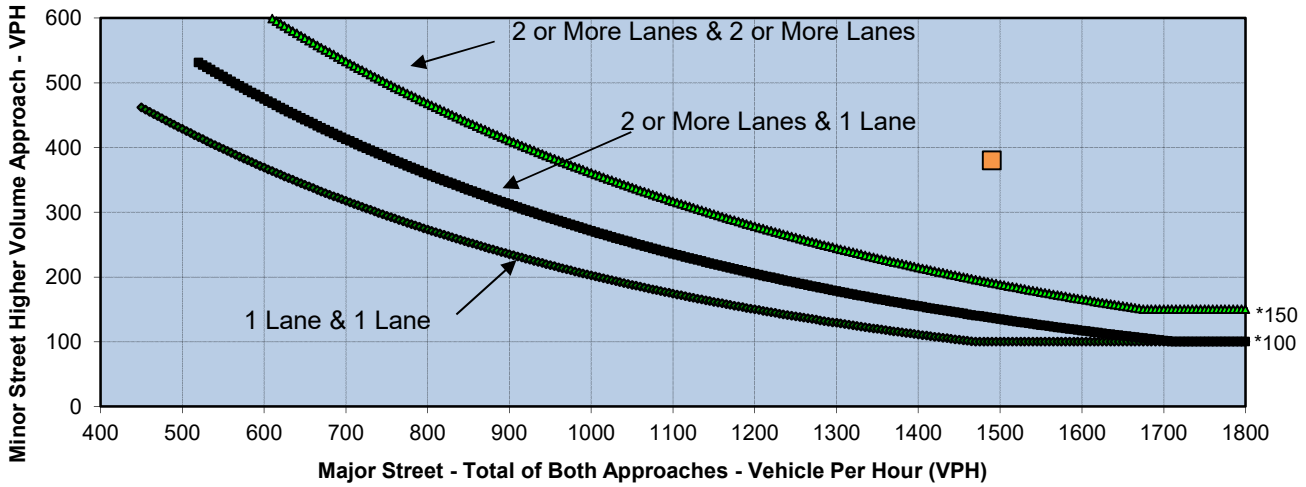
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,390	400	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	150	220	60	40
Through	390	450	10	100
Right	130	150	30	240
Total	670	820	100	380

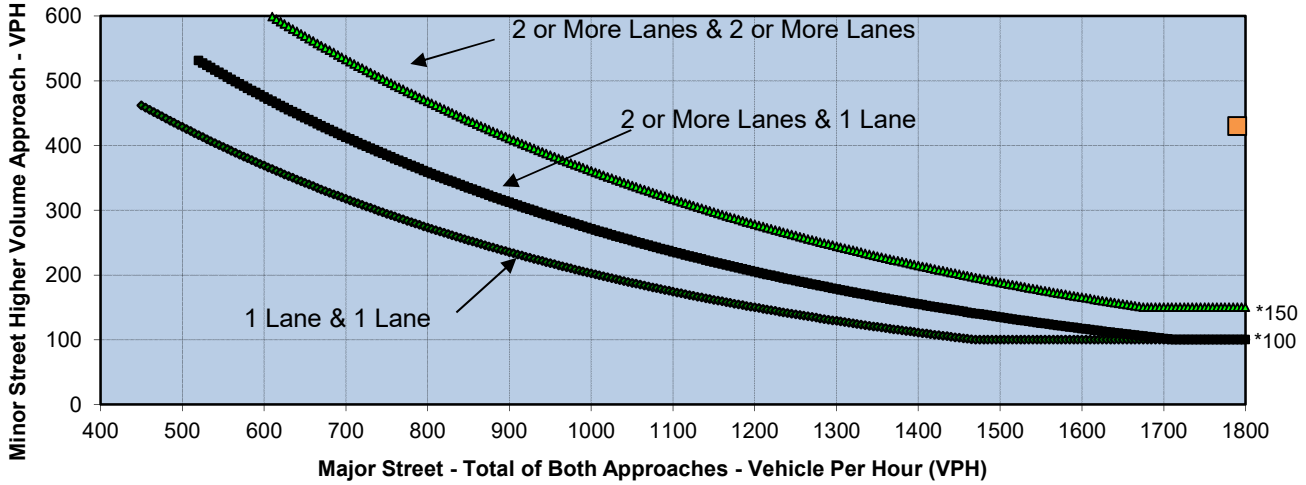
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,490**	**380**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	160	200	70	50
Through	500	490	20	120
Right	370	70	40	260
Total	1,030	760	130	430

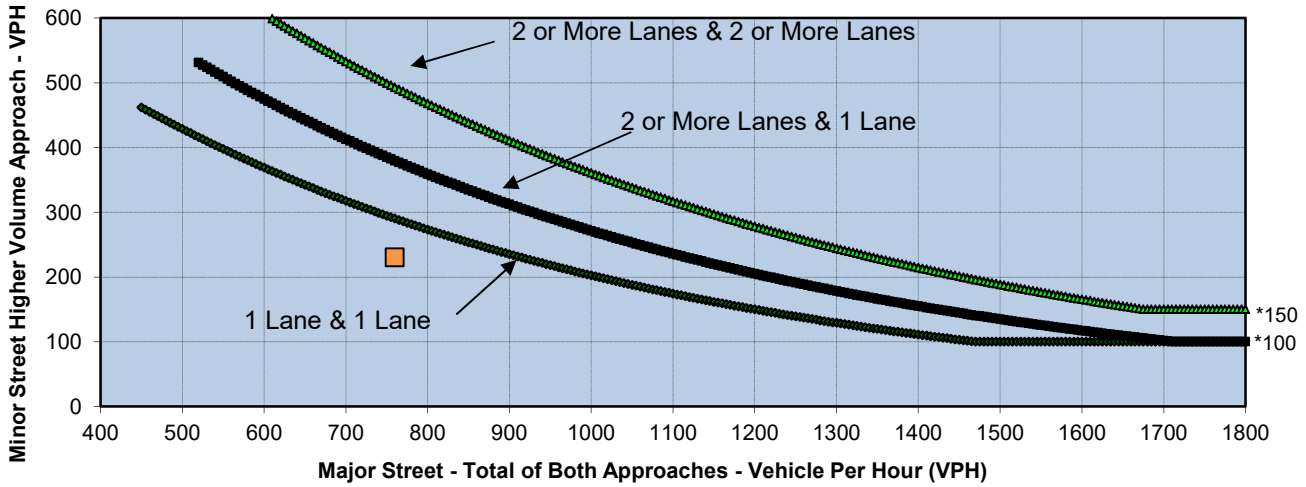
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,790	430	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66		Project	Midway & Old Town CPU
Major Street	Sports Arena Boulevard	Scenario	1B
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	340	0	30	0
Through	190	190	0	0
Right	0	40	200	0
Total	530	230	230	0

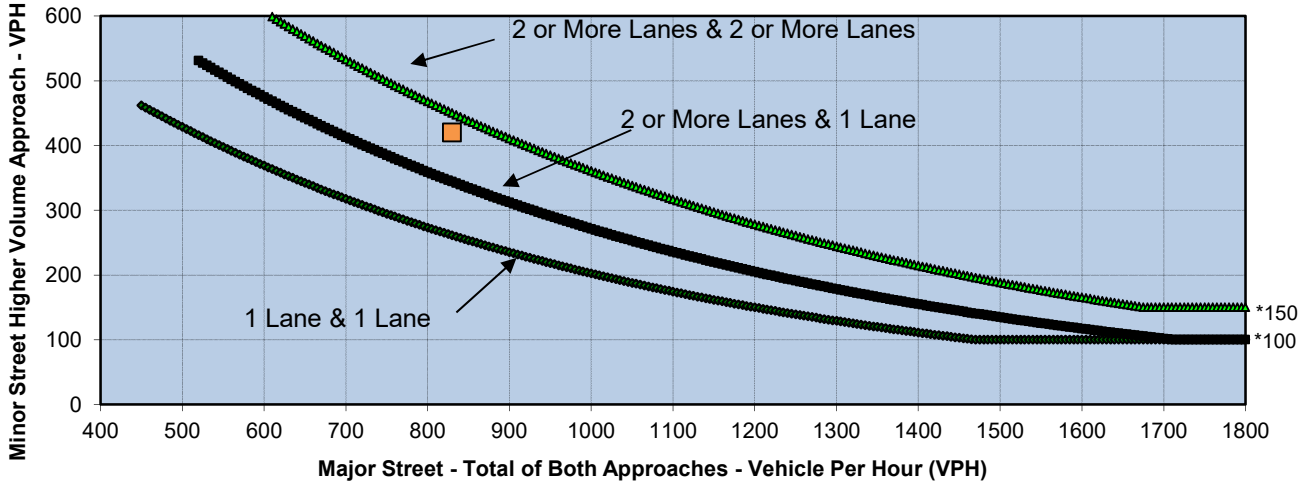
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**760**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	1B
Peak Hour	PM

Turn Movement Volumes

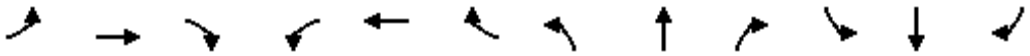
	NB	SB	EB	WB
Left	200	0	160	0
Through	140	240	0	0
Right	0	250	260	0
Total	340	490	420	0

Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	830	420	

Appendix I
Peak Hour Intersection Worksheets – Preferred Plan Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1145	400	160	1340	170	480	400	145	580	280	115
Future Volume (vph)	55	1145	400	160	1340	170	480	400	145	580	280	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.94	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1492	3433	1863	1558	1770	1774	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1492	3433	1863	1558	1770	1774	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	1245	435	174	1457	185	522	435	158	630	304	125
RTOR Reduction (vph)	0	0	261	0	0	74	0	0	91	0	11	0
Lane Group Flow (vph)	60	1245	174	174	1457	111	522	435	67	630	418	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.6	43.0	43.0	13.5	51.8	51.8	34.9	34.0	34.0	42.0	39.3	
Effective Green, g (s)	5.0	44.3	44.3	13.9	53.2	53.2	35.3	34.8	34.8	41.0	40.5	
Actuated g/C Ratio	0.03	0.30	0.30	0.09	0.35	0.35	0.24	0.23	0.23	0.27	0.27	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	59	1501	461	318	1255	529	807	432	361	483	478	
v/s Ratio Prot	c0.03	0.24		0.05	c0.41		0.15	c0.23		c0.36	0.24	
v/s Ratio Perm			0.11			0.07			0.04			
v/c Ratio	1.02	0.83	0.38	0.55	1.16	0.21	0.65	1.01	0.18	1.30	0.87	
Uniform Delay, d1	72.5	49.3	41.9	65.0	48.4	33.7	51.7	57.6	46.2	54.5	52.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	122.0	5.4	2.4	1.0	81.6	0.9	1.3	45.0	0.3	151.4	15.7	
Delay (s)	194.5	54.8	44.3	66.1	130.0	34.6	53.1	102.6	46.5	205.9	68.1	
Level of Service	F	D	D	E	F	C	D	F	D	F	E	
Approach Delay (s)		57.0			114.2			71.5			150.1	
Approach LOS		E			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	95.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	545	1200	370	0	0	660
Future Volume (vph)	545	1200	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	592	1304	402	0	0	717
RTOR Reduction (vph)	0	299	0	0	0	0
Lane Group Flow (vph)	592	1005	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	20.1	20.1	13.1			13.1
Effective Green, g (s)	20.1	20.1	13.1			13.1
Actuated g/C Ratio	0.43	0.43	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1461	1186	982			982
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.36				
v/c Ratio	0.41	0.85	0.41			0.73
Uniform Delay, d1	9.4	12.2	13.9			15.4
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	5.6	0.1			2.4
Delay (s)	9.5	17.7	14.0			17.9
Level of Service	A	B	B			B
Approach Delay (s)	15.2		14.0			17.9
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	15.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	47.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

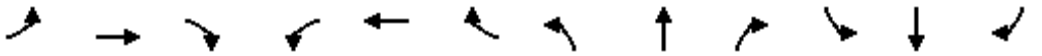
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	110	985	240	0	1155
Future Volume (Veh/h)	0	110	985	240	0	1155
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	120	1071	261	0	1255
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked	0.96	0.96			0.96	
vC, conflicting volume	1620	490			1332	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1515	345			1217	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	81			100	
cM capacity (veh/h)	106	627			549	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	120	428	428	475	418	418	418
Volume Left	0	0	0	0	0	0	0
Volume Right	120	0	0	261	0	0	0
cSH	627	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.19	0.25	0.25	0.28	0.25	0.25	0.25
Queue Length 95th (ft)	18	0	0	0	0	0	0
Control Delay (s)	12.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	12.1	0.0			0.0		
Approach LOS	B						

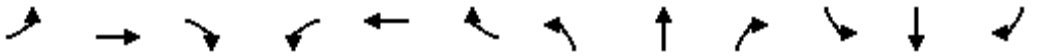
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	310	280	30	140	290	185	460	50	370	520	255
Future Volume (vph)	450	310	280	30	140	290	185	460	50	370	520	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1564	1770	3539	1573	1770	3482		1770	3539	1567
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1564	1770	3539	1573	1770	3482		1770	3539	1567
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	337	304	33	152	315	201	500	54	402	565	277
RTOR Reduction (vph)	0	0	50	0	0	46	0	6	0	0	0	126
Lane Group Flow (vph)	489	337	254	33	152	269	201	548	0	402	565	151
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	33.3	49.2	67.5	3.4	19.2	46.5	18.3	24.3		27.3	33.3	66.6
Effective Green, g (s)	34.2	50.1	69.3	4.4	20.2	46.5	19.2	25.2		28.2	34.2	66.6
Actuated g/C Ratio	0.28	0.41	0.57	0.04	0.17	0.38	0.16	0.21		0.23	0.28	0.55
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	496	765	888	63	585	599	278	719		409	992	855
v/s Ratio Prot	c0.28	c0.18	0.04	0.02	0.04	0.10	0.11	c0.16		c0.23	0.16	0.05
v/s Ratio Perm			0.12			0.07						0.05
v/c Ratio	0.99	0.44	0.29	0.52	0.26	0.45	0.72	0.76		0.98	0.57	0.18
Uniform Delay, d1	43.7	25.9	13.6	57.8	44.4	28.2	48.9	45.6		46.7	37.6	13.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	36.4	0.1	0.2	7.6	1.0	0.5	9.0	4.8		39.7	1.4	0.1
Delay (s)	80.1	26.0	13.8	65.4	45.4	28.7	57.8	50.4		86.4	39.0	14.0
Level of Service	F	C	B	E	D	C	E	D		F	D	B
Approach Delay (s)		46.1			36.2			52.4			48.8	
Approach LOS		D			D			D			D	

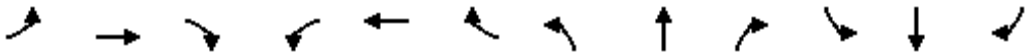
Intersection Summary			
HCM 2000 Control Delay	47.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	122.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



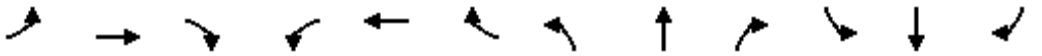
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	105	100	80	95	160	65	310	40	80	410	90
Future Volume (vph)	105	105	100	80	95	160	65	310	40	80	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1556	1770	1863	1551	3433	3472		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1556	1770	1863	1551	3433	3472		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	114	114	109	87	103	174	71	337	43	87	446	98
RTOR Reduction (vph)	0	0	88	0	0	150	0	6	0	0	0	46
Lane Group Flow (vph)	114	114	21	87	103	24	71	374	0	87	446	52
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	16.7	16.7	22.8	15.5	15.5	15.5	6.1	58.8		9.9	62.6	62.6
Effective Green, g (s)	17.6	17.6	23.6	16.4	16.4	16.4	6.5	59.7		10.3	63.5	63.5
Actuated g/C Ratio	0.15	0.15	0.20	0.14	0.14	0.14	0.05	0.50		0.09	0.53	0.53
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	246	259	306	241	254	211	185	1727		151	1872	837
v/s Ratio Prot	c0.07	0.06	0.00	0.05	c0.06		0.02	0.11		c0.05	c0.13	
v/s Ratio Perm			0.01			0.02						0.03
v/c Ratio	0.46	0.44	0.07	0.36	0.41	0.11	0.38	0.22		0.58	0.24	0.06
Uniform Delay, d1	46.9	46.7	39.3	47.0	47.3	45.4	54.8	17.0		52.8	15.2	13.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.22	0.72	0.72
Incremental Delay, d2	1.4	1.2	0.0	0.9	1.1	0.2	0.5	0.3		2.8	0.3	0.1
Delay (s)	48.3	47.9	39.3	48.0	48.4	45.7	55.3	17.3		67.0	11.1	10.0
Level of Service	D	D	D	D	D	D	E	B		E	B	B
Approach Delay (s)		45.2			47.0			23.3			18.7	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	10	10	20	5	20	60	655	90	20	540	15
Future Volume (vph)	25	10	10	20	5	20	60	655	90	20	540	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.94		1.00	0.98		1.00	1.00	
Flt Protected		0.97			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1752			1698		1770	3475		1770	3523	
Flt Permitted		0.80			0.83		0.41	1.00		0.33	1.00	
Satd. Flow (perm)		1443			1444		765	3475		623	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	11	11	22	5	22	65	712	98	22	587	16
RTOR Reduction (vph)	0	10	0	0	20	0	0	13	0	0	2	0
Lane Group Flow (vph)	0	39	0	0	29	0	65	797	0	22	601	0
Confl. Peds. (#/hr)			1			10						3
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		3.6			3.6		23.0	21.8		21.6	21.1	
Effective Green, g (s)		4.5			4.5		23.8	22.7		22.4	22.0	
Actuated g/C Ratio		0.11			0.11		0.59	0.57		0.56	0.55	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		161			162		494	1967		373	1932	
v/s Ratio Prot							c0.01	c0.23		0.00	0.17	
v/s Ratio Perm		c0.03			0.02		0.07			0.03		
v/c Ratio		0.24			0.18		0.13	0.41		0.06	0.31	
Uniform Delay, d1		16.2			16.1		3.4	4.9		4.0	4.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			0.2		0.0	0.1		0.0	0.1	
Delay (s)		16.5			16.3		3.5	5.0		4.0	5.0	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		16.5			16.3			4.9			5.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	40.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	290	1795	300	115	330	215	225	280	175
Future Volume (vph)	220	1460	170	290	1795	300	115	330	215	225	280	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	315	1951	326	125	359	234	245	304	190
RTOR Reduction (vph)	0	12	0	0	0	76	0	0	77	0	0	79
Lane Group Flow (vph)	239	1760	0	315	1951	250	125	359	157	245	304	111
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.8	42.8		10.4	44.5	53.5	8.4	24.0	34.4	9.0	24.6	33.4
Effective Green, g (s)	9.2	43.9		10.8	45.5	53.5	8.8	24.9	36.2	9.4	25.5	35.2
Actuated g/C Ratio	0.09	0.42		0.10	0.43	0.51	0.08	0.24	0.34	0.09	0.24	0.34
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	2083		353	2203	786	148	839	583	307	859	520
v/s Ratio Prot	0.07	c0.35		0.09	c0.38	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.80	0.84		0.89	0.89	0.32	0.84	0.43	0.27	0.80	0.35	0.21
Uniform Delay, d1	47.0	27.5		46.5	27.4	15.1	47.4	34.0	24.8	46.9	32.9	25.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	4.4		23.0	5.7	0.1	32.2	0.1	0.1	12.6	0.1	0.1
Delay (s)	59.8	31.9		69.5	33.1	15.2	79.6	34.1	24.9	59.5	33.0	25.1
Level of Service	E	C		E	C	B	E	C	C	E	C	C
Approach Delay (s)		35.2			35.2			39.1			39.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	110	20	595	80	140	1110
Future Volume (vph)	110	20	595	80	140	1110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.98		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1750		3476		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1750		3476		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	22	647	87	152	1207
RTOR Reduction (vph)	12	0	13	0	0	0
Lane Group Flow (vph)	130	0	721	0	152	1207
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	8.4		30.4		8.6	43.5
Effective Green, g (s)	8.4		30.4		8.6	43.5
Actuated g/C Ratio	0.14		0.50		0.14	0.71
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	241		1735		249	2527
v/s Ratio Prot	c0.07		0.21		c0.09	c0.34
v/s Ratio Perm						
v/c Ratio	0.54		0.42		0.61	0.48
Uniform Delay, d1	24.4		9.6		24.6	3.8
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	2.3		0.7		4.4	0.6
Delay (s)	26.8		10.4		29.0	4.4
Level of Service	C		B		C	A
Approach Delay (s)	26.8		10.4			7.2
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	60.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

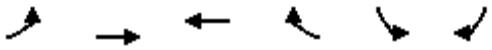
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	110	555	130	0	575
Future Volume (Veh/h)	0	110	555	130	0	575
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	120	603	141	0	625
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			491
pX, platoon unblocked	0.87					
vC, conflicting volume	988	377			746	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	692	377			746	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	81			100	
cM capacity (veh/h)	329	618			856	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	120	402	342	312	312
Volume Left	0	0	0	0	0
Volume Right	120	0	141	0	0
cSH	618	1700	1700	1700	1700
Volume to Capacity	0.19	0.24	0.20	0.18	0.18
Queue Length 95th (ft)	18	0	0	0	0
Control Delay (s)	12.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.2	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	1.0		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		



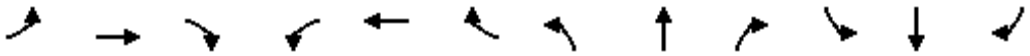
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	795	1290	630	420	195
Future Volume (vph)	0	795	1290	630	420	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	864	1402	685	457	212
RTOR Reduction (vph)	0	0	0	277	0	170
Lane Group Flow (vph)	0	864	1402	408	457	42
Confl. Peds. (#/hr)				8	8	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	8	1	
Permitted Phases						1
Actuated Green, G (s)		31.7	31.7	27.1	12.1	12.1
Effective Green, g (s)		31.7	31.7	26.6	12.1	12.1
Actuated g/C Ratio		0.52	0.52	0.44	0.20	0.20
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	3.0	2.5	2.5
Lane Grp Cap (vph)		1851	1851	1223	685	316
v/s Ratio Prot		0.24	c0.40	0.15	c0.13	
v/s Ratio Perm						0.03
v/c Ratio		0.47	0.76	0.33	0.67	0.13
Uniform Delay, d1		9.1	11.4	11.2	22.4	19.9
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	1.8	0.2	2.2	0.1
Delay (s)		9.3	13.2	11.3	24.6	20.1
Level of Service		A	B	B	C	C
Approach Delay (s)		9.3	12.6		23.2	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.6	Sum of lost time (s)	17.1
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



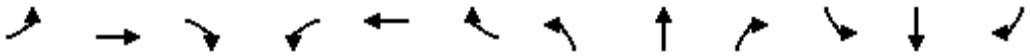
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	25	40	435	60	110	680
Future Volume (vph)	25	40	435	60	110	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.0	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1550	4980		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1550	4980		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	43	473	65	120	739
RTOR Reduction (vph)	0	38	8	0	0	0
Lane Group Flow (vph)	27	5	530	0	120	739
Confl. Peds. (#/hr)	4	11		9	9	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.7	11.7	72.3		11.8	88.5
Effective Green, g (s)	11.7	12.6	72.3		11.8	88.5
Actuated g/C Ratio	0.11	0.11	0.66		0.11	0.80
Clearance Time (s)	4.9	4.9	4.9		4.4	4.9
Vehicle Extension (s)	2.0	2.0	5.0		2.0	3.2
Lane Grp Cap (vph)	188	177	3273		189	4091
v/s Ratio Prot	c0.02		0.11		c0.07	c0.15
v/s Ratio Perm		0.00				
v/c Ratio	0.14	0.03	0.16		0.63	0.18
Uniform Delay, d1	44.6	43.3	7.2		47.0	2.5
Progression Factor	1.00	1.00	2.15		1.00	1.00
Incremental Delay, d2	0.1	0.0	0.1		5.0	0.1
Delay (s)	44.7	43.3	15.6		52.1	2.6
Level of Service	D	D	B		D	A
Approach Delay (s)	43.8		15.6			9.5
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.24		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



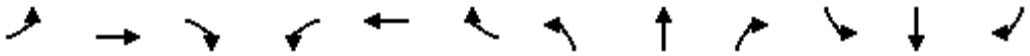
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	45	100	155	130	110	205	420	85	70	535	120
Future Volume (vph)	70	45	100	155	130	110	205	420	85	70	535	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.5	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.93		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1734		1770	4807		3433	3442	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1734		1770	4807		3433	3442	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	49	109	168	141	120	223	457	92	76	582	130
RTOR Reduction (vph)	0	88	0	0	27	0	0	23	0	0	14	0
Lane Group Flow (vph)	76	70	0	168	234	0	223	526	0	76	698	0
Confl. Peds. (#/hr)									120			
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	13.5	13.5		17.4	17.4		17.2	35.4		24.1	42.8	
Effective Green, g (s)	14.4	14.4		18.3	18.3		17.6	36.3		24.5	43.7	
Actuated g/C Ratio	0.13	0.13		0.17	0.17		0.16	0.33		0.22	0.40	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		3.9	3.9	
Lane Grp Cap (vph)	231	218		294	288		283	1586		764	1367	
v/s Ratio Prot	c0.04	0.04		0.09	c0.14		c0.13	0.11		0.02	c0.20	
v/s Ratio Perm												
v/c Ratio	0.33	0.32		0.57	0.81		0.79	0.33		0.10	0.51	
Uniform Delay, d1	43.4	43.4		42.2	44.2		44.4	27.7		34.0	25.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.94	0.96	
Incremental Delay, d2	0.8	0.9		1.7	15.2		12.5	0.6		0.1	1.4	
Delay (s)	44.3	44.2		43.9	59.4		56.9	28.3		32.2	25.4	
Level of Service	D	D		D	E		E	C		C	C	
Approach Delay (s)		44.2			53.3			36.6			26.0	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	10	30	5	45	25	625	30	75	685	65
Future Volume (vph)	30	10	10	30	5	45	25	625	30	75	685	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.97		1.00	0.86		1.00	0.99		1.00	0.99	
Flt Protected		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1754		1770	1609		1770	5044		3433	3483	
Flt Permitted		0.97		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1754		1770	1609		1770	5044		3433	3483	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	11	33	5	49	27	679	33	82	745	71
RTOR Reduction (vph)	0	8	0	0	45	0	0	3	0	0	4	0
Lane Group Flow (vph)	0	47	0	33	9	0	27	709	0	82	812	0
Confl. Peds. (#/hr)			7	7			9		4	4		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		6.7		5.3	5.3		2.0	19.4		13.4	31.3	
Effective Green, g (s)		6.7		5.3	5.3		2.0	19.4		13.4	31.3	
Actuated g/C Ratio		0.10		0.08	0.08		0.03	0.30		0.21	0.49	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		182		145	132		54	1519		714	1692	
v/s Ratio Prot		c0.03		c0.02	0.01		c0.02	0.14		0.02	c0.23	
v/s Ratio Perm												
v/c Ratio		0.26		0.23	0.07		0.50	0.47		0.11	0.48	
Uniform Delay, d1		26.6		27.6	27.3		30.7	18.3		20.7	11.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.3	0.1		2.6	0.1		0.0	0.1	
Delay (s)		26.8		27.9	27.4		33.3	18.4		20.7	11.2	
Level of Service		C		C	C		C	B		C	B	
Approach Delay (s)		26.8			27.6			18.9			12.0	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	64.4	Sum of lost time (s)	19.6
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	40	20	100	160	45	610	40	35	715	30
Future Volume (vph)	20	10	40	20	100	160	45	610	40	35	715	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.9	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.97	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1583		1847	1583	1770	5039		1770	5054	
Flt Permitted		0.79	1.00		0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1474	1583		1761	1583	1770	5039		1770	5054	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	11	43	22	109	174	49	663	43	38	777	33
RTOR Reduction (vph)	0	0	35	0	0	142	0	10	0	0	6	0
Lane Group Flow (vph)	0	33	8	0	131	32	49	696	0	38	804	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		8						
Actuated Green, G (s)		10.1	10.1		10.1	10.1	2.4	30.4		2.5	30.5	
Effective Green, g (s)		10.1	10.1		9.2	10.1	2.4	30.4		2.5	30.5	
Actuated g/C Ratio		0.18	0.18		0.17	0.18	0.04	0.55		0.05	0.55	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		270	290		294	290	77	2785		80	2802	
v/s Ratio Prot							c0.03	0.14		c0.02	c0.16	
v/s Ratio Perm		0.02	0.00		c0.07	0.02						
v/c Ratio		0.12	0.03		0.45	0.11	0.64	0.25		0.47	0.29	
Uniform Delay, d1		18.7	18.4		20.6	18.7	25.9	6.4		25.6	6.5	
Progression Factor		1.00	1.00		1.00	1.00	0.81	0.63		1.00	1.00	
Incremental Delay, d2		0.2	0.0		1.1	0.2	14.1	0.2		4.4	0.3	
Delay (s)		19.0	18.5		21.7	18.9	35.0	4.2		30.0	6.7	
Level of Service		B	B		C	B	C	A		C	A	
Approach Delay (s)		18.7			20.1			6.2			7.8	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	41.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	200	1465	135	100	2140	330	100	270	180	100	75	170
Future Volume (vph)	200	1465	135	100	2140	330	100	270	180	100	75	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	7.8	5.9	5.9	5.9	5.9	5.9	5.9
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (prot)	3433	4741		1362	5085	1583	1611	1681	1610	1655	1398	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (perm)	3433	4741		1362	5085	1583	1611	1681	1610	1655	1398	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	1592	147	109	2326	359	109	293	196	109	82	185
RTOR Reduction (vph)	0	0	0	42	0	36	75	0	0	0	70	0
Lane Group Flow (vph)	217	1750	0	56	2326	323	34	179	206	213	12	185
Confl. Peds. (#/hr)								9			45	18
Confl. Bikes (#/hr)											10	
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	8.2	63.3		63.3	51.3	67.1	34.7	15.8	15.8	15.8	15.8	13.0
Effective Green, g (s)	9.6	65.4		63.3	53.2	63.3	34.7	15.8	15.8	15.8	15.8	13.0
Actuated g/C Ratio	0.09	0.59		0.58	0.48	0.58	0.32	0.14	0.14	0.14	0.14	0.12
Clearance Time (s)	4.0	6.1		6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Vehicle Extension (s)	3.0	2.8		2.8	3.2	2.9	4.1	2.9	2.9	2.9	2.9	2.9
Lane Grp Cap (vph)	299	2818		783	2459	910	508	241	231	237	200	209
v/s Ratio Prot	c0.06	0.37			c0.46	0.04		0.11	0.13	c0.13		c0.10
v/s Ratio Perm				0.04		0.16	0.02				0.01	
v/c Ratio	0.73	0.62		0.07	0.95	0.36	0.07	0.74	0.89	0.90	0.06	0.89
Uniform Delay, d1	48.9	14.3		10.3	27.0	12.5	26.3	45.2	46.3	46.3	40.7	47.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.85	0.86	0.86	3.49	1.00
Incremental Delay, d2	8.5	1.0		0.2	9.3	0.2	0.1	11.3	31.5	32.0	0.1	32.8
Delay (s)	57.4	15.4		10.5	36.3	12.7	26.4	49.9	71.4	72.0	142.1	80.6
Level of Service	E	B		B	D	B	C	D	E	E	F	F
Approach Delay (s)		19.6			33.1					74.5		61.3
Approach LOS		B			C					E		E

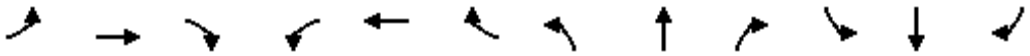
Intersection Summary			
HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	170	30
Future Volume (vph)	170	30
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.9	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	185	33
RTOR Reduction (vph)	114	0
Lane Group Flow (vph)	104	0
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		1
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	13.0	
Effective Green, g (s)	13.0	
Actuated g/C Ratio	0.12	
Clearance Time (s)	5.9	
Vehicle Extension (s)	2.9	
Lane Grp Cap (vph)	329	
v/s Ratio Prot	0.04	
v/s Ratio Perm		
v/c Ratio	0.32	
Uniform Delay, d1	44.4	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	45.0	
Level of Service	D	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	90	90	80	70	70	60	40	80	10	20	20
Future Volume (vph)	40	90	90	80	70	70	60	40	80	10	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.94			0.96			0.94			0.95	
Flt Protected		0.99			0.98			0.98			0.99	
Satd. Flow (prot)		1744			1751			1722			1745	
Flt Permitted		0.92			0.77			0.91			0.96	
Satd. Flow (perm)		1614			1372			1586			1683	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	98	98	87	76	76	65	43	87	11	22	22
RTOR Reduction (vph)	0	53	0	0	36	0	0	32	0	0	9	0
Lane Group Flow (vph)	0	186	0	0	203	0	0	163	0	0	46	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		11.6			11.6			27.0			27.5	
Effective Green, g (s)		11.6			11.6			27.0			27.5	
Actuated g/C Ratio		0.24			0.24			0.57			0.58	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		393			334			899			972	
v/s Ratio Prot												
v/s Ratio Perm		0.12			c0.15			c0.10			0.03	
v/c Ratio		0.47			0.61			0.18			0.05	
Uniform Delay, d1		15.4			16.0			5.0			4.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.9			3.1			0.4			0.0	
Delay (s)		16.3			19.1			5.4			4.4	
Level of Service		B			B			A			A	
Approach Delay (s)		16.3			19.1			5.4			4.4	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	47.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	47.3%	ICU Level of Service	A
Analysis Period (min)	15		

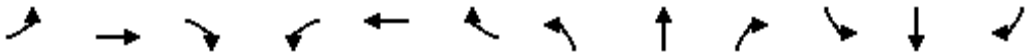
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	290	600	585	55	200	190
Future Volume (vph)	290	600	585	55	200	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5020		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5020		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	652	636	60	217	207
RTOR Reduction (vph)	0	0	6	0	0	172
Lane Group Flow (vph)	315	652	690	0	217	35
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.8	91.7	60.9		20.3	20.3
Effective Green, g (s)	26.8	91.7	60.9		20.3	20.3
Actuated g/C Ratio	0.22	0.76	0.51		0.17	0.17
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	395	3885	2547		299	267
v/s Ratio Prot	c0.18	0.13	c0.14		c0.12	
v/s Ratio Perm						0.02
v/c Ratio	0.80	0.17	0.27		0.73	0.13
Uniform Delay, d1	44.0	3.8	16.9		47.2	42.4
Progression Factor	1.16	0.16	1.26		1.00	1.00
Incremental Delay, d2	10.6	0.1	0.3		8.5	0.2
Delay (s)	61.6	0.7	21.5		55.7	42.6
Level of Service	E	A	C		E	D
Approach Delay (s)		20.5	21.5		49.3	
Approach LOS		C	C		D	

Intersection Summary			
HCM 2000 Control Delay	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

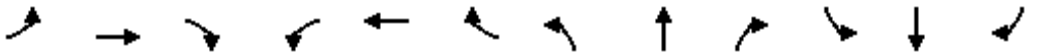
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	0	90	300	295	90	0	0	0	0	60	80
Future Volume (vph)	20	0	90	300	295	90	0	0	0	0	60	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.96						0.92	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1797						1719	
Flt Permitted	0.85		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1585		1583	1770	1797						1719	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	0	98	326	321	98	0	0	0	0	65	87
RTOR Reduction (vph)	0	0	87	200	15	0	0	0	0	0	70	0
Lane Group Flow (vph)	22	0	11	126	404	0	0	0	0	0	82	0
Turn Type	Perm		Perm	Split	NA						NA	
Protected Phases				8	8						6	
Permitted Phases	4		4									
Actuated Green, G (s)	4.7		4.7	15.6	15.6						8.0	
Effective Green, g (s)	4.7		4.7	15.6	15.6						8.0	
Actuated g/C Ratio	0.12		0.12	0.39	0.39						0.20	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	184		184	685	695						341	
v/s Ratio Prot				0.07	c0.22						c0.05	
v/s Ratio Perm	c0.01		0.01									
v/c Ratio	0.12		0.06	0.18	0.58						0.24	
Uniform Delay, d1	15.9		15.8	8.2	9.8						13.6	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.3		0.1	0.1	1.2						0.4	
Delay (s)	16.2		16.0	8.3	11.0						14.0	
Level of Service	B		B	A	B						B	
Approach Delay (s)		16.0			9.8			0.0			14.0	
Approach LOS		B			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	40.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		

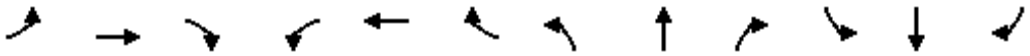
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1765	0	330	2355	0	0	0	0	355	190	115
Future Volume (vph)	0	1765	0	330	2355	0	0	0	0	355	190	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frt		1.00		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		5085		1770	6408					1681	1748	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		5085		1770	6408					1681	1748	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1918	0	359	2560	0	0	0	0	386	207	125
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	40
Lane Group Flow (vph)	0	1918	0	359	2560	0	0	0	0	320	273	85
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		55.3		32.8	92.8					32.4	32.4	32.4
Effective Green, g (s)		56.5		33.2	93.7					33.3	33.3	33.3
Actuated g/C Ratio		0.42		0.25	0.69					0.25	0.25	0.25
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2128		435	4447					414	431	390
v/s Ratio Prot		c0.38		c0.20	0.40							
v/s Ratio Perm										c0.19	0.16	0.05
v/c Ratio		0.90		0.83	0.58					0.77	0.63	0.22
Uniform Delay, d1		36.6		48.2	10.5					47.3	45.4	40.5
Progression Factor		1.00		1.10	0.07					1.00	1.00	1.00
Incremental Delay, d2		6.7		1.2	0.0					8.0	2.2	0.1
Delay (s)		43.4		54.1	0.8					55.3	47.6	40.6
Level of Service		D		D	A					E	D	D
Approach Delay (s)		43.4			7.4			0.0			49.8	
Approach LOS		D			A			A			D	

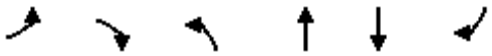
Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



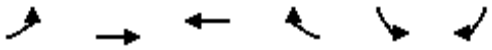
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	320	95	125	255	0	105	0	145	115	180	10
Future Volume (vph)	0	320	95	125	255	0	105	0	145	115	180	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3333		1746	3539		1770		1548	1770	1846	
Flt Permitted		1.00		0.43	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3333		790	3539		1770		1548	1770	1846	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	348	103	136	277	0	114	0	158	125	196	11
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	73	0	2	0
Lane Group Flow (vph)	0	438	0	136	277	0	114	0	85	125	205	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		68.8		81.9	81.9		13.7		68.8	20.2	20.2	
Effective Green, g (s)		69.7		82.3	82.8		14.1		69.7	21.1	21.1	
Actuated g/C Ratio		0.54		0.63	0.64		0.11		0.54	0.16	0.16	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1787		567	2254		191		829	287	299	
v/s Ratio Prot		0.13		c0.02	0.08		c0.06			0.07	c0.11	
v/s Ratio Perm				c0.14					0.05			
v/c Ratio		0.24		0.24	0.12		0.60		0.10	0.44	0.69	
Uniform Delay, d1		16.1		9.9	9.3		55.2		14.8	49.1	51.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		0.3		0.1	0.1		4.9		0.2	1.1	6.4	
Delay (s)		16.4		10.0	9.4		60.2		15.0	50.1	57.7	
Level of Service		B		A	A		E		B	D	E	
Approach Delay (s)		16.4			9.6			34.0			54.9	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	70	180	335	465	460	150
Future Volume (vph)	70	180	335	465	460	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.90		1.00	1.00	0.96	
Flt Protected	0.99		0.95	1.00	1.00	
Satd. Flow (prot)	1639		1770	5085	4898	
Flt Permitted	0.99		0.95	1.00	1.00	
Satd. Flow (perm)	1639		1770	5085	4898	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	196	364	505	500	163
RTOR Reduction (vph)	91	0	0	0	31	0
Lane Group Flow (vph)	181	0	364	505	632	0
Confl. Peds. (#/hr)		2				
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	18.2		31.1	93.8	58.7	
Effective Green, g (s)	18.2		30.7	93.8	57.8	
Actuated g/C Ratio	0.15		0.26	0.78	0.48	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	248		452	3974	2359	
v/s Ratio Prot	c0.11		c0.21	0.10	c0.13	
v/s Ratio Perm						
v/c Ratio	0.73		0.81	0.13	0.27	
Uniform Delay, d1	48.6		41.8	3.2	18.5	
Progression Factor	1.00		0.91	1.48	1.00	
Incremental Delay, d2	10.5		9.9	0.1	0.3	
Delay (s)	59.1		48.0	4.8	18.8	
Level of Service	E		D	A	B	
Approach Delay (s)	59.1			22.8	18.8	
Approach LOS	E			C	B	

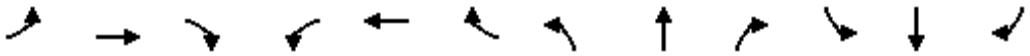
Intersection Summary			
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	130	70	35	20	30
Future Volume (Veh/h)	50	130	70	35	20	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	141	76	38	22	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1157	644			
pX, platoon unblocked						
vC, conflicting volume	114				344	95
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	114				344	95
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				96	97
cM capacity (veh/h)	1475				629	962

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	54	141	114	55
Volume Left	54	0	0	22
Volume Right	0	0	38	33
cSH	1475	1700	1700	793
Volume to Capacity	0.04	0.08	0.07	0.07
Queue Length 95th (ft)	3	0	0	6
Control Delay (s)	7.5	0.0	0.0	9.9
Lane LOS	A			A
Approach Delay (s)	2.1		0.0	9.9
Approach LOS				A

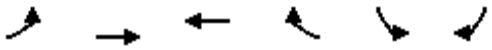
Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	2010	0	0	2610	595	75	310	90	0	0	0
Future Volume (vph)	110	2010	0	0	2610	595	75	310	90	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frt	1.00	1.00			1.00	0.85		0.97				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1583		3412				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1583		3412				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	2185	0	0	2837	647	82	337	98	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	128	0	6	0	0	0	0
Lane Group Flow (vph)	120	2185	0	0	2837	519	0	511	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	13.6	90.6			72.6	72.6		34.6				
Effective Green, g (s)	14.0	91.5			73.5	73.5		35.5				
Actuated g/C Ratio	0.10	0.68			0.54	0.54		0.26				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	183	3446			2768	861		897				
v/s Ratio Prot	0.07	c0.43			c0.56			c0.15				
v/s Ratio Perm						0.33						
v/c Ratio	0.66	0.63			1.02	0.60		0.57				
Uniform Delay, d1	58.2	12.3			30.8	20.9		43.1				
Progression Factor	0.80	0.94			1.00	1.00		1.00				
Incremental Delay, d2	3.2	0.5			23.8	3.1		0.5				
Delay (s)	50.0	12.0			54.6	24.0		43.6				
Level of Service	D	B			D	C		D				
Approach Delay (s)		14.0			48.9			43.6			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	580	380	290	0	0
Future Volume (Veh/h)	0	580	380	290	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	630	413	315	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		480	811			
pX, platoon unblocked	0.95				0.98	0.95
vC, conflicting volume	728				886	364
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	616				627	234
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	915				406	732

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	0	315	315	275	453
Volume Left	0	0	0	0	0
Volume Right	0	0	0	0	315
cSH	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.19	0.19	0.16	0.27
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0
Lane LOS					
Approach Delay (s)	0.0			0.0	
Approach LOS					

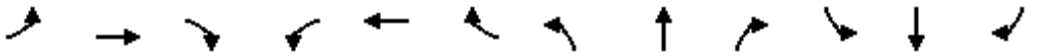
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	23.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	160	0	0	125	305	565
Future Volume (vph)	160	0	0	125	305	565
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	174	0	0	136	332	614

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	174	136	332	614
Volume Left (vph)	174	0	332	0
Volume Right (vph)	0	136	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.1	4.9	5.8	5.3
Degree Utilization, x	0.30	0.19	0.53	0.90
Capacity (veh/h)	568	707	616	680
Control Delay (s)	11.7	9.0	13.9	35.2
Approach Delay (s)	11.7	9.0	27.7	
Approach LOS	B	A	D	

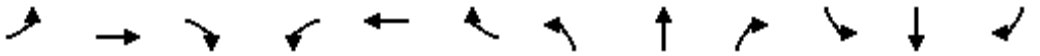
Intersection Summary			
Delay	23.5		
Level of Service	C		
Intersection Capacity Utilization	45.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	90	20	60	30	5	10	15	25	5	10	225	480
Future Volume (vph)	90	20	60	30	5	10	15	25	5	10	225	480
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	98	22	65	33	5	11	16	27	5	11	245	522

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	109	76	49	48	256	522
Volume Left (vph)	98	0	33	16	11	0
Volume Right (vph)	0	65	11	5	0	522
Hadj (s)	0.48	-0.56	0.03	0.04	0.06	-0.67
Departure Headway (s)	6.9	5.8	6.5	6.1	5.4	4.6
Degree Utilization, x	0.21	0.12	0.09	0.08	0.38	0.67
Capacity (veh/h)	489	570	507	561	653	764
Control Delay (s)	10.5	8.4	10.2	9.6	10.4	15.4
Approach Delay (s)	9.6		10.2	9.6	13.8	
Approach LOS	A		B	A	B	

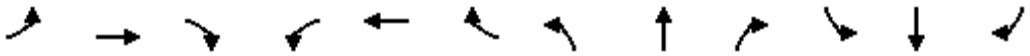
Intersection Summary				
Delay	12.7			
Level of Service	B			
Intersection Capacity Utilization	46.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	335	175	540	515	0	0	0	0	245	320	350
Future Volume (vph)	0	335	175	540	515	0	0	0	0	245	320	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3359	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3359	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	364	190	587	560	0	0	0	0	266	348	380
RTOR Reduction (vph)	0	0	105	0	0	0	0	0	0	0	0	234
Lane Group Flow (vph)	0	364	85	587	560	0	0	0	0	186	428	146
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		31.3	31.3	16.1	51.8					18.4	18.4	18.4
Effective Green, g (s)		32.2	32.2	16.5	52.7					19.3	19.3	19.3
Actuated g/C Ratio		0.40	0.40	0.21	0.66					0.24	0.24	0.24
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1424	637	708	2331					388	810	381
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.05							0.12	0.13	0.09
v/c Ratio		0.26	0.13	0.83	0.24					0.48	0.53	0.38
Uniform Delay, d1		15.9	15.1	30.4	5.5					26.0	26.4	25.4
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.4	0.4	7.6	0.2					0.3	0.3	0.2
Delay (s)		16.4	15.5	38.0	5.8					26.4	26.7	25.6
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		16.1			22.3			0.0			26.2	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

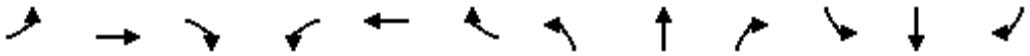
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	25	35	0	0	0	0	0	0	1510	70
Future Volume (Veh/h)	0	0	25	35	0	0	0	0	0	0	1510	70
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	27	38	0	0	0	0	0	0	1641	76
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1679	1679	585	574	1717	0	1717			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1679	1679	585	574	1717	0	1717			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	94	90	100	100	100			100		
cM capacity (veh/h)	62	94	454	378	89	1084	365			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	27	38	656	656	404
Volume Left	0	38	0	0	0
Volume Right	27	0	0	0	76
cSH	454	378	1700	1700	1700
Volume to Capacity	0.06	0.10	0.39	0.39	0.24
Queue Length 95th (ft)	5	8	0	0	0
Control Delay (s)	13.4	15.6	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	13.4	15.6	0.0		
Approach LOS	B	C			

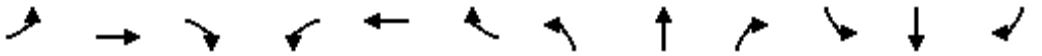
Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	49.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	170	135	165	340	0	0	0	0	430	1235	345
Future Volume (vph)	0	170	135	165	340	0	0	0	0	430	1235	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3482					1770	4919	
Flt Permitted		1.00	1.00		0.78					0.95	1.00	
Satd. Flow (perm)		1863	1583		2749					1770	4919	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	185	147	179	370	0	0	0	0	467	1342	375
RTOR Reduction (vph)	0	0	35	0	0	0	0	0	0	0	77	0
Lane Group Flow (vph)	0	185	112	0	549	0	0	0	0	467	1640	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		21.3	21.3		21.3					30.7	30.7	
Effective Green, g (s)		24.0	24.0		24.0					33.0	33.0	
Actuated g/C Ratio		0.37	0.37		0.37					0.51	0.51	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		687	584		1015					898	2497	
v/s Ratio Prot		0.10									c0.33	
v/s Ratio Perm			0.07		c0.20					0.26		
v/c Ratio		0.27	0.19		0.54					0.52	0.66	
Uniform Delay, d1		14.4	13.9		16.2					10.7	11.8	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		1.0	0.7		2.1					2.2	1.4	
Delay (s)		15.3	14.7		18.2					12.9	13.2	
Level of Service		B	B		B					B	B	
Approach Delay (s)		15.0			18.2			0.0			13.1	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

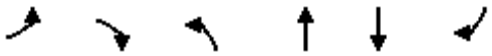


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	645	90	35	490	0	0	0	0	540	330	505
Future Volume (vph)	0	645	90	35	490	0	0	0	0	540	330	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3474		1770	3539						4661	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3474		1770	3539						4661	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	701	98	38	533	0	0	0	0	587	359	549
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	0	127
Lane Group Flow (vph)	0	783	0	38	533	0	0	0	0	0	946	422
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		23.4		1.8	27.9						25.1	25.1
Effective Green, g (s)		21.6		2.2	27.8						24.2	26.5
Actuated g/C Ratio		0.33		0.03	0.43						0.37	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1154		59	1513						1735	555
v/s Ratio Prot		c0.23		c0.02	0.15							
v/s Ratio Perm											0.20	c0.31
v/c Ratio		0.68		0.64	0.35						0.94dl	0.76
Uniform Delay, d1		18.7		31.0	12.5						16.1	16.5
Progression Factor		1.00		1.33	0.86						1.00	1.00
Incremental Delay, d2		3.2		15.4	0.6						0.2	5.3
Delay (s)		21.9		56.7	11.4						16.3	21.8
Level of Service		C		E	B						B	C
Approach Delay (s)		21.9			14.4			0.0			18.3	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



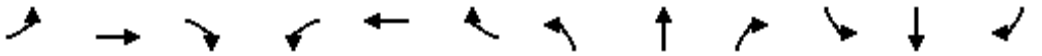
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	110	1090	1790	780	655	120
Future Volume (vph)	110	1090	1790	780	655	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2767	3433	5085	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2767	3433	5085	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1185	1946	848	712	130
RTOR Reduction (vph)	0	19	0	0	0	1
Lane Group Flow (vph)	120	1166	1946	848	712	129
Confl. Peds. (#/hr)	129	61	34			
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	13.4	76.0	62.6	98.6	32.0	45.4
Effective Green, g (s)	13.4	76.0	62.6	98.6	32.0	45.4
Actuated g/C Ratio	0.11	0.63	0.52	0.82	0.27	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	197	1844	1790	4178	1356	651
v/s Ratio Prot	0.07	c0.33	c0.57	0.17	c0.14	0.02
v/s Ratio Perm		0.09				0.06
v/c Ratio	0.61	0.63	1.09	0.20	0.53	0.20
Uniform Delay, d1	50.8	13.5	28.7	2.3	37.5	25.1
Progression Factor	1.00	1.00	0.40	0.55	0.81	0.94
Incremental Delay, d2	5.3	0.7	43.4	0.0	1.4	0.1
Delay (s)	56.1	14.2	54.7	1.3	31.9	23.8
Level of Service	E	B	D	A	C	C
Approach Delay (s)	18.0			38.5	30.7	
Approach LOS	B			D	C	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	95	270	0	0	540	315	60	0	60	250	20	180
Future Volume (vph)	95	270	0	0	540	315	60	0	60	250	20	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.95	0.95	1.00
Frt	1.00	1.00			1.00	0.85		0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539			3539	1583		1695		1681	1697	1583
Flt Permitted	0.95	1.00			1.00	1.00		0.76		0.50	0.54	1.00
Satd. Flow (perm)	1770	3539			3539	1583		1326		893	964	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	103	293	0	0	587	342	65	0	65	272	22	196
RTOR Reduction (vph)	0	0	0	0	0	228	0	118	0	0	0	151
Lane Group Flow (vph)	103	293	0	0	587	114	0	12	0	147	147	45
Turn Type	Prot	NA			NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		7
Actuated Green, G (s)	4.6	28.4			19.8	19.8		5.4		13.7	13.7	13.7
Effective Green, g (s)	4.6	28.4			19.8	19.8		5.4		13.7	13.7	13.7
Actuated g/C Ratio	0.08	0.48			0.33	0.33		0.09		0.23	0.23	0.23
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	136	1689			1177	526		120		205	221	364
v/s Ratio Prot	c0.06	0.08			c0.17							
v/s Ratio Perm						0.07		c0.01		c0.16	0.15	0.03
v/c Ratio	0.76	0.17			0.50	0.22		0.10		0.72	0.67	0.12
Uniform Delay, d1	26.9	8.9			15.9	14.3		24.8		21.1	20.8	18.1
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	21.1	0.2			1.5	0.9		0.4		11.3	7.3	0.2
Delay (s)	48.0	9.1			17.4	15.2		25.2		32.4	28.2	18.3
Level of Service	D	A			B	B		C		C	C	B
Approach Delay (s)		19.2			16.6			25.2			25.5	
Approach LOS		B			B			C			C	

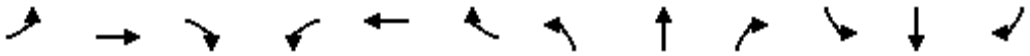
Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	59.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



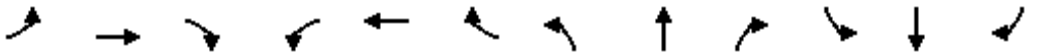
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	50	270	600	0	0	0	0	165	20	225
Future Volume (vph)	0	210	50	270	600	0	0	0	0	165	20	225
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3426		1763	1863					1681	1702	1583
Flt Permitted		1.00		0.58	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3426		1074	1863					1681	1702	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	228	54	293	652	0	0	0	0	179	22	245
RTOR Reduction (vph)	0	26	0	0	0	0	0	0	0	0	0	80
Lane Group Flow (vph)	0	256	0	293	652	0	0	0	0	97	104	165
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Perm	NA					Perm	NA	custom
Protected Phases		7			8						6	7
Permitted Phases				8						6		6
Actuated Green, G (s)		11.0		25.4	25.4					9.5	9.5	20.5
Effective Green, g (s)		11.0		25.7	25.7					11.7	11.7	24.9
Actuated g/C Ratio		0.18		0.43	0.43					0.19	0.19	0.41
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		627		459	796					327	331	703
v/s Ratio Prot		c0.07			c0.35							0.05
v/s Ratio Perm				0.27						0.06	0.06	0.05
v/c Ratio		0.41		0.64	0.82					0.30	0.31	0.24
Uniform Delay, d1		21.7		13.5	15.2					20.7	20.8	11.4
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.4		2.1	6.3					0.5	0.5	0.2
Delay (s)		22.1		15.7	21.4					21.2	21.3	11.6
Level of Service		C		B	C					C	C	B
Approach Delay (s)		22.1			19.6			0.0			15.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	60.1	Sum of lost time (s)	11.7
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



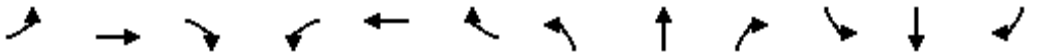
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	20	20	420	95	170	30	1290	160	125	715	120
Future Volume (vph)	5	20	20	420	95	170	30	1290	160	125	715	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1683		1770	5001		1770	4960	
Flt Permitted	0.47	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	870	1710		1352	1683		1770	5001		1770	4960	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	22	22	457	103	185	33	1402	174	136	777	130
RTOR Reduction (vph)	0	14	0	0	75	0	0	16	0	0	24	0
Lane Group Flow (vph)	5	30	0	457	213	0	33	1560	0	136	883	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	32.6	32.6		31.9	31.9		3.5	33.4		9.1	38.8	
Effective Green, g (s)	32.6	32.6		32.3	32.3		3.5	34.8		9.6	40.9	
Actuated g/C Ratio	0.37	0.37		0.36	0.36		0.04	0.39		0.11	0.46	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	318	626		490	610		69	1955		190	2279	
v/s Ratio Prot		0.02			0.13		0.02	c0.31		c0.08	0.18	
v/s Ratio Perm	0.01			c0.34								
v/c Ratio	0.02	0.05		0.93	0.35		0.48	0.80		0.72	0.39	
Uniform Delay, d1	18.0	18.2		27.3	20.7		41.9	24.0		38.4	15.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		24.8	0.3		1.9	3.5		12.1	0.5	
Delay (s)	18.0	18.2		52.1	21.0		43.8	27.5		50.5	16.3	
Level of Service	B	B		D	C		D	C		D	B	
Approach Delay (s)		18.2			40.1			27.8			20.8	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	645	565	145	140	715	140	290	670	95	75	670	215
Future Volume (vph)	645	565	145	140	715	140	290	670	95	75	670	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3431		1770	3443		1770	4982		1770	5085	1571
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3431		1770	3443		1770	4982		1770	5085	1571
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	701	614	158	152	777	152	315	728	103	82	728	234
RTOR Reduction (vph)	0	17	0	0	13	0	0	14	0	0	0	51
Lane Group Flow (vph)	701	755	0	152	916	0	315	817	0	82	728	183
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	40.6	57.2		15.0	31.0		18.6	30.4		8.5	20.2	60.8
Effective Green, g (s)	41.0	58.4		15.4	32.8		19.0	31.3		8.9	21.2	61.6
Actuated g/C Ratio	0.32	0.45		0.12	0.25		0.15	0.24		0.07	0.16	0.47
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	558	1541		209	868		258	1199		121	829	744
v/s Ratio Prot	c0.40	0.22		0.09	c0.27		c0.18	0.16		0.05	c0.14	0.08
v/s Ratio Perm												0.04
v/c Ratio	1.26	0.49		0.73	1.06		1.22	0.68		0.68	0.88	0.25
Uniform Delay, d1	44.5	25.3		55.3	48.6		55.5	44.8		59.1	53.1	20.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	129.4	0.3		10.2	46.3		129.1	3.1		11.2	12.7	0.1
Delay (s)	173.9	25.6		65.5	94.9		184.6	48.0		70.4	65.8	20.4
Level of Service	F	C		E	F		F	D		E	E	C
Approach Delay (s)		96.2			90.8			85.5			56.0	
Approach LOS		F			F			F			E	

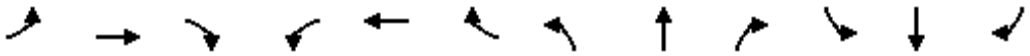
Intersection Summary			
HCM 2000 Control Delay	83.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	335	140	320	350	95	225	110	200	70	150	95
Future Volume (vph)	105	335	140	320	350	95	225	110	200	70	150	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	114	364	152	348	380	103	245	120	217	76	163	103
RTOR Reduction (vph)	0	0	81	0	0	62	0	0	148	0	0	82
Lane Group Flow (vph)	114	364	71	348	380	41	245	120	69	76	163	21
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.0	32.9	40.6	10.9	34.8	34.8	7.7	19.8	30.7	6.9	19.0	19.0
Effective Green, g (s)	9.4	33.8	41.4	11.3	35.7	35.7	8.1	19.2	28.5	7.3	18.5	18.5
Actuated g/C Ratio	0.11	0.38	0.46	0.13	0.40	0.40	0.09	0.22	0.32	0.08	0.21	0.21
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	186	1342	1294	435	1417	634	312	401	506	145	1055	328
v/s Ratio Prot	0.06	0.10	0.00	c0.10	c0.11		c0.07	c0.06	0.02	0.04	0.03	
v/s Ratio Perm			0.02			0.03			0.03			0.01
v/c Ratio	0.61	0.27	0.05	0.80	0.27	0.07	0.79	0.30	0.14	0.52	0.15	0.07
Uniform Delay, d1	38.1	19.1	13.1	37.8	17.9	16.4	39.6	29.3	21.6	39.2	28.9	28.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.2	0.5	0.0	9.6	0.5	0.2	11.3	0.7	0.0	1.6	0.1	0.1
Delay (s)	42.3	19.6	13.1	47.4	18.4	16.6	51.0	30.0	21.6	40.8	29.0	28.5
Level of Service	D	B	B	D	B	B	D	C	C	D	C	C
Approach Delay (s)		22.2			30.3			35.7			31.5	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	89.1	Sum of lost time (s)	19.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	225	60	15	140	210	40	165	240	5	5	20
Future Volume (vph)	135	225	60	15	140	210	40	165	240	5	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.92			0.93			0.91	
Flt Protected		0.98			1.00			1.00			0.99	
Satd. Flow (prot)		1791			1714			1686			1676	
Flt Permitted		0.78			0.98			0.97			0.95	
Satd. Flow (perm)		1418			1682			1647			1600	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	147	245	65	16	152	228	43	179	261	5	5	22
RTOR Reduction (vph)	0	8	0	0	41	0	0	62	0	0	16	0
Lane Group Flow (vph)	0	449	0	0	355	0	0	421	0	0	16	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		39.2			39.2			19.1			19.1	
Effective Green, g (s)		40.1			40.1			20.0			20.0	
Actuated g/C Ratio		0.59			0.59			0.29			0.29	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		834			990			483			469	
v/s Ratio Prot												
v/s Ratio Perm		c0.32			0.21			c0.26			0.01	
v/c Ratio		0.54			0.36			0.87			0.04	
Uniform Delay, d1		8.4			7.3			22.8			17.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.3			1.0			15.3			0.0	
Delay (s)		8.8			8.3			38.1			17.2	
Level of Service		A			A			D			B	
Approach Delay (s)		8.8			8.3			38.1			17.2	
Approach LOS		A			A			D			B	

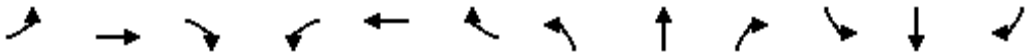
Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	460	145	215	620	145	145
Future Volume (vph)	460	145	215	620	145	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4867		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4867		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	500	158	234	674	158	158
RTOR Reduction (vph)	73	0	0	0	0	121
Lane Group Flow (vph)	585	0	234	674	158	37
Confl. Peds. (#/hr)		7	7		30	15
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	22.1		10.3	36.8	13.3	13.3
Effective Green, g (s)	24.0		10.7	36.8	14.2	14.2
Actuated g/C Ratio	0.40		0.18	0.61	0.24	0.24
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1950		316	2174	419	375
v/s Ratio Prot	0.12		c0.13	c0.19	c0.09	0.02
v/s Ratio Perm						
v/c Ratio	0.30		0.74	0.31	0.38	0.10
Uniform Delay, d1	12.2		23.3	5.5	19.1	17.9
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4		7.9	0.4	0.2	0.0
Delay (s)	12.6		31.2	5.9	19.4	17.9
Level of Service	B		C	A	B	B
Approach Delay (s)	12.6			12.4	18.6	
Approach LOS	B			B	B	

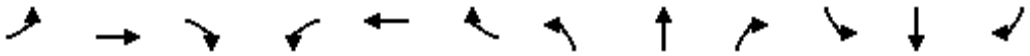
Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	59.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	5	10	5	30	10	30	25	150	25	45	170	40
Future Volume (vph)	5	10	5	30	10	30	25	150	25	45	170	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	11	5	33	11	33	27	163	27	49	185	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	21	77	217	277
Volume Left (vph)	5	33	27	49
Volume Right (vph)	5	33	27	43
Hadj (s)	-0.06	-0.14	-0.02	-0.02
Departure Headway (s)	5.1	4.9	4.4	4.4
Degree Utilization, x	0.03	0.10	0.27	0.34
Capacity (veh/h)	631	661	782	794
Control Delay (s)	8.2	8.5	9.0	9.6
Approach Delay (s)	8.2	8.5	9.0	9.6
Approach LOS	A	A	A	A

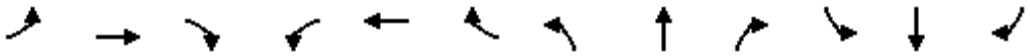
Intersection Summary				
Delay	9.2			
Level of Service	A			
Intersection Capacity Utilization	35.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	5	10	15	20	10	25	135	25	40	110	60
Future Volume (vph)	20	5	10	15	20	10	25	135	25	40	110	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	5	11	16	22	11	27	147	27	43	120	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	38	49	201	228
Volume Left (vph)	22	16	27	43
Volume Right (vph)	11	11	27	65
Hadj (s)	-0.02	-0.04	-0.02	-0.10
Departure Headway (s)	4.9	4.9	4.3	4.2
Degree Utilization, x	0.05	0.07	0.24	0.27
Capacity (veh/h)	664	669	802	818
Control Delay (s)	8.2	8.2	8.7	8.8
Approach Delay (s)	8.2	8.2	8.7	8.8
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.7		
Level of Service	A		
Intersection Capacity Utilization	28.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	5	15	15	95	10	10	20	250	300	10	90	5
Future Volume (vph)	5	15	15	95	10	10	20	250	300	10	90	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	16	16	103	11	11	22	272	326	11	98	5

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	37	125	294	326	114
Volume Left (vph)	5	103	22	0	11
Volume Right (vph)	16	11	0	326	5
Hadj (s)	-0.20	0.15	0.07	-0.67	0.03
Departure Headway (s)	5.4	5.6	5.2	4.4	5.1
Degree Utilization, x	0.06	0.19	0.42	0.40	0.16
Capacity (veh/h)	596	594	683	795	669
Control Delay (s)	8.7	9.9	10.7	9.1	9.1
Approach Delay (s)	8.7	9.9	9.9		9.1
Approach LOS	A	A	A		A

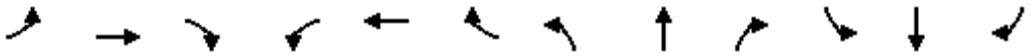
Intersection Summary				
Delay	9.7			
Level of Service	A			
Intersection Capacity Utilization	38.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	25	15	35	35	40	145
Future Volume (vph)	25	15	35	35	40	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	27	16	38	38	43	158

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	43	76	201
Volume Left (vph)	0	38	43
Volume Right (vph)	16	0	158
Hadj (s)	-0.19	0.13	-0.39
Departure Headway (s)	4.2	4.5	3.8
Degree Utilization, x	0.05	0.09	0.21
Capacity (veh/h)	810	756	921
Control Delay (s)	7.4	8.0	7.8
Approach Delay (s)	7.4	8.0	7.8
Approach LOS	A	A	A

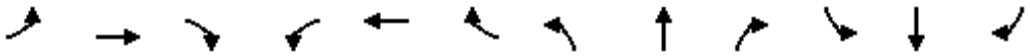
Intersection Summary			
Delay	7.8		
Level of Service	A		
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	10	5	40	20	15	10	135	90	10	35	15
Future Volume (vph)	10	10	5	40	20	15	10	135	90	10	35	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	11	5	43	22	16	11	147	98	11	38	16

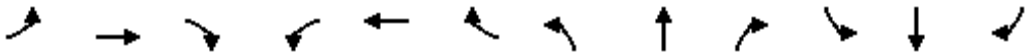
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	27	81	256	65
Volume Left (vph)	11	43	11	11
Volume Right (vph)	5	16	98	16
Hadj (s)	0.00	0.02	-0.19	-0.08
Departure Headway (s)	4.7	4.6	4.0	4.3
Degree Utilization, x	0.04	0.10	0.29	0.08
Capacity (veh/h)	701	716	863	786
Control Delay (s)	7.9	8.2	8.7	7.7
Approach Delay (s)	7.9	8.2	8.7	7.7
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.4			
Level of Service	A			
Intersection Capacity Utilization	36.2%	ICU Level of Service	A	
Analysis Period (min)	15			



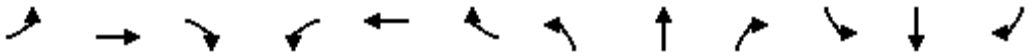
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	105	85	10	25	5	250	260	35	20	50	70
Future Volume (vph)	295	105	85	10	25	5	250	260	35	20	50	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.98		1.00	0.98		1.00	0.91	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1761			1807		1763	1824		1764	1675	
Flt Permitted		0.79			0.89		0.67	1.00		0.50	1.00	
Satd. Flow (perm)		1431			1633		1250	1824		930	1675	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	321	114	92	11	27	5	272	283	38	22	54	76
RTOR Reduction (vph)	0	14	0	0	3	0	0	7	0	0	43	0
Lane Group Flow (vph)	0	513	0	0	40	0	272	314	0	22	87	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		
Actuated Green, G (s)		23.4			23.4		24.4	24.4		24.4	24.4	
Effective Green, g (s)		23.4			23.4		24.4	24.4		24.4	24.4	
Actuated g/C Ratio		0.42			0.42		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		4.4	4.4		2.1	2.1	
Lane Grp Cap (vph)		600			684		546	797		406	732	
v/s Ratio Prot								0.17			0.05	
v/s Ratio Perm		c0.36			0.02		c0.22			0.02		
v/c Ratio		0.86			0.06		0.50	0.39		0.05	0.12	
Uniform Delay, d1		14.7			9.6		11.3	10.7		9.0	9.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.1			0.0		3.2	1.5		0.3	0.3	
Delay (s)		25.7			9.7		14.5	12.1		9.3	9.7	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		25.7			9.7			13.2			9.6	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	55.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	420	150	215	705	80	110	5	270	5	20	20
Future Volume (vph)	35	420	150	215	705	80	110	5	270	5	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.98			0.91			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1769	4885		1770	3477			1638			1740	
Flt Permitted	0.33	1.00		0.32	1.00			0.89			0.96	
Satd. Flow (perm)	617	4885		602	3477			1472			1685	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	457	163	234	766	87	120	5	293	5	22	22
RTOR Reduction (vph)	0	77	0	0	10	0	0	148	0	0	16	0
Lane Group Flow (vph)	38	543	0	234	843	0	0	270	0	0	33	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	22.1	20.7		33.3	27.5			14.2			14.2	
Effective Green, g (s)	22.9	21.7		33.7	28.4			15.1			15.1	
Actuated g/C Ratio	0.40	0.38		0.59	0.50			0.26			0.26	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	282	1849		527	1723			387			444	
v/s Ratio Prot	0.00	0.11		c0.07	c0.24							
v/s Ratio Perm	0.05			0.20				c0.18			0.02	
v/c Ratio	0.13	0.29		0.44	0.49			0.70			0.07	
Uniform Delay, d1	10.6	12.4		5.9	9.6			19.0			15.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.4		0.2	1.0			4.4			0.0	
Delay (s)	10.6	12.8		6.2	10.6			23.4			15.9	
Level of Service	B	B		A	B			C			B	
Approach Delay (s)		12.7			9.7			23.4			15.9	
Approach LOS		B			A			C			B	

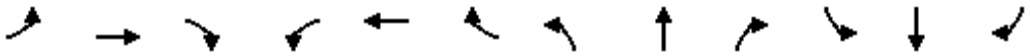
Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	57.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	60	10	10	5	5	5	10	155	35	60	115	55
Future Volume (vph)	60	10	10	5	5	5	10	155	35	60	115	55
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	11	11	5	5	5	11	168	38	65	125	60

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	87	15	217	250
Volume Left (vph)	65	5	11	65
Volume Right (vph)	11	5	38	60
Hadj (s)	0.11	-0.10	-0.06	-0.06
Departure Headway (s)	5.1	5.0	4.4	4.3
Degree Utilization, x	0.12	0.02	0.26	0.30
Capacity (veh/h)	646	642	792	796
Control Delay (s)	8.8	8.1	8.9	9.2
Approach Delay (s)	8.8	8.1	8.9	9.2
Approach LOS	A	A	A	A

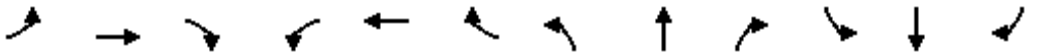
Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	43.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	10	30	10	10	10	50	150	10	15	85	40
Future Volume (vph)	30	10	30	10	10	10	50	150	10	15	85	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	11	33	11	11	11	54	163	11	16	92	43

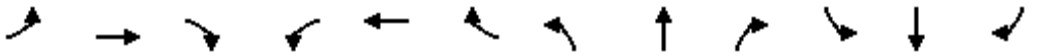
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	77	33	228	151
Volume Left (vph)	33	11	54	16
Volume Right (vph)	33	11	11	43
Hadj (s)	-0.14	-0.10	0.05	-0.12
Departure Headway (s)	4.7	4.8	4.4	4.3
Degree Utilization, x	0.10	0.04	0.28	0.18
Capacity (veh/h)	707	686	794	798
Control Delay (s)	8.2	8.0	9.1	8.2
Approach Delay (s)	8.2	8.0	9.1	8.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
Level of Service	A			
Intersection Capacity Utilization	33.9%	ICU Level of Service	A	
Analysis Period (min)	15			



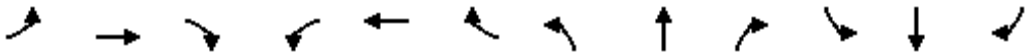
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	400	270	25	10	650	255	0	0	5	190	145	315
Future Volume (vph)	400	270	25	10	650	255	0	0	5	190	145	315
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3488		1770	3390				1590	1681	1736	1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3488		1770	3390				1590	1681	1736	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	293	27	11	707	277	0	0	5	207	158	342
RTOR Reduction (vph)	0	6	0	0	45	0	0	0	0	0	0	215
Lane Group Flow (vph)	435	314	0	11	939	0	0	0	5	108	257	127
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	11.2	38.3		0.7	27.8				70.9	17.3	17.3	17.3
Effective Green, g (s)	11.6	39.2		1.1	28.7				70.9	18.6	18.6	18.6
Actuated g/C Ratio	0.16	0.55		0.02	0.40				1.00	0.26	0.26	0.26
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	561	1928		27	1372				1590	440	455	415
v/s Ratio Prot	c0.13	0.09		0.01	c0.28					0.06	c0.15	
v/s Ratio Perm									0.00			0.08
v/c Ratio	0.78	0.16		0.41	0.68				0.00	0.25	0.56	0.31
Uniform Delay, d1	28.4	7.8		34.6	17.4				0.0	20.6	22.6	21.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	6.1	0.2		3.6	2.8				0.0	0.5	2.2	0.7
Delay (s)	34.5	8.0		38.2	20.2				0.0	21.1	24.9	21.7
Level of Service	C	A		D	C				A	C	C	C
Approach Delay (s)		23.2			20.4			0.0			22.7	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	70.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	700	85	70	1415	55	230	30	70	60	35	15
Future Volume (vph)	30	700	85	70	1415	55	230	30	70	60	35	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.98		1.00	0.99		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1678	3368		1671	3413		1633	1527			1667	
Flt Permitted	0.95	1.00		0.95	1.00		0.66	1.00			0.80	
Satd. Flow (perm)	1678	3368		1671	3413		1139	1527			1362	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	761	92	76	1538	60	250	33	76	65	38	16
RTOR Reduction (vph)	0	7	0	0	2	0	0	57	0	0	5	0
Lane Group Flow (vph)	33	846	0	76	1596	0	250	52	0	0	114	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.4	67.9		8.3	72.8		29.6	29.6			29.6	
Effective Green, g (s)	3.8	68.8		8.7	73.7		30.5	30.5			30.5	
Actuated g/C Ratio	0.03	0.57		0.07	0.61		0.25	0.25			0.25	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	53	1930		121	2096		289	388			346	
v/s Ratio Prot	0.02	0.25		c0.05	c0.47			0.03				
v/s Ratio Perm							c0.22				0.08	
v/c Ratio	0.62	0.44		0.63	0.76		0.87	0.13			0.33	
Uniform Delay, d1	57.4	14.6		54.1	16.8		42.8	34.6			36.4	
Progression Factor	1.00	1.00		0.85	1.52		1.00	1.00			1.00	
Incremental Delay, d2	15.2	0.7		2.0	0.8		21.9	0.1			0.2	
Delay (s)	72.6	15.3		48.1	26.2		64.7	34.6			36.6	
Level of Service	E	B		D	C		E	C			D	
Approach Delay (s)		17.5			27.2			55.6			36.6	
Approach LOS		B			C			E			D	

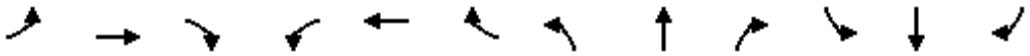
Intersection Summary			
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	655	85	165	1240	65	60	125	100	255	375	245
Future Volume (vph)	180	655	85	165	1240	65	60	125	100	255	375	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3458		1770	3503		1770	3539	1550	1770	3269	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3458		1770	3503		1770	3539	1550	1770	3269	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	712	92	179	1348	71	65	136	109	277	408	266
RTOR Reduction (vph)	0	8	0	0	3	0	0	0	45	0	90	0
Lane Group Flow (vph)	196	796	0	179	1416	0	65	136	64	277	584	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	14.5	41.8		16.1	42.9		7.0	21.4	37.5	22.0	36.5	
Effective Green, g (s)	14.9	42.7		16.5	44.3		7.4	22.4	38.3	22.4	37.4	
Actuated g/C Ratio	0.12	0.36		0.14	0.37		0.06	0.19	0.32	0.19	0.31	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	219	1230		243	1293		109	660	494	330	1018	
v/s Ratio Prot	c0.11	0.23		0.10	c0.40		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.02			
v/c Ratio	0.89	0.65		0.74	1.10		0.60	0.21	0.13	0.84	0.57	
Uniform Delay, d1	51.8	32.3		49.7	37.9		54.8	41.3	29.0	47.1	34.6	
Progression Factor	1.17	0.79		0.99	0.86		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	31.8	2.5		8.1	53.5		5.7	0.2	0.0	16.2	0.7	
Delay (s)	92.4	28.2		57.5	86.1		60.6	41.5	29.1	63.2	35.3	
Level of Service	F	C		E	F		E	D	C	E	D	
Approach Delay (s)		40.7			82.9			41.1			43.4	
Approach LOS		D			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	58.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		

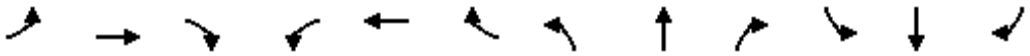
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	985	75	305	1380	65	65	15	140	60	5	10
Future Volume (vph)	0	985	75	305	1380	65	65	15	140	60	5	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected		1.00		0.95	1.00			0.96	1.00		0.96	
Satd. Flow (prot)		5018		1770	3511			1788	1552		1750	
Flt Permitted		1.00		0.95	1.00			0.75	1.00		0.71	
Satd. Flow (perm)		5018		1770	3511			1390	1552		1298	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1071	82	332	1500	71	71	16	152	65	5	11
RTOR Reduction (vph)	0	6	0	0	2	0	0	0	126	0	5	0
Lane Group Flow (vph)	0	1148	0	332	1569	0	0	87	26	0	76	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		58.7		27.2	90.3			19.5	19.5		19.5	
Effective Green, g (s)		60.0		27.6	91.6			20.4	20.4		20.4	
Actuated g/C Ratio		0.50		0.23	0.76			0.17	0.17		0.17	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		2509		407	2680			236	263		220	
v/s Ratio Prot		0.23		c0.19	c0.45							
v/s Ratio Perm								c0.06	0.02		0.06	
v/c Ratio		0.46		0.82	0.59			0.37	0.10		0.35	
Uniform Delay, d1		19.4		43.8	6.1			44.1	42.0		43.9	
Progression Factor		1.52		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		11.3	0.9			0.4	0.1		0.3	
Delay (s)		29.9		55.1	7.0			44.5	42.1		44.3	
Level of Service		C		E	A			D	D		D	
Approach Delay (s)		29.9			15.4			43.0			44.3	
Approach LOS		C			B			D			D	

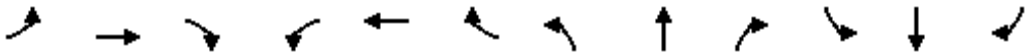
Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



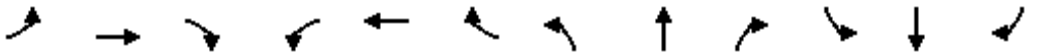
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	275	3120	0	0	0	0	0	150	155
Future Volume (vph)	0	0	0	275	3120	0	0	0	0	0	150	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.92	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5061						4645	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5061						4645	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	299	3391	0	0	0	0	0	163	168
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3681	0	0	0	0	0	331	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3548						975	
v/s Ratio Prot											c0.07	
v/s Ratio Perm					0.73							
v/c Ratio					1.04						0.34	
Uniform Delay, d1					13.4						30.2	
Progression Factor					1.00						1.00	
Incremental Delay, d2					26.0						0.1	
Delay (s)					39.4						30.3	
Level of Service					D						C	
Approach Delay (s)		0.0			39.4			0.0			30.3	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



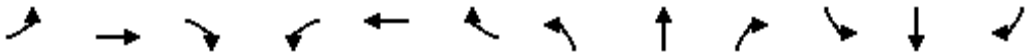
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	890	105	0	0	0	0	0	0	165	340	0
Future Volume (vph)	0	890	105	0	0	0	0	0	0	165	340	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.98									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		4993									4977	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		4993									4977	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	967	114	0	0	0	0	0	0	179	370	0
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	73	0
Lane Group Flow (vph)	0	1065	0	0	0	0	0	0	0	0	476	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		47.0									19.0	
Effective Green, g (s)		47.0									20.0	
Actuated g/C Ratio		0.63									0.27	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3128									1327	
v/s Ratio Prot		c0.21										
v/s Ratio Perm											0.10	
v/c Ratio		0.34									0.36	
Uniform Delay, d1		6.6									22.3	
Progression Factor		0.57									1.00	
Incremental Delay, d2		0.3									0.2	
Delay (s)		4.1									22.5	
Level of Service		A									C	
Approach Delay (s)		4.1			0.0			0.0			22.5	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1080	40	115	780	185	45	40	85	75	75	210
Future Volume (vph)	230	1080	40	115	780	185	45	40	85	75	75	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1174	43	125	848	201	49	43	92	82	82	228
RTOR Reduction (vph)	0	3	0	0	0	186	0	0	79	0	0	188
Lane Group Flow (vph)	250	1214	0	125	848	15	49	43	13	82	82	40
Confl. Peds. (#/hr)	2											2
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	8.5	34.2		7.1	32.9	5.5	2.8	8.8	8.8	5.5	12.4	12.4
Effective Green, g (s)	8.5	35.7		7.1	34.3	5.5	2.8	10.6	10.6	5.5	13.3	13.3
Actuated g/C Ratio	0.11	0.48		0.09	0.46	0.07	0.04	0.14	0.14	0.07	0.18	0.18
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	389	1677		167	1620	116	66	263	224	252	330	277
v/s Ratio Prot	c0.07	c0.34		0.07	0.24		c0.03	0.02		0.02	c0.04	
v/s Ratio Perm						0.01			0.01			0.03
v/c Ratio	0.64	0.72		0.75	0.52	0.13	0.74	0.16	0.06	0.33	0.25	0.15
Uniform Delay, d1	31.7	15.7		33.0	14.5	32.5	35.7	28.3	27.8	32.9	26.5	26.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	2.8		14.8	1.2	0.2	32.0	0.1	0.0	0.3	0.4	0.2
Delay (s)	34.5	18.4		47.8	15.7	32.6	67.7	28.4	27.9	33.2	26.9	26.3
Level of Service	C	B		D	B	C	E	C	C	C	C	C
Approach Delay (s)		21.2			22.0			38.6			27.8	
Approach LOS		C			C			D			C	

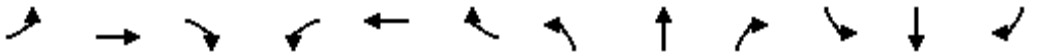
Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	74.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	540	2585	150	295	290	0	0	205	80
Future Volume (vph)	0	0	0	540	2585	150	295	290	0	0	205	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6280		1770	3539			3374	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6280		1770	3539			3374	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	568	2721	158	311	305	0	0	216	84
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	28	0
Lane Group Flow (vph)	0	0	0	0	3441	0	311	305	0	0	272	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					62.8		20.5	37.4			12.0	
Effective Green, g (s)					62.8		20.5	37.4			12.0	
Actuated g/C Ratio					0.57		0.19	0.34			0.11	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					3585		329	1203			368	
v/s Ratio Prot							c0.18	0.09			c0.08	
v/s Ratio Perm					0.55							
v/c Ratio					0.96		0.95	0.25			0.74	
Uniform Delay, d1					22.4		44.2	26.2			47.5	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					8.2		35.2	0.1			7.3	
Delay (s)					30.6		79.4	26.3			54.8	
Level of Service					C		E	C			D	
Approach Delay (s)		0.0			30.6			53.1			54.8	
Approach LOS		A			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	700	65	0	0	0	0	505	230	65	680	0
Future Volume (vph)	85	700	65	0	0	0	0	505	230	65	680	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5056	1551					4807		1770	5085	
Flt Permitted		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5056	1551					4807		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	761	71	0	0	0	0	549	250	71	739	0
RTOR Reduction (vph)	0	0	40	0	0	0	0	110	0	0	0	0
Lane Group Flow (vph)	0	853	31	0	0	0	0	689	0	71	739	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		32.2	32.2					22.0		6.6	33.0	
Effective Green, g (s)		33.1	33.1					22.0		7.0	33.0	
Actuated g/C Ratio		0.44	0.44					0.29		0.09	0.44	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2231	684					1410		165	2237	
v/s Ratio Prot								c0.14		c0.04	0.15	
v/s Ratio Perm		0.17	0.02									
v/c Ratio		0.38	0.05					0.49		0.43	0.33	
Uniform Delay, d1		14.1	11.9					21.9		32.1	13.8	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1					1.2		8.0	0.4	
Delay (s)		14.6	12.1					23.1		40.1	14.2	
Level of Service		B	B					C		D	B	
Approach Delay (s)		14.4			0.0			23.1			16.4	
Approach LOS		B			A			C			B	

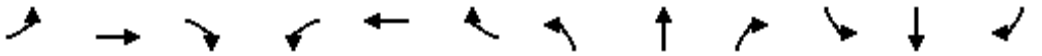
Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1170	520	270	890	305	195
Future Volume (vph)	1170	520	270	890	305	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.98	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3377	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3377	1421
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1272	565	293	967	332	212
RTOR Reduction (vph)	0	5	0	0	24	113
Lane Group Flow (vph)	1272	560	293	967	372	35
Confl. Peds. (#/hr)						2
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.6	42.2	8.0	41.8	13.6	13.6
Effective Green, g (s)	30.8	46.6	7.9	43.2	15.8	15.8
Actuated g/C Ratio	0.46	0.70	0.12	0.64	0.24	0.24
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1626	1195	404	2281	796	335
v/s Ratio Prot	c0.36	c0.11	c0.09	0.27	0.11	
v/s Ratio Perm		0.24				0.02
v/c Ratio	0.78	0.47	0.73	0.42	0.47	0.10
Uniform Delay, d1	15.3	4.6	28.5	5.8	22.0	20.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.8	0.1	5.4	0.6	0.2	0.0
Delay (s)	19.1	4.7	33.9	6.4	22.1	20.1
Level of Service	B	A	C	A	C	C
Approach Delay (s)	14.7			12.8	21.6	
Approach LOS	B			B	C	

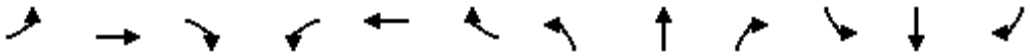
Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	67.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1055	140	380	330	0	0	0	0	340	0	665
Future Volume (vph)	0	1055	140	380	330	0	0	0	0	340	0	665
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1147	152	413	359	0	0	0	0	370	0	723
RTOR Reduction (vph)	0	0	87	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1147	65	413	359	0	0	0	0	370	0	723
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		25.9	25.9	9.0	39.1					14.5		63.2
Effective Green, g (s)		26.9	26.9	9.2	40.1					15.1		63.2
Actuated g/C Ratio		0.43	0.43	0.15	0.63					0.24		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1506	664	499	2245					422		1583
v/s Ratio Prot		c0.32		c0.12	0.10					c0.21		
v/s Ratio Perm			0.04									0.46
v/c Ratio		0.76	0.10	0.83	0.16					0.88		0.46
Uniform Delay, d1		15.4	10.9	26.2	4.7					23.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.7	0.3	10.3	0.2					17.6		1.0
Delay (s)		19.1	11.2	36.6	4.9					40.8		1.0
Level of Service		B	B	D	A					D		A
Approach Delay (s)		18.2			21.8			0.0			14.4	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

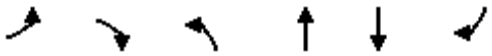
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	885	645	0	0	615	590	185	10	295	0	0	0
Future Volume (vph)	885	645	0	0	615	590	185	10	295	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3279			1778	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3279			1778	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	962	701	0	0	668	641	201	11	321	0	0	0
RTOR Reduction (vph)	0	0	0	0	183	0	0	0	278	0	0	0
Lane Group Flow (vph)	962	701	0	0	1126	0	0	212	43	0	0	0
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	23.6	59.4			31.6			10.1	10.1			
Effective Green, g (s)	23.8	59.9			32.1			10.7	10.7			
Actuated g/C Ratio	0.30	0.75			0.40			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1026	2663			1322			239	212			
v/s Ratio Prot	c0.28	0.20			c0.34			c0.12				
v/s Ratio Perm									0.03			
v/c Ratio	0.94	0.26			0.85			0.89	0.20			
Uniform Delay, d1	27.2	3.0			21.6			33.9	30.7			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	15.0	0.2			7.1			29.4	0.2			
Delay (s)	42.2	3.3			28.7			63.2	30.8			
Level of Service	D	A			C			E	C			
Approach Delay (s)		25.8			28.7			43.7			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	79.6	Sum of lost time (s)	13.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

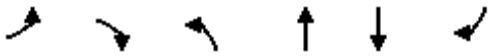
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	210	210	110	500	700	110
Future Volume (vph)	210	210	110	500	700	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.93		1.00	1.00	0.98	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1695		1770	3539	3467	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1695		1770	3539	3467	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	228	120	543	761	120
RTOR Reduction (vph)	35	0	0	0	9	0
Lane Group Flow (vph)	421	0	120	543	872	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	35.5		13.1	76.5	59.4	
Effective Green, g (s)	35.5		13.1	76.5	59.4	
Actuated g/C Ratio	0.30		0.11	0.64	0.49	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	501		193	2256	1716	
v/s Ratio Prot	c0.25		c0.07	0.15	c0.25	
v/s Ratio Perm						
v/c Ratio	0.84		0.62	0.24	0.51	
Uniform Delay, d1	39.6		51.1	9.3	20.4	
Progression Factor	1.00		1.02	0.91	1.00	
Incremental Delay, d2	11.8		6.0	0.2	1.1	
Delay (s)	51.4		57.9	8.8	21.5	
Level of Service	D		E	A	C	
Approach Delay (s)	51.4			17.7	21.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

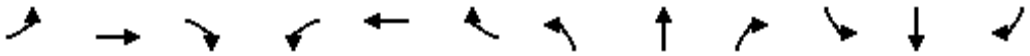
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	180	0	0	160	30
Future Volume (Veh/h)	0	180	0	0	160	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	0	0	174	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				973	1298	
pX, platoon unblocked						
vC, conflicting volume	190	104	207			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	190	104	207			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	79	100			
cM capacity (veh/h)	781	931	1361			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	196	116	91
Volume Left	0	0	0
Volume Right	196	0	33
cSH	931	1700	1700
Volume to Capacity	0.21	0.07	0.05
Queue Length 95th (ft)	20	0	0
Control Delay (s)	9.9	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.9	0.0	
Approach LOS	A		

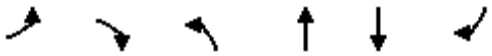
Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	100	60	90	0	0	0	0	40	220	10
Future Volume (vph)	0	20	100	60	90	0	0	0	0	40	220	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.89			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		1654			1826						3494	
Flt Permitted		1.00			0.86						0.99	
Satd. Flow (perm)		1654			1598						3494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	22	109	65	98	0	0	0	0	43	239	11
RTOR Reduction (vph)	0	56	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	75	0	0	163	0	0	0	0	0	289	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases				6						4		
Actuated Green, G (s)		31.5			31.5						24.5	
Effective Green, g (s)		31.5			31.5						24.5	
Actuated g/C Ratio		0.48			0.48						0.38	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		801			774						1316	
v/s Ratio Prot		0.05										
v/s Ratio Perm					c0.10						0.08	
v/c Ratio		0.09			0.21						0.22	
Uniform Delay, d1		9.0			9.6						13.8	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			0.6						0.4	
Delay (s)		9.1			10.2						14.1	
Level of Service		A			B						B	
Approach Delay (s)		9.1			10.2			0.0			14.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		

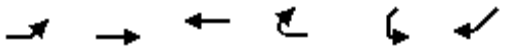
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	150	140	330	310	30
Future Volume (vph)	50	150	140	330	310	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.90			1.00	0.99	
Flt Protected	0.99			0.99	1.00	
Satd. Flow (prot)	1653			1835	1840	
Flt Permitted	0.99			0.80	1.00	
Satd. Flow (perm)	1653			1481	1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	163	152	359	337	33
RTOR Reduction (vph)	141	0	0	0	4	0
Lane Group Flow (vph)	76	0	0	511	366	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.3			45.5	45.5	
Effective Green, g (s)	8.3			45.5	45.5	
Actuated g/C Ratio	0.13			0.74	0.74	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	222			1090	1354	
v/s Ratio Prot	c0.05				0.20	
v/s Ratio Perm				c0.35		
v/c Ratio	0.34			0.47	0.27	
Uniform Delay, d1	24.3			3.3	2.7	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.9			1.4	0.5	
Delay (s)	25.2			4.7	3.2	
Level of Service	C			A	A	
Approach Delay (s)	25.2			4.7	3.2	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

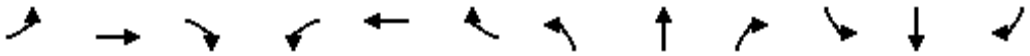
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	50	670	1420	40	150	250
Future Volume (vph)	50	670	1420	40	150	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3525		1674	
Flt Permitted	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	3525		1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	728	1543	43	163	272
RTOR Reduction (vph)	0	0	3	0	74	0
Lane Group Flow (vph)	54	728	1583	0	361	0
Turn Type	Prot	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases						
Actuated Green, G (s)	3.5	46.0	38.0		23.6	
Effective Green, g (s)	3.5	46.0	38.0		23.6	
Actuated g/C Ratio	0.04	0.59	0.48		0.30	
Clearance Time (s)	4.5	4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	78	2071	1704		502	
v/s Ratio Prot	c0.03	0.21	c0.45		c0.22	
v/s Ratio Perm						
v/c Ratio	0.69	0.35	0.93		0.72	
Uniform Delay, d1	37.0	8.5	19.0		24.5	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	23.3	0.1	9.4		8.6	
Delay (s)	60.3	8.6	28.4		33.1	
Level of Service	E	A	C		C	
Approach Delay (s)		12.2	28.4		33.1	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

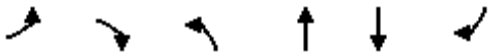
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	10	30	40	100	240	150	390	130	220	450	150
Future Volume (vph)	60	10	30	40	100	240	150	390	130	220	450	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.96			0.91		1.00	0.96		1.00	0.96	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1735			1695		1770	3407		1770	3406	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1735			1695		1770	3407		1770	3406	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	11	33	43	109	261	163	424	141	239	489	163
RTOR Reduction (vph)	0	20	0	0	67	0	0	35	0	0	35	0
Lane Group Flow (vph)	0	89	0	0	346	0	163	530	0	239	617	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		7.6			19.3		10.8	15.5		14.1	18.8	
Effective Green, g (s)		7.6			19.3		10.8	15.5		14.1	18.8	
Actuated g/C Ratio		0.10			0.26		0.14	0.21		0.19	0.25	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		176			439		256	708		334	859	
v/s Ratio Prot		c0.05			c0.20		0.09	0.16		c0.14	c0.18	
v/s Ratio Perm												
v/c Ratio		0.51			0.79		0.64	0.75		0.72	0.72	
Uniform Delay, d1		31.7			25.7		30.0	27.7		28.3	25.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.3			9.1		5.1	4.3		7.1	2.9	
Delay (s)		34.0			34.8		35.1	32.0		35.4	28.3	
Level of Service		C			C		D	C		D	C	
Approach Delay (s)		34.0			34.8			32.7			30.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

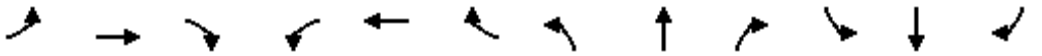
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	200	340	190	190	40
Future Volume (vph)	30	200	340	190	190	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			4.5	4.5	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.88			1.00	0.98	
Flt Protected	0.99			0.97	1.00	
Satd. Flow (prot)	1634			1805	1819	
Flt Permitted	0.99			0.66	1.00	
Satd. Flow (perm)	1634			1237	1819	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	217	370	207	207	43
RTOR Reduction (vph)	188	0	0	0	8	0
Lane Group Flow (vph)	62	0	0	577	242	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.1			43.5	43.5	
Effective Green, g (s)	8.1			43.5	43.5	
Actuated g/C Ratio	0.13			0.72	0.72	
Clearance Time (s)	4.5			4.5	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	218			887	1305	
v/s Ratio Prot	c0.04				0.13	
v/s Ratio Perm				c0.47		
v/c Ratio	0.28			0.65	0.19	
Uniform Delay, d1	23.6			4.5	2.8	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.7			3.7	0.3	
Delay (s)	24.4			8.2	3.1	
Level of Service	C			A	A	
Approach Delay (s)	24.4			8.2	3.1	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	60.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

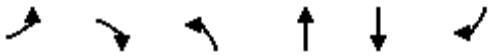
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	50	190	170	140	70	2380	70	80	1615	50
Future Volume (vph)	50	20	50	190	170	140	70	2380	70	80	1615	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.89		1.00	0.93		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3162		1770	3300		1770	5064		1770	5063	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3162		1770	3300		1770	5064		1770	5063	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	54	207	185	152	76	2587	76	87	1755	54
RTOR Reduction (vph)	0	46	0	0	120	0	0	3	0	0	3	0
Lane Group Flow (vph)	54	30	0	207	217	0	76	2660	0	87	1806	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Effective Green, g (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Actuated g/C Ratio	0.06	0.14		0.12	0.21		0.07	0.54		0.07	0.53	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	101	442		221	684		122	2713		116	2696	
v/s Ratio Prot	0.03	0.01		c0.12	c0.07		0.04	c0.53		c0.05	0.36	
v/s Ratio Perm												
v/c Ratio	0.53	0.07		0.94	0.32		0.62	0.98		0.75	0.67	
Uniform Delay, d1	55.0	44.8		52.0	40.3		54.3	27.2		55.1	20.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.82	0.95	
Incremental Delay, d2	5.4	0.3		42.8	1.2		9.5	13.3		19.1	1.1	
Delay (s)	60.3	45.1		94.8	41.6		63.8	40.5		64.1	20.4	
Level of Service	E	D		F	D		E	D		E	C	
Approach Delay (s)		51.4			61.8			41.2			22.4	
Approach LOS		D			E			D			C	

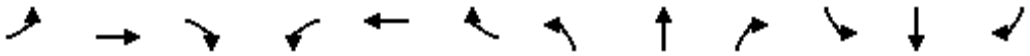
Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	110	0	200	700	0	0
Future Volume (vph)	110	0	200	700	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	0	217	761	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	120	0	217	761	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.07			c0.22		
v/s Ratio Perm			0.12			
v/c Ratio	0.17		0.31	0.54		
Uniform Delay, d1	7.7		8.2	9.2		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		1.1	1.5		
Delay (s)	8.2		9.3	10.6		
Level of Service	A		A	B		
Approach Delay (s)	8.2			10.4	0.0	
Approach LOS	A			B	A	

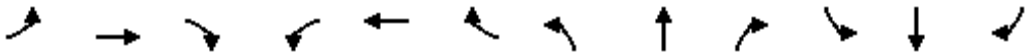
Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	410	775	0	0	375	200	150	200	20	0	0	0
Future Volume (vph)	410	775	0	0	375	200	150	200	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.95			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (prot)	3433	1863			3355			3465	1583			
Flt Permitted	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (perm)	3433	1863			3355			3465	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	842	0	0	408	217	163	217	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	99	0	0	0	18	0	0	0
Lane Group Flow (vph)	446	842	0	0	526	0	0	380	4	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	14.4	43.5			24.7			11.7	11.7			
Effective Green, g (s)	14.4	43.5			24.7			11.7	11.7			
Actuated g/C Ratio	0.22	0.67			0.38			0.18	0.18			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	760	1246			1274			623	284			
v/s Ratio Prot	0.13	c0.45			0.16							
v/s Ratio Perm								0.11	0.00			
v/c Ratio	0.59	0.68			0.41			0.61	0.01			
Uniform Delay, d1	22.6	6.5			14.8			24.5	21.9			
Progression Factor	1.01	1.10			1.00			1.00	1.00			
Incremental Delay, d2	1.0	2.4			1.0			1.2	0.0			
Delay (s)	23.9	9.6			15.8			25.7	21.9			
Level of Service	C	A			B			C	C			
Approach Delay (s)		14.5			15.8			25.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1680	560	120	1170	355	460	345	180	300	255	35
Future Volume (vph)	90	1680	560	120	1170	355	460	345	180	300	255	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1826	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1826	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1826	609	130	1272	386	500	375	196	326	277	38
RTOR Reduction (vph)	0	0	237	0	0	156	0	0	96	0	3	0
Lane Group Flow (vph)	98	1826	372	130	1272	230	500	375	100	326	312	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.7	59.9	59.9	10.0	61.1	61.1	22.9	32.6	32.6	30.0	37.9	
Effective Green, g (s)	9.1	61.2	61.2	10.4	62.5	62.5	23.3	33.4	33.4	29.0	39.1	
Actuated g/C Ratio	0.06	0.41	0.41	0.07	0.42	0.42	0.16	0.22	0.22	0.19	0.26	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	107	2074	636	238	1474	627	533	414	345	342	475	
v/s Ratio Prot	c0.06	0.36		0.04	c0.36		0.15	c0.20		c0.18	0.17	
v/s Ratio Perm			0.24			0.15			0.06			
v/c Ratio	0.92	0.88	0.58	0.55	0.86	0.37	0.94	0.91	0.29	0.95	0.66	
Uniform Delay, d1	70.1	41.0	34.5	67.5	39.8	30.1	62.6	56.8	48.5	59.8	49.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	59.6	5.8	3.9	1.4	6.9	1.6	24.0	23.2	0.6	36.0	2.5	
Delay (s)	129.7	46.8	38.4	68.9	46.8	31.8	86.7	80.0	49.1	95.8	52.0	
Level of Service	F	D	D	E	D	C	F	E	D	F	D	
Approach Delay (s)		48.0			45.1			77.4			74.3	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1800	925	0	0	880
Future Volume (vph)	830	1800	925	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1957	1005	0	0	957
RTOR Reduction (vph)	0	5	0	0	0	0
Lane Group Flow (vph)	902	1952	1005	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	94.0	94.0	42.0			42.0
Effective Green, g (s)	94.0	94.0	42.0			42.0
Actuated g/C Ratio	0.63	0.63	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	2151	1746	990			990
v/s Ratio Prot	0.26		c0.28			0.27
v/s Ratio Perm		c0.70				
v/c Ratio	0.42	1.12	1.02			0.97
Uniform Delay, d1	14.2	28.0	54.0			53.3
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.0	61.6	32.4			20.6
Delay (s)	14.2	89.6	86.4			73.9
Level of Service	B	F	F			E
Approach Delay (s)	65.8		86.4			73.9
Approach LOS	E		F			E

Intersection Summary			
HCM 2000 Control Delay	71.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		

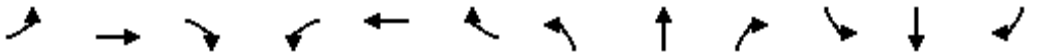
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	305	1470	120	0	1530
Future Volume (Veh/h)	0	305	1470	120	0	1530
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	332	1598	130	0	1663
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.82					
vC, conflicting volume	2217	601			1728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1709	601			1728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	25			100	
cM capacity (veh/h)	67	443			361	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	332	639	639	450	554	554	554
Volume Left	0	0	0	0	0	0	0
Volume Right	332	0	0	130	0	0	0
cSH	443	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.75	0.38	0.38	0.26	0.33	0.33	0.33
Queue Length 95th (ft)	155	0	0	0	0	0	0
Control Delay (s)	33.8	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D						
Approach Delay (s)	33.8	0.0			0.0		
Approach LOS	D						

Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

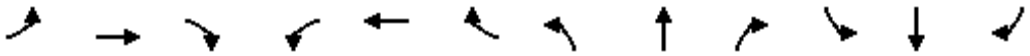


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	385	335	320	80	540	695	420	510	80	410	715	405
Future Volume (vph)	385	335	320	80	540	695	420	510	80	410	715	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1568	1770	3539	1568	1770	3467		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1568	1770	3539	1568	1770	3467		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	418	364	348	87	587	755	457	554	87	446	777	440
RTOR Reduction (vph)	0	0	31	0	0	31	0	9	0	0	0	50
Lane Group Flow (vph)	418	364	317	87	587	724	457	632	0	446	777	390
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	29.1	50.2	84.3	11.0	32.1	69.6	34.1	31.6		37.5	35.0	64.1
Effective Green, g (s)	30.0	51.1	86.1	12.0	33.1	69.6	35.0	32.5		38.4	35.9	64.1
Actuated g/C Ratio	0.20	0.34	0.57	0.08	0.22	0.46	0.23	0.22		0.26	0.24	0.43
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	354	634	941	141	780	778	413	751		453	847	669
v/s Ratio Prot	c0.24	0.20	0.08	0.05	0.17	c0.23	c0.26	0.18		c0.25	0.22	0.11
v/s Ratio Perm			0.12			0.23						0.14
v/c Ratio	1.18	0.57	0.34	0.62	0.75	0.93	1.11	0.84		0.98	0.92	0.58
Uniform Delay, d1	60.0	40.5	16.9	66.8	54.6	37.9	57.5	56.3		55.5	55.6	32.8
Progression Factor	1.00	1.00	1.00	1.10	0.60	1.13	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	106.7	3.8	0.2	16.6	6.3	17.8	76.4	8.5		38.3	15.5	0.8
Delay (s)	166.7	44.3	17.1	90.2	38.8	60.6	133.9	64.8		93.8	71.1	33.6
Level of Service	F	D	B	F	D	E	F	E		F	E	C
Approach Delay (s)		81.2			53.4			93.6			67.2	
Approach LOS		F			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	71.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	135	170	60	150	85	230	625	65	150	725	170
Future Volume (vph)	200	135	170	60	150	85	230	625	65	150	725	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1750	1557	1770	1863	1547	3433	3479		1770	3539	1531
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1750	1557	1770	1863	1547	3433	3479		1770	3539	1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	147	185	65	163	92	250	679	71	163	788	185
RTOR Reduction (vph)	0	0	133	0	0	76	0	5	0	0	0	105
Lane Group Flow (vph)	174	190	52	65	163	16	250	745	0	163	788	80
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.8	23.8	35.7	21.9	21.9	21.9	11.9	50.8		14.4	53.3	53.3
Effective Green, g (s)	24.7	24.7	36.5	22.8	22.8	22.8	12.3	51.7		14.8	54.2	54.2
Actuated g/C Ratio	0.19	0.19	0.28	0.18	0.18	0.18	0.09	0.40		0.11	0.42	0.42
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	319	332	437	310	326	271	324	1383		201	1475	638
v/s Ratio Prot	0.10	c0.11	0.01	0.04	c0.09		0.07	0.21		c0.09	c0.22	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.55	0.57	0.12	0.21	0.50	0.06	0.77	0.54		0.81	0.53	0.13
Uniform Delay, d1	47.6	47.8	34.8	45.9	48.4	44.7	57.5	30.0		56.2	28.4	23.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.42	0.66	0.40
Incremental Delay, d2	1.9	2.4	0.0	0.3	1.2	0.1	9.9	1.5		14.8	1.0	0.3
Delay (s)	49.5	50.2	34.8	46.2	49.7	44.8	67.4	31.5		94.4	19.6	9.7
Level of Service	D	D	C	D	D	D	E	C		F	B	A
Approach Delay (s)		44.8			47.6			40.5			28.7	
Approach LOS		D			D			D			C	

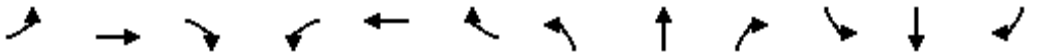
Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	45	75	10	60	80	1045	200	50	945	20
Future Volume (vph)	40	20	45	75	10	60	80	1045	200	50	945	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.97		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.94		1.00	0.98		1.00	1.00	
Flt Protected		0.98			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1697			1655		1770	3434		1770	3528	
Flt Permitted		0.79			0.69		0.23	1.00		0.16	1.00	
Satd. Flow (perm)		1374			1174		437	3434		306	3528	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	49	82	11	65	87	1136	217	54	1027	22
RTOR Reduction (vph)	0	20	0	0	19	0	0	7	0	0	1	0
Lane Group Flow (vph)	0	94	0	0	139	0	87	1346	0	54	1048	0
Confl. Peds. (#/hr)	33					33			3	3		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		21.1			21.1		116.3	110.1		113.1	108.5	
Effective Green, g (s)		22.0			22.0		117.1	111.0		113.9	109.4	
Actuated g/C Ratio		0.15			0.15		0.78	0.74		0.76	0.73	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		201			172		399	2541		281	2573	
v/s Ratio Prot							c0.01	c0.39		0.01	0.30	
v/s Ratio Perm		0.07			c0.12		0.16			0.14		
v/c Ratio		0.47			0.81		0.22	0.53		0.19	0.41	
Uniform Delay, d1		58.6			62.0		4.8	8.3		6.0	7.8	
Progression Factor		1.00			1.35		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.6			21.3		0.1	0.8		0.1	0.5	
Delay (s)		59.2			104.8		4.9	9.1		6.1	8.3	
Level of Service		E			F		A	A		A	A	
Approach Delay (s)		59.2			104.8			8.9			8.2	
Approach LOS		E			F			A			A	

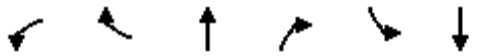
Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	375	1700	200	510	1395	385	230	645	410	345	530	285
Future Volume (vph)	375	1700	200	510	1395	385	230	645	410	345	530	285
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4943		3433	5085	1463	1770	3539	1521	3433	3539	1516
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4943		3433	5085	1463	1770	3539	1521	3433	3539	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	1848	217	554	1516	418	250	701	446	375	576	310
RTOR Reduction (vph)	0	10	0	0	0	39	0	0	55	0	0	55
Lane Group Flow (vph)	408	2055	0	554	1516	379	250	701	391	375	576	255
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.6	58.8		19.9	59.2	75.9	16.2	30.8	50.7	16.7	31.3	50.9
Effective Green, g (s)	20.0	59.9		20.3	60.2	75.9	16.6	31.7	52.5	17.1	32.2	52.7
Actuated g/C Ratio	0.14	0.41		0.14	0.42	0.52	0.11	0.22	0.36	0.12	0.22	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	473	2041		480	2111	765	202	773	587	404	785	550
v/s Ratio Prot	0.12	c0.42		c0.16	0.30	0.06	c0.14	c0.20	0.10	c0.11	0.16	0.07
v/s Ratio Perm						0.20			0.16			0.10
v/c Ratio	0.86	1.01		1.15	0.72	0.50	1.24	0.91	0.67	0.93	0.73	0.46
Uniform Delay, d1	61.2	42.5		62.4	35.3	22.2	64.2	55.2	38.9	63.3	52.4	35.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.5	21.6		90.8	1.3	0.2	141.9	13.9	2.2	26.9	3.1	0.2
Delay (s)	75.6	64.1		153.2	36.6	22.4	206.1	69.2	41.1	90.2	55.5	35.5
Level of Service	E	E		F	D	C	F	E	D	F	E	D
Approach Delay (s)		66.0			60.2			84.7			60.9	
Approach LOS		E			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	66.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	110	240	700	110	390	1445
Future Volume (vph)	110	240	700	110	390	1445
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.91		0.98		1.00	1.00
Flt Protected	0.98		1.00		0.95	1.00
Satd. Flow (prot)	1664		3467		1770	3539
Flt Permitted	0.98		1.00		0.95	1.00
Satd. Flow (perm)	1664		3467		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	261	761	120	424	1571
RTOR Reduction (vph)	116	0	18	0	0	0
Lane Group Flow (vph)	265	0	863	0	424	1571
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	13.8		22.0		18.6	45.1
Effective Green, g (s)	13.8		22.0		18.6	45.1
Actuated g/C Ratio	0.20		0.32		0.27	0.66
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	338		1123		484	2350
v/s Ratio Prot	c0.16		c0.25		c0.24	0.44
v/s Ratio Perm						
v/c Ratio	0.79		0.77		0.88	0.67
Uniform Delay, d1	25.6		20.7		23.5	6.9
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	11.4		5.1		16.1	1.5
Delay (s)	37.0		25.7		39.7	8.4
Level of Service	D		C		D	A
Approach Delay (s)	37.0		25.7			15.1
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	67.9	Sum of lost time (s)	13.5
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

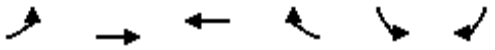
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	355	740	210	0	650
Future Volume (Veh/h)	0	355	740	210	0	650
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	386	804	228	0	707
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			407
pX, platoon unblocked	0.86					
vC, conflicting volume	1274	521			1034	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	994	521			1034	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	23			100	
cM capacity (veh/h)	208	498			667	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	386	536	496	354	354
Volume Left	0	0	0	0	0
Volume Right	386	0	228	0	0
cSH	498	1700	1700	1700	1700
Volume to Capacity	0.77	0.32	0.29	0.21	0.21
Queue Length 95th (ft)	173	0	0	0	0
Control Delay (s)	32.9	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	32.9	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		



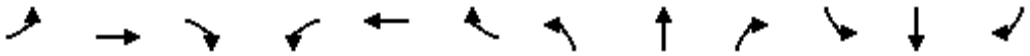
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1230	965	865	355	345
Future Volume (vph)	0	1230	965	865	355	345
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1337	1049	940	386	375
RTOR Reduction (vph)	0	0	0	433	0	307
Lane Group Flow (vph)	0	1337	1049	507	386	68
Confl. Peds. (#/hr)				6	3	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	2	1	
Permitted Phases				8		1
Actuated Green, G (s)		33.8	33.8	33.8	11.2	11.2
Effective Green, g (s)		33.8	33.8	33.3	11.2	11.2
Actuated g/C Ratio		0.55	0.55	0.54	0.18	0.18
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	2.9	2.5	2.5
Lane Grp Cap (vph)		1935	1935	1501	622	286
v/s Ratio Prot		c0.38	0.30	0.18	c0.11	
v/s Ratio Perm						0.04
v/c Ratio		0.69	0.54	0.34	0.62	0.24
Uniform Delay, d1		10.2	9.0	8.0	23.3	21.6
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1	0.3	0.1	1.7	0.3
Delay (s)		11.3	9.3	8.2	25.0	22.0
Level of Service		B	A	A	C	C
Approach Delay (s)		11.3	8.8		23.5	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	16.6
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



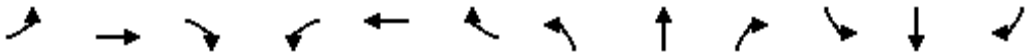
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	200	1135	70	95	1000
Future Volume (vph)	70	200	1135	70	95	1000
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.1	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.94	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1495	5030		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1495	5030		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	217	1234	76	103	1087
RTOR Reduction (vph)	0	199	2	0	0	0
Lane Group Flow (vph)	76	18	1308	0	103	1087
Confl. Peds. (#/hr)	11	16		18	18	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.8	11.8	111.8		13.1	129.3
Effective Green, g (s)	11.8	12.7	111.8		13.1	129.3
Actuated g/C Ratio	0.08	0.08	0.75		0.09	0.86
Clearance Time (s)	4.0	4.0	4.9		4.4	4.9
Vehicle Extension (s)	3.0	3.0	5.0		2.0	3.2
Lane Grp Cap (vph)	139	126	3749		154	4383
v/s Ratio Prot	c0.04		c0.26		c0.06	0.21
v/s Ratio Perm		0.01				
v/c Ratio	0.55	0.15	0.35		0.67	0.25
Uniform Delay, d1	66.5	63.6	6.6		66.3	1.8
Progression Factor	1.00	1.00	1.64		1.18	1.18
Incremental Delay, d2	4.3	0.5	0.2		6.7	0.1
Delay (s)	70.9	64.2	11.0		85.1	2.3
Level of Service	E	E	B		F	A
Approach Delay (s)	65.9		11.0			9.4
Approach LOS	E		B			A

Intersection Summary			
HCM 2000 Control Delay	16.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



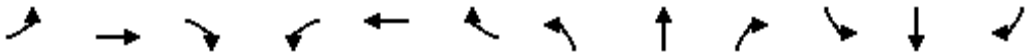
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	115	145	115	30	110	235	1125	110	140	885	85
Future Volume (vph)	60	115	145	115	30	110	235	1125	110	140	885	85
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1683		1770	1617		1770	5000		3433	3481	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1683		1770	1617		1770	5000		3433	3481	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	125	158	125	33	120	255	1223	120	152	962	92
RTOR Reduction (vph)	0	32	0	0	89	0	0	7	0	0	4	0
Lane Group Flow (vph)	65	251	0	125	64	0	255	1336	0	152	1050	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	26.7	26.7		14.2	14.2		24.5	70.3		19.7	65.5	
Effective Green, g (s)	27.6	27.6		15.1	15.1		24.9	71.2		20.1	66.4	
Actuated g/C Ratio	0.18	0.18		0.10	0.10		0.17	0.47		0.13	0.44	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		2.0	3.9	
Lane Grp Cap (vph)	325	309		178	162		293	2373		460	1540	
v/s Ratio Prot	0.04	c0.15		c0.07	0.04		c0.14	0.27		0.04	c0.30	
v/s Ratio Perm												
v/c Ratio	0.20	0.81		0.70	0.39		0.87	0.56		0.33	0.68	
Uniform Delay, d1	51.8	58.7		65.3	63.2		61.0	28.2		58.9	33.4	
Progression Factor	1.00	1.00		1.00	1.00		1.06	0.53		0.87	1.30	
Incremental Delay, d2	0.3	15.0		9.8	0.6		20.6	0.9		0.2	2.4	
Delay (s)	52.2	73.7		75.1	63.7		85.0	15.7		51.4	45.9	
Level of Service	D	E		E	E		F	B		D	D	
Approach Delay (s)		69.7			68.8			26.8			46.6	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	41.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	15	60	145	15	135	35	1270	55	105	1100	65
Future Volume (vph)	60	15	60	145	15	135	35	1270	55	105	1100	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.94		1.00	0.86		1.00	0.99		1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1698		1770	1611		1770	5037		3433	3501	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1698		1770	1611		1770	5037		3433	3501	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	16	65	158	16	147	38	1380	60	114	1196	71
RTOR Reduction (vph)	0	22	0	0	130	0	0	2	0	0	2	0
Lane Group Flow (vph)	0	124	0	158	33	0	38	1438	0	114	1265	0
Confl. Peds. (#/hr)			6	6			7		18	18		7
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		18.1		17.3	17.3		6.3	82.3		13.2	89.2	
Effective Green, g (s)		18.1		17.3	17.3		6.3	82.3		13.2	89.2	
Actuated g/C Ratio		0.12		0.12	0.12		0.04	0.55		0.09	0.59	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		204		204	185		74	2763		302	2081	
v/s Ratio Prot		c0.07		c0.09	0.02		0.02	c0.29		0.03	c0.36	
v/s Ratio Perm												
v/c Ratio		0.61		0.77	0.18		0.51	0.52		0.38	0.61	
Uniform Delay, d1		62.6		64.5	59.9		70.3	21.4		64.5	19.3	
Progression Factor		1.00		1.00	1.00		1.08	0.82		0.67	0.42	
Incremental Delay, d2		3.5		15.3	0.2		2.4	0.7		0.2	1.1	
Delay (s)		66.1		79.7	60.1		78.6	18.3		43.4	9.2	
Level of Service		E		E	E		E	B		D	A	
Approach Delay (s)		66.1			69.8			19.9			12.0	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.1
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	60	20	100	160	125	1105	15	25	1155	115
Future Volume (vph)	30	10	60	20	100	160	125	1105	15	25	1155	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		5.8	4.0	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.99		1.00	1.00	1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.96	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1795	1562		1847	1583	1770	5070		1770	4972	
Flt Permitted		0.56	1.00		0.94	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1041	1562		1747	1583	1770	5070		1770	4972	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	65	22	109	174	136	1201	16	27	1255	125
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	44	7	0	131	174	136	1217	0	27	1374	0
Confl. Peds. (#/hr)			1	1			19		19	19		19
Turn Type	Perm	NA	Perm	Perm	NA	Free	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		Free						
Actuated Green, G (s)		16.8	16.8		16.8	150.0	32.4	114.2		4.8	86.6	
Effective Green, g (s)		16.8	16.8		15.9	150.0	32.4	114.2		4.8	86.6	
Actuated g/C Ratio		0.11	0.11		0.11	1.00	0.22	0.76		0.03	0.58	
Clearance Time (s)		4.9	4.9		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.9		2.0	3.9	
Lane Grp Cap (vph)		116	174		185	1583	382	3859		56	2870	
v/s Ratio Prot							c0.08	0.24		0.02	c0.28	
v/s Ratio Perm		0.04	0.00		c0.07	0.11						
v/c Ratio		0.38	0.04		0.71	0.11	0.36	0.32		0.48	0.48	
Uniform Delay, d1		61.8	59.4		64.8	0.0	49.9	5.6		71.4	18.5	
Progression Factor		1.29	3.20		1.00	1.00	1.00	1.00		0.94	1.37	
Incremental Delay, d2		0.7	0.0		9.7	0.1	0.2	0.2		1.9	0.5	
Delay (s)		80.2	190.3		74.5	0.1	50.1	5.8		68.9	25.9	
Level of Service		F	F		E	A	D	A		E	C	
Approach Delay (s)		145.9			32.1			10.3			26.7	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



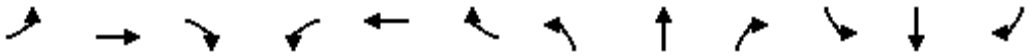
Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	310	1640	465	100	1875	620	100	350	395	100	215	200
Future Volume (vph)	310	1640	465	100	1875	620	100	350	395	100	215	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	5.9	5.9	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.96	1.00	1.00	1.00	1.00	0.89	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (prot)	3433	4606		1362	5085	1528	1611	1681	1610	1639	1409	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (perm)	3433	4606		1362	5085	1528	1611	1681	1610	1639	1409	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	337	1783	505	109	2038	674	109	380	429	109	234	217
RTOR Reduction (vph)	0	0	0	51	0	29	68	0	0	0	140	0
Lane Group Flow (vph)	337	2299	0	47	2038	645	41	243	334	341	94	217
Confl. Peds. (#/hr)	29		31			29		10			63	63
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	7.0	41.0		41.0	30.2	50.1	32.0	19.9	19.9	19.9	19.9	10.0
Effective Green, g (s)	8.4	43.1		41.0	32.1	46.3	32.0	19.9	19.9	19.9	19.9	10.0
Actuated g/C Ratio	0.10	0.51		0.48	0.38	0.54	0.38	0.23	0.23	0.23	0.23	0.12
Clearance Time (s)	4.0	6.1		6.1	5.9	4.0	5.9	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	2.8		2.8	3.2	3.0	4.1	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	339	2335		656	1920	832	606	393	376	383	329	208
v/s Ratio Prot	0.10	c0.50			c0.40	0.16		0.14	0.21	c0.21		c0.12
v/s Ratio Perm				0.03		0.26	0.03				0.07	
v/c Ratio	0.99	0.98		0.07	1.06	0.78	0.07	0.62	0.89	0.89	0.29	1.04
Uniform Delay, d1	38.3	20.6		11.8	26.4	15.2	17.0	29.1	31.5	31.5	26.7	37.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	47.0	15.3		0.2	39.1	4.6	0.1	2.9	21.5	21.8	0.5	74.2
Delay (s)	85.3	35.9		12.0	65.6	19.8	17.0	32.0	53.0	53.3	27.2	111.7
Level of Service	F	D		B	E	B	B	C	D	D	C	F
Approach Delay (s)		41.1			54.2					43.4		91.2
Approach LOS		D			D					D		F

Intersection Summary			
HCM 2000 Control Delay	50.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	340	90
Future Volume (vph)	340	90
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	370	98
RTOR Reduction (vph)	147	0
Lane Group Flow (vph)	321	0
Confl. Peds. (#/hr)		31
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	10.0	
Effective Green, g (s)	10.0	
Actuated g/C Ratio	0.12	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	327	
v/s Ratio Prot	0.12	
v/s Ratio Perm		
v/c Ratio	0.98	
Uniform Delay, d1	37.4	
Progression Factor	1.00	
Incremental Delay, d2	44.3	
Delay (s)	81.7	
Level of Service	F	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	110	290	90	190	40	60	60	110	40	30	40
Future Volume (vph)	70	110	290	90	190	40	60	60	110	40	30	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.92			0.98			0.94			0.95	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		1695			1806			1720			1740	
Flt Permitted		0.91			0.72			0.90			0.86	
Satd. Flow (perm)		1547			1312			1576			1524	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	120	315	98	207	43	65	65	120	43	33	43
RTOR Reduction (vph)	0	123	0	0	11	0	0	41	0	0	23	0
Lane Group Flow (vph)	0	388	0	0	337	0	0	209	0	0	96	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		16.8			16.8			21.9			22.4	
Effective Green, g (s)		16.8			16.8			21.9			22.4	
Actuated g/C Ratio		0.35			0.35			0.46			0.47	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		544			462			723			715	
v/s Ratio Prot												
v/s Ratio Perm		0.25			c0.26			c0.13			0.06	
v/c Ratio		0.71			0.73			0.29			0.13	
Uniform Delay, d1		13.4			13.5			8.0			7.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.4			5.7			1.0			0.1	
Delay (s)		17.8			19.2			9.1			7.2	
Level of Service		B			B			A			A	
Approach Delay (s)		17.8			19.2			9.1			7.2	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	47.7	Sum of lost time (s)	9.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

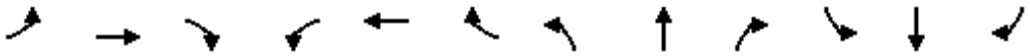
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	280	1440	845	25	50	450
Future Volume (vph)	280	1440	845	25	50	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5063		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5063		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	1565	918	27	54	489
RTOR Reduction (vph)	0	0	2	0	0	441
Lane Group Flow (vph)	304	1565	943	0	54	48
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	25.9	100.2	70.3		11.8	11.8
Effective Green, g (s)	25.9	100.2	70.3		11.8	11.8
Actuated g/C Ratio	0.22	0.84	0.59		0.10	0.10
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	382	4245	2966		174	155
v/s Ratio Prot	c0.17	c0.31	0.19		c0.03	
v/s Ratio Perm						0.03
v/c Ratio	0.80	0.37	0.32		0.31	0.31
Uniform Delay, d1	44.5	2.4	12.6		50.3	50.3
Progression Factor	1.00	1.00	0.62		1.00	1.00
Incremental Delay, d2	10.9	0.2	0.2		1.0	1.1
Delay (s)	55.5	2.6	8.1		51.3	51.5
Level of Service	E	A	A		D	D
Approach Delay (s)		11.2	8.1		51.4	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

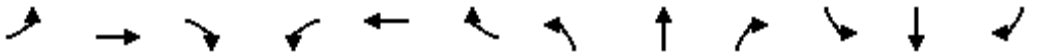
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	0	130	400	190	140	0	0	0	0	60	80
Future Volume (vph)	90	0	130	400	190	140	0	0	0	0	60	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.94						0.92	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1744						1719	
Flt Permitted	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1770		1583	1770	1744						1719	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	0	141	435	207	152	0	0	0	0	65	87
RTOR Reduction (vph)	0	0	124	279	38	0	0	0	0	0	69	0
Lane Group Flow (vph)	98	0	17	156	321	0	0	0	0	0	83	0
Turn Type	Prot		Perm	Split	NA						NA	
Protected Phases	2!			8	8						6!	
Permitted Phases			4									
Actuated Green, G (s)	8.2		4.8	14.0	14.0						8.2	
Effective Green, g (s)	8.2		4.8	14.0	14.0						8.2	
Actuated g/C Ratio	0.21		0.12	0.36	0.36						0.21	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	372		194	635	626						361	
v/s Ratio Prot	c0.06			0.09	c0.18						0.05	
v/s Ratio Perm			c0.01									
v/c Ratio	0.26		0.09	0.25	0.51						0.23	
Uniform Delay, d1	12.9		15.2	8.8	9.8						12.8	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.4		0.2	0.2	0.7						0.3	
Delay (s)	13.3		15.4	9.0	10.5						13.1	
Level of Service	B		B	A	B						B	
Approach Delay (s)		14.5			9.7			0.0			13.1	
Approach LOS		B			A			A			B	

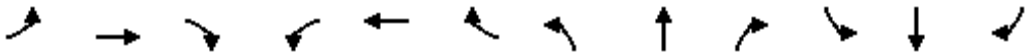
Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	39.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



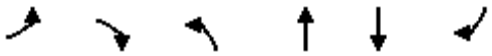
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1925	95	150	2395	0	0	0	0	580	200	100
Future Volume (vph)	0	1925	95	150	2395	0	0	0	0	580	200	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00					0.99	1.00	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		5050		1770	6408					1662	1727	1561
Flt Permitted		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (perm)		5050		1770	6408					1662	1727	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2092	103	163	2603	0	0	0	0	630	217	109
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	0	2191	0	163	2603	0	0	0	0	485	362	67
Confl. Peds. (#/hr)				13						14		3
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		50.5		12.7	67.9					37.3	37.3	37.3
Effective Green, g (s)		51.7		13.1	68.8					38.2	38.2	38.2
Actuated g/C Ratio		0.45		0.11	0.60					0.33	0.33	0.33
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2270		201	3833					552	573	518
v/s Ratio Prot		c0.43		c0.09	0.41							
v/s Ratio Perm										c0.29	0.21	0.04
v/c Ratio		0.97		0.81	0.68					0.88	0.63	0.13
Uniform Delay, d1		30.8		49.7	15.6					36.2	32.5	26.8
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		12.3		20.4	1.0					14.3	1.7	0.0
Delay (s)		43.1		70.1	16.6					50.5	34.1	26.8
Level of Service		D		E	B					D	C	C
Approach Delay (s)		43.1			19.8			0.0			41.6	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



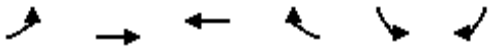
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	740	220	135	460	0	170	0	290	290	300	0
Future Volume (vph)	0	740	220	135	460	0	170	0	290	290	300	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3303		1770	3539		1770		1556	1770	1863	
Flt Permitted		1.00		0.10	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3303		194	3539		1770		1556	1770	1863	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	804	239	147	500	0	185	0	315	315	326	0
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	193	0	0	0
Lane Group Flow (vph)	0	1013	0	147	500	0	185	0	122	315	326	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		34.0		44.6	44.6		11.9		34.0	19.3	19.3	
Effective Green, g (s)		34.9		45.0	45.5		12.3		34.9	20.2	20.2	
Actuated g/C Ratio		0.39		0.50	0.51		0.14		0.39	0.22	0.22	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1280		212	1789		241		603	397	418	
v/s Ratio Prot		c0.31		c0.05	0.14		c0.10			c0.18	0.18	
v/s Ratio Perm				0.29					0.08			
v/c Ratio		0.79		0.69	0.28		0.77		0.20	0.79	0.78	
Uniform Delay, d1		24.3		16.8	12.8		37.5		18.3	32.9	32.8	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		5.1		7.7	0.4		13.6		0.8	10.4	8.9	
Delay (s)		29.4		24.5	13.2		51.1		19.1	43.4	41.7	
Level of Service		C		C	B		D		B	D	D	
Approach Delay (s)		29.4			15.8			30.9			42.5	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM 2000 Control Delay	29.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	220	430	465	865	430	100
Future Volume (vph)	220	430	465	865	430	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.97	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1668		1770	5085	4915	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1668		1770	5085	4915	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	467	505	940	467	109
RTOR Reduction (vph)	59	0	0	0	32	0
Lane Group Flow (vph)	647	0	505	940	544	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	48.0		36.2	64.0	23.8	
Effective Green, g (s)	48.0		35.8	64.0	22.9	
Actuated g/C Ratio	0.40		0.30	0.53	0.19	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	667		528	2712	937	
v/s Ratio Prot	c0.39		c0.29	0.18	c0.11	
v/s Ratio Perm						
v/c Ratio	0.97		0.96	0.35	0.58	
Uniform Delay, d1	35.3		41.3	16.0	44.2	
Progression Factor	1.00		1.03	1.23	1.00	
Incremental Delay, d2	27.0		27.3	0.3	2.6	
Delay (s)	62.3		70.0	20.0	46.8	
Level of Service	E		E	C	D	
Approach Delay (s)	62.3			37.5	46.8	
Approach LOS	E			D	D	

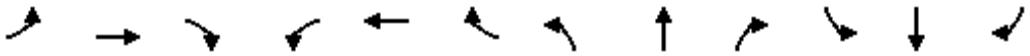
Intersection Summary			
HCM 2000 Control Delay	45.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	65	75	160	80	65	125
Future Volume (Veh/h)	65	75	160	80	65	125
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	71	82	174	87	71	136
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1226	738			
pX, platoon unblocked						
vC, conflicting volume	261				442	218
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	261				442	218
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				87	83
cM capacity (veh/h)	1303				542	822

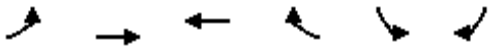
Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	71	82	261	207
Volume Left	71	0	0	71
Volume Right	0	0	87	136
cSH	1303	1700	1700	698
Volume to Capacity	0.05	0.05	0.15	0.30
Queue Length 95th (ft)	4	0	0	31
Control Delay (s)	7.9	0.0	0.0	12.3
Lane LOS	A			B
Approach Delay (s)	3.7		0.0	12.3
Approach LOS				B

Intersection Summary			
Average Delay	5.0		
Intersection Capacity Utilization	38.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	2290	110	0	2350	560	120	240	230	0	0	0
Future Volume (vph)	105	2290	110	0	2350	560	120	240	230	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frpb, ped/bikes	1.00	1.00			1.00	0.96		0.99				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	0.99			1.00	0.85		0.94				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5044			5085	1519		3257				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5044			5085	1519		3257				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	114	2489	120	0	2554	609	130	261	250	0	0	0
RTOR Reduction (vph)	0	3	0	0	0	150	0	4	0	0	0	0
Lane Group Flow (vph)	114	2606	0	0	2554	459	0	637	0	0	0	0
Confl. Peds. (#/hr)	15		2			15	1		20			
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	19.8	102.2			78.0	78.0		38.0				
Effective Green, g (s)	20.2	103.1			78.9	78.9		38.9				
Actuated g/C Ratio	0.13	0.69			0.53	0.53		0.26				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	238	3466			2674	798		844				
v/s Ratio Prot	0.06	c0.52			c0.50			c0.20				
v/s Ratio Perm						0.30						
v/c Ratio	0.48	0.75			0.96	0.58		0.76				
Uniform Delay, d1	60.0	15.2			33.9	24.2		51.2				
Progression Factor	1.00	1.00			1.00	1.00		1.00				
Incremental Delay, d2	0.6	1.6			9.7	3.0		3.4				
Delay (s)	60.6	16.7			43.5	27.2		54.6				
Level of Service	E	B			D	C		D				
Approach Delay (s)		18.6			40.4			54.6			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	32.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	1200	595	110	0	0
Future Volume (Veh/h)	120	1200	595	110	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	130	1304	647	120	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		345	945			
pX, platoon unblocked	0.94				0.79	0.94
vC, conflicting volume	767				1619	384
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	635				930	228
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	85				100	100
cM capacity (veh/h)	892				179	731

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	130	652	652	431	336
Volume Left	130	0	0	0	0
Volume Right	0	0	0	0	120
cSH	892	1700	1700	1700	1700
Volume to Capacity	0.15	0.38	0.38	0.25	0.20
Queue Length 95th (ft)	13	0	0	0	0
Control Delay (s)	9.7	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.9			0.0	
Approach LOS					

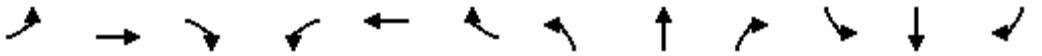
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	160	0	0	590	355	280
Future Volume (vph)	160	0	0	590	355	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	174	0	0	641	386	304

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	174	641	386	304
Volume Left (vph)	174	0	386	0
Volume Right (vph)	0	641	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.9	4.9	6.4	5.9
Degree Utilization, x	0.34	0.87	0.68	0.50
Capacity (veh/h)	500	728	549	603
Control Delay (s)	13.4	31.4	20.8	13.3
Approach Delay (s)	13.4	31.4	17.5	
Approach LOS	B	D	C	

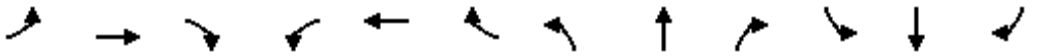
Intersection Summary			
Delay	22.9		
Level of Service	C		
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	435	40	150	20	5	10	50	120	20	10	195	180
Future Volume (vph)	435	40	150	20	5	10	50	120	20	10	195	180
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	473	43	163	22	5	11	54	130	22	11	212	196

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	495	185	38	206	223	196
Volume Left (vph)	473	0	22	54	11	0
Volume Right (vph)	0	163	11	22	0	196
Hadj (s)	0.51	-0.58	-0.02	0.02	0.06	-0.67
Departure Headway (s)	7.0	5.9	7.8	7.3	7.2	6.5
Degree Utilization, x	0.97	0.30	0.08	0.42	0.45	0.35
Capacity (veh/h)	501	594	433	486	491	546
Control Delay (s)	57.6	10.3	11.5	15.6	14.7	11.8
Approach Delay (s)	44.8		11.5	15.6	13.4	
Approach LOS	E		B	C	B	

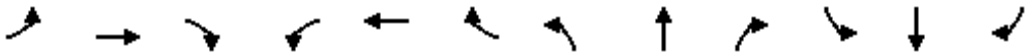
Intersection Summary				
Delay	29.5			
Level of Service	D			
Intersection Capacity Utilization	62.4%	ICU Level of Service		B
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	710	285	425	490	0	0	0	0	330	470	1055
Future Volume (vph)	0	710	285	425	490	0	0	0	0	330	470	1055
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	772	310	462	533	0	0	0	0	359	511	1147
RTOR Reduction (vph)	0	0	216	0	0	0	0	0	0	0	0	75
Lane Group Flow (vph)	0	772	94	462	533	0	0	0	0	359	511	1072
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		28.1	28.1	15.6	48.1					72.1	72.1	72.1
Effective Green, g (s)		29.0	29.0	16.0	49.0					73.0	73.0	73.0
Actuated g/C Ratio		0.22	0.22	0.12	0.38					0.56	0.56	0.56
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		789	353	422	1333					904	1903	888
v/s Ratio Prot		c0.22		c0.13	0.15							
v/s Ratio Perm			0.06							0.22	0.15	c0.68
v/c Ratio		0.98	0.27	1.09	0.40					0.40	0.27	1.21
Uniform Delay, d1		50.2	41.7	57.0	29.7					16.1	14.7	28.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		27.2	1.8	71.9	0.9					0.1	0.0	104.1
Delay (s)		77.4	43.6	128.9	30.6					16.2	14.7	132.6
Level of Service		E	D	F	C					B	B	F
Approach Delay (s)		67.7			76.2			0.0			82.0	
Approach LOS		E			E			A			F	

Intersection Summary			
HCM 2000 Control Delay	76.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		

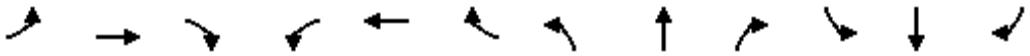
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	40	40	0	0	0	0	0	0	1660	25
Future Volume (Veh/h)	0	0	40	40	0	0	0	0	0	0	1660	25
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	43	43	0	0	0	0	0	0	1804	27
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1818	1818	615	644	1831	0	1831			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1818	1818	615	644	1831	0	1831			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	90	87	100	100	100			100		
cM capacity (veh/h)	49	77	434	322	76	1084	329			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	43	43	722	722	388
Volume Left	0	43	0	0	0
Volume Right	43	0	0	0	27
cSH	434	322	1700	1700	1700
Volume to Capacity	0.10	0.13	0.42	0.42	0.23
Queue Length 95th (ft)	8	11	0	0	0
Control Delay (s)	14.2	17.9	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	14.2	17.9	0.0		
Approach LOS	B	C			

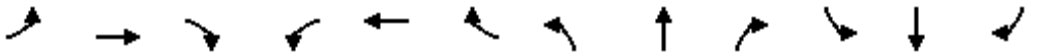
Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	51.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	455	245	95	155	0	0	0	0	380	830	495
Future Volume (vph)	0	455	245	95	155	0	0	0	0	380	830	495
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.94	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3473					1770	4800	
Flt Permitted		1.00	1.00		0.63					0.95	1.00	
Satd. Flow (perm)		1863	1583		2227					1770	4800	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	495	266	103	168	0	0	0	0	413	902	538
RTOR Reduction (vph)	0	0	42	0	0	0	0	0	0	0	166	0
Lane Group Flow (vph)	0	495	224	0	271	0	0	0	0	413	1274	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		25.3	25.3		25.3					26.7	26.7	
Effective Green, g (s)		28.0	28.0		28.0					29.0	29.0	
Actuated g/C Ratio		0.43	0.43		0.43					0.45	0.45	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		802	681		959					789	2141	
v/s Ratio Prot		c0.27									c0.27	
v/s Ratio Perm			0.14		0.12					0.23		
v/c Ratio		0.62	0.33		0.28					0.52	0.60	
Uniform Delay, d1		14.3	12.3		12.0					13.0	13.6	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		3.5	1.3		0.7					2.5	1.2	
Delay (s)		17.9	13.6		12.7					15.5	14.8	
Level of Service		B	B		B					B	B	
Approach Delay (s)		16.4			12.7			0.0			15.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

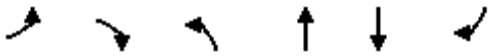


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1125	350	65	685	0	0	0	0	740	1125	665
Future Volume (vph)	0	1125	350	65	685	0	0	0	0	740	1125	665
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3413		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3413		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1223	380	71	745	0	0	0	0	804	1223	723
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	0	86
Lane Group Flow (vph)	0	1590	0	71	745	0	0	0	0	0	2027	637
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		62.1		4.6	69.4						58.6	58.6
Effective Green, g (s)		60.3		5.0	69.3						57.7	60.0
Actuated g/C Ratio		0.43		0.04	0.49						0.41	0.43
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1470		63	1751						1942	583
v/s Ratio Prot		c0.47		c0.04	0.21							
v/s Ratio Perm											0.43	c0.47
v/c Ratio		1.08		1.13	0.43						1.16dl	1.09
Uniform Delay, d1		39.9		67.5	22.6						41.1	40.0
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		48.9		152.3	0.8						32.9	65.2
Delay (s)		88.7		219.8	23.4						74.1	105.2
Level of Service		F		F	C						E	F
Approach Delay (s)		88.7			40.5			0.0			82.3	
Approach LOS		F			D			A			F	

Intersection Summary			
HCM 2000 Control Delay	77.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



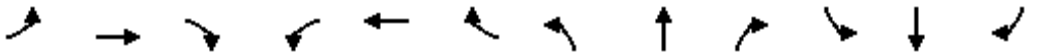
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	160	1260	1590	1240	1140	50
Future Volume (vph)	160	1260	1590	1240	1140	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2787	3433	5085	5085	1564
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2787	3433	5085	5085	1564
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	1370	1728	1348	1239	54
RTOR Reduction (vph)	0	0	0	0	0	6
Lane Group Flow (vph)	174	1370	1728	1348	1239	48
Confl. Peds. (#/hr)			3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	17.7	88.0	70.3	104.3	30.0	47.7
Effective Green, g (s)	17.7	88.0	70.3	104.3	30.0	47.7
Actuated g/C Ratio	0.14	0.68	0.54	0.80	0.23	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	240	1972	1856	4079	1173	621
v/s Ratio Prot	0.10	c0.38	c0.50	0.27	c0.24	0.01
v/s Ratio Perm		0.12				0.02
v/c Ratio	0.72	0.69	0.93	0.33	1.06	0.08
Uniform Delay, d1	53.8	12.8	27.6	3.5	50.0	26.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.4	1.1	9.0	0.2	42.5	0.1
Delay (s)	64.2	13.9	36.6	3.7	92.5	26.9
Level of Service	E	B	D	A	F	C
Approach Delay (s)	19.6			22.2	89.7	
Approach LOS	B			C	F	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	280	535	0	0	885	660	40	0	120	250	30	420
Future Volume (vph)	280	535	0	0	885	660	40	0	120	250	30	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.91	0.91	
Frt	1.00	1.00			1.00	0.85		0.90		1.00	0.87	
Flt Protected	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	3539			3539	1583		1653		1610	2933	
Flt Permitted	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	3539			3539	1583		1653		1610	2933	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	582	0	0	962	717	43	0	130	272	33	457
RTOR Reduction (vph)	0	0	0	0	0	470	0	113	0	0	382	0
Lane Group Flow (vph)	304	582	0	0	962	247	0	60	0	245	135	0
Turn Type	Prot	NA			NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6						
Actuated Green, G (s)	16.7	55.2			33.6	33.6		12.7		15.2	15.2	
Effective Green, g (s)	16.7	55.2			33.6	33.6		12.7		15.2	15.2	
Actuated g/C Ratio	0.17	0.57			0.34	0.34		0.13		0.16	0.16	
Clearance Time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5		2.0		2.0	2.0	
Lane Grp Cap (vph)	303	2003			1219	545		215		250	457	
v/s Ratio Prot	c0.17	0.16			c0.27			c0.04		c0.15	0.05	
v/s Ratio Perm						0.16						
v/c Ratio	1.00	0.29			0.79	0.45		0.28		0.98	0.30	
Uniform Delay, d1	40.4	11.0			28.8	24.8		38.3		41.0	36.4	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	52.5	0.4			5.2	2.7		0.3		50.5	0.1	
Delay (s)	92.9	11.4			34.0	27.5		38.5		91.5	36.6	
Level of Service	F	B			C	C		D		F	D	
Approach Delay (s)		39.3			31.2			38.5			54.2	
Approach LOS		D			C			D			D	

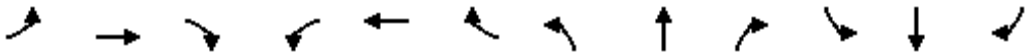
Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	97.5	Sum of lost time (s)	19.3
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	410	100	595	660	0	0	0	0	405	10	710
Future Volume (vph)	0	410	100	595	660	0	0	0	0	405	10	710
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		3423		1770	1863					1681	1689	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		3423		1770	1863					1681	1689	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	446	109	647	717	0	0	0	0	440	11	772
RTOR Reduction (vph)	0	31	0	0	0	0	0	0	0	0	0	59
Lane Group Flow (vph)	0	524	0	647	717	0	0	0	0	233	218	713
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Split	NA					Split	NA	custom
Protected Phases		7		8	8					6	6	6
Permitted Phases												7
Actuated Green, G (s)		14.3		27.4	27.4					10.9	10.9	25.2
Effective Green, g (s)		14.3		27.7	27.7					13.1	13.1	29.6
Actuated g/C Ratio		0.21		0.41	0.41					0.20	0.20	0.44
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		732		733	772					329	331	744
v/s Ratio Prot		0.15		0.37	c0.38					0.14	0.13	c0.19
v/s Ratio Perm												0.26
v/c Ratio		0.72		0.88	0.93					0.71	0.66	0.96
Uniform Delay, d1		24.4		18.0	18.6					25.1	24.8	18.0
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.3		11.8	17.0					6.8	4.7	23.0
Delay (s)		27.7		29.9	35.6					31.9	29.5	41.0
Level of Service		C		C	D					C	C	D
Approach Delay (s)		27.7			32.9			0.0			37.2	
Approach LOS		C			C			A			D	

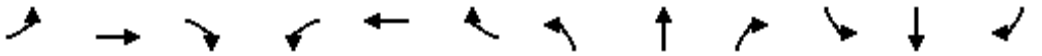
Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	11.7
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	170	40	365	50	235	10	1530	250	280	565	20
Future Volume (vph)	50	170	40	365	50	235	10	1530	250	280	565	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.88		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1802		1757	1632		1765	4978		1770	5054	
Flt Permitted	0.42	1.00		0.52	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	783	1802		953	1632		1765	4978		1770	5054	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	185	43	397	54	255	11	1663	272	304	614	22
RTOR Reduction (vph)	0	7	0	0	144	0	0	18	0	0	3	0
Lane Group Flow (vph)	54	221	0	397	165	0	11	1917	0	304	633	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	45.0	45.0		44.3	44.3		0.8	45.8		19.0	63.3	
Effective Green, g (s)	45.0	45.0		44.7	44.7		0.8	47.2		16.8	65.4	
Actuated g/C Ratio	0.37	0.37		0.36	0.36		0.01	0.38		0.14	0.53	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	285	658		345	592		11	1907		241	2682	
v/s Ratio Prot		0.12			0.10		0.01	c0.39		c0.17	0.13	
v/s Ratio Perm	0.07			c0.42								
v/c Ratio	0.19	0.34		1.15	0.28		1.00	1.01		1.26	0.24	
Uniform Delay, d1	26.7	28.3		39.2	27.8		61.2	38.0		53.2	15.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		96.0	0.3		271.4	21.9		146.6	0.2	
Delay (s)	26.8	28.4		135.2	28.1		332.6	59.9		199.8	15.7	
Level of Service	C	C		F	C		F	E		F	B	
Approach Delay (s)		28.1			88.3			61.4			75.2	
Approach LOS		C			F			E			E	

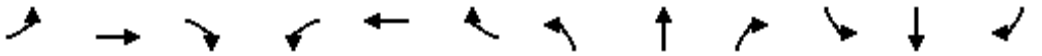
Intersection Summary			
HCM 2000 Control Delay	67.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	14.5
Intersection Capacity Utilization	99.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



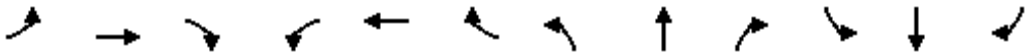
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	625	1090	450	255	960	135	465	1025	225	160	640	275
Future Volume (vph)	625	1090	450	255	960	135	465	1025	225	160	640	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3384		1770	3466		1770	4935		1770	5085	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3384		1770	3466		1770	4935		1770	5085	1569
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	679	1185	489	277	1043	147	505	1114	245	174	696	299
RTOR Reduction (vph)	0	30	0	0	7	0	0	23	0	0	0	50
Lane Group Flow (vph)	679	1644	0	277	1183	0	505	1336	0	174	696	249
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	38.6	62.8		16.6	40.2		29.6	41.1		10.6	22.0	60.6
Effective Green, g (s)	39.0	64.0		17.0	42.0		30.0	42.0		11.0	23.0	61.4
Actuated g/C Ratio	0.26	0.43		0.11	0.28		0.20	0.28		0.07	0.15	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	460	1443		200	970		354	1381		129	779	642
v/s Ratio Prot	c0.38	0.49		0.16	c0.34		c0.29	c0.27		0.10	0.14	0.10
v/s Ratio Perm												0.06
v/c Ratio	1.48	1.14		1.39	1.22		1.43	0.97		1.35	0.89	0.39
Uniform Delay, d1	55.5	43.0		66.5	54.0		60.0	53.3		69.5	62.3	31.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	225.8	71.7		201.1	108.1		207.7	17.6		199.4	14.8	0.1
Delay (s)	281.3	114.7		267.6	162.1		267.7	70.9		268.9	77.1	31.3
Level of Service	F	F		F	F		F	E		F	E	C
Approach Delay (s)		162.7			182.1			124.2			93.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	144.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	119.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	155	785	220	215	360	90	255	250	640	85	110	70
Future Volume (vph)	155	785	220	215	360	90	255	250	640	85	110	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.65	1.00	1.00	0.99	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2700	3433	3539	1033	3433	1863	1560	1770	5085	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2700	3433	3539	1033	3433	1863	1560	1770	5085	1530
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	168	853	239	234	391	98	277	272	696	92	120	76
RTOR Reduction (vph)	0	0	141	0	0	59	0	0	48	0	0	59
Lane Group Flow (vph)	168	853	98	234	391	39	277	272	648	92	120	17
Confl. Peds. (#/hr)			27	27		170	23		15	15		23
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	15.2	34.1	43.9	25.5	44.4	44.4	9.8	26.8	52.3	9.1	26.1	26.1
Effective Green, g (s)	15.6	35.0	44.7	25.9	45.3	45.3	10.2	26.2	50.1	9.5	25.6	25.6
Actuated g/C Ratio	0.14	0.31	0.39	0.23	0.40	0.40	0.09	0.23	0.44	0.08	0.22	0.22
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	241	1085	1057	779	1405	410	306	427	684	147	1140	343
v/s Ratio Prot	0.09	c0.24	0.01	0.07	0.11		c0.08	0.15	c0.20	0.05	0.02	
v/s Ratio Perm			0.03			0.04			0.21			0.01
v/c Ratio	0.70	0.79	0.09	0.30	0.28	0.09	0.91	0.64	0.95	0.63	0.11	0.05
Uniform Delay, d1	47.0	36.1	21.9	36.6	23.3	21.6	51.5	39.7	30.7	50.6	35.2	34.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.9	5.8	0.0	0.1	0.5	0.5	27.9	3.9	21.9	5.9	0.1	0.1
Delay (s)	53.9	41.9	21.9	36.7	23.8	22.0	79.3	43.5	52.6	56.4	35.2	34.8
Level of Service	D	D	C	D	C	C	E	D	D	E	D	C
Approach Delay (s)		39.7			27.7			56.6			41.9	
Approach LOS		D			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	43.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	19.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



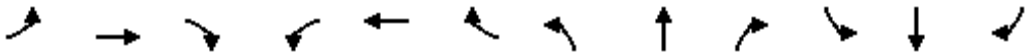
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	595	350	70	10	190	170	125	55	105	10	10	20
Future Volume (vph)	595	350	70	10	190	170	125	55	105	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.94			0.95			0.93	
Flt Protected		0.97			1.00			0.98			0.99	
Satd. Flow (prot)		1787			1728			1708			1696	
Flt Permitted		0.61			0.97			0.86			0.87	
Satd. Flow (perm)		1124			1674			1496			1502	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	647	380	76	11	207	185	136	60	114	11	11	22
RTOR Reduction (vph)	0	2	0	0	15	0	0	17	0	0	18	0
Lane Group Flow (vph)	0	1101	0	0	388	0	0	293	0	0	26	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		89.2			89.2			21.0			21.0	
Effective Green, g (s)		90.1			90.1			21.9			21.9	
Actuated g/C Ratio		0.75			0.75			0.18			0.18	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		843			1256			273			274	
v/s Ratio Prot												
v/s Ratio Perm		c0.98			0.23			c0.20			0.02	
v/c Ratio		1.31			0.31			1.07			0.09	
Uniform Delay, d1		15.0			4.8			49.0			40.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		146.2			0.6			75.1			0.1	
Delay (s)		161.1			5.5			124.1			40.9	
Level of Service		F			A			F			D	
Approach Delay (s)		161.1			5.5			124.1			40.9	
Approach LOS		F			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	118.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	109.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1075	435	230	495	170	255
Future Volume (vph)	1075	435	230	495	170	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4714		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4714		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1168	473	250	538	185	277
RTOR Reduction (vph)	81	0	0	0	0	217
Lane Group Flow (vph)	1560	0	250	538	185	60
Confl. Peds. (#/hr)		53	53		46	81
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.7		12.5	46.6	14.5	14.5
Effective Green, g (s)	31.6		12.9	46.6	15.4	15.4
Actuated g/C Ratio	0.45		0.18	0.66	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2101		322	2326	384	343
v/s Ratio Prot	c0.33		c0.14	0.15	c0.10	0.04
v/s Ratio Perm						
v/c Ratio	0.74		0.78	0.23	0.48	0.18
Uniform Delay, d1	16.3		27.6	4.9	24.3	22.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	2.4		10.2	0.2	0.3	0.1
Delay (s)	18.7		37.8	5.1	24.6	22.7
Level of Service	B		D	A	C	C
Approach Delay (s)	18.7			15.5	23.4	
Approach LOS	B			B	C	

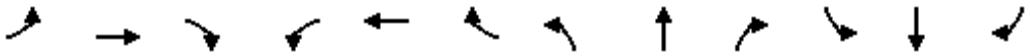
Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	70.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	5	5	10	10	85	20	150	40	165	170	95
Future Volume (vph)	10	5	5	10	10	85	20	150	40	165	170	95
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	5	5	11	11	92	22	163	43	179	185	103

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	21	114	228	467
Volume Left (vph)	11	11	22	179
Volume Right (vph)	5	92	43	103
Hadj (s)	0.00	-0.43	-0.06	-0.02
Departure Headway (s)	5.7	5.1	4.7	4.5
Degree Utilization, x	0.03	0.16	0.30	0.59
Capacity (veh/h)	537	622	725	774
Control Delay (s)	8.9	9.1	9.8	13.7
Approach Delay (s)	8.9	9.1	9.8	13.7
Approach LOS	A	A	A	B

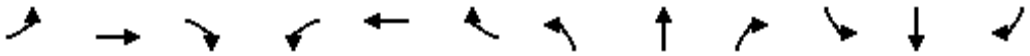
Intersection Summary				
Delay	11.9			
Level of Service	B			
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	60	20	20	10	25	25	5	170	20	70	140	65
Future Volume (vph)	60	20	20	10	25	25	5	170	20	70	140	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	65	22	22	11	27	27	5	185	22	76	152	71

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	109	65	212	299
Volume Left (vph)	65	11	5	76
Volume Right (vph)	22	27	22	71
Hadj (s)	0.03	-0.18	-0.02	-0.06
Departure Headway (s)	5.2	5.1	4.7	4.6
Degree Utilization, x	0.16	0.09	0.28	0.38
Capacity (veh/h)	620	624	728	752
Control Delay (s)	9.2	8.6	9.5	10.3
Approach Delay (s)	9.2	8.6	9.5	10.3
Approach LOS	A	A	A	B

Intersection Summary			
Delay	9.7		
Level of Service	A		
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	10	10	75	20	25	20	220	410	10	235	5
Future Volume (vph)	10	10	10	75	20	25	20	220	410	10	235	5
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	11	11	82	22	27	22	239	446	11	255	5

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	33	131	261	446	271
Volume Left (vph)	11	82	22	0	11
Volume Right (vph)	11	27	0	446	5
Hadj (s)	-0.10	0.04	0.08	-0.67	0.03
Departure Headway (s)	6.1	6.0	5.4	4.6	5.2
Degree Utilization, x	0.06	0.22	0.39	0.58	0.40
Capacity (veh/h)	511	545	655	761	661
Control Delay (s)	9.5	10.6	10.6	12.5	11.6
Approach Delay (s)	9.5	10.6	11.8		11.6
Approach LOS	A	B	B		B

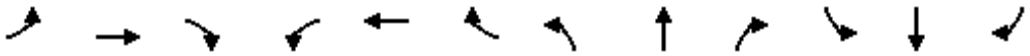
Intersection Summary				
Delay	11.6			
Level of Service	B			
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	35	20	90	30	10	120
Future Volume (vph)	35	20	90	30	10	120
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	38	22	98	33	11	130

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	60	131	141
Volume Left (vph)	0	98	11
Volume Right (vph)	22	0	130
Hadj (s)	-0.19	0.18	-0.50
Departure Headway (s)	4.2	4.4	3.8
Degree Utilization, x	0.07	0.16	0.15
Capacity (veh/h)	831	775	893
Control Delay (s)	7.5	8.3	7.5
Approach Delay (s)	7.5	8.3	7.5
Approach LOS	A	A	A

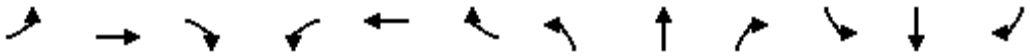
Intersection Summary			
Delay	7.8		
Level of Service	A		
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	10	10	10	10	10	5	150	100	5	90	15
Future Volume (vph)	10	10	10	10	10	10	5	150	100	5	90	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	11	11	11	11	11	5	163	109	5	98	16

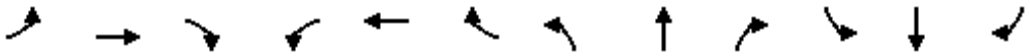
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	33	33	277	119
Volume Left (vph)	11	11	5	5
Volume Right (vph)	11	11	109	16
Hadj (s)	-0.10	-0.10	-0.20	-0.04
Departure Headway (s)	4.7	4.7	4.0	4.3
Degree Utilization, x	0.04	0.04	0.31	0.14
Capacity (veh/h)	698	698	881	805
Control Delay (s)	7.9	7.9	8.7	8.0
Approach Delay (s)	7.9	7.9	8.7	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.4			
Level of Service	A			
Intersection Capacity Utilization	38.3%	ICU Level of Service	A	
Analysis Period (min)	15			



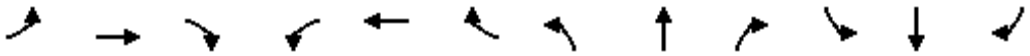
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	295	60	110	20	90	50	120	320	10	10	50	160
Future Volume (vph)	295	60	110	20	90	50	120	320	10	10	50	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.96		1.00	1.00		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1744			1765		1765	1853		1764	1620	
Flt Permitted		0.74			0.93		0.60	1.00		0.46	1.00	
Satd. Flow (perm)		1327			1644		1122	1853		851	1620	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	321	65	120	22	98	54	130	348	11	11	54	174
RTOR Reduction (vph)	0	21	0	0	31	0	0	2	0	0	100	0
Lane Group Flow (vph)	0	485	0	0	143	0	130	357	0	11	128	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		22.7			22.7		22.5	22.5		22.5	22.5	
Effective Green, g (s)		22.7			22.7		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.43			0.43		0.42	0.42		0.42	0.42	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		566			701		474	783		359	685	
v/s Ratio Prot								c0.19			0.08	
v/s Ratio Perm		c0.37			0.09		0.12			0.01		
v/c Ratio		0.86			0.20		0.27	0.46		0.03	0.19	
Uniform Delay, d1		13.8			9.6		10.0	11.0		9.0	9.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.7			0.1		1.4	1.9		0.2	0.6	
Delay (s)		25.5			9.6		11.4	12.9		9.1	10.2	
Level of Service		C			A		B	B		A	B	
Approach Delay (s)		25.5			9.6			12.5			10.2	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	53.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	1050	210	285	590	10	115	20	250	30	20	20
Future Volume (vph)	85	1050	210	285	590	10	115	20	250	30	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.91			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1765	4922		1769	3528			1658			1745	
Flt Permitted	0.40	1.00		0.15	1.00			0.88			0.74	
Satd. Flow (perm)	751	4922		278	3528			1484			1319	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	1141	228	310	641	11	125	22	272	33	22	22
RTOR Reduction (vph)	0	38	0	0	2	0	0	108	0	0	16	0
Lane Group Flow (vph)	92	1331	0	310	650	0	0	311	0	0	61	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	26.4	22.3		36.5	28.0			15.8			15.8	
Effective Green, g (s)	27.2	23.3		36.9	28.9			16.7			16.7	
Actuated g/C Ratio	0.44	0.38		0.59	0.47			0.27			0.27	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	402	1846		407	1641			399			354	
v/s Ratio Prot	0.02	0.27		c0.12	0.18							
v/s Ratio Perm	0.08			c0.33				c0.21			0.05	
v/c Ratio	0.23	0.72		0.76	0.40			0.78			0.17	
Uniform Delay, d1	10.3	16.6		11.1	10.9			21.0			17.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	2.5		7.4	0.7			8.5			0.1	
Delay (s)	10.5	19.1		18.5	11.6			29.5			17.5	
Level of Service	B	B		B	B			C			B	
Approach Delay (s)		18.5			13.8			29.5			17.5	
Approach LOS		B			B			C			B	

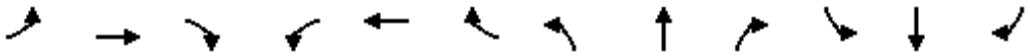
Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	90	20	25	10	10	10	15	210	25	30	155	80
Future Volume (vph)	90	20	25	10	10	10	15	210	25	30	155	80
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	98	22	27	11	11	11	16	228	27	33	168	87

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	147	33	271	288
Volume Left (vph)	98	11	16	33
Volume Right (vph)	27	11	27	87
Hadj (s)	0.06	-0.10	-0.01	-0.12
Departure Headway (s)	5.3	5.4	4.7	4.6
Degree Utilization, x	0.22	0.05	0.36	0.37
Capacity (veh/h)	612	578	727	743
Control Delay (s)	9.8	8.7	10.3	10.3
Approach Delay (s)	9.8	8.7	10.3	10.3
Approach LOS	A	A	B	B

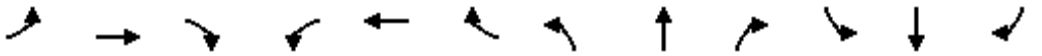
Intersection Summary				
Delay	10.1			
Level of Service	B			
Intersection Capacity Utilization	44.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	10	10	10	10	65	10	10	190	80
Future Volume (vph)	20	20	20	10	10	10	10	65	10	10	190	80
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	11	11	11	11	71	11	11	207	87

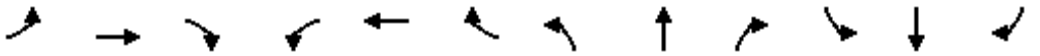
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	33	93	305
Volume Left (vph)	22	11	11	11
Volume Right (vph)	22	11	11	87
Hadj (s)	-0.10	-0.10	-0.01	-0.13
Departure Headway (s)	4.7	4.8	4.4	4.1
Degree Utilization, x	0.09	0.04	0.11	0.35
Capacity (veh/h)	697	685	774	845
Control Delay (s)	8.2	8.0	8.0	9.3
Approach Delay (s)	8.2	8.0	8.0	9.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.8			
Level of Service	A			
Intersection Capacity Utilization	30.9%	ICU Level of Service	A	
Analysis Period (min)	15			



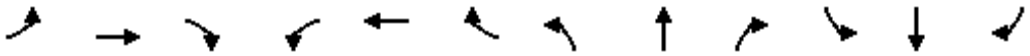
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	640	910	65	30	535	85	0	0	30	120	90	305
Future Volume (vph)	640	910	65	30	535	85	0	0	30	120	90	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3497		1770	3459				1611	1681	1736	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3497		1770	3459				1611	1681	1736	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	696	989	71	33	582	92	0	0	33	130	98	332
RTOR Reduction (vph)	0	5	0	0	12	0	0	0	0	0	0	259
Lane Group Flow (vph)	696	1055	0	33	662	0	0	0	33	69	159	73
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	17.9	42.6		1.9	26.6				74.1	15.0	15.0	15.0
Effective Green, g (s)	18.3	43.5		2.3	27.5				74.1	16.3	16.3	16.3
Actuated g/C Ratio	0.25	0.59		0.03	0.37				1.00	0.22	0.22	0.22
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	847	2052		54	1283				1611	369	381	343
v/s Ratio Prot	c0.20	c0.30		0.02	0.19					0.04	c0.09	
v/s Ratio Perm									0.02			0.05
v/c Ratio	0.82	0.51		0.61	0.52				0.02	0.19	0.42	0.21
Uniform Delay, d1	26.4	9.1		35.5	18.1				0.0	23.5	24.8	23.7
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.9		13.5	1.5				0.0	0.4	1.2	0.5
Delay (s)	32.5	10.0		49.0	19.6				0.0	23.9	26.0	24.2
Level of Service	C	A		D	B				A	C	C	C
Approach Delay (s)		18.9			21.0			0.0			24.7	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	74.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	960	120	0	750	70	140	200	55	20	150	10
Future Volume (vph)	125	960	120	0	750	70	140	200	55	20	150	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00			1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00			1.00		0.99	1.00			1.00	
Frt	1.00	0.98			0.99		1.00	0.97			0.99	
Flt Protected	0.95	1.00			1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3378			3386		1647	1678			1740	
Flt Permitted	0.95	1.00			1.00		0.42	1.00			0.71	
Satd. Flow (perm)	1678	3378			3386		731	1678			1243	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	1043	130	0	815	76	152	217	60	22	163	11
RTOR Reduction (vph)	0	4	0	0	6	0	0	7	0	0	2	0
Lane Group Flow (vph)	136	1169	0	0	885	0	152	270	0	0	194	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	25.1	105.8			76.3		29.4	29.4			29.4	
Effective Green, g (s)	25.5	106.7			77.2		30.3	30.3			30.3	
Actuated g/C Ratio	0.18	0.74			0.53		0.21	0.21			0.21	
Clearance Time (s)	4.4	4.9			4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1			2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	295	2485			1802		152	350			259	
v/s Ratio Prot	0.08	c0.35			c0.26			0.16				
v/s Ratio Perm							c0.21				0.16	
v/c Ratio	0.46	0.47			0.49		1.00	0.77			0.75	
Uniform Delay, d1	53.6	7.7			21.5		57.4	54.1			53.8	
Progression Factor	1.00	1.00			1.84		1.00	1.00			1.00	
Incremental Delay, d2	0.4	0.6			0.3		73.0	9.2			10.3	
Delay (s)	54.0	8.4			39.8		130.3	63.3			64.1	
Level of Service	D	A			D		F	E			E	
Approach Delay (s)		13.1			39.8			87.1			64.1	
Approach LOS		B			D			F			E	

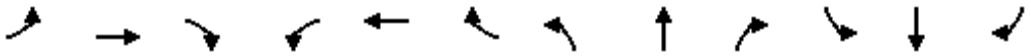
Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	445	1445	155	215	845	215	95	420	235	315	245	175
Future Volume (vph)	445	1445	155	215	845	215	95	420	235	315	245	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3468		1770	3383		1770	3539	1526	1770	3184	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3468		1770	3383		1770	3539	1526	1770	3184	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	484	1571	168	234	918	234	103	457	255	342	266	190
RTOR Reduction (vph)	0	6	0	0	15	0	0	0	62	0	87	0
Lane Group Flow (vph)	484	1733	0	234	1137	0	103	457	193	342	369	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	31.6	59.1		15.6	42.6		12.3	25.8	41.4	25.8	39.4	
Effective Green, g (s)	32.0	60.0		16.0	44.0		12.7	26.8	42.2	26.2	40.3	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.09	0.18	0.29	0.18	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	390	1435		195	1026		155	654	444	319	884	
v/s Ratio Prot	c0.27	c0.50		0.13	0.34		0.06	c0.13	0.05	c0.19	0.12	
v/s Ratio Perm									0.08			
v/c Ratio	1.24	1.21		1.20	1.11		0.66	0.70	0.43	1.07	0.42	
Uniform Delay, d1	56.5	42.5		64.5	50.5		64.1	55.3	41.7	59.4	42.8	
Progression Factor	0.96	0.95		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	128.2	100.2		128.7	62.5		8.0	3.5	0.2	70.9	0.3	
Delay (s)	182.4	140.5		193.2	113.0		72.1	58.8	42.0	130.3	43.0	
Level of Service	F	F		F	F		E	E	D	F	D	
Approach Delay (s)		149.6			126.6			55.2			80.4	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	118.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.5%	ICU Level of Service	G
Analysis Period (min)	15		

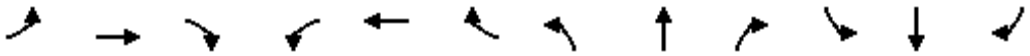
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1950	100	165	1290	105	105	35	230	65	25	25
Future Volume (vph)	10	1950	100	165	1290	105	105	35	230	65	25	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5040		1770	3494			1795	1556		1746	
Flt Permitted	0.95	1.00		0.95	1.00			0.70	1.00		0.69	
Satd. Flow (perm)	1770	5040		1770	3494			1305	1556		1245	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	2120	109	179	1402	114	114	38	250	71	27	27
RTOR Reduction (vph)	0	5	0	0	5	0	0	0	108	0	13	0
Lane Group Flow (vph)	11	2224	0	179	1511	0	0	152	142	0	112	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	0.8	46.2		11.8	57.2			17.4	17.4		17.4	
Effective Green, g (s)	1.2	47.5		12.2	58.5			18.3	18.3		18.3	
Actuated g/C Ratio	0.01	0.53		0.14	0.65			0.20	0.20		0.20	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	23	2660		239	2271			265	316		253	
v/s Ratio Prot	0.01	c0.44		c0.10	0.43							
v/s Ratio Perm								c0.12	0.09		0.09	
v/c Ratio	0.48	0.84		0.75	0.67			0.57	0.45		0.44	
Uniform Delay, d1	44.1	18.0		37.4	9.7			32.3	31.4		31.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	5.6	3.3		10.7	1.6			1.9	0.4		0.5	
Delay (s)	49.7	21.3		48.1	11.3			34.2	31.8		31.8	
Level of Service	D	C		D	B			C	C		C	
Approach Delay (s)		21.4			15.2			32.7			31.8	
Approach LOS		C			B			C			C	

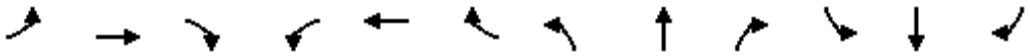
Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



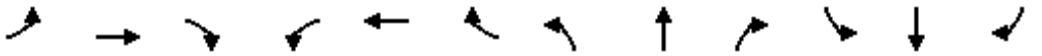
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	370	2395	0	0	0	0	0	450	160
Future Volume (vph)	0	0	0	370	2395	0	0	0	0	0	450	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.96	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5045						4857	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5045						4857	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	402	2603	0	0	0	0	0	489	174
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2995	0	0	0	0	0	663	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.6						18.2	
Effective Green, g (s)					62.9						19.1	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3525						1030	
v/s Ratio Prot											c0.14	
v/s Ratio Perm					0.59							
v/c Ratio					0.85						0.64	
Uniform Delay, d1					10.0						32.3	
Progression Factor					1.00						1.00	
Incremental Delay, d2					2.8						1.0	
Delay (s)					12.8						33.4	
Level of Service					B						C	
Approach Delay (s)		0.0			12.8			0.0			33.4	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



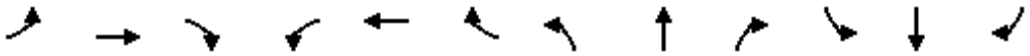
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1650	235	0	0	0	0	0	0	355	465	0
Future Volume (vph)	0	1650	235	0	0	0	0	0	0	355	465	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.98									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		4978									4951	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		4978									4951	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1793	255	0	0	0	0	0	0	386	505	0
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	13	0
Lane Group Flow (vph)	0	2014	0	0	0	0	0	0	0	0	878	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		27.0									19.0	
Effective Green, g (s)		27.0									20.0	
Actuated g/C Ratio		0.49									0.36	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		2443									1800	
v/s Ratio Prot		c0.40										
v/s Ratio Perm											0.18	
v/c Ratio		0.82									0.49	
Uniform Delay, d1		12.0									13.5	
Progression Factor		1.00									1.00	
Incremental Delay, d2		3.3									0.2	
Delay (s)		15.3									13.7	
Level of Service		B									B	
Approach Delay (s)		15.3			0.0			0.0			13.7	
Approach LOS		B			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	1285	155	155	1420	135	135	100	155	125	125	220
Future Volume (vph)	245	1285	155	155	1420	135	135	100	155	125	125	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3482		1770	3539	1558	1770	1863	1583	3433	1863	1562
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3482		1770	3539	1558	1770	1863	1583	3433	1863	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	266	1397	168	168	1543	147	147	109	168	136	136	239
RTOR Reduction (vph)	0	8	0	0	0	114	0	0	139	0	0	150
Lane Group Flow (vph)	266	1557	0	168	1543	33	147	109	29	136	136	89
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	9.0	46.8		11.0	48.9	6.8	9.0	15.1	15.1	6.8	13.8	13.8
Effective Green, g (s)	9.0	48.3		11.0	50.3	6.8	9.0	16.9	16.9	6.8	14.7	14.7
Actuated g/C Ratio	0.09	0.49		0.11	0.51	0.07	0.09	0.17	0.17	0.07	0.15	0.15
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	312	1698		196	1798	107	160	318	270	235	276	231
v/s Ratio Prot	0.08	c0.45		c0.09	0.44		c0.08	0.06		0.04	c0.07	
v/s Ratio Perm						0.02			0.02			0.06
v/c Ratio	0.85	0.92		0.86	0.86	0.31	0.92	0.34	0.11	0.58	0.49	0.39
Uniform Delay, d1	44.3	23.5		43.2	21.2	43.9	44.6	36.2	34.7	44.7	38.7	38.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.9	9.4		28.0	5.6	0.6	46.8	0.2	0.1	2.1	1.4	1.1
Delay (s)	63.3	32.9		71.2	26.8	44.5	91.4	36.4	34.7	46.9	40.1	39.1
Level of Service	E	C		E	C	D	F	D	C	D	D	D
Approach Delay (s)		37.3			32.2			54.8			41.5	
Approach LOS		D			C			D			D	

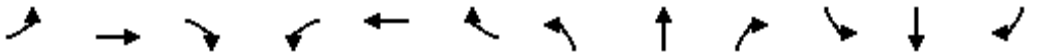
Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	265	1935	355	350	625	0	0	325	170
Future Volume (vph)	0	0	0	265	1935	355	350	625	0	0	325	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			0.99	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.98		1.00	1.00			0.95	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6209		1770	3539			3337	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6209		1770	3539			3337	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	279	2037	374	368	658	0	0	342	179
RTOR Reduction (vph)	0	0	0	0	25	0	0	0	0	0	54	0
Lane Group Flow (vph)	0	0	0	0	2665	0	368	658	0	0	467	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					50.8		26.2	49.4			18.3	
Effective Green, g (s)					50.8		26.2	49.4			18.3	
Actuated g/C Ratio					0.46		0.24	0.45			0.17	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					2867		421	1589			555	
v/s Ratio Prot							c0.21	0.19			c0.14	
v/s Ratio Perm					0.43							
v/c Ratio					0.93		0.87	0.41			0.84	
Uniform Delay, d1					27.9		40.3	20.5			44.4	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					6.8		17.9	0.2			10.9	
Delay (s)					34.7		58.2	20.7			55.3	
Level of Service					C		E	C			E	
Approach Delay (s)		0.0			34.7			34.1			55.3	
Approach LOS		A			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1250	110	0	0	0	0	855	485	150	350	0
Future Volume (vph)	120	1250	110	0	0	0	0	855	485	150	350	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5062	1535					4762		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5062	1535					4762		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	1359	120	0	0	0	0	929	527	163	380	0
RTOR Reduction (vph)	0	0	69	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	0	1489	51	0	0	0	0	1429	0	163	380	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		32.8	32.8					24.7		8.3	37.4	
Effective Green, g (s)		33.7	33.7					24.7		8.7	37.4	
Actuated g/C Ratio		0.42	0.42					0.31		0.11	0.47	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2132	646					1470		192	2377	
v/s Ratio Prot								c0.30		c0.09	0.07	
v/s Ratio Perm		0.29	0.03									
v/c Ratio		0.70	0.08					1.02dr		0.85	0.16	
Uniform Delay, d1		19.0	13.9					27.3		35.0	12.3	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		1.9	0.2					17.7		34.8	0.1	
Delay (s)		20.9	14.1					45.0		69.8	12.4	
Level of Service		C	B					D		E	B	
Approach Delay (s)		20.4			0.0			45.0			29.6	
Approach LOS		C			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

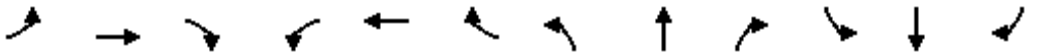
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1455	765	510	1465	475	275
Future Volume (vph)	1455	765	510	1465	475	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1568	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1568	3433	3539	3433	1418
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1582	832	554	1592	516	299
RTOR Reduction (vph)	0	3	0	0	0	231
Lane Group Flow (vph)	1582	829	554	1592	516	68
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	48.3	69.8	18.0	71.5	21.5	21.5
Effective Green, g (s)	50.5	74.2	17.9	72.9	23.7	23.7
Actuated g/C Ratio	0.48	0.71	0.17	0.70	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1708	1172	587	2466	777	321
v/s Ratio Prot	c0.45	c0.16	c0.16	0.45	0.15	
v/s Ratio Perm		0.37				0.05
v/c Ratio	0.93	0.71	0.94	0.65	0.66	0.21
Uniform Delay, d1	25.3	8.9	42.9	8.7	36.8	32.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.1	1.6	23.7	1.3	1.7	0.1
Delay (s)	35.4	10.5	66.6	10.1	38.5	33.0
Level of Service	D	B	E	B	D	C
Approach Delay (s)	26.8			24.6	36.5	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	104.6	Sum of lost time (s)	12.5
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		

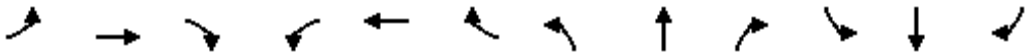
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1095	345	375	395	0	0	0	0	395	0	1275
Future Volume (vph)	0	1095	345	375	395	0	0	0	0	395	0	1275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1190	375	408	429	0	0	0	0	429	0	1386
RTOR Reduction (vph)	0	0	213	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1190	163	408	429	0	0	0	0	429	0	1386
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		31.5	31.5	10.2	45.9					19.5		75.0
Effective Green, g (s)		32.5	32.5	10.4	46.9					20.1		75.0
Actuated g/C Ratio		0.43	0.43	0.14	0.63					0.27		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1533	676	476	2213					474		1583
v/s Ratio Prot		0.34		0.12	0.12					0.24		
v/s Ratio Perm			0.10									c0.88
v/c Ratio		0.78	0.24	0.86	0.19					0.91		0.88
Uniform Delay, d1		18.1	13.4	31.6	6.0					26.5		0.0
Progression Factor		1.00	1.00	0.68	2.10					1.00		1.00
Incremental Delay, d2		3.9	0.8	7.3	0.1					20.2		7.1
Delay (s)		22.1	14.3	28.9	12.7					46.7		7.1
Level of Service		C	B	C	B					D		A
Approach Delay (s)		20.2			20.6			0.0			16.5	
Approach LOS		C			C			A			B	

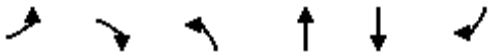
Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	890	720	0	0	590	500	195	20	465	0	0	0
Future Volume (vph)	890	720	0	0	590	500	195	20	465	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (prot)	3433	3539			3272			1782	1583			
Flt Permitted	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (perm)	3433	3539			3272			1782	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	967	783	0	0	641	543	212	22	505	0	0	0
RTOR Reduction (vph)	0	0	0	0	203	0	0	0	185	0	0	0
Lane Group Flow (vph)	967	783	0	0	981	0	0	234	320	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	21.5	49.7			24.0			15.2	15.2			
Effective Green, g (s)	21.7	50.2			24.5			15.8	15.8			
Actuated g/C Ratio	0.29	0.67			0.33			0.21	0.21			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	993	2368			1068			375	333			
v/s Ratio Prot	c0.28	0.22			c0.30			0.13				
v/s Ratio Perm									c0.20			
v/c Ratio	0.97	0.33			0.92			0.62	0.96			
Uniform Delay, d1	26.4	5.3			24.3			26.9	29.3			
Progression Factor	1.36	0.73			1.00			1.00	1.00			
Incremental Delay, d2	17.2	0.2			13.8			2.3	38.8			
Delay (s)	53.0	4.1			38.1			29.2	68.1			
Level of Service	D	A			D			C	E			
Approach Delay (s)		31.1			38.1			55.8			0.0	
Approach LOS		C			D			E			A	

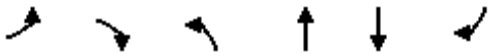
Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	200	150	870	890	180
Future Volume (vph)	230	200	150	870	890	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1700		1770	3539	3450	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1700		1770	3539	3450	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	217	163	946	967	196
RTOR Reduction (vph)	26	0	0	0	11	0
Lane Group Flow (vph)	441	0	163	946	1152	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	37.9		16.0	83.1	62.6	
Effective Green, g (s)	37.9		16.0	83.1	62.6	
Actuated g/C Ratio	0.29		0.12	0.64	0.48	
Clearance Time (s)	4.5		4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	495		217	2262	1661	
v/s Ratio Prot	c0.26		c0.09	0.27	c0.33	
v/s Ratio Perm						
v/c Ratio	0.89		0.75	0.42	0.69	
Uniform Delay, d1	44.1		55.1	11.5	26.2	
Progression Factor	1.00		1.04	1.24	1.00	
Incremental Delay, d2	18.0		12.7	0.5	2.4	
Delay (s)	62.1		69.9	14.9	28.6	
Level of Service	E		E	B	C	
Approach Delay (s)	62.1			23.0	28.6	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

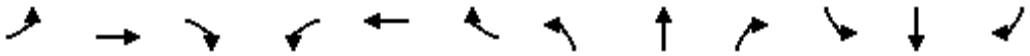
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	380	0	0	210	160
Future Volume (Veh/h)	0	380	0	0	210	160
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	413	0	0	228	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				897	1285	
pX, platoon unblocked						
vC, conflicting volume	315	201	402			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	315	201	402			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	49	100			
cM capacity (veh/h)	653	806	1153			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	413	152	250
Volume Left	0	0	0
Volume Right	413	0	174
cSH	806	1700	1700
Volume to Capacity	0.51	0.09	0.15
Queue Length 95th (ft)	74	0	0
Control Delay (s)	14.1	0.0	0.0
Lane LOS	B		
Approach Delay (s)	14.1	0.0	
Approach LOS	B		

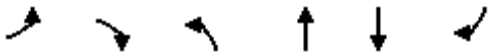
Intersection Summary			
Average Delay	7.1		
Intersection Capacity Utilization	41.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	30	110	120	240	0	0	0	0	50	520	70
Future Volume (vph)	0	30	110	120	240	0	0	0	0	50	520	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.89			1.00						0.98	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1666			1832						3468	
Flt Permitted		1.00			0.84						1.00	
Satd. Flow (perm)		1666			1563						3468	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	33	120	130	261	0	0	0	0	54	565	76
RTOR Reduction (vph)	0	79	0	0	0	0	0	0	0	0	12	0
Lane Group Flow (vph)	0	74	0	0	391	0	0	0	0	0	683	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		17.5			17.5						25.3	
Effective Green, g (s)		17.5			17.5						25.3	
Actuated g/C Ratio		0.34			0.34						0.50	
Clearance Time (s)		4.0			4.0						4.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		573			538						1727	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.25						0.20	
v/c Ratio		0.13			0.73						0.40	
Uniform Delay, d1		11.4			14.6						8.0	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			4.9						0.7	
Delay (s)		11.5			19.4						8.6	
Level of Service		B			B						A	
Approach Delay (s)		11.5			19.4			0.0			8.6	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	50.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

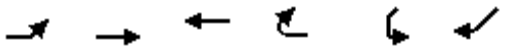
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	200	180	370	480	150
Future Volume (vph)	120	200	180	370	480	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.97	
Flt Protected	0.98			0.98	1.00	
Satd. Flow (prot)	1674			1833	1803	
Flt Permitted	0.98			0.56	1.00	
Satd. Flow (perm)	1674			1044	1803	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	217	196	402	522	163
RTOR Reduction (vph)	89	0	0	0	15	0
Lane Group Flow (vph)	258	0	0	598	670	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	13.9			47.0	47.0	
Effective Green, g (s)	13.9			47.0	47.0	
Actuated g/C Ratio	0.20			0.68	0.68	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	337			712	1229	
v/s Ratio Prot	c0.15				0.37	
v/s Ratio Perm				c0.57		
v/c Ratio	0.77			0.84	0.55	
Uniform Delay, d1	26.0			8.1	5.5	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	10.0			11.4	1.7	
Delay (s)	36.0			19.6	7.3	
Level of Service	D			B	A	
Approach Delay (s)	36.0			19.6	7.3	
Approach LOS	D			B	A	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	68.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		

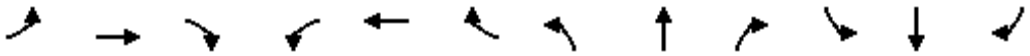
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	60	1090	1200	40	160	240
Future Volume (vph)	60	1090	1200	40	160	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3522		1678	
Flt Permitted	0.13	1.00	1.00		0.98	
Satd. Flow (perm)	240	3539	3522		1678	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1185	1304	43	174	261
RTOR Reduction (vph)	0	0	4	0	27	0
Lane Group Flow (vph)	65	1185	1343	0	408	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)	31.0	31.0	31.0		22.2	
Effective Green, g (s)	31.0	31.0	31.0		22.2	
Actuated g/C Ratio	0.51	0.51	0.51		0.36	
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	121	1792	1784		608	
v/s Ratio Prot		0.33	c0.38		c0.24	
v/s Ratio Perm	0.27					
v/c Ratio	0.54	0.66	0.75		0.67	
Uniform Delay, d1	10.2	11.2	12.0		16.4	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.5	0.9	1.8		5.8	
Delay (s)	14.8	12.1	13.9		22.2	
Level of Service	B	B	B		C	
Approach Delay (s)		12.3	13.9		22.2	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	61.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

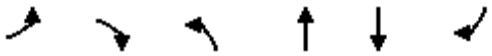
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	20	40	50	120	260	160	500	370	200	490	70
Future Volume (vph)	70	20	40	50	120	260	160	500	370	200	490	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.96			0.92		1.00	0.94		1.00	0.98	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1739			1701		1770	3313		1770	3473	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1739			1701		1770	3313		1770	3473	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	22	43	54	130	283	174	543	402	217	533	76
RTOR Reduction (vph)	0	18	0	0	61	0	0	146	0	0	12	0
Lane Group Flow (vph)	0	123	0	0	406	0	174	799	0	217	597	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		11.1			21.5		11.6	22.7		11.9	23.0	
Effective Green, g (s)		11.1			21.5		11.6	22.7		11.9	23.0	
Actuated g/C Ratio		0.13			0.25		0.14	0.27		0.14	0.27	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		226			429		240	882		247	937	
v/s Ratio Prot		c0.07			c0.24		0.10	c0.24		c0.12	0.17	
v/s Ratio Perm												
v/c Ratio		0.54			0.95		0.72	0.91		0.88	0.64	
Uniform Delay, d1		34.7			31.3		35.3	30.2		35.9	27.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.7			30.1		10.4	12.7		27.7	1.4	
Delay (s)		37.3			61.4		45.6	42.9		63.6	28.9	
Level of Service		D			E		D	D		E	C	
Approach Delay (s)		37.3			61.4			43.3			38.0	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	85.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

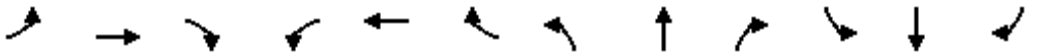
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	160	260	200	140	240	250
Future Volume (vph)	160	260	200	140	240	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.93	
Flt Protected	0.98			0.97	1.00	
Satd. Flow (prot)	1675			1810	1734	
Flt Permitted	0.98			0.49	1.00	
Satd. Flow (perm)	1675			921	1734	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	283	217	152	261	272
RTOR Reduction (vph)	94	0	0	0	54	0
Lane Group Flow (vph)	363	0	0	369	479	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	16.5			38.2	38.2	
Effective Green, g (s)	16.5			38.2	38.2	
Actuated g/C Ratio	0.26			0.61	0.61	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	440			561	1056	
v/s Ratio Prot	c0.22				0.28	
v/s Ratio Perm				c0.40		
v/c Ratio	0.83			0.66	0.45	
Uniform Delay, d1	21.7			8.0	6.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	12.0			5.9	1.4	
Delay (s)	33.7			13.9	8.0	
Level of Service	C			B	A	
Approach Delay (s)	33.7			13.9	8.0	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	62.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

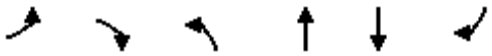
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	200	100	80	100	80	100	2990	240	200	2170	50
Future Volume (vph)	100	200	100	80	100	80	100	2990	240	200	2170	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.93		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3362		1770	3304		1770	5029		1770	5068	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3362		1770	3304		1770	5029		1770	5068	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	217	109	87	109	87	109	3250	261	217	2359	54
RTOR Reduction (vph)	0	41	0	0	78	0	0	6	0	0	1	0
Lane Group Flow (vph)	109	285	0	87	118	0	109	3505	0	217	2412	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Effective Green, g (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Actuated g/C Ratio	0.06	0.11		0.06	0.11		0.08	0.63		0.09	0.64	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	358		106	352		149	3185		165	3253	
v/s Ratio Prot	c0.06	c0.08		0.05	0.04		0.06	c0.70		c0.12	0.48	
v/s Ratio Perm												
v/c Ratio	1.03	0.80		0.82	0.34		0.73	1.10		1.32	0.74	
Uniform Delay, d1	70.5	65.4		69.7	62.1		67.0	27.5		68.0	18.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	95.2	16.6		37.7	2.6		16.8	50.7		178.1	1.6	
Delay (s)	165.7	82.0		107.4	64.6		83.8	78.2		246.1	19.9	
Level of Service	F	F		F	E		F	E		F	B	
Approach Delay (s)		103.0			77.8			78.4			38.6	
Approach LOS		F			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	64.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

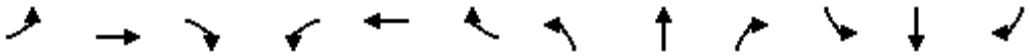
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	0	370	490	0	0
Future Volume (vph)	100	0	370	490	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	402	533	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	109	0	402	533	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.06			0.15		
v/s Ratio Perm			c0.23			
v/c Ratio	0.15		0.57	0.38		
Uniform Delay, d1	7.7		9.3	8.5		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		3.3	0.8		
Delay (s)	8.1		12.6	9.2		
Level of Service	A		B	A		
Approach Delay (s)	8.1			10.7	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Peak Hour Intersection Calculation Worksheets - Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1145	400	160	1340	170	480	400	145	580	280	115
Future Volume (vph)	55	1145	400	160	1340	170	480	400	145	580	280	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1573	3433	5085	1544	3433	1863	1564	3433	1774	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1573	3433	5085	1544	3433	1863	1564	3433	1774	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	1245	435	174	1457	185	522	435	158	630	304	125
RTOR Reduction (vph)	0	0	162	0	0	87	0	0	47	0	16	0
Lane Group Flow (vph)	60	1245	273	174	1457	98	522	435	111	630	413	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.2	25.7	47.1	5.8	28.2	50.4	21.4	28.8	34.6	22.2	27.8	
Effective Green, g (s)	3.6	27.0	49.7	6.2	29.6	53.2	21.8	29.6	36.2	21.2	29.0	
Actuated g/C Ratio	0.04	0.27	0.50	0.06	0.30	0.53	0.22	0.30	0.36	0.21	0.29	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	63	1372	830	212	1505	846	748	551	622	727	514	
v/s Ratio Prot	0.03	0.24	0.07	c0.05	c0.29	0.03	0.15	c0.23	0.01	c0.18	0.23	
v/s Ratio Perm			0.10			0.04			0.06			
v/c Ratio	0.95	0.91	0.33	0.82	0.97	0.12	0.70	0.79	0.18	0.87	0.80	
Uniform Delay, d1	48.1	35.3	15.1	46.4	34.7	11.7	36.1	32.3	21.8	38.0	32.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	95.4	10.3	0.1	20.9	16.8	0.0	2.3	7.7	0.1	10.3	8.3	
Delay (s)	143.5	45.6	15.2	67.2	51.5	11.7	38.4	40.1	21.8	48.3	41.2	
Level of Service	F	D	B	E	D	B	D	D	C	D	D	
Approach Delay (s)		41.4			48.9			36.7			45.4	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	43.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

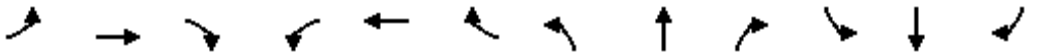
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	545	1200	370	0	0	660
Future Volume (vph)	545	1200	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	592	1304	402	0	0	717
RTOR Reduction (vph)	0	546	0	0	0	0
Lane Group Flow (vph)	592	758	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	10.0	10.0	12.2			12.2
Effective Green, g (s)	10.0	10.0	12.2			12.2
Actuated g/C Ratio	0.28	0.28	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	948	997	1192			1192
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.21				
v/c Ratio	0.62	0.76	0.34			0.60
Uniform Delay, d1	11.5	12.0	9.0			10.0
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.9	3.1	0.1			0.6
Delay (s)	12.4	15.1	9.0			10.6
Level of Service	B	B	A			B
Approach Delay (s)	14.3		9.0			10.6
Approach LOS	B		A			B

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	36.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		

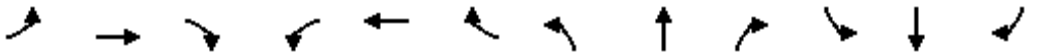
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	310	280	30	140	290	185	460	50	370	520	255
Future Volume (vph)	450	310	280	30	140	290	185	460	50	370	520	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1565	1770	3539	1568	3433	3482		3433	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1565	1770	3539	1568	3433	3482		3433	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	337	304	33	152	315	201	500	54	402	565	277
RTOR Reduction (vph)	0	0	94	0	0	86	0	9	0	0	0	160
Lane Group Flow (vph)	489	337	210	33	152	229	201	545	0	402	565	117
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	11.4	28.2	35.5	1.8	18.5	27.8	7.3	18.4		9.3	20.4	31.8
Effective Green, g (s)	12.3	29.1	37.3	2.8	19.5	27.8	8.2	19.3		10.2	21.3	31.8
Actuated g/C Ratio	0.16	0.39	0.49	0.04	0.26	0.37	0.11	0.26		0.14	0.28	0.42
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	559	718	773	65	914	577	372	890		463	998	659
v/s Ratio Prot	c0.14	c0.18	0.03	0.02	0.04	0.05	0.06	0.16		c0.12	c0.16	0.03
v/s Ratio Perm			0.10			0.10						0.05
v/c Ratio	0.87	0.47	0.27	0.51	0.17	0.40	0.54	0.61		0.87	0.57	0.18
Uniform Delay, d1	30.8	17.4	11.2	35.7	21.7	17.6	31.9	24.8		32.0	23.2	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	14.2	0.2	0.2	6.1	0.4	0.5	1.6	1.3		15.7	1.4	0.1
Delay (s)	45.1	17.6	11.4	41.8	22.1	18.1	33.5	26.1		47.7	24.5	13.8
Level of Service	D	B	B	D	C	B	C	C		D	C	B
Approach Delay (s)		27.8			20.9			28.0			29.6	
Approach LOS		C			C			C			C	

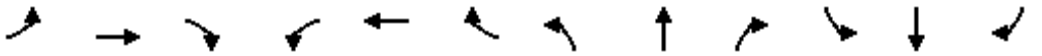
Intersection Summary			
HCM 2000 Control Delay	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	75.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	290	1795	300	115	330	215	225	280	175
Future Volume (vph)	220	1460	170	290	1795	300	115	330	215	225	280	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6284		3433	6408	1553	1770	3539	1543	3433	3539	1556
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6284		3433	6408	1553	1770	3539	1543	3433	3539	1556
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	315	1951	326	125	359	234	245	304	190
RTOR Reduction (vph)	0	22	0	0	0	124	0	0	100	0	0	85
Lane Group Flow (vph)	239	1750	0	315	1951	202	125	359	134	245	304	105
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.5	31.0		5.1	27.7	38.1	4.0	19.7	24.8	10.4	26.1	34.6
Effective Green, g (s)	8.9	32.1		5.5	28.7	38.1	4.4	20.6	26.6	10.8	27.0	36.4
Actuated g/C Ratio	0.10	0.38		0.06	0.34	0.45	0.05	0.24	0.31	0.13	0.32	0.43
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	359	2373		222	2163	696	91	857	546	436	1124	666
v/s Ratio Prot	0.07	c0.28		c0.09	c0.30	0.04	c0.07	c0.10	0.02	c0.07	0.09	0.02
v/s Ratio Perm						0.09			0.07			0.05
v/c Ratio	0.67	0.74		1.42	0.90	0.29	1.37	0.42	0.24	0.56	0.27	0.16
Uniform Delay, d1	36.6	22.8		39.8	26.8	14.9	40.3	27.2	21.7	34.9	21.6	14.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6	2.1		212.8	6.7	0.1	223.0	0.1	0.1	1.0	0.0	0.0
Delay (s)	40.2	24.9		252.6	33.5	15.0	263.3	27.3	21.8	35.9	21.7	14.9
Level of Service	D	C		F	C	B	F	C	C	D	C	B
Approach Delay (s)		26.7			57.8			66.6			24.7	
Approach LOS		C			E			E			C	

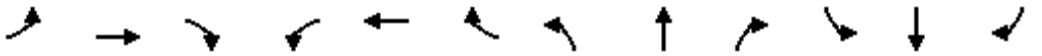
Intersection Summary			
HCM 2000 Control Delay	44.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	335	175	540	515	0	0	0	0	245	320	350
Future Volume (vph)	0	335	175	540	515	0	0	0	0	245	320	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3359	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3359	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	364	190	587	560	0	0	0	0	266	348	380
RTOR Reduction (vph)	0	0	105	0	0	0	0	0	0	0	0	288
Lane Group Flow (vph)	0	364	85	587	560	0	0	0	0	186	428	92
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		31.3	31.3	16.1	51.8					18.4	18.4	18.4
Effective Green, g (s)		32.2	32.2	16.5	52.7					19.3	19.3	19.3
Actuated g/C Ratio		0.40	0.40	0.21	0.66					0.24	0.24	0.24
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1424	637	708	2331					388	810	672
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.05							0.12	0.13	0.03
v/c Ratio		0.26	0.13	0.83	0.24					0.48	0.53	0.14
Uniform Delay, d1		15.9	15.1	30.4	5.5					26.0	26.4	23.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.4	0.4	7.6	0.2					0.3	0.3	0.0
Delay (s)		16.4	15.5	38.0	5.8					26.4	26.7	23.8
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		16.1			22.3			0.0			25.5	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

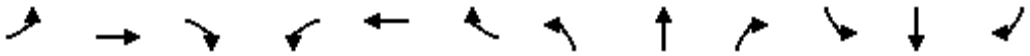


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	645	90	35	490	0	0	0	0	540	330	505
Future Volume (vph)	0	645	90	35	490	0	0	0	0	540	330	505
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		4992		1770	3539						4661	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		4992		1770	3539						4661	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	701	98	38	533	0	0	0	0	587	359	549
RTOR Reduction (vph)	0	26	0	0	0	0	0	0	0	0	0	122
Lane Group Flow (vph)	0	773	0	38	533	0	0	0	0	0	946	427
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		23.1		1.6	27.4						25.6	25.6
Effective Green, g (s)		21.3		2.0	27.3						24.7	27.0
Actuated g/C Ratio		0.33		0.03	0.42						0.38	0.42
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1635		54	1486						1771	565
v/s Ratio Prot		c0.15		c0.02	0.15							
v/s Ratio Perm											0.20	c0.31
v/c Ratio		0.47		0.70	0.36						0.92dl	0.76
Uniform Delay, d1		17.4		31.2	12.9						15.7	16.2
Progression Factor		1.00		1.33	0.85						1.00	1.00
Incremental Delay, d2		1.0		26.8	0.6						0.2	5.1
Delay (s)		18.4		68.2	11.6						15.8	21.3
Level of Service		B		E	B						B	C
Approach Delay (s)		18.4			15.4			0.0			17.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

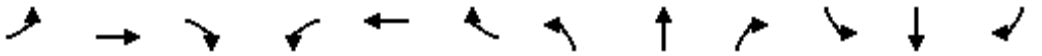
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



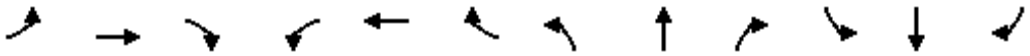
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	20	20	420	95	170	30	1290	160	125	715	120
Future Volume (vph)	5	20	20	420	95	170	30	1290	160	125	715	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.90		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1765	1683		1770	5001		3433	4960	
Flt Permitted	0.50	1.00		0.73	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	926	1710		1353	1683		1770	5001		3433	4960	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	22	22	457	103	185	33	1402	174	136	777	130
RTOR Reduction (vph)	0	13	0	0	92	0	0	19	0	0	27	0
Lane Group Flow (vph)	5	31	0	457	196	0	33	1557	0	136	880	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	28.0	28.0		27.3	27.3		1.9	26.8		3.3	28.0	
Effective Green, g (s)	28.0	28.0		27.7	27.7		1.9	28.2		3.8	30.1	
Actuated g/C Ratio	0.39	0.39		0.38	0.38		0.03	0.39		0.05	0.42	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	360	665		520	647		46	1958		181	2073	
v/s Ratio Prot		0.02			0.12		0.02	c0.31		c0.04	0.18	
v/s Ratio Perm	0.01			c0.34								
v/c Ratio	0.01	0.05		0.88	0.30		0.72	0.79		0.75	0.42	
Uniform Delay, d1	13.5	13.7		20.6	15.4		34.8	19.3		33.6	14.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		15.5	0.3		35.7	3.4		16.0	0.6	
Delay (s)	13.5	13.7		36.1	15.7		70.5	22.8		49.7	15.5	
Level of Service	B	B		D	B		E	C		D	B	
Approach Delay (s)		13.7			28.2			23.8			19.9	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	72.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



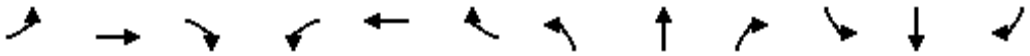
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	645	565	145	140	715	140	290	670	95	75	670	215
Future Volume (vph)	645	565	145	140	715	140	290	670	95	75	670	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.86		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	4929		1770	4948		3433	4709		1770	5085	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	4929		1770	4948		3433	4709		1770	5085	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	701	614	158	152	777	152	315	728	103	82	728	234
RTOR Reduction (vph)	0	46	0	0	31	0	0	16	0	0	0	44
Lane Group Flow (vph)	701	726	0	152	898	0	315	815	0	82	728	190
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	20.6	33.7		11.9	24.4		9.4	24.5		5.4	20.4	41.0
Effective Green, g (s)	21.0	34.9		12.3	26.2		9.8	25.4		5.8	21.4	41.8
Actuated g/C Ratio	0.22	0.37		0.13	0.28		0.10	0.27		0.06	0.23	0.44
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	763	1822		230	1373		356	1267		108	1152	694
v/s Ratio Prot	c0.20	0.15		0.09	c0.18		c0.09	c0.17		0.05	0.14	0.06
v/s Ratio Perm												0.06
v/c Ratio	0.92	0.40		0.66	0.65		0.88	0.64		0.76	0.63	0.27
Uniform Delay, d1	35.9	22.0		39.1	30.1		41.7	30.5		43.6	32.9	16.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	15.7	0.2		5.4	1.1		21.5	2.5		23.4	2.6	0.1
Delay (s)	51.5	22.2		44.5	31.2		63.3	33.0		67.0	35.6	16.8
Level of Service	D	C		D	C		E	C		E	D	B
Approach Delay (s)		36.1			33.0			41.3			33.8	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	94.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	225	60	15	140	210	40	165	240	5	5	20
Future Volume (vph)	135	225	60	15	140	210	40	165	240	5	5	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.91			0.93			0.91	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1770	1794		1770	1695			1685			1676	
Flt Permitted	0.95	1.00		0.95	1.00			0.97			0.95	
Satd. Flow (perm)	1770	1794		1770	1695			1646			1599	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	147	245	65	16	152	228	43	179	261	5	5	22
RTOR Reduction (vph)	0	11	0	0	64	0	0	60	0	0	16	0
Lane Group Flow (vph)	147	299	0	16	316	0	0	423	0	0	16	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.4	38.1		0.7	27.0			20.4			20.4	
Effective Green, g (s)	11.8	39.0		1.6	27.9			21.3			21.3	
Actuated g/C Ratio	0.16	0.53		0.02	0.38			0.29			0.29	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	286	958		38	647			480			466	
v/s Ratio Prot	c0.08	0.17		0.01	c0.19							
v/s Ratio Perm								c0.26			0.01	
v/c Ratio	0.51	0.31		0.42	0.49			0.88			0.04	
Uniform Delay, d1	28.0	9.5		35.2	17.1			24.6			18.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.7	0.9		7.4	2.6			16.6			0.0	
Delay (s)	28.6	10.4		42.6	19.8			41.2			18.5	
Level of Service	C	B		D	B			D			B	
Approach Delay (s)		16.2			20.7			41.2			18.5	
Approach LOS		B			C			D			B	

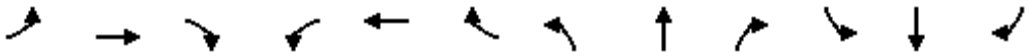
Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	73.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	655	85	165	1240	65	60	125	100	255	375	245
Future Volume (vph)	180	655	85	165	1240	65	60	125	100	255	375	245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4974		1770	5036		1770	3539	1555	3433	3280	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4974		1770	5036		1770	3539	1555	3433	3280	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	712	92	179	1348	71	65	136	109	277	408	266
RTOR Reduction (vph)	0	20	0	0	6	0	0	0	59	0	141	0
Lane Group Flow (vph)	196	784	0	179	1413	0	65	136	50	277	533	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	7.9	24.4		13.1	29.1		6.1	17.6	30.7	11.2	22.8	
Effective Green, g (s)	8.3	25.3		13.5	30.5		6.5	18.6	31.5	11.6	23.7	
Actuated g/C Ratio	0.10	0.30		0.16	0.36		0.08	0.22	0.37	0.14	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	335	1480		281	1807		135	774	576	468	914	
v/s Ratio Prot	0.06	0.16		c0.10	c0.28		c0.04	0.04	0.01	0.08	c0.16	
v/s Ratio Perm									0.02			
v/c Ratio	0.59	0.53		0.64	0.78		0.48	0.18	0.09	0.59	0.58	
Uniform Delay, d1	36.7	24.9		33.5	24.3		37.6	27.0	17.4	34.5	26.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.4		3.5	3.5		1.0	0.1	0.0	1.3	0.8	
Delay (s)	38.4	26.3		36.9	27.7		38.6	27.1	17.4	35.8	27.2	
Level of Service	D	C		D	C		D	C	B	D	C	
Approach Delay (s)		28.6			28.8			26.1			29.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1680	560	120	1170	355	460	345	180	300	255	35
Future Volume (vph)	90	1680	560	120	1170	355	460	345	180	300	255	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	5085	1537	3433	1863	1560	3433	1826	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	5085	1537	3433	1863	1560	3433	1826	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1826	609	130	1272	386	500	375	196	326	277	38
RTOR Reduction (vph)	0	0	142	0	0	117	0	0	50	0	5	0
Lane Group Flow (vph)	98	1826	467	130	1272	269	500	375	146	326	310	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.3	42.1	57.3	5.7	39.4	54.4	15.2	29.7	35.4	15.0	27.7	
Effective Green, g (s)	8.7	43.4	59.9	6.1	40.8	57.2	15.6	30.5	37.0	14.0	28.9	
Actuated g/C Ratio	0.08	0.39	0.54	0.06	0.37	0.52	0.14	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	139	2006	853	190	1886	799	486	516	524	436	479	
v/s Ratio Prot	c0.06	c0.36	0.08	0.04	0.25	0.05	c0.15	c0.20	0.02	0.09	c0.17	
v/s Ratio Perm			0.22			0.12			0.08			
v/c Ratio	0.71	0.91	0.55	0.68	0.67	0.34	1.03	0.73	0.28	0.75	0.65	
Uniform Delay, d1	49.4	31.5	16.3	51.0	29.0	15.4	47.2	36.0	26.7	46.3	36.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	7.7	0.4	7.9	2.0	0.1	48.4	5.3	0.1	6.0	2.3	
Delay (s)	61.8	39.1	16.6	58.9	31.0	15.5	95.6	41.3	26.8	52.3	38.3	
Level of Service	E	D	B	E	C	B	F	D	C	D	D	
Approach Delay (s)		34.6			29.7			64.0			45.4	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

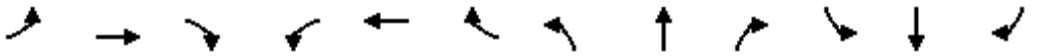
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1800	925	0	0	880
Future Volume (vph)	830	1800	925	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1957	1005	0	0	957
RTOR Reduction (vph)	0	14	0	0	0	0
Lane Group Flow (vph)	902	1943	1005	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	48.0	48.0	26.4			26.4
Effective Green, g (s)	48.0	48.0	26.4			26.4
Actuated g/C Ratio	0.54	0.54	0.30			0.30
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1864	1960	1056			1056
v/s Ratio Prot	0.26		c0.28			0.27
v/s Ratio Perm		c0.54				
v/c Ratio	0.48	0.99	0.95			0.91
Uniform Delay, d1	12.5	20.0	30.4			29.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	18.2	17.1			10.8
Delay (s)	12.6	38.2	47.5			40.6
Level of Service	B	D	D			D
Approach Delay (s)	30.1		47.5			40.6
Approach LOS	C		D			D

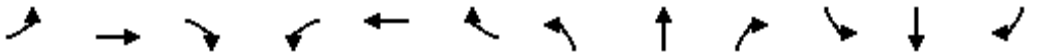
Intersection Summary			
HCM 2000 Control Delay	35.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



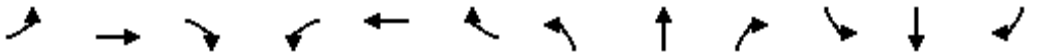
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	385	335	320	80	540	695	420	510	80	410	715	405
Future Volume (vph)	385	335	320	80	540	695	420	510	80	410	715	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1567	1770	3539	1568	3433	3467		3433	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1567	1770	3539	1568	3433	3467		3433	3539	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	418	364	348	87	587	755	457	554	87	446	777	440
RTOR Reduction (vph)	0	0	57	0	0	54	0	11	0	0	0	62
Lane Group Flow (vph)	418	364	291	87	587	701	457	630	0	446	777	378
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	13.7	35.9	54.0	9.0	31.2	59.1	18.1	27.5		27.9	37.3	51.0
Effective Green, g (s)	14.6	36.8	55.8	10.0	32.2	59.1	19.0	28.4		28.8	38.2	51.0
Actuated g/C Ratio	0.12	0.31	0.46	0.08	0.27	0.49	0.16	0.24		0.24	0.32	0.42
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	417	571	780	147	949	836	543	820		823	1126	663
v/s Ratio Prot	c0.12	0.20	0.06	0.05	0.17	c0.20	c0.13	c0.18		0.13	0.22	0.06
v/s Ratio Perm			0.13			0.25						0.18
v/c Ratio	1.00	0.64	0.37	0.59	0.62	0.84	0.84	0.77		0.54	0.69	0.57
Uniform Delay, d1	52.7	35.9	20.8	53.0	38.5	26.3	49.0	42.7		39.8	35.7	26.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	44.7	5.4	0.3	15.1	3.0	8.4	11.4	4.4		1.5	2.5	0.7
Delay (s)	97.4	41.2	21.1	68.2	41.5	34.7	60.4	47.1		41.3	38.3	26.9
Level of Service	F	D	C	E	D	C	E	D		D	D	C
Approach Delay (s)		55.8			39.6			52.6			36.1	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	375	1700	200	510	1395	385	230	645	410	345	530	285
Future Volume (vph)	375	1700	200	510	1395	385	230	645	410	345	530	285
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.93	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6233		3433	6408	1476	1770	3539	1527	3433	3539	1523
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6233		3433	6408	1476	1770	3539	1527	3433	3539	1523
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	1848	217	554	1516	418	250	701	446	375	576	310
RTOR Reduction (vph)	0	15	0	0	0	44	0	0	55	0	0	59
Lane Group Flow (vph)	408	2050	0	554	1516	374	250	701	391	375	576	251
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.8	47.0		22.0	49.3	66.6	19.2	29.9	51.9	17.3	28.0	47.8
Effective Green, g (s)	20.2	48.1		22.4	50.3	66.6	19.6	30.8	53.7	17.7	28.9	49.6
Actuated g/C Ratio	0.15	0.36		0.17	0.37	0.49	0.15	0.23	0.40	0.13	0.21	0.37
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	513	2220		569	2387	728	256	807	646	450	757	559
v/s Ratio Prot	0.12	c0.33		c0.16	0.24	0.07	c0.14	c0.20	0.10	0.11	c0.16	0.07
v/s Ratio Perm						0.19			0.15			0.10
v/c Ratio	0.80	0.92		0.97	0.64	0.51	0.98	0.87	0.60	0.83	0.76	0.45
Uniform Delay, d1	55.4	41.7		56.0	34.8	23.2	57.5	50.2	32.2	57.2	49.8	32.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.8	8.0		30.8	0.6	0.3	49.0	9.5	1.1	12.0	4.1	0.2
Delay (s)	63.2	49.6		86.8	35.4	23.5	106.5	59.7	33.3	69.2	53.9	32.6
Level of Service	E	D		F	D	C	F	E	C	E	D	C
Approach Delay (s)		51.9			44.8			59.6			53.2	
Approach LOS		D			D			E			D	

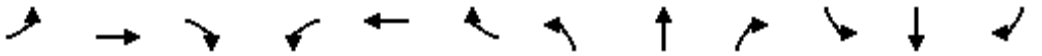
Intersection Summary			
HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	710	285	425	490	0	0	0	0	330	470	1055
Future Volume (vph)	0	710	285	425	490	0	0	0	0	330	470	1055
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	772	310	462	533	0	0	0	0	359	511	1147
RTOR Reduction (vph)	0	0	78	0	0	0	0	0	0	0	0	359
Lane Group Flow (vph)	0	772	232	462	533	0	0	0	0	359	511	788
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.2	26.2	13.1	43.7					26.5	26.5	26.5
Effective Green, g (s)		27.1	27.1	13.5	44.6					27.4	27.4	27.4
Actuated g/C Ratio		0.34	0.34	0.17	0.56					0.34	0.34	0.34
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1198	536	579	1972					551	1161	954
v/s Ratio Prot		c0.22		c0.13	0.15							
v/s Ratio Perm			0.15							0.22	0.15	c0.28
v/c Ratio		0.64	0.43	0.80	0.27					0.65	0.44	0.83
Uniform Delay, d1		22.4	20.5	31.9	9.2					22.3	20.4	24.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		2.7	2.5	7.1	0.3					2.1	0.1	5.6
Delay (s)		25.1	23.0	39.0	9.6					24.4	20.5	29.8
Level of Service		C	C	D	A					C	C	C
Approach Delay (s)		24.5			23.2			0.0			26.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

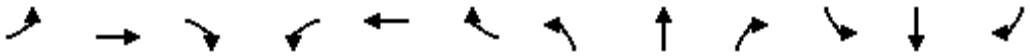


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1125	350	65	685	0	0	0	0	740	1125	665
Future Volume (vph)	0	1125	350	65	685	0	0	0	0	740	1125	665
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		4904		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		4904		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1223	380	71	745	0	0	0	0	804	1223	723
RTOR Reduction (vph)	0	30	0	0	0	0	0	0	0	0	0	50
Lane Group Flow (vph)	0	1573	0	71	745	0	0	0	0	0	2027	673
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		37.6		5.1	45.4						52.6	52.6
Effective Green, g (s)		35.8		5.5	45.3						51.7	54.0
Actuated g/C Ratio		0.33		0.05	0.41						0.47	0.49
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1596		88	1457						2214	668
v/s Ratio Prot		c0.32		c0.04	0.21							
v/s Ratio Perm											0.43	c0.49
v/c Ratio		0.99		0.81	0.51						1.02dl	1.01
Uniform Delay, d1		36.8		51.7	24.1						27.1	28.0
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		19.4		38.0	1.3						6.3	36.5
Delay (s)		56.2		89.8	25.4						33.4	64.5
Level of Service		E		F	C						C	E
Approach Delay (s)		56.2			31.0			0.0			41.6	
Approach LOS		E			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	44.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

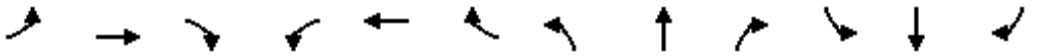
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



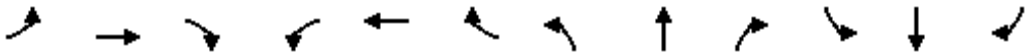
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	170	40	365	50	235	10	1530	250	280	565	20
Future Volume (vph)	50	170	40	365	50	235	10	1530	250	280	565	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.88		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1803		1758	1632		1765	4978		3433	5054	
Flt Permitted	0.44	1.00		0.53	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	816	1803		979	1632		1765	4978		3433	5054	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	185	43	397	54	255	11	1663	272	304	614	22
RTOR Reduction (vph)	0	8	0	0	113	0	0	20	0	0	3	0
Lane Group Flow (vph)	54	220	0	397	196	0	11	1915	0	304	633	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.5	43.5		42.8	42.8		0.8	44.3		12.0	54.8	
Effective Green, g (s)	43.5	43.5		43.2	43.2		0.8	45.7		9.8	56.9	
Actuated g/C Ratio	0.38	0.38		0.38	0.38		0.01	0.40		0.09	0.50	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	313	692		373	622		12	2009		297	2540	
v/s Ratio Prot		0.12			0.12		0.01	c0.38		c0.09	0.13	
v/s Ratio Perm	0.07			c0.41								
v/c Ratio	0.17	0.32		1.06	0.31		0.92	0.95		1.02	0.25	
Uniform Delay, d1	23.0	24.4		35.0	24.6		56.2	32.7		51.7	16.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		64.7	0.3		209.7	11.7		58.4	0.2	
Delay (s)	23.1	24.5		99.7	24.9		265.9	44.5		110.1	16.2	
Level of Service	C	C		F	C		F	D		F	B	
Approach Delay (s)		24.3			66.9			45.7			46.6	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	48.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	113.2	Sum of lost time (s)	14.5
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



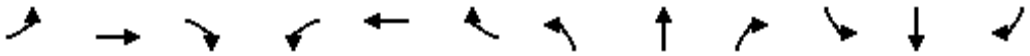
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	650	1090	340	255	960	135	465	1025	225	160	640	275
Future Volume (vph)	650	1090	340	255	960	135	465	1025	225	160	640	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4904		1770	4981		3433	5085	1562	1770	5085	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4904		1770	4981		3433	5085	1562	1770	5085	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	707	1185	370	277	1043	147	505	1114	245	174	696	299
RTOR Reduction (vph)	0	51	0	0	17	0	0	0	189	0	0	69
Lane Group Flow (vph)	707	1504	0	277	1173	0	505	1114	56	174	696	230
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	23.2	36.1		17.8	30.1		16.8	24.8	24.8	11.4	19.3	42.5
Effective Green, g (s)	23.6	37.3		18.2	31.9		17.2	25.7	24.8	11.8	20.3	43.3
Actuated g/C Ratio	0.22	0.34		0.17	0.29		0.16	0.24	0.23	0.11	0.19	0.40
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	743	1678		295	1457		541	1198	355	191	947	622
v/s Ratio Prot	c0.21	c0.31		0.16	0.24		c0.15	c0.22		0.10	0.14	0.08
v/s Ratio Perm									0.04			0.07
v/c Ratio	0.95	0.90		0.94	0.81		0.93	0.93	0.16	0.91	0.73	0.37
Uniform Delay, d1	42.1	34.0		44.9	35.7		45.3	40.8	33.7	48.1	41.8	23.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.7	6.8		35.7	3.3		23.0	13.8	0.9	40.3	5.1	0.1
Delay (s)	63.8	40.8		80.5	39.0		68.4	54.6	34.7	88.4	46.9	23.3
Level of Service	E	D		F	D		E	D	C	F	D	C
Approach Delay (s)		48.0			46.8			55.7			47.0	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	49.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	109.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	595	350	70	10	190	170	125	55	105	10	10	20
Future Volume (vph)	595	350	70	10	190	170	125	55	105	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.93			0.95			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1770	1808		1770	1713			1711			1695	
Flt Permitted	0.95	1.00		0.95	1.00			0.84			0.90	
Satd. Flow (perm)	1770	1808		1770	1713			1470			1552	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	647	380	76	11	207	185	136	60	114	11	11	22
RTOR Reduction (vph)	0	7	0	0	34	0	0	24	0	0	17	0
Lane Group Flow (vph)	647	449	0	11	358	0	0	286	0	0	27	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	32.8	56.2		0.8	23.8			18.8			18.8	
Effective Green, g (s)	33.2	57.1		1.7	24.7			19.7			19.7	
Actuated g/C Ratio	0.37	0.64		0.02	0.28			0.22			0.22	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	655	1152		33	472			323			341	
v/s Ratio Prot	c0.37	0.25		0.01	c0.21							
v/s Ratio Perm								c0.19			0.02	
v/c Ratio	0.99	0.39		0.33	0.76			0.88			0.08	
Uniform Delay, d1	28.0	7.8		43.4	29.7			33.9			27.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	31.7	1.0		5.9	10.9			23.2			0.0	
Delay (s)	59.7	8.8		49.3	40.6			57.0			27.8	
Level of Service	E	A		D	D			E			C	
Approach Delay (s)		38.7			40.8			57.0			27.8	
Approach LOS		D			D			E			C	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	89.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

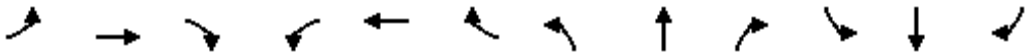


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	445	1445	155	215	845	215	95	420	235	315	245	175
Future Volume (vph)	445	1445	155	215	845	215	95	420	235	315	245	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.97	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4987		1770	4873		1770	3539	1538	3433	3205	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4987		1770	4873		1770	3539	1538	3433	3205	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	484	1571	168	234	918	234	103	457	255	342	266	190
RTOR Reduction (vph)	0	11	0	0	37	0	0	0	44	0	114	0
Lane Group Flow (vph)	484	1728	0	234	1115	0	103	457	211	342	342	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	18.6	42.3		16.7	39.9		10.4	24.4	41.1	12.9	27.0	
Effective Green, g (s)	19.0	43.2		17.1	41.3		10.8	25.4	41.9	13.3	27.9	
Actuated g/C Ratio	0.17	0.38		0.15	0.36		0.09	0.22	0.36	0.12	0.24	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	567	1873		263	1750		166	781	560	397	777	
v/s Ratio Prot	c0.14	c0.35		0.13	0.23		0.06	c0.13	0.06	c0.10	0.11	
v/s Ratio Perm									0.08			
v/c Ratio	0.85	0.92		0.89	0.64		0.62	0.59	0.38	0.86	0.44	
Uniform Delay, d1	46.6	34.3		48.0	30.6		50.1	40.1	26.9	49.9	36.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.5	9.1		27.8	1.8		5.1	1.3	0.2	16.6	0.3	
Delay (s)	58.2	43.4		75.8	32.4		55.2	41.4	27.1	66.6	37.2	
Level of Service	E	D		E	C		E	D	C	E	D	
Approach Delay (s)		46.6			39.7			38.7			49.8	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	44.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

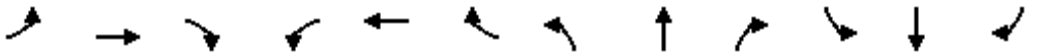
Peak Hour Intersection Calculation Worksheets - Partial Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1145	400	160	1340	170	480	400	145	580	280	115
Future Volume (vph)	55	1145	400	160	1340	170	480	400	145	580	280	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1774	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1774	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	1245	435	174	1457	185	522	435	158	630	304	125
RTOR Reduction (vph)	0	0	117	0	0	42	0	0	31	0	11	0
Lane Group Flow (vph)	60	1245	318	174	1457	143	522	435	127	630	418	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	5.1	41.2	65.6	20.3	56.3	83.7	24.4	33.6	53.9	27.4	34.8	
Effective Green, g (s)	5.5	42.5	68.2	20.7	57.7	86.5	24.8	34.4	55.5	26.4	36.0	
Actuated g/C Ratio	0.04	0.30	0.49	0.15	0.41	0.62	0.18	0.25	0.40	0.19	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	69	1543	800	507	1458	960	608	457	661	647	456	
v/s Ratio Prot	c0.03	0.24	0.07	0.05	c0.41	0.03	0.15	0.23	0.03	c0.18	c0.24	
v/s Ratio Perm			0.13			0.06			0.05			
v/c Ratio	0.87	0.81	0.40	0.34	1.00	0.15	0.86	0.95	0.19	0.97	0.92	
Uniform Delay, d1	66.9	45.0	22.8	53.5	41.1	11.3	55.9	52.0	27.6	56.5	50.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	62.8	4.6	0.1	0.1	23.4	0.0	11.2	30.2	0.1	28.6	22.6	
Delay (s)	129.7	49.6	23.0	53.7	64.5	11.3	67.1	82.2	27.6	85.0	73.2	
Level of Service	F	D	C	D	E	B	E	F	C	F	E	
Approach Delay (s)		45.7			58.1			67.4			80.2	
Approach LOS		D			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	60.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1680	560	120	1170	355	460	345	180	300	255	35
Future Volume (vph)	90	1680	560	120	1170	355	460	345	180	300	255	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	3539	1537	3433	1863	1560	3433	1826	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	3539	1537	3433	1863	1560	3433	1826	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1826	609	130	1272	386	500	375	196	326	277	38
RTOR Reduction (vph)	0	0	142	0	0	117	0	0	50	0	5	0
Lane Group Flow (vph)	98	1826	467	130	1272	269	500	375	146	326	310	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.3	42.1	57.3	5.7	39.4	54.4	15.2	29.7	35.4	15.0	27.7	
Effective Green, g (s)	8.7	43.4	59.9	6.1	40.8	57.2	15.6	30.5	37.0	14.0	28.9	
Actuated g/C Ratio	0.08	0.39	0.54	0.06	0.37	0.52	0.14	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	139	2006	853	190	1312	799	486	516	524	436	479	
v/s Ratio Prot	c0.06	c0.36	0.08	0.04	c0.36	0.05	c0.15	c0.20	0.02	0.09	c0.17	
v/s Ratio Perm			0.22			0.12			0.08			
v/c Ratio	0.71	0.91	0.55	0.68	0.97	0.34	1.03	0.73	0.28	0.75	0.65	
Uniform Delay, d1	49.4	31.5	16.3	51.0	34.0	15.4	47.2	36.0	26.7	46.3	36.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	7.7	0.4	7.9	18.5	0.1	48.4	5.3	0.1	6.0	2.3	
Delay (s)	61.8	39.1	16.6	58.9	52.5	15.5	95.6	41.3	26.8	52.3	38.3	
Level of Service	E	D	B	E	D	B	F	D	C	D	D	
Approach Delay (s)		34.6			45.0			64.0			45.4	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	44.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix J
VMT Analysis Worksheet – Adopted Plan

2035a - Adopted GP - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	3,087	-	3,087	4,336,442
CHULA VISTA TOTAL	5,601,350	7,698	-	7,698	5,593,652
CORONADO TOTAL	466,994	1,344	-	1,344	465,650
DEL MAR TOTAL	101,376	60	-	60	101,316
EL CAJON TOTAL	2,442,502	3,987	-	3,987	2,438,515
ENCINITAS TOTAL	2,556,112	3,788	-	3,788	2,552,324
ESCONDIDO TOTAL	3,482,331	1,991	-	1,991	3,480,340
External TOTAL	526,485	428	-	428	526,057
IMPERIAL BEACH TOTAL	131,328	26	-	26	131,302
LA MESA TOTAL	2,089,142	6,352	-	6,352	2,082,790
LEMON GROVE TOTAL	959,602	1,726	-	1,726	957,876
NATIONAL CITY TOTAL	1,962,160	6,474	-	6,474	1,955,686
OCEANSIDE TOTAL	4,088,716	1,017	-	1,017	4,087,699
POWAY TOTAL	1,304,035	615	-	615	1,303,420
SAN DIEGO TOTAL	47,221,594	277,444	18,009	259,435	46,944,150
SAN MARCOS TOTAL	2,642,965	296	-	296	2,642,669
SANTEE TOTAL	1,347,654	846	-	846	1,346,808
SOLANA BEACH TOTAL	715,186	1,390	-	1,390	713,796
Unincorporated TOTAL	24,605,963	12,944	-	12,944	24,593,019
VISTA TOTAL	1,899,984	104	-	104	1,899,880
REGIONWIDE TOTAL	108,485,008	331,617	18,009	313,608	108,153,391

2035a - Adopted GP - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	13,654	-	13,654	4,325,875
CHULA VISTA TOTAL	5,601,350	32,436	-	32,436	5,568,914
CORONADO TOTAL	466,994	6,103	-	6,103	460,891
DEL MAR TOTAL	101,376	232	-	232	101,144
EL CAJON TOTAL	2,442,502	15,077	-	15,077	2,427,425
ENCINITAS TOTAL	2,556,112	16,034	-	16,034	2,540,078
ESCONDIDO TOTAL	3,482,331	8,349	-	8,349	3,473,982
External TOTAL	526,485	2,332	-	2,332	524,153
IMPERIAL BEACH TOTAL	131,328	293	-	293	131,035
LA MESA TOTAL	2,089,142	23,565	-	23,565	2,065,577
LEMON GROVE TOTAL	959,602	7,337	-	7,337	952,265
NATIONAL CITY TOTAL	1,962,160	27,348	-	27,348	1,934,812
OCEANSIDE TOTAL	4,088,716	5,026	-	5,026	4,083,690
POWAY TOTAL	1,304,035	2,464	-	2,464	1,301,571
SAN DIEGO TOTAL	47,221,594	1,228,648	204,475	1,024,173	45,992,946
SAN MARCOS TOTAL	2,642,965	1,173	-	1,173	2,641,792
SANTEE TOTAL	1,347,654	3,470	-	3,470	1,344,184
SOLANA BEACH TOTAL	715,186	5,763	-	5,763	709,423
Unincorporated TOTAL	24,605,963	59,614	-	59,614	24,546,349
VISTA TOTAL	1,899,984	657	-	657	1,899,327
REGIONWIDE TOTAL	108,485,008	832,025 2,291,600	204,475	1,255,100	107,025,433

Midway-Pacific Highway & Old Town Mobility Element Updates

Transportation Impact Study

Midway-Pacific Highway: Alternative 2 With Sports Arena
Old Town: Alternative 3

Draft Report

December 2017

Prepared for:

The City of SAN DIEGO

Prepared by:

CHEN RYAN
3900 Fifth Avenue, Suite 210
San Diego, CA 92103

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1.0 Introduction

1.1 Purpose of the Report

This Transportation Impact Study (TIS) serves to identify and document potential traffic impacts related to the buildout of the Preferred Plan alternative of the Midway-Pacific Highway and Old Town Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway impacts. This technical report also provides vehicle miles traveled (VMT) for the Existing conditions and buildout of the Community Plan Updates and compares these to the projected 2035 VMT per person and average trip length for the entire Region.

Figure 1-1 displays the project study area for both the Midway-Pacific Highway Corridor and Old Town communities. This report identifies significant traffic impacts and potential mitigation measures associated with the implementation of the Preferred Plan for the Midway-Pacific Highway and Old Town Community Plan Updates and is intended to support the Environmental Impact Report (EIR).

Study Scenarios

Two (2) scenarios were evaluated for this Mobility Element Update transportation impact study, including:

- Existing Conditions – utilized to establish the existing base line traffic operations within the project study area.
- Preferred Plan – represents the preferred land use plan and proposed roadway network. Improvements resulting in the preferred plan roadway network were developed in collaboration between community members, City staff, and the project consultant team. Initially, the mobility issues and needs identified in the Existing Conditions Report were compared to the mobility issues and needs identified in other on-going or recent planning efforts. The Preferred Plan was modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the Preferred Plan Community Plan land uses and adopted Year 2035 land uses outside of the study communities for regional growth.

1.2 Report Organization

Following this introductory chapter, the report is organized into the following chapters:

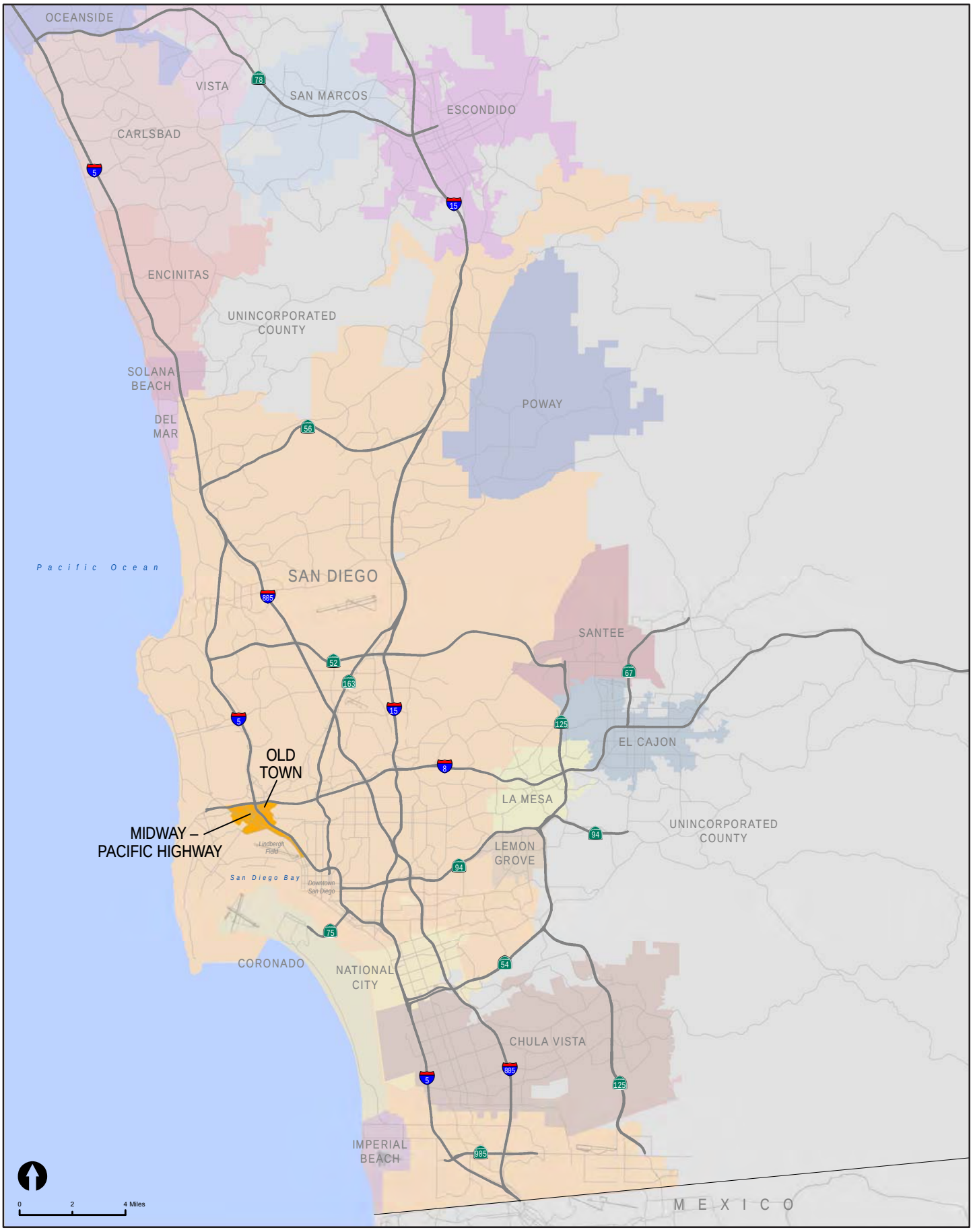
2.0 *Analysis Methodology* – This chapter describes the methodologies and standards utilized to analyze roadway, intersection, and freeway segment and freeway ramp meter traffic conditions.

3.0 *Existing Conditions* - This chapter describes the existing traffic network within the study area and provides analysis results for existing traffic conditions.

4.0 *Preferred Plan* – This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to the Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters were evaluated. Mitigation measures for significant impacts identified, if feasible.

5.0 *Adopted Plan* – This chapter is included for informational purposes and includes a description and high-level analysis of the currently adopted plan for both the Midway-Pacific Highway Corridor and Old Town communities. No impact analyses were conducted for this scenario.

6.0 *Summary* – This chapter summarizes the analysis and impact findings outlined in chapters three through five.



Midway-Pacific Highway and Old Town Community Plan Update

CHEN RYAN

Figure 1-1
Midway-Pacific Highway and Old Town within the Region

2.0 Analysis Methodology

This chapter describes the various methodologies utilized to analyze the mobility network within the Midway-Pacific Highway and Old Town communities. Analysis of the vehicular systems – roadways, intersections and freeways – were prepared for this study in accordance with the *City of San Diego Traffic Impact Study Guidelines,* SANTEC/ITE Guidelines, and the enhanced California Environmental Quality Act (CEQA) project review process.

2.1 Selection of the Study Area

This section describes the process used to identify roadway segments and intersections for analysis.

2.1.1 Roadway Segments

Roadway segments were evaluated if one or more of the following circumstances applied:

- The roadway segment is an existing or planned circulation element roadway as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The roadway segment provides freeway access to/from the Midway-Pacific Highway or Old Town communities.
- The roadway segment is located outside of either study community; however, it may influence or impact the flow of transportation within either of the communities.

2.1.2 Intersections

Intersections were evaluated if one or more of the following circumstances applied:

- The intersection is comprised of a circulation element roadway intersecting with another circulation element roadway. This includes existing and future/planned circulation element roadways as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The intersection is at a freeway ramp interchange located within the Midway-Pacific Highway or Old Town communities or is a major gateway to either community.
- The intersection is a major intersection located outside of either community, however, it may influence or impact the flow of transportation within the communities.
- The intersection meets criteria used in previous studies, whereby both streets meet one of the following:
    - 4 lanes or greater
    - 3 lanes and carries over 15,000 ADT
    - 2 lanes and carries over 10,000 ADT
- Intersections at freeway access ramps.
- Significant intersections where travel time analysis is performed.

A total of 59 intersections were identified based on the criteria listed above, which include 11 intersections located outside the study communities. These intersections were added to the study area because of their proximity to the communities, and the likelihood that changes within the communities could directly affect traffic in/out of the communities. Figure 2-1 displays the location of the 59 study intersections and roadway segments.

2.2 Level of Service Definition

Vehicular level of service (LOS) is a quantitative measure that represents quality of service for the driver. These conditions are generally described in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents the best operating conditions from a driver's perspective, while LOS F represents the worst. Table 2-1 describes generalized definitions of auto LOS A through F.

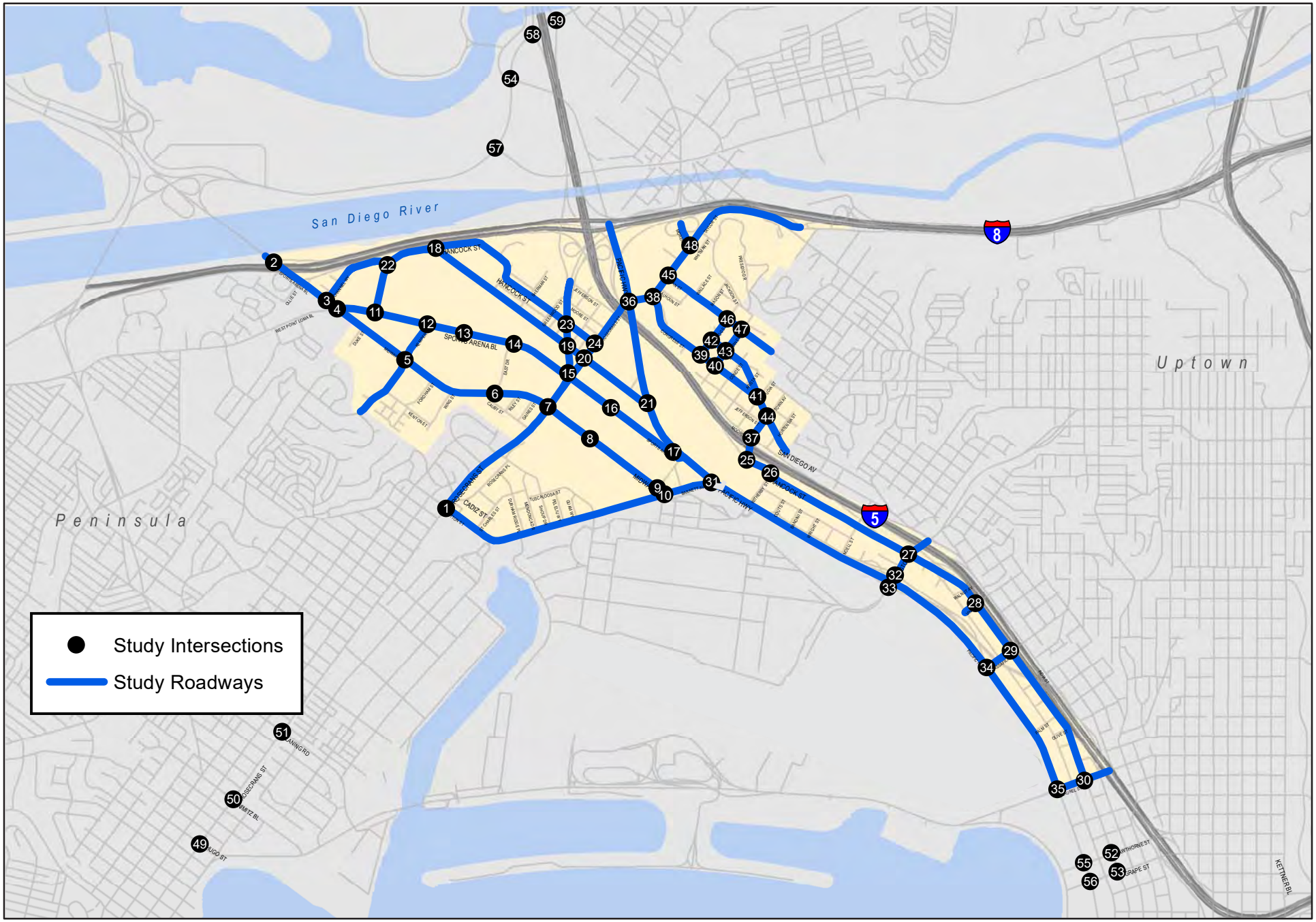
Table 2-1 Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual (2010)

2.2.1 Roadway Segment Level of Service Standards and Thresholds

Roadway segment level of service standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment level of service is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted Average Daily Traffic (ADT) volumes. Table 2-2 presents the roadway segment capacity and LOS standards utilized to analyze roadways in this report.



Midway-Pacific Highway and
Old Town Community Plan Update

CHEN RYAN

Figure 2-1
Project Study Area

Table 2-2 City of San Diego Roadway Segment Daily Capacity and Level of Service Standards

Roadway Functional Classification	Lanes	Level of Service				
		A	B	C	D	E
Freeway	8	60,000	84,000	120,000	140,000	150,000
Freeway	6	45,000	63,000	90,000	110,000	120,000
Freeway	4	30,000	42,000	60,000	70,000	80,000
Expressway	6	30,000	42,000	60,000	70,000	80,000
Prime Arterial	8	35,000	50,000	70,000	75,000	80,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
Major Arterial	7	22,500	31,500	45,000	50,000	55,000
Major Arterial	6	20,000	28,000	40,000	45,000	50,000
Major Arterial	5	17,500	24,500	35,000	40,000	45,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Major Arterial	3	11,250	15,750	22,500	26,250	30,000
Major Arterial	2	7,500	10,500	15,000	17,500	20,000
Major Arterial (one-way)	3	12,500	16,500	22,500	25,000	27,500
Major Arterial (one-way)	2	10,000	13,000	17,500	20,000	22,500
Collector (w/ two-way left turn lane)	4	10,000	14,000	20,000	25,000	30,000
Collector (w/ two-way left turn lane)	3	7,500	10,500	15,000	18,750	22,500
Collector (w/ two-way left turn lane)	2	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	4	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	3	4,000	5,000	7,500	10,000	11,000
Collector (w/o two-way left turn lane)	2	2,500	3,500	5,000	6,500	8,000
Collector (w/o two-way left turn lane) – no fronting property	2	4,000	5,500	7,500	9,000	10,000
Collector (one-way)	3	11,000	14,000	19,000	22,500	26,000
Collector (one-way)	2	7,500	9,500	12,500	15,000	17,500
Collector (one-way)	1	2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2	-	-	2,200	-	-

Source: City of San Diego Traffic Impact Study Manual (1998);
Updated with input from City of San Diego Planning Department Mobility Staff (2017)

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. LOS D is considered acceptable for Mobility Element roadway segments in the City of San Diego. Often, a roadway segment that is analyzed to be LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized (or intersection analysis, if arterial analysis is not applicable) to provide a more accurate indication of LOS.

2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Based on existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all study area.
- Peak Hour Factor: Based on existing peak hour counts.
- Existing Conditions Signal Timing: Based on existing signal timing plans (as of November 2012).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in *2000 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209*. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (sec/veh).

The *2000 HCM* methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections, based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The level of service criteria used for this technique is described in Table 2-3. The computerized analysis of intersection operations was performed utilizing the *Synchro 9.0 (2000 HCM methodology)* traffic analysis software (by Trafficware, 2011).

Table 2-3 Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board Special Report 209 (2000)

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections, were analyzed using the *2000 HCM* unsignalized intersection analysis methodology. The Synchro 8.0 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or

measured average control delay of all movements. Table 2-4 summarizes the level of service criteria for unsignalized intersections.

Table 2-4 Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: Highway Capacity Manual (2000)

The City of San Diego considers LOS D or better during the AM and PM peak hours to be acceptable intersection LOS.

2.2.3 Freeway/State Highway Level of Service Standards and Thresholds

Freeway LOS analysis is based upon procedures developed by Caltrans District 11. The procedure for calculating freeway LOS involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour ("K"), directional ("D") and truck ("T") factors to Average Daily Traffic (ADT) volumes. The base capacities were assumed to be 2,350 passenger-cars per hour per main lane (pc/h/ln) and 1,410 pc/h/ln for auxiliary lanes. A 0.95 peak-hour factor (PHF) is utilized for this analysis.

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in Table 2-5. The corresponding level of service represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour. LOS D or better is used in this study as the threshold for acceptable freeway operations based upon Caltrans and the SANDAG Regional Growth Management Strategy (RGMS) requirements.

2.2.4 Ramp Metering Analysis

Ramp metering is a means of controlling the volume of traffic entering the freeway with the goal of improving freeway main lane traffic operations and flow. Freeway ramp meter analyses estimate peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location.

Meter rates, which represent the number of vehicles permitted through the signal, onto the ramp and freeway, were obtained from Caltrans for use in the analysis. Ramp metering analyses to calculate delays at study area freeway ramps were conducted following the procedures outlined in the *City of San Diego Traffic Impact Study Manual (1998)*.

Table 2-5 Caltrans District 11 Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways and conventional highways			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for conventional highways			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
Used for freeways and expressways			
"F0"	1.01–1.25	Considerable (0-1 hour delay)	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe (1-2 hour delay)	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe (2-3 hour delay)	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe (3+ hours of delay)	Gridlock.

Source: SANTEC/ITE Guidelines for TIS in the San Diego Region.

2.2.5 Determination of Significant Impacts

This section outlines the thresholds for determining significant project-related impacts to roadways, intersections, and freeways in the City of San Diego. Generally, a significant impact is identified when the addition of project traffic results in a level of service dropping from LOS D or better to substandard LOS E or F. Table 2-6 summarizes the significant impact thresholds for facilities operating at a substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the (V/C) ratio.

Table 2-6 City of San Diego Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering*
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E	0.01	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Source: CEQA Significance Determination Thresholds, City of San Diego Development Services Department (2007)

Note:
* For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

3.0 Existing Conditions

This section describes study area intersections, roadways and freeway segments, as well as existing peak hour intersection traffic volumes, and daily roadway and freeway traffic volumes. A Vehicle Miles Traveled (VMT) comparison is also presented. Level of service analysis results for all study area facilities under Existing Conditions are presented separately below.

3.1 Vehicle Miles Traveled

The VMT generated within the communities were estimated using the SANDAG Series 12 Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to/from and within the community. Table 3-1 displays the total VMT generated within the Midway-Pacific Highway and Old Town communities and the average trip length under both the Base Year conditions. VMT calculations for the Midway-Pacific Highway and Old Town communities are included as Appendix A.

As shown, the Midway-Pacific Highway community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.5 miles vs. 5.2 miles; VMT of 156 miles vs. 27 miles, respectively).

The Old Town community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.6 miles vs. 5.2 miles; VMT of 182 miles vs. 27 miles, respectively).

Table 3-1 Vehicle Miles Traveled (VMT) Comparison Existing Conditions

Measure	Midway-Pacific Highway	Old Town	San Diego Region
	Base Year	Base Year	Base Year
Total VMT (miles)	730,121	151,300	85,182,063
Total # of Auto Trips	294,796	57,989	16,458,692
Average Trip Length[1] (miles)	2.5	2.6	5.2
Population	4,670	830	3,130,717
Daily VMT by Population (miles)	156	182	27

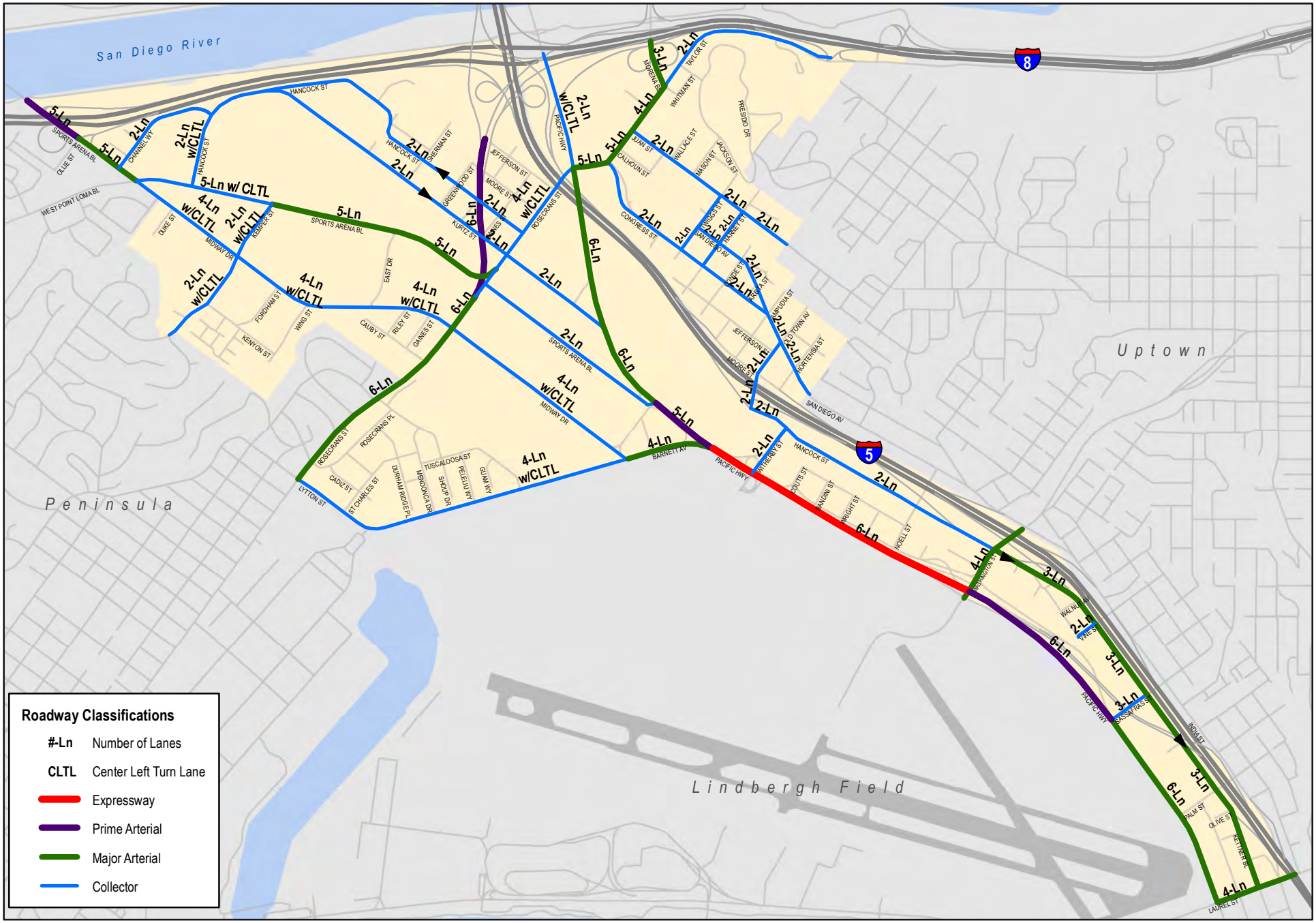
Source: SANDAG (2017); Chen Ryan Associates (2017)

Note:

[1]Average trip length is estimated by dividing the total VMT by the total # of auto trips.

3.2 Roadway Segment Analysis

Chapter 2 documents the selection of study area roadway segments and study intersections. The roadway network is comprised of regional facilities such as I-5 and I-8, as well as numerous arterials and local streets. Roadways outside the boundary of the Midway-Pacific Highway and Old Town communities were included in this assessment due to their location within the sphere of influence and will be required for the environmental studies. Figure 3-1 displays the functional classification for study area roadway segments. Table 3-2 provides a description of the study area roadway segments.



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Figure 3-1
Existing Roadway Classifications

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
North-South									
Midway/Pacific Highway Corridor									
Lytton St / Barnett Ave	Rosecrans St	Midway Dr	4-Lane Collector w/ CLTL	Commercial & Military Use	None	40	Yes	Class II	76'/86'
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76
	Kemper St	East Dr	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76'
	East Dr	Rosecrans St	4-Lane Collector w/ CLTL	Commercial	Parallel (NE Side)	35	Yes	None	60'/80'
	Rosecrans St	Barnett Ave	4-Lane Collector w/ CLTL	Commercial & Industrial	None	35	Yes	None	56'/72'
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	None	None	35	Yes	Class III	72'/84
	I-8 EB Ramps	W. Point Loma Blvd/ Sports Arena Blvd	6-Lane Major Arterial	Commercial & Multi-Family Residential	Parallel (SW Side)	35	Yes	Class III	76'/88'
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector w/ CLTL	Commercial & Multi-Family Residential	Parallel (Both)	35	Yes	None	96'/106'
	Kemper St	East Dr	5-Lane Major Arterial	Commercial & Private Recreation	Parallel (SW Side)	35	Yes	None	96'/106'
	East Dr	Rosecrans St	5-Lane Major Arterial	Commercial	None	35	Yes	None	82'/92'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	35	Intermittent	None	52'/82'
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	Commercial & Industrial	Parallel (Both)	30	Yes	None	40'/48'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	30	Gutter Only	None	48'/48'
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector w/ CLTL	Industrial	Parallel (Both)	30	Only on south side	None	62'/78'
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	Industrial	Parallel (Both)	30	Yes	None	40'/50'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Hancock St	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	Industrial	None	30	Yes	None	40'/50'
	Old Town Ave	Witherby St	2-Lane Collector	Industrial	None	30	Curb Only	None	44'/44'
	Witherby St	Washington St	2-Lane Collector	Industrial	Parallel (North) Diagonal (south)	30	Yes	None	60'/70'
Kettner Blvd	Washington St	Vine St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	None	40	Sidewalk on SW Side	None	42'/58'
	Vine St	Sassafras St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Sidewalk on SW Side	None	52'/58'
	Sassafras St	Laurel St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Yes	None	52'/68'
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector w/ CLTL	Transportation Related Utilities	Parallel (Both)	45	Yes	Class II	86'/108'
	Taylor St	Kurtz St	6-Lane Major Arterial	Institutional & Industrial	None	45	Yes	Class II	88'/110'
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	Industrial	None	45	Yes	Class II	88'/110'
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	Commercial & Industrial	None	45	Sidewalk on NE Side	Class III	92'/110'
	Barnett Ave	Washington St	Expressway	Commercial & Industrial	None	55	None	Class II	118'/118'
	Washington St	Sassafras St	6-Lane Prime Arterial	Commercial & Industrial	None	45	None	Class III	42' SB / 46' NB
	Sassafras St	Laurel St	6-Lane Major Arterial	Commercial & Industrial	None	45	Yes	Class III	98'/110'
Old Town									
Congress St	Taylor St	Twiggs St	2-Lane Collector	Commercial & Transit Station	Parallel (Both)	25	Yes	Class III	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	Class III	36'/48'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Congress St	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	Commercial, Single Family Residential & School	Parallel (Both)	25	Yes	Class III	36'/48'
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	52'/70'
	Harney St	Ampudia St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	40'/52'
	Ampudia St	Old Town Ave	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	Class III	42'/54'
	Old Town Ave	Hortensia St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	Class III	40'/56'
Juan St	Taylor St	Twiggs St	2-Lane Collector	Institutional, Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Harney St	San Juan Rd	2-Lane Collector	Commercial & Park	Parallel (Both)	30	Yes	None	36'/48'
Morena Boulevard	I-8 EB Ramps	Taylor Street	3-Lane Major	Commercial	None	Not Posted	Yes	None	56'/68'
East-West									
Midway/Pacific Highway Corridor									
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	None	40'/50'
Kemper St	Kenyon St	Midway Dr	2-Lane Collector w/ CLTL	Commercial & Industrial	Parallel (NW Side)	25	NW side only	None	62'/76'
	Midway Dr	Sports Arena Blvd	2-Lane Collector w/ CLTL	Commercial	Parallel (Both)	25	Yes	None	50'/60'
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	Commercial	None	35	Yes	None	106'/120'
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	Commercial, Multi-Family Residential & Industrial	None	35	Yes	None	106'/120'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	Commercial	None	35	Yes	None	106'/120'
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector w/ CLTL	Commercial & Institutional	Parallel (Both)	35	NW side only	None	82'/100'
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	Commercial & Industrial	None	40	Yes	Class III	92'/108'
Washington St	Frontage Rd	Pacific Hwy	4-Lane Major Arterial	None	None	25	Yes	None	62'/70'
	Pacific Hwy	Hancock St	4-Lane Major Arterial	Commercial	Parallel (SE Side)	25	Yes	None	60'/74'
Vine St	California St	Kettner Blvd	2-Lane Collector	Industrial	Diagonal (SE Side)	25	Yes	None	50'/78'
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	Institutional	None	25	Yes	None	52'/74'
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	Commercial	None	25	Yes	Class III	54'/70'
Old Town									
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	Transit Station	None	35	Yes	None	94'/118'
	Congress St	Juan St	5-Lane Major Arterial	Institutional	None	35	Yes	None	80'/98'
	Juan St	Morena Blvd	4-Lane Major Arterial	Commercial & Park	None	35	Yes	None	80'/100'
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	Commercial & Park	None	35	Curb Only	Class II	40'/42'
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	30'/42'
	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (Both)	25	Yes	None	30'/50'
Harney St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	None	30/42'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Harney St	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (SE Side)	25	Yes	None	30'/46'
Old Town Ave	Hancock St	Moore St	2-Lane Collector	None	None	25	SE Side Only	None	28'/36'
	Moore St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	38'/48'

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Figure 3-2 displays existing average daily traffic volumes for the study roadway segments, along with the current LOS. Table 3-3 displays existing roadway segment ADT and LOS for the Midway-Pacific Highway and Old Town San Diego communities. Appendix B contains the average daily traffic counts utilized in this report.

It should be noted that the existing conditions report was completed in November 2012; therefore, the traffic counts conducted to evaluate Existing conditions were collected in year 2012 as well. To ensure the counts used to evaluate existing conditions are still relevant to current conditions, a sampling of the 2012 counts were validated with recently conducted counts (collected in 2015 and 2016). Through the validation process limited growth was observed in the traffic volumes between year 2012 and year 2015/2016 conditions. Therefore, the counts used to evaluate existing conditions would still be considered valid.

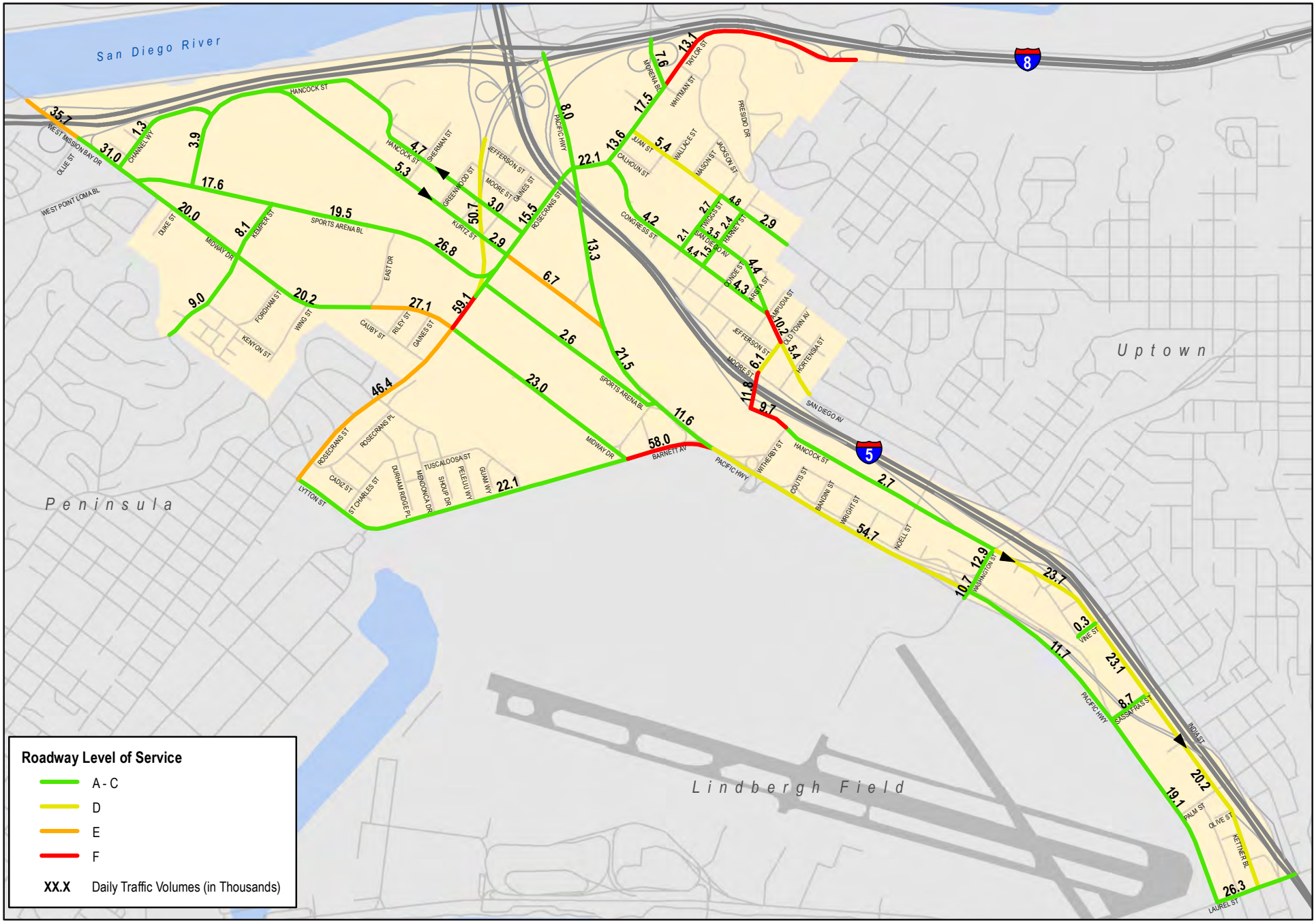
As shown in Table 3-2, the following nine (9) roadway segments operate at LOS E or F under Existing Conditions:

Midway/Pacific Highway Corridor

- Midway Drive, between East Drive and Rosecrans Street (LOS E)
- Kurtz Street, between Rosecrans Street and Pacific Highway (LOS E)
- Hancock Street, between Old Town Avenue and Witherby Street (LOS F)
- Rosecrans Street between Lytton Street and Midway Drive (LOS E)
- Rosecrans Street, between Midway Drive and Sports Arena Boulevard (LOS F)
- Barnett Avenue, between Midway Drive and Pacific Highway (LOS F)

Old Town

- San Diego Avenue, between Ampudia Street and Old Town Avenue (LOS F)
- Taylor Street, between Morena Blvd and I-8 EB Ramps (LOS F)
- Old Town Avenue, Hancock Street to Moore Street (LOS F)



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Figure 3-2
Existing Roadway Segment Traffic Volumes and Level of Service

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
North-South							
Midway/Pacific Highway Corridor							
Lytton Street/ Barnett Avenue	Rosecrans St	Midway Dr	4-Lane Collector (CLTL)	30,000	22,070	0.74	D
Midway Dr	W. Point Loma Blvd/Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	19,960	0.67	C
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,240	0.67	D
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	27,600	0.92	**E**
	Rosecrans St	Barnett Ave	4-Lane Collector (CLTL)	30,000	23,000	0.77	D
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	50,000	35,670	0.71	C
	I-8 EB Ramps	W. Point Loma Blvd/Sports Arena Blvd	6-Lane Major Arterial	50,000	31,010	0.62	C
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector (CLTL)	37,500	17,600	0.47	B
	Kemper St	East Dr	5-Lane Major Arterial	45,000	19,520	0.43	B
	East Dr	Rosecrans St	5-Lane Major Arterial	45,000	26,800	0.6	C
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	2,600	0.33	B
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	5,340	0.31	B
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	6,690	0.84	**E**
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	3,930	0.26	A
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	17,500	4,710	0.27	A
	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	17,500	2,990	0.17	A
	Old Town Ave	Witherby St	2-Lane Collector	8,000	9,680	1.21	**F**
	Witherby St	Washington St	2-Lane Collector	8,000	2,740	0.34	B
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	23,720	0.86	D
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	23,080	0.84	D
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	20,150	0.73	C
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	7,460	0.5	C
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	13,300	0.27	A
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	21,470	0.43	B
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	50,000	11,600	0.23	A
	Barnett Ave	Washington St	Expressway	80,000	54,690	0.68	C
	Washington St	Sassafras St	6-Lane Prime Arterial	60,000	11,650	0.19	A

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Pacific Hwy	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	19,160	0.38	B
Old Town							
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	4,230	0.53	C
	Twiggs St	Harney St	2-Lane Collector	8,000	4,380	0.55	C
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	4,280	0.54	C
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	3,540	0.44	C
	Conde St	Arista Ave	2-Lane Collector	8,000	4,350	0.54	C
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	10,160	1.27	**F**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	5,400	0.68	D
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	5,430	0.68	D
	Twiggs St	Harney St	2-Lane Collector	8,000	4,810	0.6	C
	Harney St	San Juan Rd	2-Lane Collector	8,000	4,230	0.53	C
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	7,585	.25	A
East-West							
Midway/Pacific Highway Corridor							
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	8,000	1,280	0.16	A
Kemper St	Kenyon St	Midway Dr	2-Lane Collector (CLTL)	15,000	9,010	0.6	C
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,120	0.54	C
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	50,700	0.85	D
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	50,000	46,400	0.93	**E**
	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	50,000	59,100	1.18	**F**
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector (CLTL)	30,000	15,500	0.52	C
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	40,000	57,954	1.45	**F**
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	10,680	0.27	A
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	12,870	0.32	A
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	250	0.03	A
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	8,700	0.79	D
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	26,290	0.66	C
Old Town							
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	22,100	0.55	C
	Congress St	Juan St	5-Lane Major Arterial	45,000	13,560	0.30	A
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	17,530	0.44	B
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	13,140	1.64	**F**
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,080	0.26	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,670	0.33	B

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,520	0.19	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,350	0.29	A
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	11,750	1.47	**F**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,120	0.77	D

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

3.3 Intersection Analysis

As described in Chapter 2, a total of fifty-nine (59) study intersections were analyzed as part of the Existing Conditions assessment, including thirty-five (35) intersections located within Midway-Pacific Highway, thirteen (13) intersections located within Old Town, and eleven (11) intersections in adjacent communities.

Figure 3-3 displays current intersection geometries, while Figure 3-4 shows existing AM and PM peak period turning movements. The study area intersection traffic counts are provided in Appendix D.

Table 3-4 displays the existing AM and PM peak hour LOS analysis results for the key study area intersections. LOS analyses were conducted using the methodologies described in Chapter 2.0. Intersection LOS calculation worksheets for Existing Conditions are provided in Appendix E. As shown, the following four (4) study intersections currently operate at LOS E or F:

Midway-Pacific Highway

- Lytton Street & Rosecrans Street (LOS E – AM peak hour)
- West Mission Bay Drive & I-8 WB Off-Ramp (LOS E – PM peak hour)

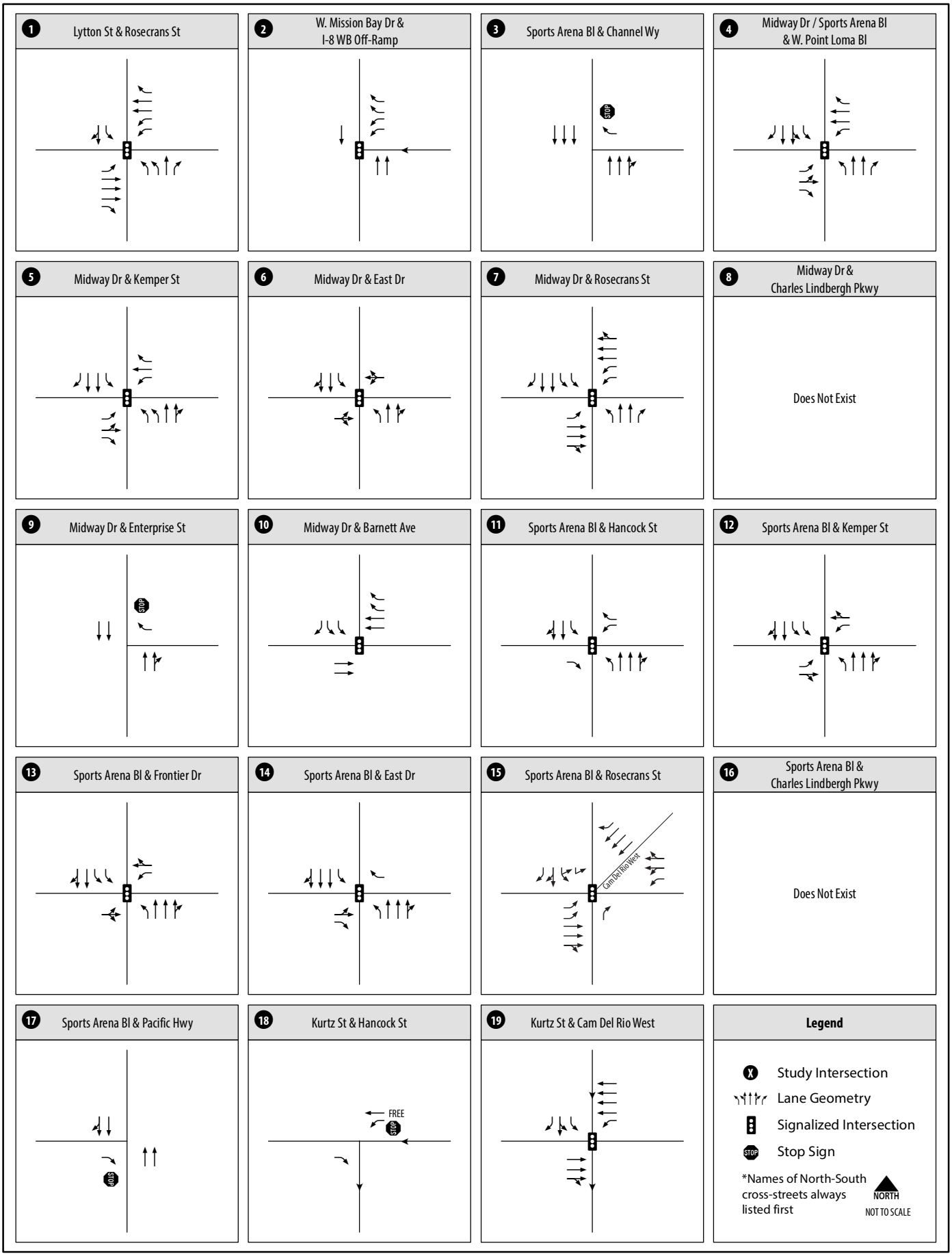
Old Town

- Pacific Highway & Taylor Street (LOS E – AM peak hour)

Intersections Outside of Study Communities

- Lowell Street/Nimitz Boulevard & Rosecrans Street (LOS E – PM peak hour)

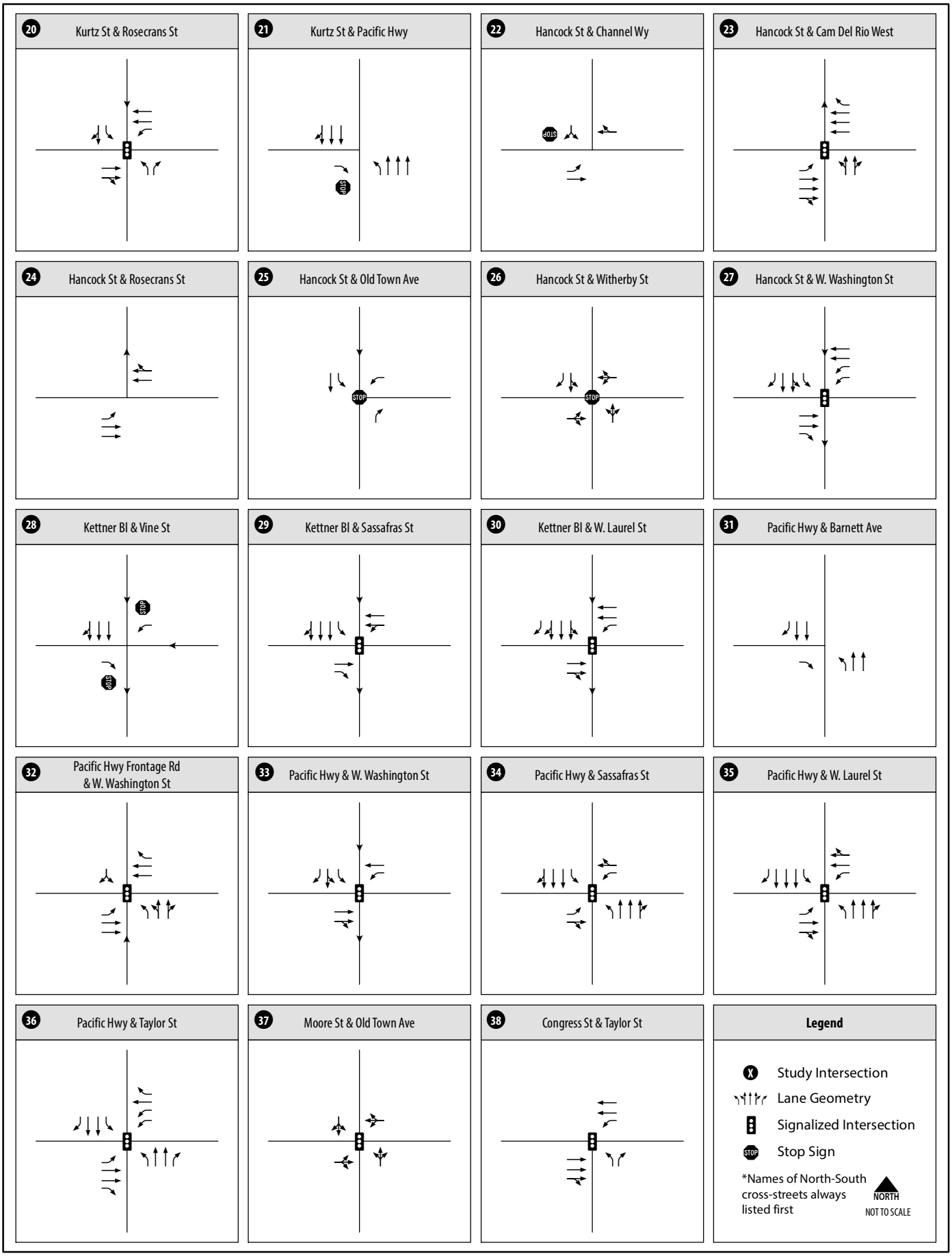
Figure 3-5 graphically displays the existing AM and PM peak hour intersection LOS results.



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Figure 3-3
Existing Intersection Geometrics (Intersections 1-19)



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Figure 3-3
Existing Intersection Geometrics (Intersections 20-38)

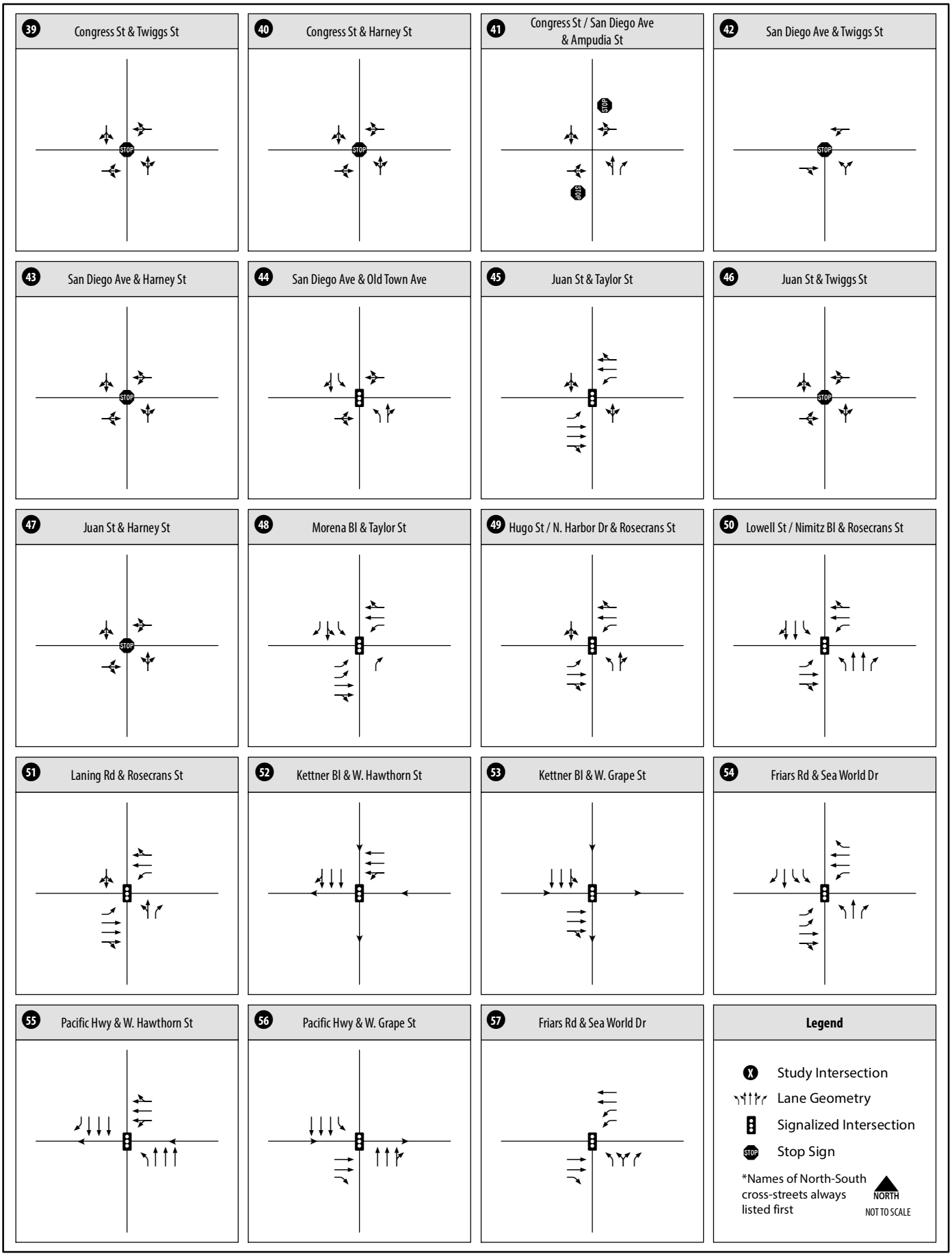
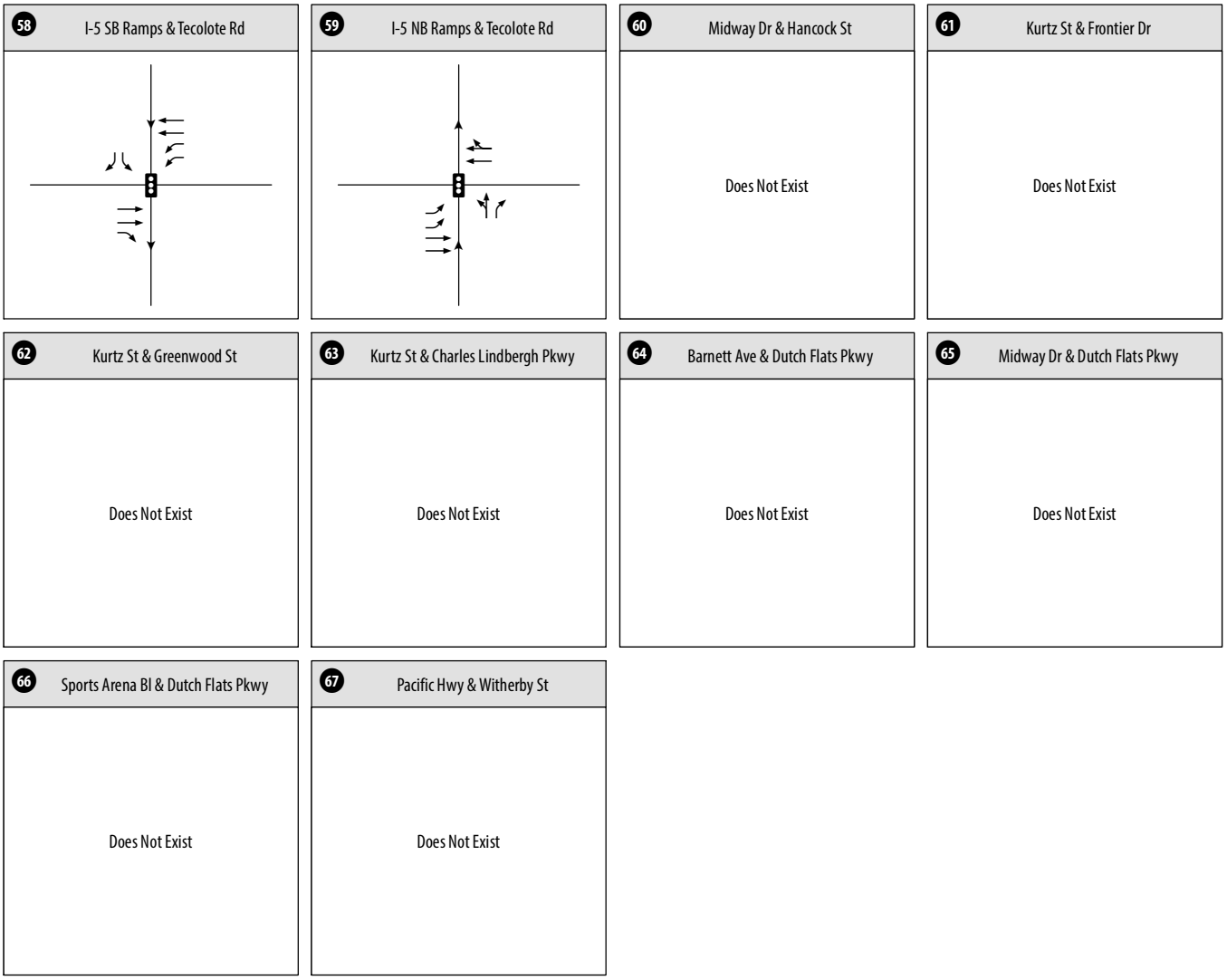


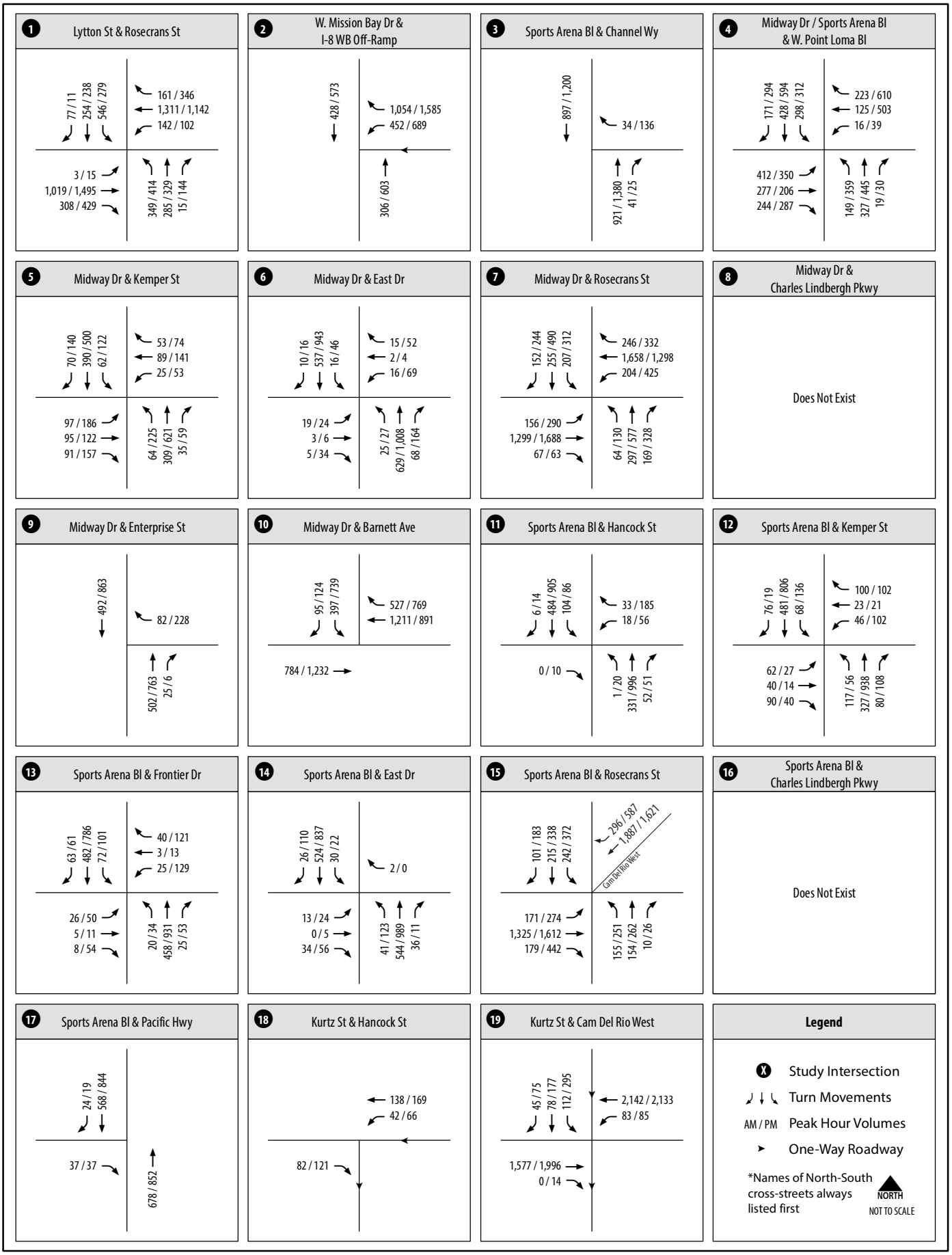
Figure 3-3
Existing Intersection Geometrics (Intersections 39-57)



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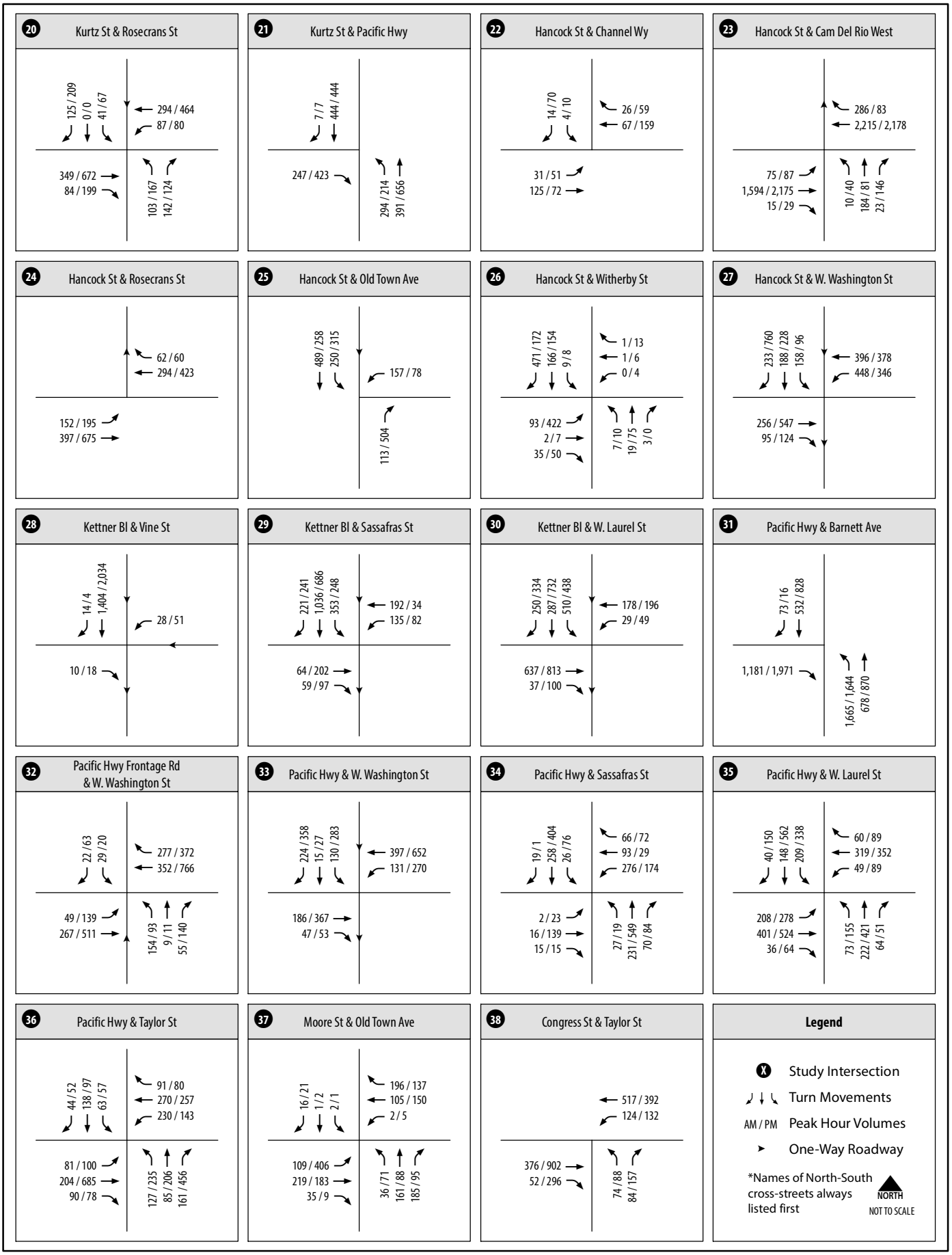
Figure 3-3
Existing Intersection Geometrics (Intersections 58-67)



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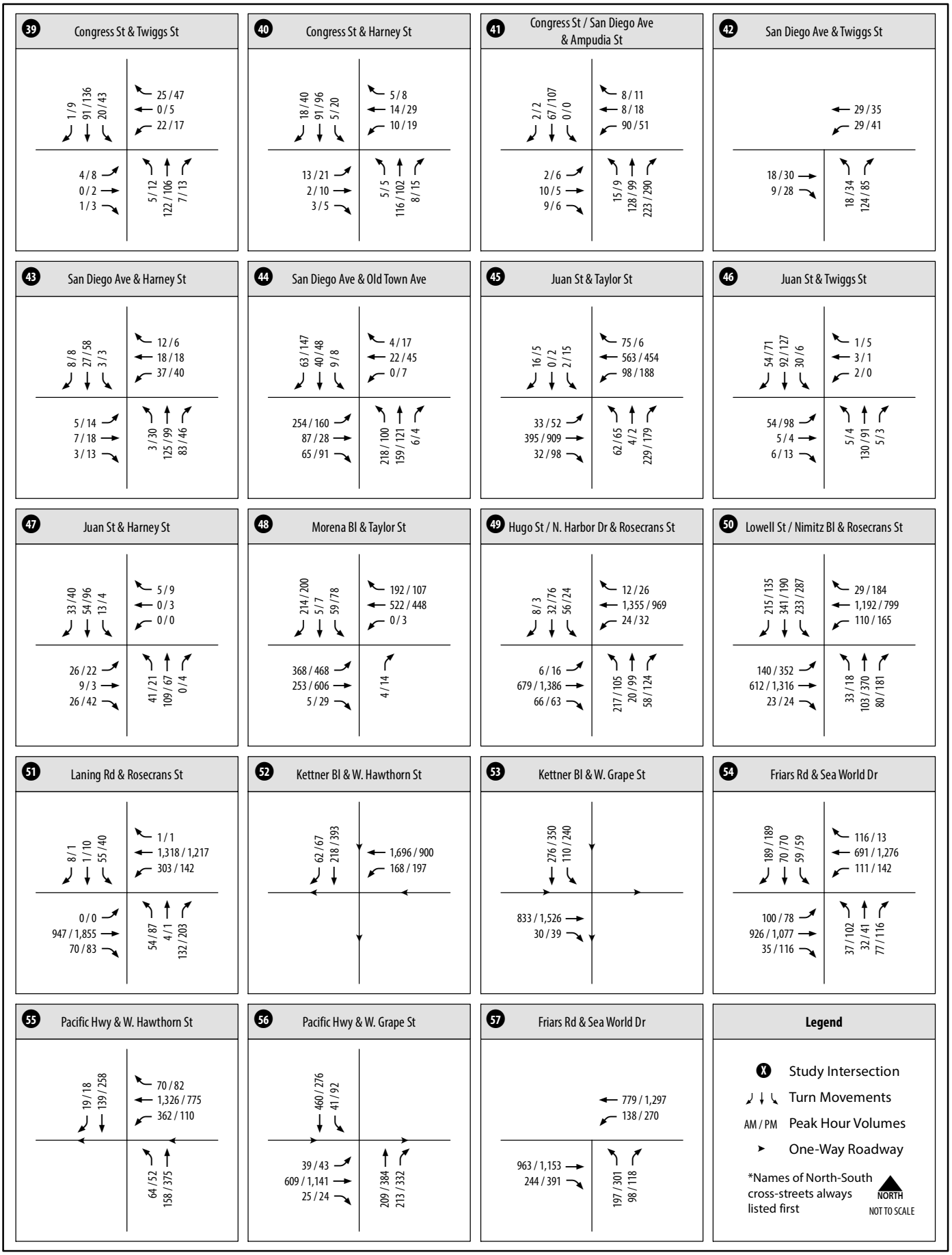
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 1-19)



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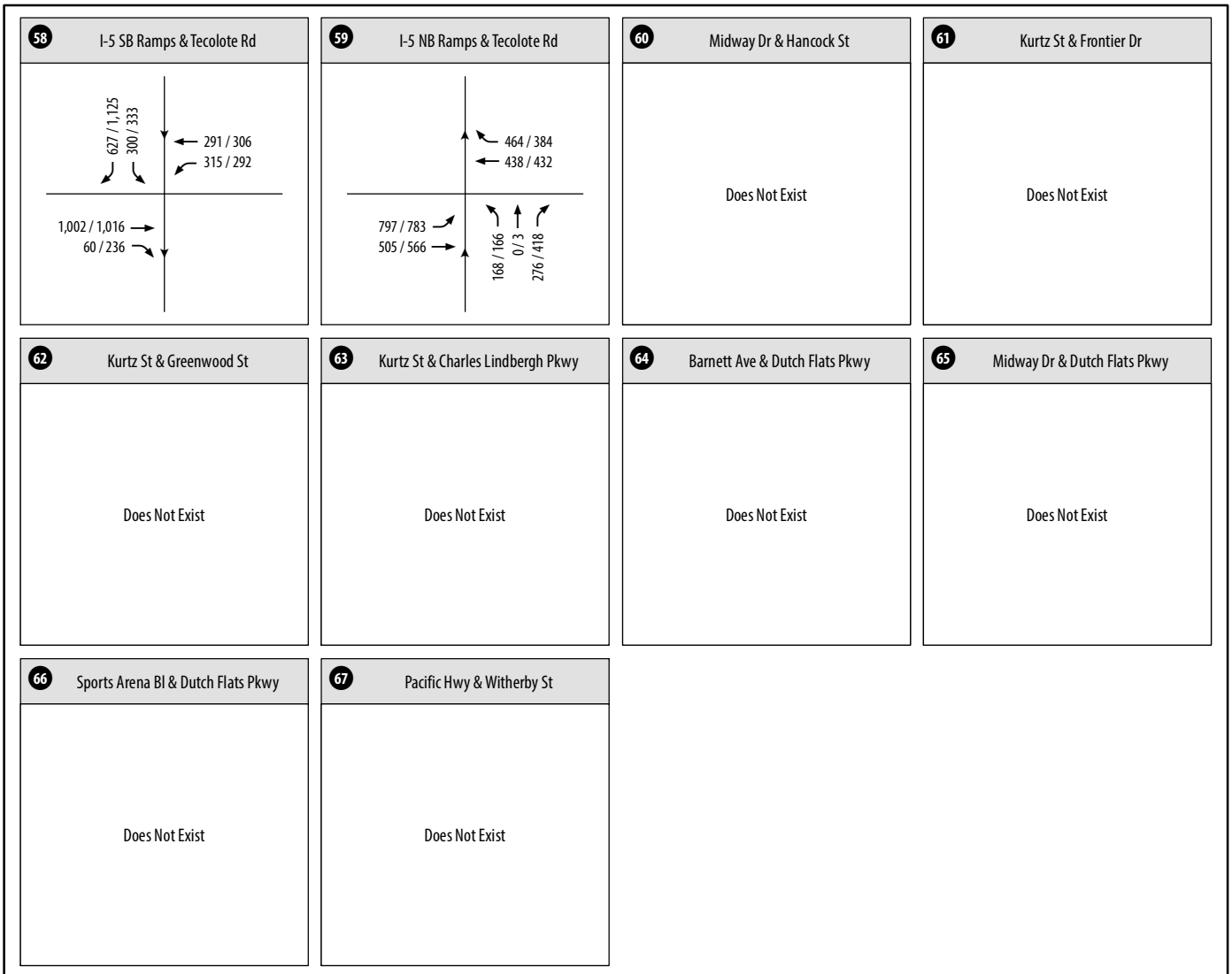
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 20-38)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movement (Intersections 39-57)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 58-67)

Table 3-4 Existing AM/PM Peak Hour Level of Service

No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
Midway-Pacific Highway						
1	Lytton St and Rosecrans St	Signal	**65.4**	**E**	44.5	D
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	14.8	B	**59.5**	**E**
3	Sports Arena Blvd and Channel Way	OWSC	11.2	B	14.7	B
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	36.6	D	47.2	D
5	Midway Dr and Kemper St	Signal	22.7	C	37.3	D
6	Midway Dr and East Dr	Signal	4.8	A	13.0	B
7	Midway Dr and Rosecrans St	Signal	34.9	C	49.1	D
8	Midway Dr and Unknown Future Connector 1	Unknown	*Does Not Exist*			
9	Midway Dr and Enterprise St	OWSC	11.0	B	18.1	C
10	Midway Dr and Barnett Ave	Signal	13.8	B	19.8	B
11	Sports Arena Blvd and Hancock St	Signal	10.0	A	13.1	B
12	Sports Arena Blvd and Kemper St	Signal	18.8	B	17.5	B
13	Sports Arena Blvd and Sports Arena Driveway	Signal	17.1	B	24.8	C
14	Sports Arena Blvd and East Dr	Signal	26.0	C	11.9	B
15	Sports Arena Blvd and Rosecrans St	Signal	35.7	D	43.2	D
16	Sports Arena Blvd and Unknown Future Connector 1	Unknown	*Does Not Exist*			
17	Sports Arena Blvd and Pacific Hwy	OWSC	10.6	B	12.0	B
18	Kurtz St and Hancock St	OWSC	*No Control Delay*			
19	Kurtz St and Camino Del Rio West	Signal	9.4	A	20.2	C
20	Kurtz St and Rosecrans St	Signal	20.0	B	31.7	C
21	Kurtz St and Pacific Hwy	OWSC	11.2	B	13.7	B
22	Hancock St and Channel Wy	OWSC	9.3	A	10.5	B
23	Hancock St and Camino Del Rio West	Signal	24.3	C	20.3	C
24	Hancock St and Rosecrans St	Unsignalized	*No Conflicting Movements*			
25	Hancock St and Old Town Ave	AWSC	16.9	C	14.6	B
26	Hancock St and Witherby St	AWSC	16.0	C	23.5	C
27	Hancock St and Washington St	Signal	22.8	C	25.9	C
28	Kettner Blvd and Vine St	TWSC	14.3	B	23.2	C
29	Kettner Blvd and Sassafras St	Signal	12.0	B	11.9	B
30	Kettner Blvd and West Laurel St	Signal	20.0	B	29.7	C
31	Pacific Hwy and Barnett Ave	Grade Separated	*No Control Delay*			
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	19.4	B	36.0	D
33	Pacific Hwy and Washington St @ Pacific St	Signal	18.7	B	31.2	C
34	Pacific Hwy and Sassafras St	Signal	14.4	B	27.3	C
35	Pacific Hwy and West Laurel St	Signal	48.4	D	42.9	D
Old Town						
36	Pacific Hwy and Taylor St	Signal	**64.6**	**E**	33.5	C
37	Moore St and Old Town Ave	Signal	16.4	B	16.4	B

Table 3-4 Existing AM/PM Peak Hour Level of Service

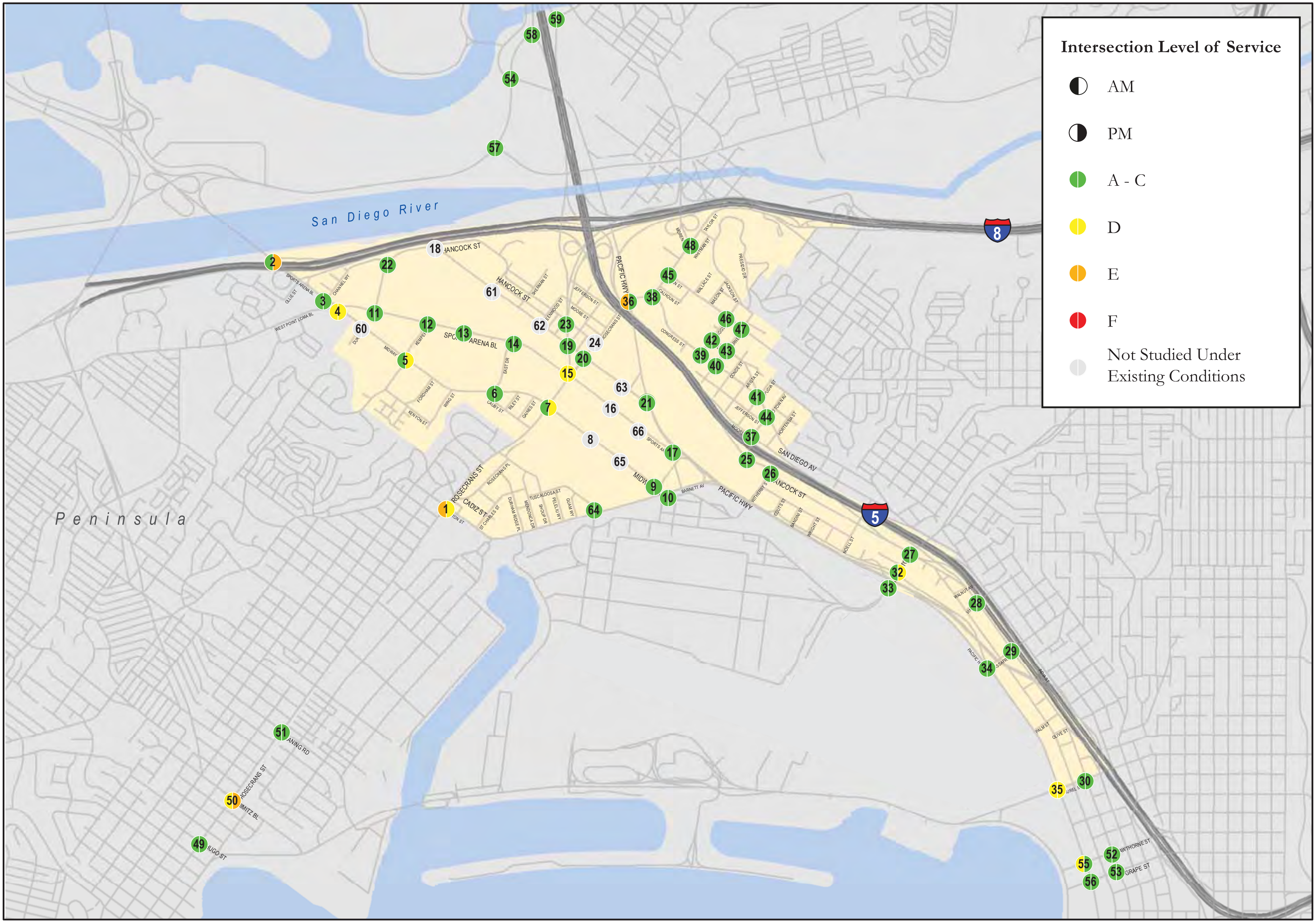
No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
38	Congress St and Taylor St	Signal	19.9	B	21.7	C
39	Congress St and Twiggs St	AWSC	8.1	A	8.6	A
40	Congress St and Harney St	AWSC	8.1	A	8.3	A
41	Congress St and San Diego Ave/Ampudia St	TWSC	12.3	B	11.5	B
42	San Diego Ave and Twiggs St	AWSC	7.9	A	8.0	A
43	San Diego Ave and Harney St	AWSC	8.2	A	8.2	A
44	San Diego Ave and Old Town Ave	Signal	18.4	B	11.6	B
45	Juan St and Taylor St	Signal	10.4	B	10.7	B
46	Juan St and Twiggs St	AWSC	8.8	A	8.5	A
47	Juan St and Harney St	AWSC	8.3	A	7.9	A
48	Morena Blvd and Taylor St	Signal	22.4	C	16.4	B
Intersections Outside of Study Communities						
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	14.7	B	20.7	C
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	41.2	D	**63.3**	**E**
51	Laning Rd and Rosecrans St	Signal	15.5	B	12.9	B
52	Kettner Blvd and West Hawthorn St	Signal	11.1	B	15.0	B
53	Kettner Blvd and West Grape St	Signal	7.4	A	8.7	A
54	Pacific Hwy and Sea World Dr	Signal	19.9	B	25.6	C
55	Pacific Hwy and West Hawthorn St	Signal	35.4	D	20.2	C
56	Pacific Hwy and West Grape St	Signal	16.8	B	24.2	C
57	Friars Rd and Sea World Dr	Signal	11.5	B	13.8	B
58	I-5 SB Ramps and Sea World Dr	Signal	15.5	B	16.3	B
59	I-5 NB Ramps and Sea World Dr	Signal	21.4	C	28.4	C

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Notes:

Bold letter indicates substandard LOS.

1 Signal = Traffic Signal; OWSC = One-Way Stop-Control; 3WSC = Three-Way Stop-Control; AWSC = All-Way Stop-Control;



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Figure 3-5
Existing AM/PM Peak Hour Intersection LOS Results

3.4 Freeway Segment Analysis

Two regional corridors run adjacent to the Midway-Pacific Highway and Old Town communities, providing regional access to and from the communities.

Interstate 5 (I-5) is a north-south freeway that traverses the United States from the Mexican to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the major metropolitan areas of San Diego, Los Angeles, Sacramento and the eastern portion of the San Francisco Bay Area. I-5 bisects the two study communities and can be accessed via the following roadway interchanges:

Midway-Pacific Highway

- Camino Del Rio West (NB on & SB off only)
- Pacific Highway (SB on & NB off only)
- Washington Street
- Palm Street (SB on only)
- Sassafras Street (NB & SB off only)

Old Town

- Old Town Avenue

Interstate 8 (I-8) is an east-west freeway that extends from the western coast of San Diego to central Arizona. I-8 runs just north of the study communities, with access provided via the following roadway interchanges:

Midway-Pacific Highway

- West Mission Bay Drive (EB & WB off only)
- Camino Del Rio West (EB on & WB off only)

Old Town

- Taylor Street

Table 3-5 displays freeway segment LOS analysis results for key freeway segments in the vicinity of the Midway-Pacific Highway and Old Town communities. Caltrans freeway volume worksheets are provided in Appendix F.

As shown, all key freeway segments are currently operating at LOS D or better with the exception of the following three (3) segments:

- I-5 NB, between Sea World Drive and I-8 (LOS E: PM Peak Period)
- I-5 SB, between I-8 and Old Town Avenue (LOS E: PM Peak Period)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: PM Peak Period)

Table 3-5 Existing Freeway Segment Level of Service Results

Freeway	Segment	ADT	Heavy Vehicle	Dir	Lanes	Capacity	AM Peak Hr %	AM Split	AM Peak Hr Vol	AM V/C	AM LOS	PM Peak Hr %	PM Split	PM Peak Hr Vol	PM V/C	PM LOS
I-8	Beginning of Freeway to Sports Arena Blvd	46,500	1.2%	EB	2M + 0A	4,700	6.3%	60%	1,900	0.40	A	8.5%	72%	3,200	0.68	C
				WB	2M + 0A	4,700		40%	1,300	0.28	A		28%	1,300	0.28	A
	Sports Arena Blvd to I-5	102,000	2.8%	EB	3M + 1A	8,450	6.4%	60%	4,400	0.52	B	7.8%	63%	5,600	0.66	C
				WB	3M + 1A	8,450		40%	2,900	0.34	A		37%	3,400	0.40	A
	I-5 to Morena Blvd	132,000	2.8%	EB	4M + 1A	10,800	6.4%	41%	3,900	0.36	A	7.2%	51%	5,500	0.51	B
				WB	5M + 0A	11,750		59%	5,500	0.47	B		49%	5,200	0.44	B
	Morena Blvd to Hotel Circle	191,000	2.8%	EB	4M + 1A	10,800	6.5%	47%	6,500	0.60	B	8.2%	55%	9,700	0.90	D
				WB	5M + 0A	11,750		53%	7,400	0.63	C		45%	8,000	0.68	C
I-5	Clairemont Dr to Sea World Dr	220,000	4.5%	NB	5M + 0A	11,750	6.4%	61%	10,000	0.85	D	8.3%	51%	10,700	0.91	D
				SB	5M + 0A	11,750		39%	6,200	0.53	B		49%	10,300	0.88	D
	Sea World Dr to I-8	199,000	4.5%	NB	4M + 1A	10,800	6.4%	62%	9,000	0.83	D	8.4%	52%	10,000	0.93	**E**
				SB	4M + 2A	12,200		38%	5,400	0.44	B		48%	9,200	0.75	C
	I-8 to Old Town Ave	199,000	4.1%	NB	4M + 1A	10,800	6.9%	49%	7,700	0.71	C	8.2%	39%	7,300	0.68	C
				SB	5M + 0A	11,750		51%	7,900	0.67	C		61%	11,400	0.97	**E**
	Old Town Ave to Washington St	192,000	4.1%	NB	4M + 0A	9,400	6.9%	49%	7,500	0.80	D	8.0%	51%	9,000	0.96	**E**
				SB	5M + 0A	11,750		51%	7,700	0.66	C		49%	8,600	0.73	C
	Washington St to Pacific Highway	142,000	4.1%	NB	4M + 0A	9,400	6.9%	54%	6,000	0.64	C	8.1%	36%	4,800	0.51	B
				SB	4M + 0A	9,400		46%	5,200	0.55	B		64%	8,400	0.89	D
	Pacific Highway to Laurel Street	147,000	4.1%	NB	4M + 1A	10,800	6.7%	58%	6,600	0.61	B	7.0%	49%	5,800	0.54	B
				SB	4M + 1A	10,800		42%	4,700	0.44	B		51%	6,100	0.56	B
	Laurel Street to Hawthorne Street	183,000	4.1%	NB	4M + 1A	10,800	6.7%	57%	8,100	0.75	C	7.3%	46%	7,100	0.66	C
				SB	4M + 1A	10,800		43%	6,000	0.56	B		54%	8,200	0.76	C

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (2016)

3.5 Freeway Ramp Metering Analysis

Table 3-6 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 3-6 Existing Freeway Ramp Meter Analysis

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Volume	Excess Demand	Delay (Minutes)	Queue (Feet)
I-8 EB / Sports Arena Boulevard	PM	2	1	490	913	423	51.8	12,267
I-5 SB / Sea World Drive	AM	1	1	318	375	57	10.8	1,653
	PM	1	1	318	528	210	39.6	6,090
I-5 NB / Sea World Drive	AM	2	0	1,118	1,261	143	7.7	4,147
	PM	2	0	1,320	1,170	0	0.0	0
I-5 SB / Old Town Avenue	PM	1	0	352	360	8	1.4	232
I-5 NB / Old Town Avenue	AM	2	0	670	466	0	0.0	0
	PM	2	0	636	631	0	0.0	0

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

As shown in Table 3-6, the following ramp meters within the study communities experience delays in excess of 15 minutes:

- I-8 EB / Sports Arena Boulevard (PM Peak) – 51.8 minute delay and 12,267 feet of queue
- I-5 SB / Sea World Drive (PM Peak) – 39.6 minute delay and 6,090 feet of queue

4.0 Preferred Plan

This chapter assess the potential traffic impacts of the Preferred Plan by comparing Preferred Plan conditions to Existing Conditions. Evaluations are provided for vehicle miles traveled (VMT), roadway segment and intersection peak hour operations, and freeway segment and ramp meter operations.

The Preferred Plan forecast traffic volumes were developed utilizing the SANDAG Series 12 Preferred Plan Future Year 2035. The modeling methodology and assumptions are provided in Chapter 5 of the Midway-Pacific Highway and Old Town Community Plan Update Mobility Report. Final SANDAG Series 12 Forecast Model Results for Year 2035, including manual adjustments, are provided in Appendix F.

4.1 Vehicle Miles Traveled

The vehicle miles traveled (VMT) within the communities were estimated using the SANDAG Series 12 Preferred Plan Future Year 2035 and Base Year models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to, from, and within the communities. Table 4-1A and Table 4-1B display the total VMT generated and average trip length within the Midway-Pacific Highway and Old Town communities, respectively, under both Preferred Plan and Base Year conditions. The results for the San Diego region are also presented in the tables for comparison purposes. VMT calculations are provided as Appendix G.

Table 4-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	880,518	150,397	20.6%	85,182,063	108,974,617	23,792,554	27.9%
Total # of Auto Trips	294,796	324,655	29,859	10.1%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	9.5%	5.2	5.4	0.2	3.7%
Population	4,670	22,695	18,025	386.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	39	-118	-75.2%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:
1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Preferred Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 9.5%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-75.2%).

Table 4-1B Vehicle Miles Traveled Comparison – Old Town Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,581	20,281	13.4%	85,182,063	108,974,617	23,792,554	27.9%
Total # of Auto Trips	57,989	59,792	1,803	3.1%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	10.0%	5.2	5.4	0.2	3.7%
Population	830	2,430	1,600	192.8%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	182	71	-112	-61.3%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region. With the implementation of the Preferred Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 10.0%. However, the anticipated population increase within the community results in an overall decrease in the daily VMT by population (-61.3%).

4.2 Roadway Segment Analysis

The majority of roadways within the Midway-Pacific Highway and Old Town communities will remain unchanged from existing conditions, however, the Preferred Plan includes roadway improvements and new roadway segments intended to accommodate anticipated future traffic demands. Table 4-2 identifies the proposed roadway segment modifications, including new roadways, in the Midway-Pacific Highway community.

Due to the historic nature of the Old Town community, the Preferred Plan does not propose any roadway widenings or other roadway capacity improvements. However, San Diego Avenue, between Twiggs Street and Conde Street, has a large curb-to-curb width (50 feet) for a standard two-lane collector roadway (typically 40 feet wide). Therefore, in order to better utilize the curb-to-curb right-of-way, it is recommended that the parallel parking on the east side of the roadway be converted to angled parking. The recommended improvement will not affect the capacity of the roadway and will increase the already constrained parking capacity within the Old Town community.

Table 4-2 Summary of Roadway Improvements

Roadway	Segment	Existing Configuration	Recommended Classification
Segment Modifications			
Lytton St / Barnett Ave	Rosecrans St and Midway Dr	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Sports Arena Blvd	I-8 WB Ramps and I-8 EB Ramps	5-Lane Prime Arterial	6-Lane Prime Arterial
Sports Arena Blvd	I-8 EB Ramps and Rosecrans St	5-Lane Major Arterial	6-Lane Major Arterial
Sports Arena Blvd	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Kurtz St	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Rosecrans St	Lytton St and Sports Arena Blvd	6-Lane Major Arterial	6-Lane Prime Arterial
Rosecrans St	Sports Arena Blvd and Taylor St	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Hancock St	Kurtz St and Rosecrans Street	2-Lane Collector (One-Way)	3-Lane Major (One-Way)
Hancock St	Old Town Ave and Witherby St	2-Lane Collector	4-Lane Collector
Barnett Ave	Midway Dr and Pacific Hwy	4-Lane Major Arterial	6-Lane Prime Arterial
Midway Drive	Rosecrans St and Barnett Avenue	4-Lane Collector W/CLTL	4-Lane Major Arterial
New Roadways			
Kemper St	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Frontier Dr	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Greenwood St	Kurtz St and Sports Arena Blvd	Does Not Exist	2-Lane Collector
Charles Lindbergh Pkwy	Kurtz St and Midway Dr	Does Not Exist	2-Lane Collector W/ CLTL
Dutch Flats Pkwy	Sports Arena Blvd and Barnett Ave	Does Not Exist	2-Lane Collector W/ CLTL

Source: Chen Ryan Associates (June 2016)

Table 4-3 displays the level of service analysis results for the study area roadway segments under both the Preferred Plan and Existing Conditions within the Midway-Pacific Highway and Old Town communities. The proposed roadway classifications and forecast ADT and LOS under buildout of the Preferred Plan are shown in Figure 4-1 and Figure 4-2.

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
North-South														
Midway Pacific Highway														
Lytton Street/ Barnett Ave	Rosecrans St	Midway Dr	4-Lane Major Arterial	40,000	23,700	0.59	C	4-Lane Major (CLTL)	30,000	22,070	0.74	D	-0.15	No
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	23,700	0.79	D	4-Lane Collector (CLTL)	30,000	19,960	0.67	C	0.12	No
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,300	0.68	D	4-Lane Collector (CLTL)	30,000	20,240	0.67	D	0.01	No
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	26,800	0.89	E	4-Lane Collector (CLTL)	30,000	27,600	0.92	E	-0.03	No
	Rosecrans St	Barnett Ave	4-Lane Major	40,000	28,300	0.71	C	4-Lane Collector (CLTL)	30,000	23,000	0.77	D	-0.06	No
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	6-Lane Prime Arterial	60,000	46,700	0.78	C	5-Lane Prime Arterial	50,000	35,670	0.71	C	0.07	No
	I-8 EB Ramps	W. Point Loma Blvd	6-Lane Major Arterial	50,000	41,000	0.82	D	6-Lane Major Arterial	50,000	31,010	0.62	C	0.2	No
	W. Point Loma Blvd/Midway Dr	Kemper St	6-Lane Major Arterial	50,000	20,200	0.40	B	5-Lane Collector (CLTL)	37,500	17,600	0.47	B	-0.07	No
	Kemper St	East Dr	6-Lane Major Arterial	50,000	25,500	0.51	B	5-Lane Major Arterial	45,000	19,520	0.43	B	0.08	No
	East Dr	Rosecrans St	6-Lane Major Arterial	50,000	18,500	0.37	A	5-Lane Major Arterial	45,000	26,800	0.6	C	-0.23	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	10,800	0.72	D	2-Lane Collector	8,000	2,600	0.33	B	0.39	No
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	14,900	0.85	D	2-Lane Collector (One-Way)	17,500	5,340	0.31	A	0.54	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	7,300	0.49	C	2-Lane Collector	8,000	6,690	0.84	E	-0.35	No

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Hancock St	Sports Arena Blvd	Kurtz St	4-Lane Collector	15,000	2,800	0.19	A	2-Lane Collector (CLTL)	15,000	3,930	0.26	A	-0.07	No
	Kurtz St	Camino Del Rio West	3-Lane Major (One-Way)	27,500	18,300	0.67	C	2-Lane Collector (One-Way)	17,500	4,710	0.27	A	0.40	No
	Camino Del Rio West	Rosecrans St	3-Lane Major (One-Way)	27,500	8,100	0.29	A	2-Lane Collector (One-Way)	17,500	2,990	0.17	A	0.12	No
	Old Town Ave	Witherby St	4-Lane Collector	15,000	11,200	0.75	D	2-Lane Collector	8,000	9,680	1.21	F	-0.46	No
	Witherby St	Washington St	2-Lane Collector	8,000	5,200	0.65	D	2-Lane Collector	8,000	2,740	0.34	B	0.31	No
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	34,200	1.24	F	3-Lane Major (One-Way)	27,500	23,720	0.86	D	0.38	Yes
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	34,100	1.24	F	3-Lane Major (One-Way)	27,500	23,080	0.84	D	0.40	Yes
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	35,500	1.29	F	3-Lane Major (One-Way)	27,500	20,150	0.73	C	0.56	Yes
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	10,800	0.72	D	2-Lane Collector (CLTL)	15,000	7,460	0.50	C	0.22	No
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	19,400	0.39	A	6-Lane Major Arterial	50,000	13,300	0.27	A	0.12	No
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	24,500	0.49	B	6-Lane Major Arterial	50,000	21,470	0.43	B	0.06	No
	Sports Arena Blvd	Barnett Ave	5-Lane Major Arterial	45,000	18,000	0.40	B	5-Lane Prime Arterial	50,000	11,600	0.23	A	0.17	No
	Barnett Ave	Washington St	Expressway	80,000	51,200	0.64	C	Expressway	80,000	54,690	0.68	C	-0.04	No
	Washington St	Sassafras St	6-Lane Major Arterial	50,000	18,600	0.37	A	6-Lane Prime Arterial	60,000	11,650	0.19	A	0.18	No
	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	32,400	0.65	C	6-Lane Major Arterial	50,000	19,160	0.38	B	0.27	No
Old Town														
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,400	0.93	E	2-Lane Collector	8,000	4,230	0.53	C	0.4	Yes

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Congress St	Twiggs St	Harney St	2-Lane Collector	8,000	6,400	0.80	D	2-Lane Collector	8,000	4,380	0.55	C	0.25	No
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	6,100	0.76	D	2-Lane Collector	8,000	4,280	0.54	C	0.22	No
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	5,000	0.63	D	2-Lane Collector	8,000	3,540	0.44	C	0.19	No
	Conde St	Arista Ave	2-Lane Collector	8,000	4,600	0.58	C	2-Lane Collector	8,000	4,350	0.54	C	0.04	No
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	12,200	1.53	**F**	2-Lane Collector	8,000	10,160	1.27	**F**	0.26	**Yes**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	6,800	0.85	**E**	2-Lane Collector	8,000	5,400	0.68	D	0.17	**Yes**
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,000	0.88	**E**	2-Lane Collector	8,000	5,430	0.68	D	0.20	**Yes**
	Twiggs St	Harney St	2-Lane Collector	8,000	6,600	0.83	**E**	2-Lane Collector	8,000	4,810	0.6	C	0.23	**Yes**
	Harney St	San Juan Rd	2-Lane Collector	8,000	3,800	0.48	C	2-Lane Collector	8,000	2,930	0.37	B	0.11	No
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	21,800	0.73	C	3-lane Major Arterial	30,000	7,585	0.25	A	0.48	No
East-West														
Midway Pacific Highway														
Channel Wy	W. Mission Bay Dr	Hancock St	4-Lane Collector	15,000	7,800	0.52	C	2-Lane Collector	8,000	1,280	0.16	A	0.36	No
Kemper St	Kenyon St	Midway Dr	4-Lane Collector	15,000	9,600	0.64	C	2-Lane Collector (CLTL)	15,000	9,010	0.6	C	0.04	No
	Midway Dr	Sports Arena Blvd	4-Lane Collector	15,000	9,400	0.63	C	2-Lane Collector (CLTL)	15,000	8,120	0.54	C	0.09	No
	Sports Arena Blvd	Hancock St	2-Lane Collector (CLTL)	15,000	9,900	0.66	C	*Does Not Exist*						No
Frontier Dr	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	13,900	0.93	**E**	*Does Not Exist*						**Yes**
Greenwood St	Sports Arena Blvd	Kurtz St	2-Lane Collector	8,000	6,400	0.80	D	*Does Not Exist*						No
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	69,000	1.15	**F**	6-Lane Prime Arterial	60,000	50,700	0.85	D	0.30	**Yes**
Rosecrans St	Lytton St	Midway Dr	6-Lane Prime Arterial	60,000	53,700	0.90	D	6-Lane Major Arterial	50,000	46,400	0.93	**E**	-0.03	No

Table 4-3 Roadway Segment Level of Service Results

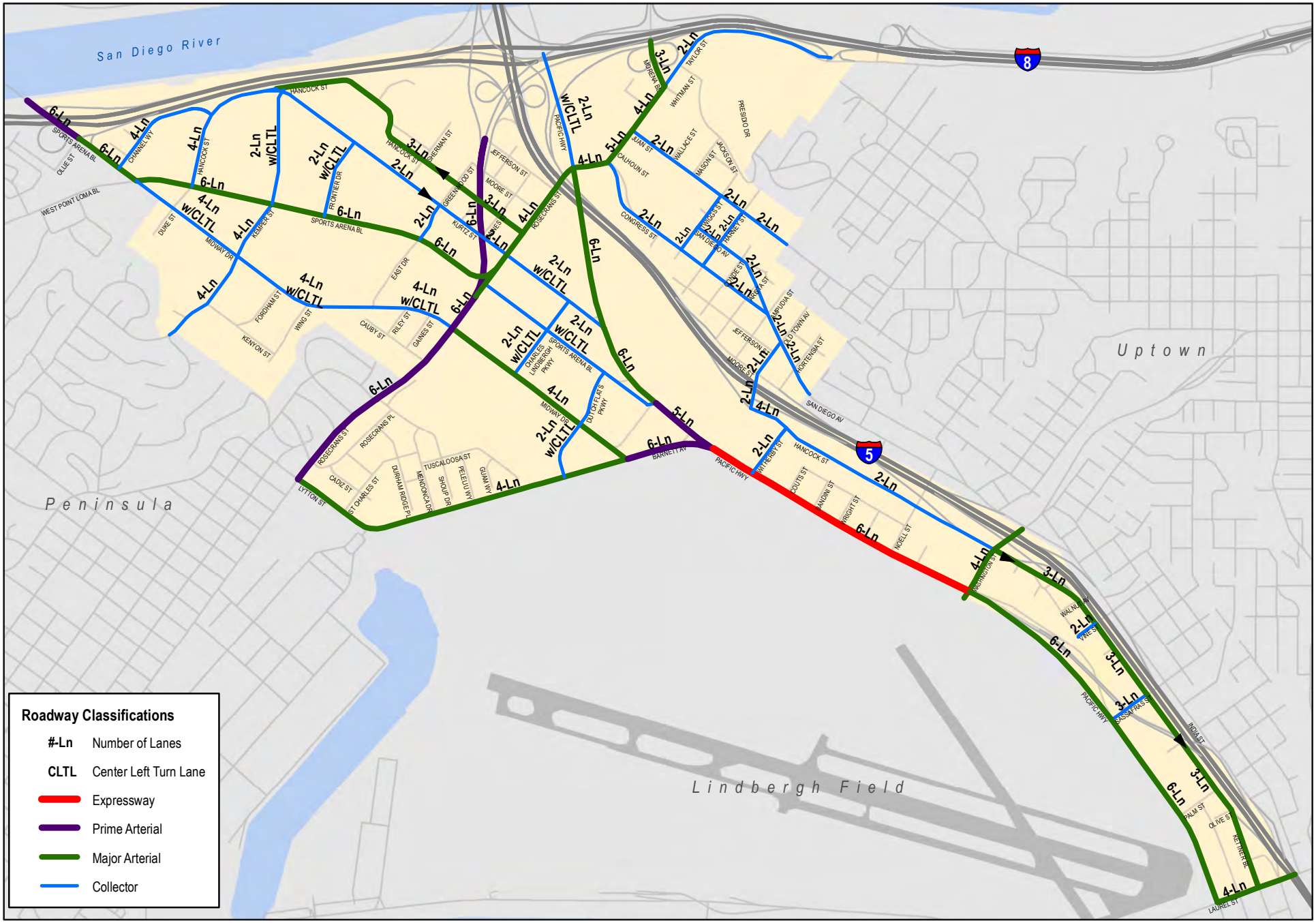
			Preferred Plan Conditions					Existing Conditions						
Roadway	**From**	**To**	**Roadway Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Functional Classification**	**Maximum Capacity at LOS E**	**ADT**	**V/C**	**LOS**	**Δ V/C**	**SI?**
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Prime Arterial	60,000	56,300	0.94	**E**	6-Lane Major Arterial	50,000	59,100	1.18	**F**	-0.24	No
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Major Arterial	40,000	22,700	0.57	C	4-Lane Collector (CLTL)	30,000	15,500	0.52	C	0.05	No
Charles Lindbergh Pkwy	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	6,000	0.40	B	*Does Not Exist*						No
	Sports Arena Blvd	Kurtz Street	2-Lane Collector (CLTL)	15,000	7,600	0.51	C	*Does Not Exist*						No
Dutch Flats Pkwy	Barnett Avenue	Midway Dr	2-Lane Collector (CLTL)	15,000	13,200	0.88	**E**	*Does Not Exist*						**Yes**
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,800	0.59	C	*Does Not Exist*						No
Barnett Ave	Midway Dr	Pacific Hwy	6-Lane Prime Arterial	60,000	51,200	0.85	D	4-Lane Major Arterial	40,000	57,954	1.45	**F**	-0.6	No
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	16,400	0.41	B	4-Lane Major Arterial	40,000	10,680	0.27	A	0.14	No
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	23,300	0.58	C	4-Lane Major Arterial	40,000	12,870	0.32	A	0.26	No
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	2,100	0.26	A	2-Lane Collector	8,000	250	0.03	A	0.23	No
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	21,200	1.93	**F**	3-Lane Collector	11,000	8,700	0.79	D	1.14	**Yes**
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	31,100	0.78	D	4-Lane Major Arterial	40,000	26,290	0.66	C	0.12	No
Old Town														
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	30,500	0.76	D	4-Lane Major Arterial	40,000	22,100	0.55	C	0.21	No
	Congress St	Juan St	5-Lane Major Arterial	45,000	21,300	0.47	B	5-Lane Major Arterial	45,000	13,560	0.30	A	0.17	No
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	25,500	0.64	C	4-Lane Major Arterial	40,000	17,530	0.44	B	0.2	No
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	15,300	1.91	**F**	2-Lane Collector	8,000	13,140	1.64	**F**	0.27	**Yes**

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,700	0.34	B	2-Lane Collector	8,000	2,080	0.26	A	0.08	No
Twiggs St	San Diego Ave	Juan St	2-Lane Collector	8,000	3,500	0.44	C	2-Lane Collector	8,000	2,670	0.33	B	0.11	No
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,600	0.20	A	2-Lane Collector	8,000	1,520	0.19	A	0.01	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,200	0.40	B	2-Lane Collector	8,000	2,350	0.29	A	0.11	No
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	12,100	1.51	**F**	2-Lane Collector	8,000	11,750	1.47	**F**	0.04	**Yes**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,700	0.84	**E**	2-Lane Collector	8,000	6,120	0.77	D	0.07	**Yes**

Source: Chen Ryan Associates (May 2017)

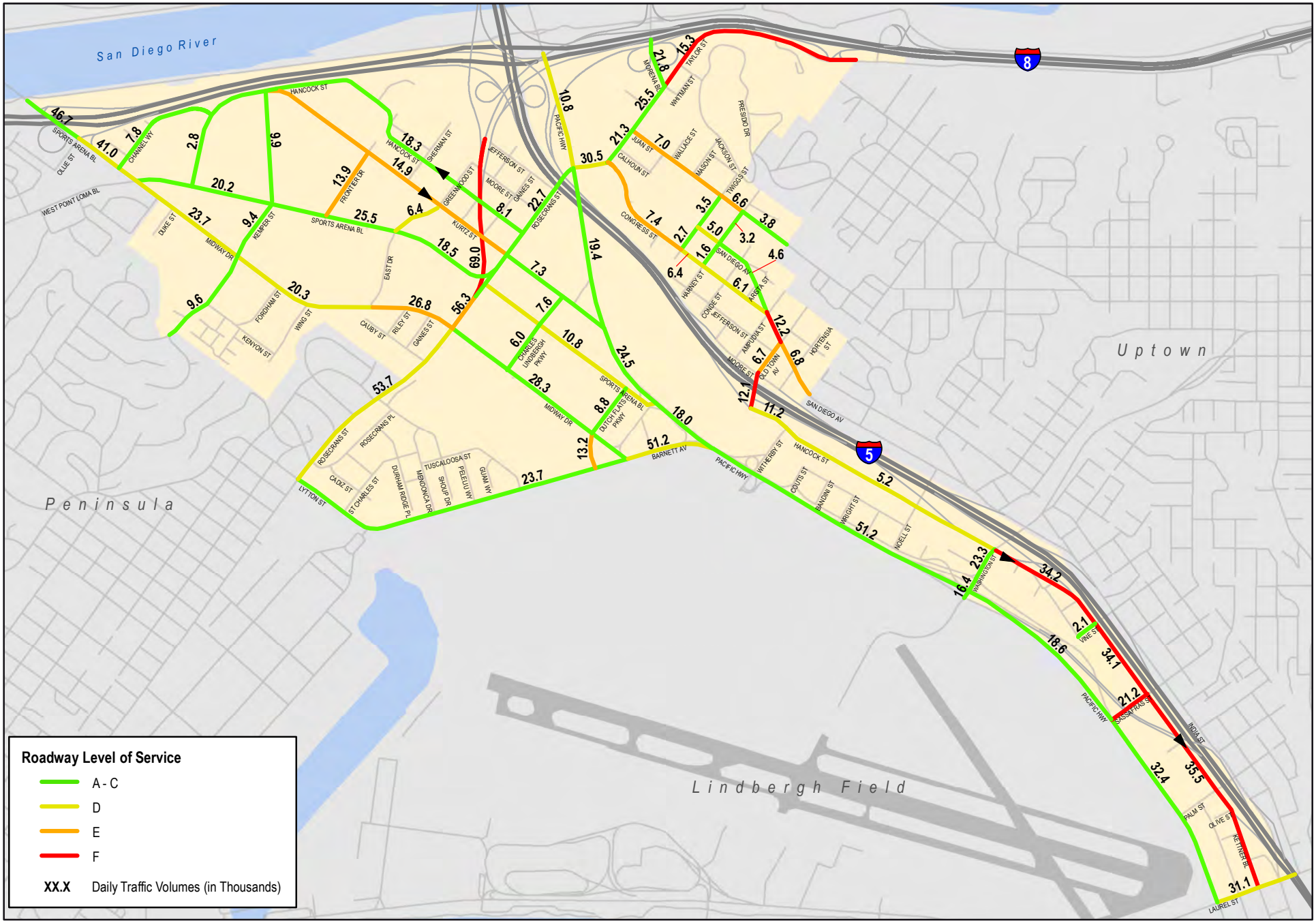
Note:
Bold letter indicates LOS E or F



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Figure 4-1
Roadway Classifications -
Preferred Plan Conditions



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Figure 4-2
Daily Roadway Segment Traffic Volumes and LOS - Preferred Plan Conditions

Based on the criteria documented in Chapter 2, the following roadway segments will have a significant impact under buildout of the Preferred Plan:

Midway-Pacific Highway Community

- Kettner Boulevard, between Washington Street and Vine Street (LOS F, ΔVC 0.38)
- Kettner Boulevard, between Vine Street and Sassafras Street (LOS F, ΔVC 0.40)
- Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F, ΔVC 0.56)
- Frontier Drive, between Sports Arena Boulevard and Kurtz Street (New Road)
- Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F, ΔVC 0.30)
- Dutch Flats Pkwy, between Barnett Avenue and Midway Drive (New Road)
- Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F, ΔVC 1.14)

Old Town Community

- Congress Street between Taylor Street and Twiggs Street (LOS E, ΔVC 0.40)
- San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F, ΔVC 0.26)
- San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E, ΔVC 0.17)
- Juan Street, between Taylor Street and Twiggs Street (LOS E, ΔVC 0.20)
- Juan Street, between Twiggs Street and Harney Street (LOS E, ΔVC 0.23)
- Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F, ΔVC 0.27)
- Old Town Avenue, between Hancock Street and Moore Street (LOS F, ΔVC 0.04)
- Old Town Avenue, between Moore Street and San Diego Avenue (LOS E, ΔVC 0.07)

4.3 Intersection Analysis

AM and PM peak hour intersection LOS analyses were conducted under Preferred Plan and Existing Conditions. The following intersection improvements were assumed under buildout of the Preferred Plan:

Rosecrans Street / Sports Arena Boulevard / Camino Del Rio West:

- Remove the southbound free right-turn movement from Camino Del Rio West onto Sports Arena Boulevard and replace it with an exclusive right-turn lane.
- Allow southbound movements to continue on Sports Arena Boulevard through the intersection. It should be noted that you would still not be able to access the southern leg of Sports Arena Boulevard from westbound Rosecrans Street or southwest bound Camino del Rio West.

Sports Arena Boulevard / Pacific Highway:

- Move intersection approximately 500 feet to the north.
- Re-align Sports Arena Boulevard to create a right-angle with Pacific Highway.
- Signalize the intersection.
- Provide an exclusive eastbound left-turn lane from Sports Arena Boulevard onto Pacific Highway.
- Provide an exclusive northbound left-turn lane from Pacific Highway onto Sports Arena Boulevard.

Sports Arena Boulevard / West Point Loma Boulevard / Midway Drive

- Remove the westbound free right-turn movement from Sports Arena Boulevard onto Sports Arena Boulevard. The right-of-way will be used to extend the curb and create a curb bulb-out to reduce the pedestrian crossing distance. Right-turn movements will be permitted from the outside through lane.

- Square up and control the northbound free right-turn movement from Midway Drive onto Sports Arena Boulevard with the intersection.

West Washington Street / Pacific Highway

- Further analyze operations at this intersection to determine if additional improvements would be beneficial.

Congress Street / San Diego Avenue / Ampudia Street:

- Convert intersection to all-way stop control
- Implement bulb-outs on all legs of the intersection
- Widen the sidewalks along the north side of San Diego Avenue

Seven new intersections are recommended for the Midway-Pacific Highway community. Additionally, the roadway network was evaluated to identify intersection locations, both existing and new intersections, that would benefit from the implementation of a roundabout or signalization. A summary of recommended intersection improvements are displayed in Table 4-4. It is not known at this time if the implementation of roundabout will be feasible at any or all intersections. A roundabout feasibility analysis will need to be performed once the new intersections and roadways are designed. Therefore, to be conservative the analysis assumed that all new intersections would be signalized, unless otherwise noted. However, it is recommended that a roundabout be implemented in lieu of a signal at all new intersections, where feasible.

With the exception of the intersection of Congress Street / San Diego Avenue, / Ampudia Street, no other operational intersection improvements were identified for the Old Town community. Traffic signal warrants were conducted at the intersections where signalization is recommended. Figure 4C-103 (CA) of the California Manual on Uniform Traffic Control Devices (MUTCD) 2012 Edition was utilized for the signal warrant. All intersections where signalization is recommended met the warrants. Signal warrant worksheets are provided in Appendix H of the Mobility Report.

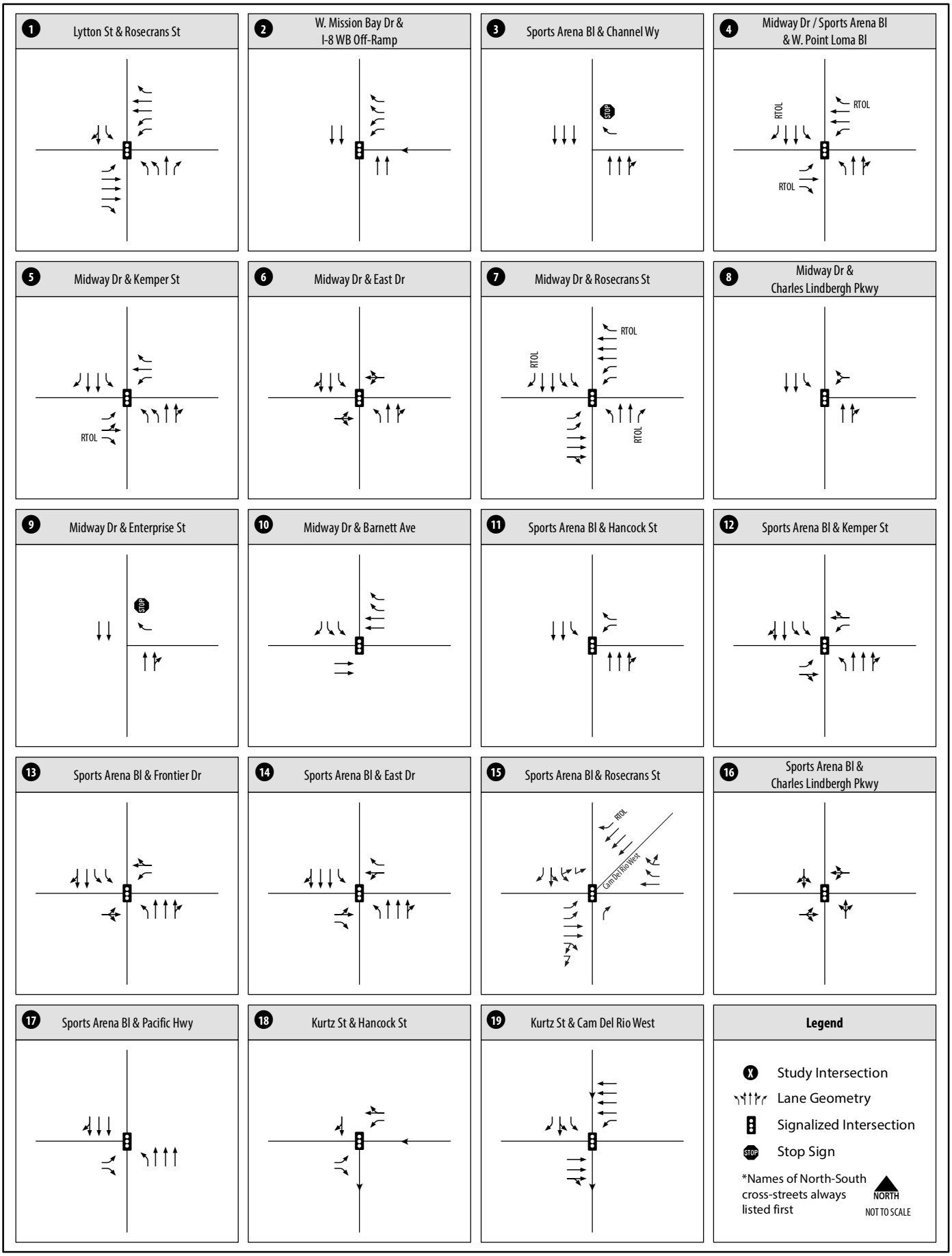
Table 4-4 Summary of Intersection Improvements

No.	Intersection	Improvement	Control
8	Midway Drive / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
12	Kemper Street / Sports Arena Boulevard	Add north leg	Signalized
13	Sports Arena Boulevard / Frontier Drive	Add north leg	Signalized
14	Sports Arena Boulevard / Greenwood Street	Add north leg	Signalized
16	Sports Arena Boulevard / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
17	Sports Arena Boulevard / Pacific Highway	Relocate intersection and signalize	Signalized
18	Kurtz Street / Hancock Street	Add south leg and signalize	Signalized
21	Kurtz Street / Pacific Highway	Signalize	Signalized
61	Kurtz Street / Frontier Drive	New intersection	Roundabout/SSSC
62	Kurtz Street / Greenwood Street	Add south leg and signalize	Signalized
63	Kurtz Street / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
64	Barnett Avenue / Dutch Flats Parkway	New intersection	Roundabout/Signalized
65	Midway Drive / Dutch Flats Parkway	New intersection	Roundabout/Signalized
66	Sports Arena Boulevard / Dutch Flats Parkway	New intersection	Roundabout/Signalized
N/A	Hancock Street / Greenwood Street	Signalize	Signalized

Source: Chen Ryan Associates (June 2016)

The proposed intersection geometrics and forecast AM/PM peak hour turning movement volumes under Preferred Plan buildout conditions are provided in Figure 4-3 and Figure 4-4, respectively.

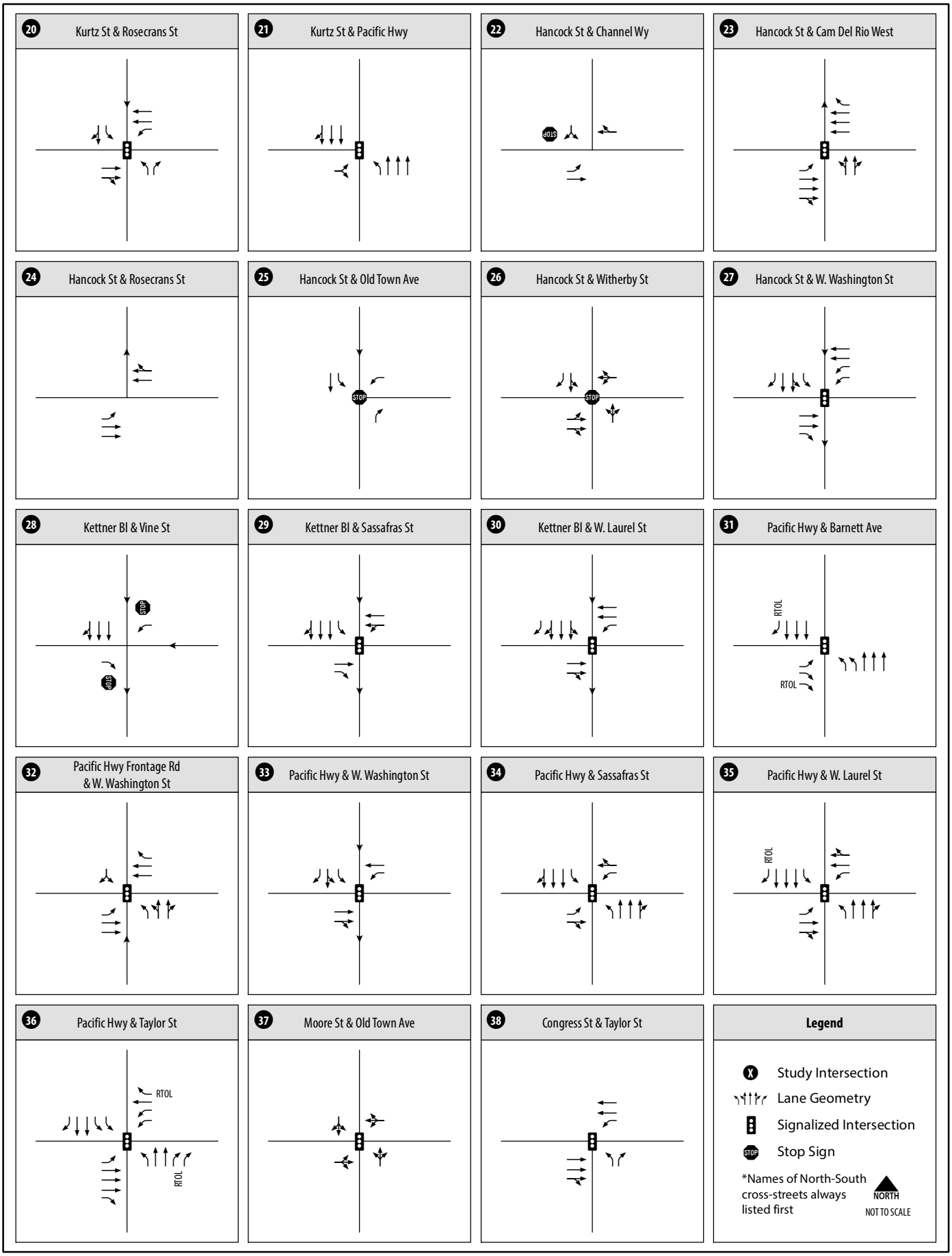
Table 4-5 displays intersection level of service and average vehicle delay results for study area intersections under Preferred Plan and Existing Conditions. Level of service calculation worksheets are provided in Appendix I.



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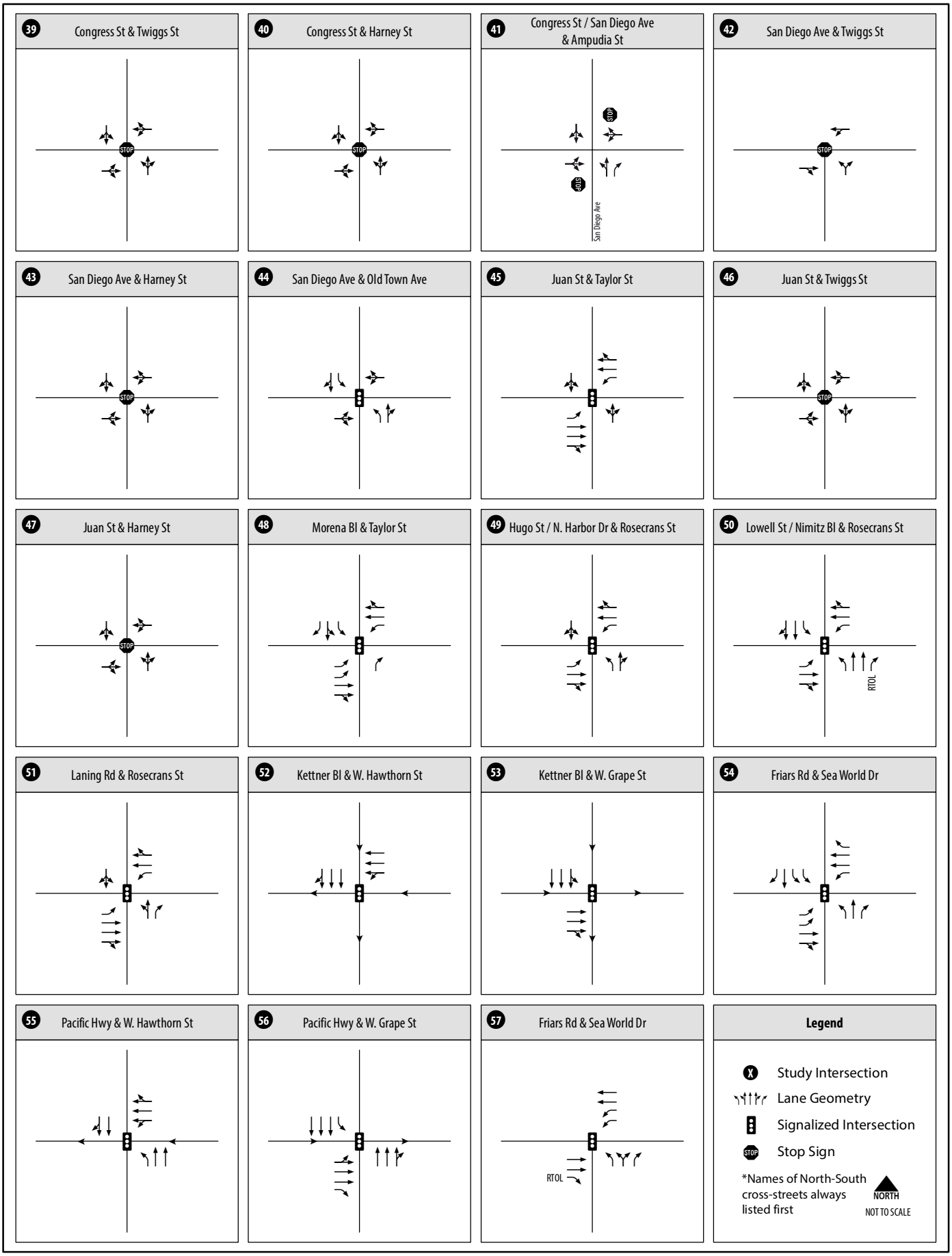
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 1-19)



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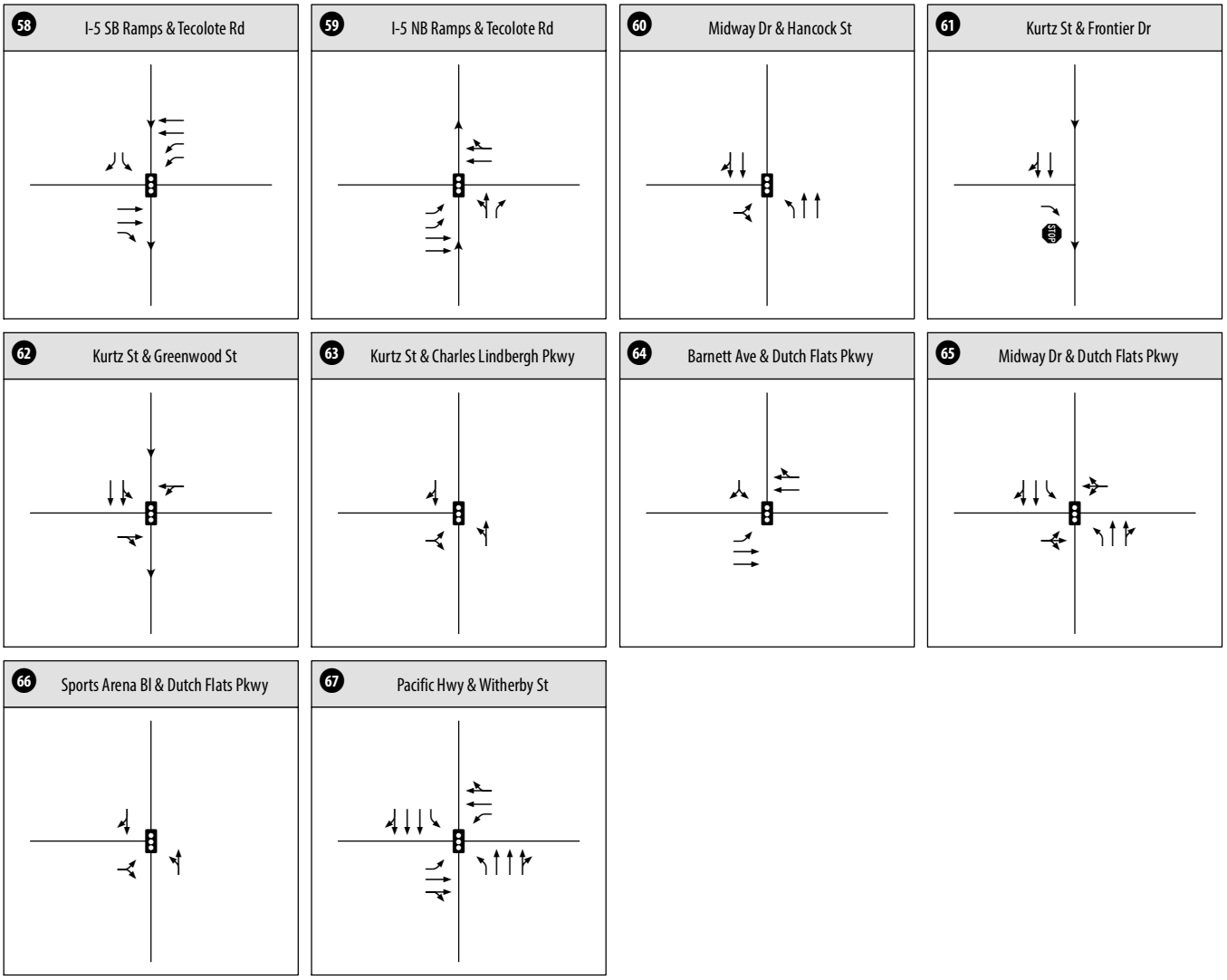
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 20-38)



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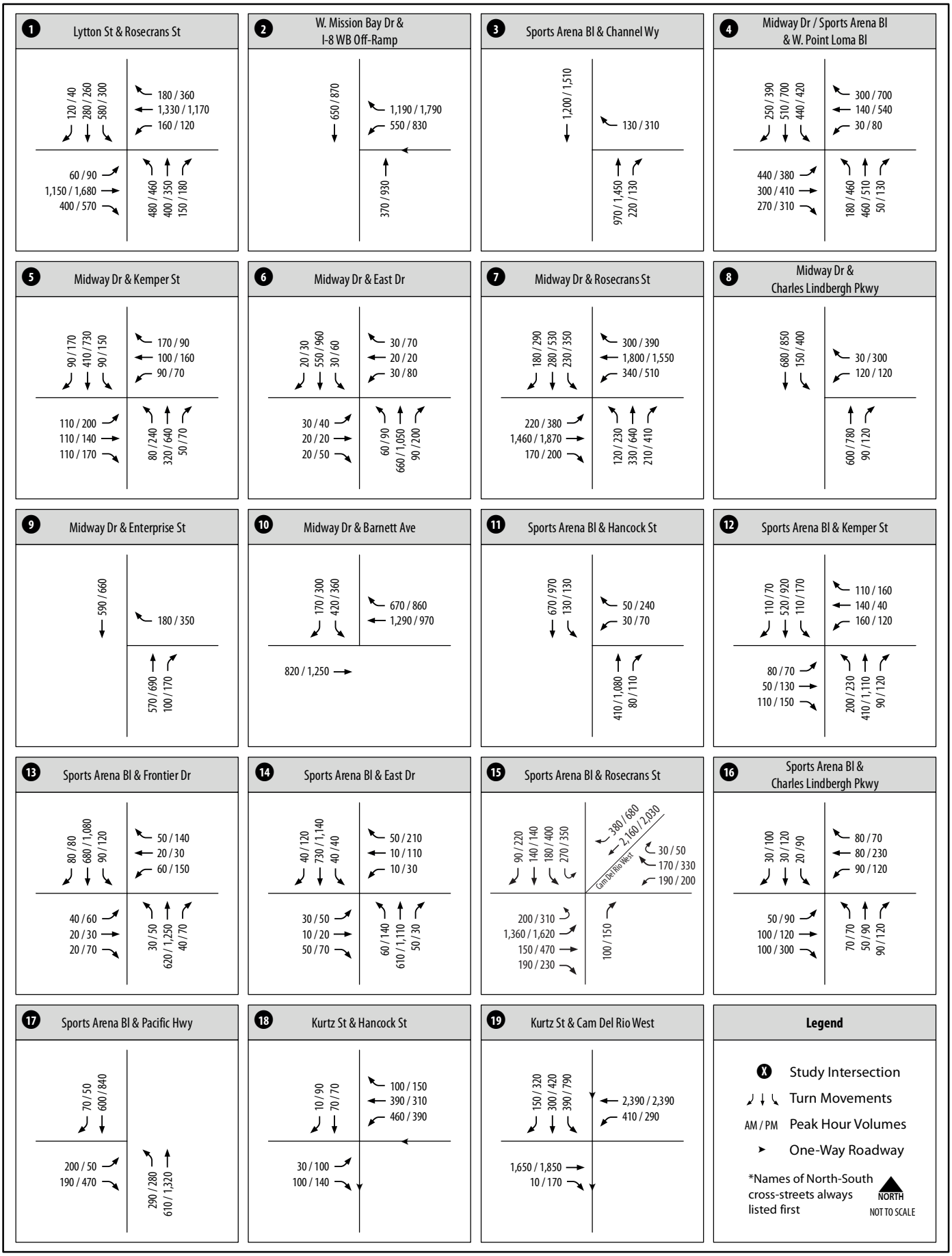
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 39-57)



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Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 58-67)

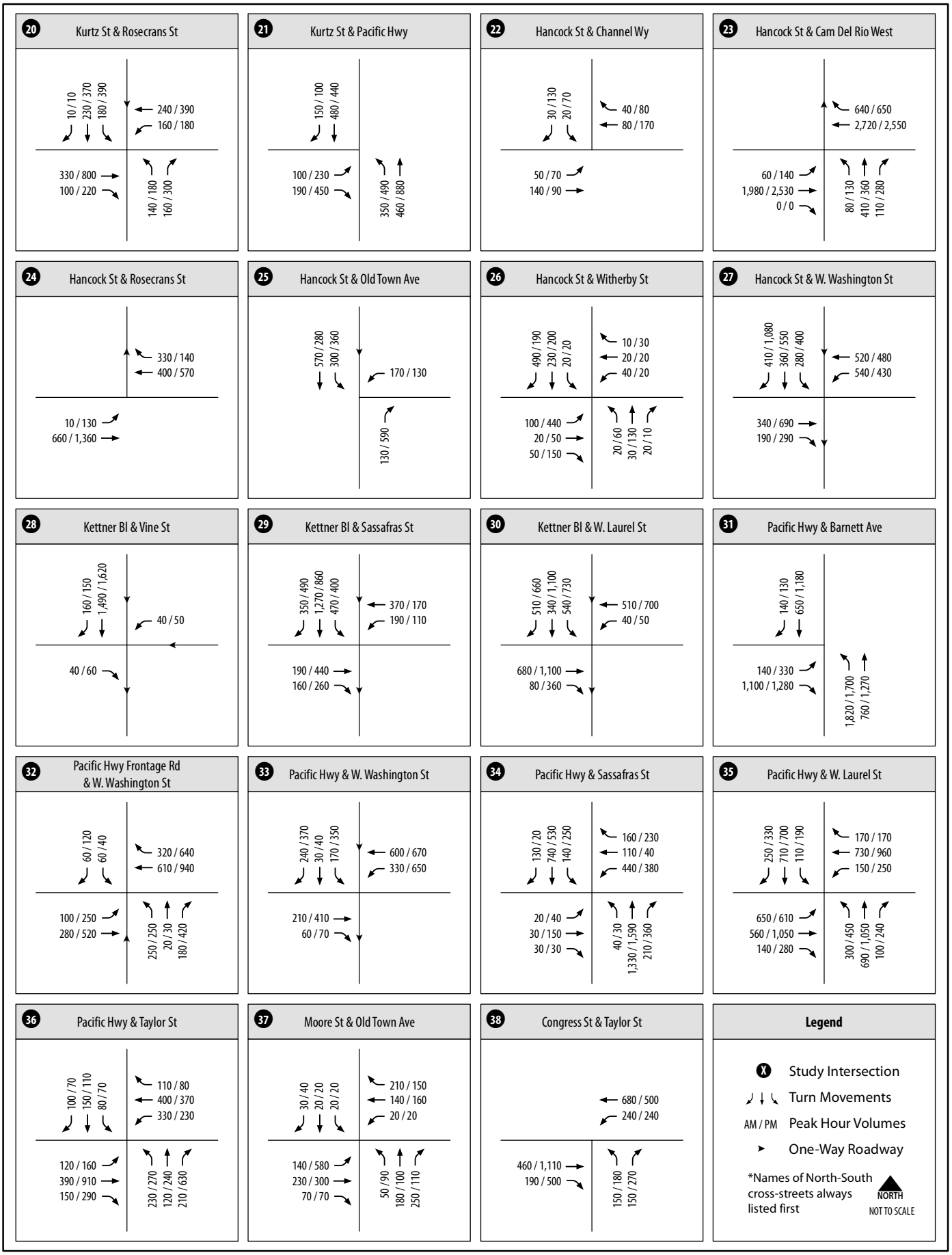


Midway-Pacific Highway and Old Town Community Plan Update

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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 1-19)

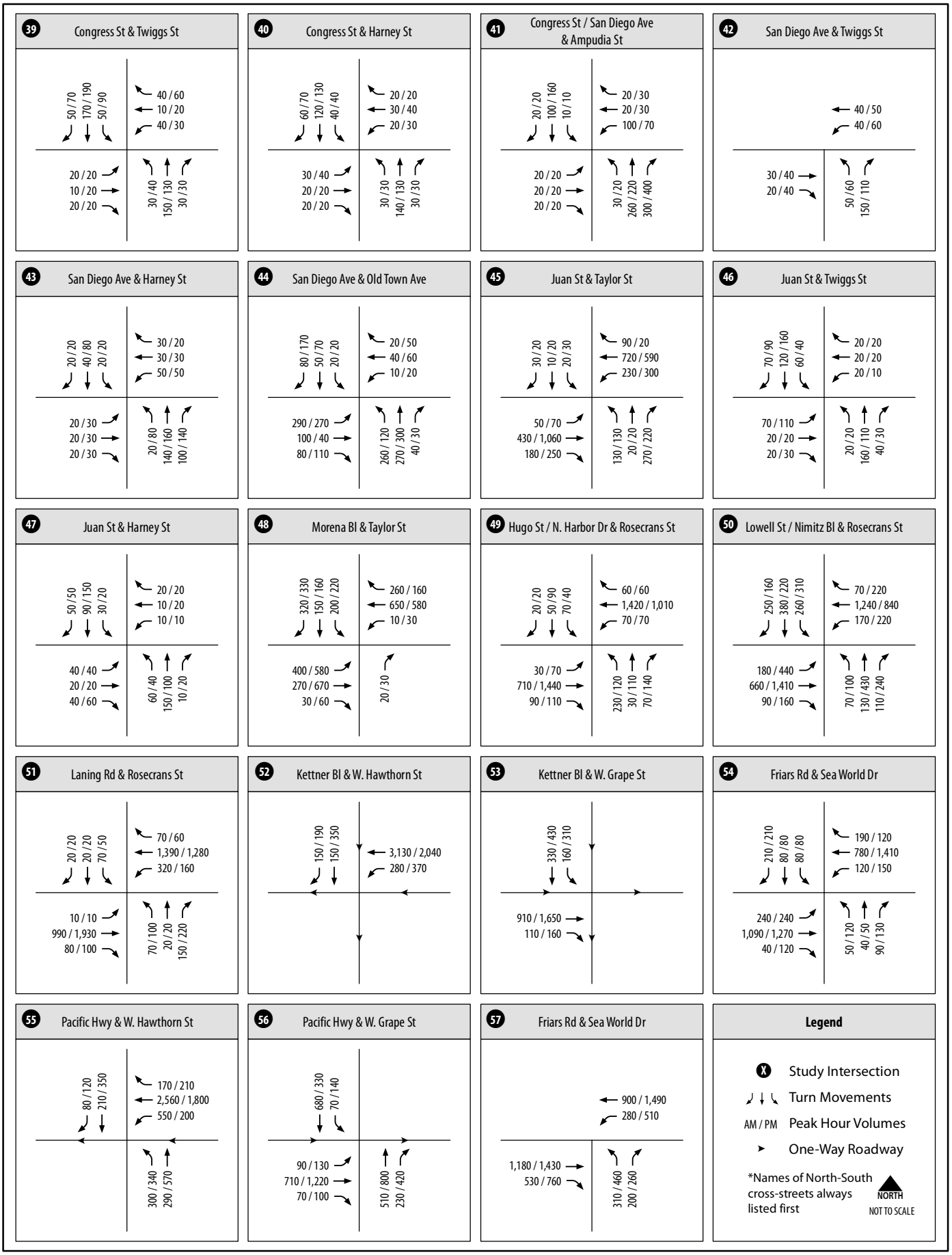


Midway-Pacific Highway and Old Town Community Plan Update

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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 20-38)



Midway-Pacific Highway and Old Town Community Plan Update

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Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 39-57)

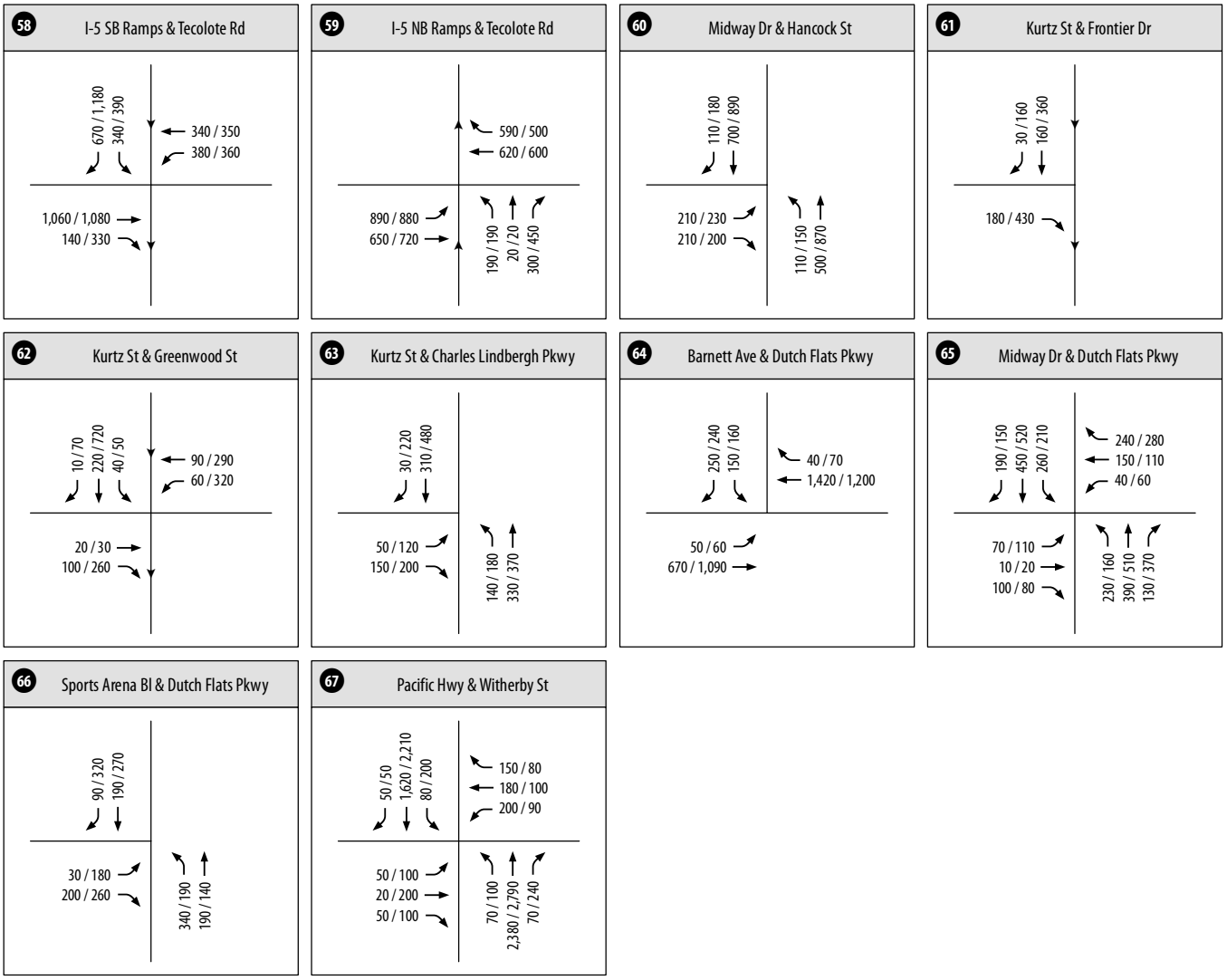


Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 58-67)

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Midway-Pacific Highway													
1	Lytton St and Rosecrans St	Signal	97.0	**F**	54.6	**D**	65.4	**E**	44.5	D	31.6	10.1	**Yes**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	15.5	B	71.1	**E**	14.8	B	59.5	**E**	0.7	11.6	**Yes**
3	Sports Arena Blvd and Channel Way	SSSC[2]	12.3	B	31.2	D	11.2	B	14.7	B	1.1	16.5	No
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	52.5	D	76.2	**E**	36.6	D	47.2	D	15.9	29.0	**Yes**
5	Midway Dr and Kemper St	Signal	31.7	C	38.1	D	22.7	C	37.3	D	9.0	0.8	No
6	Midway Dr and East Dr	Signal	6.8	A	17.6	B	4.8	A	13.0	B	2.0	4.6	No
7	Midway Dr and Rosecrans St	Signal	39.3	D	75.2	**E**	34.9	C	49.1	D	4.4	26.1	**Yes**
8	Midway Dr and Charles Lindbergh Pkwy	Signal	10.9	B	28.8	C	*Intersection does not currently exist*						No
9	Midway Dr and Enterprise St	SSSC[2]	13.3	B	26.5	D	11.0	B	18.1	C	2.3	8.4	No
10	Midway Dr and Barnett Ave	Signal	13.7	B	12.3	B	13.8	B	19.8	B	-0.1	-7.5	No
11	Sports Arena Blvd and Hancock St	Signal	14.7	B	18.9	B	10.0	A	13.1	B	4.7	5.8	No
12	Sports Arena Blvd and Kemper St	Signal	38.3	D	44.5	D	18.8	B	17.5	B	19.5	27.0	No
13	Sports Arena Blvd and Sports Arena Driveway	Signal	20.6	C	27.0	C	17.1	B	24.8	C	3.5	2.2	No
14	Sports Arena Blvd and East Dr	Signal	7.6	A	25.7	C	26.0	C	11.9	B	-18.4	13.8	No
15	Sports Arena Blvd and Rosecrans St	Signal	39.3	D	52.6	D	35.7	D	43.2	D	3.6	9.4	No
16	Sports Arena Blvd and Charles Lindbergh Pkwy	Signal	14.1	B	18.9	B	*Intersection does not currently exist*						No
17	Sports Arena Blvd and Pacific Hwy	Signal	25.1	C	17.8	B	10.6	B	12.0	B	14.5	5.8	No
18	Kurtz St and Hancock St	Signal	12.7	B	12.5	B	*Intersection does not currently exist*						No
19	Kurtz St and Camino Del Rio West	Signal	28.4	C	54.8	D	9.4	A	20.2	C	19.0	34.6	No
20	Kurtz St and Rosecrans St	Signal	30.0	C	41.9	D	20.0	B	31.7	C	10.0	10.2	No
21	Kurtz St and Pacific Hwy	Signal	32.4	C	50.3	D	11.2	B	13.7	B	21.2	36.6	No
22	Hancock St and Channel Wy	SSSC[2]	10.2	B	15.0	C	9.3	A	10.5	B	0.9	4.5	No
23	Hancock St and Camino Del Rio West	Signal	44.8	D	45.2	D	24.3	C	20.3	C	20.5	24.9	No
24	Hancock St and Rosecrans St	*No Conflicting Movements*											

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
25	Hancock St and Old Town Ave	AWSC[3]	24.8	C	20.9	C	16.9	C	14.6	B	7.9	6.3	No
26	Hancock St and Witherby St	AWSC[3]	13.9	B	34.9	D	16.0	C	23.5	C	-2.1	11.4	No
27	Hancock St and Washington St	Signal	23.1	C	77.8	**E**	22.8	C	25.9	C	0.3	51.9	**Yes**
28	Kettner Blvd and Vine St	SSSC[2]	16.5	C	19.9	C	14.3	B	23.2	C	2.2	-3.3	No
29	Kettner Blvd and Sassafras St	Signal	14.9	B	15.2	B	12.0	B	11.9	B	2.9	3.3	No
30	Kettner Blvd and West Laurel St	Signal	19.9	B	96.5	**F**	20.0	B	29.7	C	-0.1	66.8	**Yes**
31	Pacific Hwy and Barnett Ave	*No Conflicting Movements*											
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	20.7	C	45.4	D	19.4	B	36.0	D	1.3	9.4	No
33	Pacific Hwy and Washington St	Signal	21.4	C	26.5	C	18.7	B	31.2	C	2.7	-4.7	No
34	Pacific Hwy and Sassafras St	Signal	31.8	C	75.4	**E**	14.4	B	27.3	C	17.4	48.1	**Yes**
35	Pacific Hwy and West Laurel St	Signal	92.8	**F**	145.2	**F**	48.4	D	42.9	D	44.4	102.3	**Yes**
Old Town													
36	Pacific Hwy and Taylor St	Signal	31.0	C	51.7	D	64.6	**E**	33.5	C	-33.6	18.2	No
37	Moore St and Old Town Ave	Signal	23.1	C	96.5	**F**	16.4	B	16.4	B	6.7	80.1	**Yes**
38	Congress St and Taylor St	Signal	14.2	B	19.8	B	19.9	B	21.7	C	-5.7	-1.9	No
39	Congress St and Twiggs St	AWSC[3]	9.7	A	10.8	B	8.1	A	8.6	A	1.6	2.2	No
40	Congress St and Harney St	AWSC[3]	9.1	A	9.5	A	8.1	A	8.3	A	1.0	1.2	No
41	Congress St and San Diego Ave/Ampudia St	AWSC[3]	10.6	B	11.4	B	12.3	B	11.5	B	-1.7	-0.1	No
42	San Diego Ave and Twiggs St	AWSC[3]	8.0	A	8.1	A	7.9	A	8.0	A	0.1	0.1	No
43	San Diego Ave and Harney St	AWSC[3]	9.0	A	10.8	B	8.2	A	8.2	A	0.8	2.6	No
44	San Diego Ave and Old Town Ave	Signal	18.0	B	13.7	B	18.4	B	11.6	B	-0.4	2.1	No
45	Juan St and Taylor St	Signal	14.6	B	19.7	B	10.4	B	10.7	B	4.2	9.0	No
46	Juan St and Twiggs St	AWSC[3]	9.7	A	10.1	B	8.8	A	8.5	A	0.9	1.6	No
47	Juan St and Harney St	AWSC[3]	9.0	A	9.0	A	8.3	A	7.9	A	0.7	1.1	No
48	Morena Blvd and Taylor St	Signal	21.9	C	24.4	C	22.4	C	16.4	B	-0.5	8.0	No

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Intersections Outside of Study Communities													
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	29.1	C	31.6	C	14.7	B	20.7	C	14.4	10.9	No
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	59.9	**E**	110.4	**F**	41.2	D	63.3	**E**	18.7	47.1	**Yes**
51	Laning Rd and Rosecrans St	Signal	25.5	C	23.2	C	15.5	B	12.9	B	10.0	10.3	No
52	Kettner Blvd and West Hawthorn St	Signal	34.7	C	13.3	B	11.1	B	15.0	B	23.6	-1.7	No
53	Kettner Blvd and West Grape St	Signal	10.2	B	9.4	A	7.4	A	8.7	A	2.8	0.7	No
54	Pacific Hwy and Sea World Dr	Signal	23.9	C	34.1	C	19.9	B	25.6	C	4.0	8.5	No
55	Pacific Hwy and West Hawthorn St	Signal	35.2	D	31.7	C	35.4	D	20.2	C	-0.2	11.5	No
56	Pacific Hwy and West Grape St	Signal	17.9	B	31.4	C	16.8	B	24.2	C	1.1	7.2	No
57	Friars Rd and Sea World Dr	Signal	15.3	B	26.0	C	11.5	B	13.8	B	3.8	12.2	No
58	I-5 SB Ramps and Sea World Dr	Signal	17.8	B	20.0	C	15.5	B	16.3	B	2.3	3.7	No
59	I-5 NB Ramps and Sea World Dr	Signal	29.0	C	43.3	D	21.4	C	28.4	C	7.6	14.9	No
New Intersections (Midway-Pacific Highway Community)													
60	Midway Dr & Duke Street / Hancock St	Signal	27.0	C	32.1	C	*Intersection does not currently exist*						No
61	Kurtz St & Frontier Dr	SSSC[2]	11.6	B	25.0	C	*Intersection does not currently exist*						No
62	Kurtz St & Greenwood St	Signal	13.2	B	21.4	C	*Intersection does not currently exist*						No
63	Kurtz St & Charles Lindbergh Pkwy	Signal	8.3	A	25.6	C	*Intersection does not currently exist*						No
64	Barnett Ave & Dutch Flats Pkwy	Signal	24.4	C	14.5	B	*Intersection does not currently exist*						No
65	Midway Dr & Dutch Flats Pkwy	Signal	47.5	D	53.7	D	*Intersection does not currently exist*						No
66	Dutch Flats Pkwy & Sports Arena Bl	Signal	11.8	B	21.7	C	*Intersection does not currently exist*						No

Source: Chen Ryan Associates (May 2017)

Note:
Bold letter indicates LOS E or F.
[1] Significant Impact
[2] Single Side Stop Controlled
[3] All Way Stop Controlled

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following intersections:

Midway-Pacific Highway Community

1. Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)
2. Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)
4. Midway Drive / West Point Loma Drive and Sports Arena Boulevard (LOS E: PM Peak Hour)
7. Midway Drive and Rosecrans Street (LOS E: PM Peak Hour)
27. Hancock Street and Washington Street (LOS E: PM Peak Hour)
30. Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)
34. Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)
35. Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)

Old Town Community

37. Moore Street and Old Town Street (LOS F: PM Peak Hour)

Outside of the Community

50. Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)

It is important to note that three of the ten intersections listed above currently experience LOS E or F during the AM and/or PM peak period under existing conditions. Additionally, two intersections experiencing LOS E or F under existing conditions will be improved to a satisfactory LOS through implementation of the Preferred Plan.

4.4 Freeway Segment Analysis

Neither the Revenue Constrained Alternative of SANDAG's *San Diego Forward Plan* (October 2015) nor the Preferred Plan recommend freeway improvements within the project study area.

Table 4-6A and Table 4-6B display freeway segment analysis results within the project study area for the AM and PM peak hours, respectively.

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following freeway segments:

- I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour)
- I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours)
- I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour)
- I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour)
- I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)
- I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour)
- I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour)

Table 4-6A Freeway Segment Level of Service Comparison (AM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (AM)				Existing Conditions (AM)				Δ in V/C (AM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	6.30%	60%	61,200	2,600	0.55	B	46,500	1,900	0.40	A	0.15	No
			WB	2M + 0A	4,700		40%		1,700	0.36	A		1,300	0.28	A	0.08	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	6.40%	60%	122,600	5,400	0.64	C	102,000	4,400	0.52	B	0.12	No
			WB	3M + 1A	8,450		40%		3,500	0.41	B		2,900	0.34	A	0.07	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	6.40%	41%	183,400	5,500	0.51	B	132,000	3,900	0.36	A	0.15	No
			WB	5M + 0A	11,750		59%		7,700	0.66	C		5,500	0.47	B	0.19	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	6.50%	47%	217,000	7,600	0.70	C	191,000	6,500	0.60	B	0.10	No
			WB	5M + 0A	11,750		53%		8,400	0.71	C		7,400	0.63	C	0.08	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	6.40%	61%	241,300	11,000	0.94	**E**	220,000	10,000	0.85	D	0.09	**Yes**
			SB	5M + 0A	11,750		39%		6,900	0.59	B		6,200	0.53	B	0.06	No
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	6.40%	62%	231,400	10,500	0.97	**E**	199,000	9,000	0.83	D	0.14	**Yes**
			SB	4M + 2A	12,200		38%		6,400	0.52	B		5,400	0.44	B	0.08	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	6.90%	49%	242,000	9,400	0.87	D	199,000	7,700	0.71	C	0.16	No
			SB	5M + 0A	11,750		51%		9,700	0.83	D		7,900	0.67	C	0.16	No
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	6.90%	49%	226,400	8,800	0.94	**E**	192,000	7,500	0.80	D	0.14	**Yes**
			SB	5M + 0A	11,750		51%		9,300	0.79	D		7,700	0.66	C	0.13	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	6.90%	54%	171,300	7,100	0.76	C	142,000	6,000	0.64	C	0.12	No
			SB	4M + 0A	9,400		46%		6,400	0.68	C		5,200	0.55	B	0.13	No
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	6.70%	58%	216,400	9,600	0.89	D	147,000	6,600	0.61	B	0.28	No
			SB	4M + 1A	10,800		42%		7,200	0.67	C		4,700	0.44	B	0.23	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	6.70%	57%	225,000	9,900	0.92	D	183,000	8,100	0.75	C	0.17	No
			SB	4M + 1A	10,800		43%		7,600	0.70	C		6,000	0.56	B	0.14	No

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

Table 4-6B Freeway Segment Level of Service Comparison (PM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (PM)				Existing Conditions (PM)				Δ in V/C (PM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	8.50%	72%	61,200	3,100	0.66	C	46,500	3,200	0.68	C	-0.02	No
			WB	2M + 0A	4,700		28%		2,800	0.60	B		1,300	0.28	A	0.32	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	7.80%	63%	122,600	5,500	0.65	C	102,000	5,600	0.66	C	-0.01	No
			WB	3M + 1A	8,450		37%		5,400	0.64	C		3,400	0.4	A	0.24	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	7.20%	51%	183,400	6,600	0.61	B	132,000	5,500	0.51	B	0.10	No
			WB	5M + 0A	11,750		49%		8,300	0.71	C		5,200	0.44	B	0.27	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	8.20%	55%	217,000	11,000	1.02	**F**	191,000	9,700	0.9	D	0.12	**Yes**
			WB	5M + 0A	11,750		45%		9,000	0.77	C		8,000	0.68	C	0.09	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	8.30%	51%	241,300	11,700	1.00	**E**	220,000	10,700	0.91	D	0.09	**Yes**
			SB	5M + 0A	11,750		49%		11,300	0.96	**E**		10,300	0.88	D	0.08	**Yes**
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	8.40%	52%	231,400	11,600	1.07	**F**	199,000	10,000	0.93	**E**	0.14	**Yes**
			SB	4M + 2A	12,200		48%		10,700	0.88	D		9,200	0.75	C	0.13	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	8.20%	39%	242,000	8,900	0.82	D	199,000	7,300	0.68	C	0.14	No
			SB	5M + 0A	11,750		61%		13,800	1.17	**F**		11,400	0.97	**E**	0.20	**Yes**
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	8.00%	51%	226,400	10,600	1.13	**F**	192,000	9,000	0.96	**E**	0.17	**Yes**
			SB	5M + 0A	11,750		49%		10,200	0.87	D		8,600	0.73	C	0.14	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	8.10%	36%	171,300	5,700	0.61	B	142,000	4,800	0.51	B	0.10	No
			SB	4M + 0A	9,400		64%		10,200	1.09	**F**		8,400	0.89	D	0.20	**Yes**
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	7.00%	49%	216,400	8,400	0.78	C	147,000	5,800	0.54	B	0.24	No
			SB	4M + 1A	10,800		51%		9,300	0.86	D		6,100	0.56	B	0.30	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	7.30%	46%	225,000	8,300	0.77	C	183,000	7,100	0.66	C	0.11	No
			SB	4M + 1A	10,800		54%		10,400	0.96	**E**		8,200	0.76	C	0.20	**Yes**

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

4.5 Ramp Meter Analysis

Table 4-7 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 4-7 Freeway Ramp Meter Analysis Comparison

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Preferred Plan Volume	Preferred Plan Excess Demand	Preferred Plan Delay (Minutes)	Preferred Plan Queue (Feet)	Existing Delay (Minutes)	Δ In Delay
I-8 EB / Sports Arena Boulevard	PM	2	1	641	930	289	27.1	8,381	25.5	1.6
I-5 SB / Sea World Drive	AM	1	1	444	520	76	10.3	2,204	0	10.3
	PM	1	1	444	690	246	33.2	7,134	11.4	21.8
I-5 NB / Sea World Drive	AM	2	0	1,555	1,470	0	0.0	0	0	0.0
	PM	2	0	1,656	1,370	0	0.0	0	0	0.0
I-5 SB / Old Town Avenue	PM	1	0	461	410	0	0.0	0	0	0.0
I-5 NB / Old Town Avenue	AM	2	0	905	370	0	0.0	0	0	0.0
	PM	2	0	888	690	0	0.0	0	0	0.0

Source: Chen Ryan Associates, Inc. (May 2017)

Based on the significance criteria outlined in Section 2.2.5, implementation of the preferred Plan would result in a significant impact to the I-5 SB / Sea World Dive ramp during the PM peak hour.

4.6 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted through implementation of the Preferred Plan.

4.6.1 Roadway Mitigation Measures

Midway-Pacific Highway Community

Kettner Boulevard, between Washington Street and Vine Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Kettner Boulevard, between Vine Street and Sassafras Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing*

features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.

Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Frontier Drive, between Sports Arena Boulevard and Kurtz Street (LOS E) – Improving from a 2-Lane Collector with a Center Left Turn-Lane to a 4-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Implementing Frontier Drive as a 4-Lane Collector with Continuous Left-Turn Lane will create longer crossing distances within a residential area and potentially could act as a barrier for pedestrians. Implementation of this improvement would not be in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F) – Improving this roadway from a 6-Lane Prime Arterial to a 6-Lane Expressway would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. This improvement would require grade separating all intersections along this segment of the roadway which is not consistent with the General Plan & Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.

Dutch Flats Parkway, between Barnett Avenue and Midway Drive (LOS E) – Improving from a 2-Lane Collector with a Center Left Turn-Lane to a 4-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Implementing Dutch Flats Parkway as a 4-Lane Collector with Continuous Left-Turn Lane will create longer crossing distances within a residential area and could potentially act as a barrier for pedestrians. Implementation of this improvement would not be in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F) - Widening the roadway from a 3-Lane Collector to a 4-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way available along this segment of Sassafras Street to accommodate a fourth travel lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

<u>Old Town Community</u>

Congress Street between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred*

Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Congress Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 26 regular parking spaces and 13 loading/taxi parking spaces would need to be removed in order to accommodate this mitigation measure. Finally, this mitigation measure would be in conflict with the Community Plan, which proposed balancing all travel modes through an enhanced active transportation environment. Therefore, this improvement project is not identified in the Old Town IFS.

San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 5 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 9 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 48 regular parking spaces and 4 loading parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Twiggs Street and Harney Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane*

and maintain existing features such as on-street parking, sidewalks, etc. Up to 11 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.

Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F) - Widening the roadway from a 2-Lane Collector to a 4-Lane Major Arterial would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Taylor Street to accommodate two additional through lanes and a center median, while maintaining a Class II bicycle facility. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Hancock Street and Moore Street (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane while maintaining right-of-way for the proposed Class II bicycle lanes. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Moore Street and San Diego Avenue (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 18 regular parking spaces and 1 loading parking space would need to be removed in order to accommodate this mitigation measure. Finally, a Class II bicycle facility is proposed along this segment. Therefore, this improvement project is not identified in the Old Town IFS.*

4.6.2 Intersection Mitigation Measures

<u>Midway-Pacific Highway Community</u>

1. *Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)* – The westbound through movement, as well as the southbound left-turn and through movements are projected to be over capacity, under implementation of the Preferred Plan. Implementing the following improvements would allow the intersection to operate at LOS D or better during both peak hours.

    - Add a second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street
    - Add an additional westbound through movement lane on Rosecrans Street (three total)
    - Implement right-turn overlap (RTOL) phases at all legs of the intersection

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is currently not enough right-of-way on Rosecrans Street to accommodate a third westbound through lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: If the second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street and RTOL phases at all legs are implemented (feasible improvements) the overall intersection delay would be reduced to the following:

AM: LOS E
PM: LOS D

Implementation of this improvement will partially mitigate the traffic related impact at the intersection. *This improvement project is identified in the Midway Pacific Highway IFS.*

2. *Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)* – The westbound right-turn movement, from I-8 WB to northbound West Mission Bay Drive, is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Providing a third exclusive westbound right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The Preferred Plan is consistent with the CIP Project #S00871: W. Mission Bay Drive Bridge Over San Diego River, which was reviewed by City and Caltrans staff. Further mitigations, beyond what is recommended as part of this CIP project would be inconsistent with Community Plan Policies and Goals for multimodal facilities*. *Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

4. *Midway Drive / West Point Loma Boulevard and Sports Arena Boulevard (LOS E: PM Peak Hour)* – All four left-turn movements at this intersection are projected to be over capacity during the PM peak hour. Providing dual-left turn lanes on Midway Drive in the northbound direction, on Sports Arena Boulevard in the southbound direction, and on West Point Loma Boulevard in the eastbound direction would improve intersection operations to LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way within the intersection to accommodate any of the additional left-turn lanes considering the proposed multi-use urban trails along Midway Drive and Sports Arena Boulevard, and in-road bicycle facilities. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

7. *Midway Drive and Rosecrans Street* (LOS E: PM Peak Hour) – Rosecrans Street is projected to operate at LOS E during the PM peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches of Rosecrans Street to include a fourth through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen Rosecrans Street to eight lanes through the intersection*

considering the proposed multi-use urban path improvements. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.

Partial Mitigation: None recommended, limited to no right-of-way is anticipated to be available with proposed Multi-Use Urban Path improvements.

27. *Hancock Street and Washington Street (LOS E: PM Peak Hour)* – The southbound Hancock Street to westbound Washington Street right-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Restriping the southbound approach to include a second southbound right-turn lane would allow the intersection to operate at LOS C during the PM Peak Hour. This improvement is feasible but may require additional engineering study. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *This improvement would require the removal of on-street parking, which is heavily utilized by the businesses and restaurants in this area. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

30. *Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)* – The eastbound through movement on Laurel Street is projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Widening the eastbound Laurel Street approach of the intersection to include a third through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the eastbound Laurel Street approach to three lanes. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

34. *Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)* – The southbound Pacific Highway to eastbound Sassafras Street left-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Adding a second southbound left-turn lane would allow the intersection to operate at LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the southbound approach of Pacific Hwy to include a second left-turn lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

35. *Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)* – Laurel Street is projected to be over capacity during both peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches to include a second eastbound left-turn lane and a third through lane in each direction along Laurel Street, as well as widening the northbound approach of Pacific Highway to include a second northbound left-turn lane and exclusive right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Laurel Street to widen to three lanes in each direction. Also,*

there is not enough right-of-way on northbound Pacific Highway with the improvements of the cycle track, multi-use urban path. Therefore, *this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

Old Town Community

37. Moore Street and Old Town Avenue (LOS F: PM Peak Hour) – The eastbound and westbound approaches along Old Town Avenue are projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Implementation of the following improvements would allow the intersection to operate at LOS D during the PM peak hour.

- Implement exclusive eastbound and westbound left-turn lanes on the Old Town Avenue approaches of the intersection.
- Convert the eastbound/westbound signal phasing from permitted to protected phasing.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The eastbound approach on the Old Town Avenue bridge is not wide enough to accommodate an eastbound left-turn lane. Therefore, this improvement project is not identified in the Old Town IFS.*

Partial Mitigation: None recommended.

Outside of the Community

50. *Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour*) – Both the eastbound Rosecrans Street through movement, and the eastbound Rosecrans Street to northbound Nimitz Boulevard left-turn movement are anticipated to be over capacity for both peak hours, under implementation of Preferred Plan. Widening the Rosecrans Street eastbound and westbound approaches of the intersection to include a third through lane, and providing an additional eastbound left-turn lane from Rosecrans Street to Nimitz Boulevard would improve the intersection operations to LOS D or better during both the AM and PM peak hours.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Rosecrans Street to widen to six lanes. Therefore, this improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

Partial Mitigation: None recommended.

Table 4-8 provides a comparison of Preferred Plan operations at the impacted intersections, with and without mitigation measures.

Table 4-8 Impacted Intersection Level of Service with Mitigation Measures

No.	Intersection	Control (Preferred Plan)	Mitigated Conditions AM Avg. Delay (sec)	Mitigated Conditions AM LOS	Mitigated Conditions PM Avg. Delay (sec)	Mitigated Conditions PM LOS	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS
Midway-Pacific Highway										
1	Lytton St and Rosecrans St	Signal	47.4	D	38.8	D	97.0	**F**	54.6	**D**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	12.6	B	35.5	D	15.5	B	71.1	**E**
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	30.0	C	52.5	D	52.5	D	76.2	**E**
7	Midway Dr and Rosecrans St	Signal	32.4	C	54.7	D	39.3	D	75.2	**E**
27	Hancock St and Washington St	Signal	22.6	C	25.4	C	23.1	C	77.8	**E**
30	Kettner Blvd and West Laurel St	Signal	18.0	B	41.4	D	19.9	B	96.5	**F**
34	Pacific Hwy and Sassafras St	Signal	26.8	C	52.0	D	31.8	C	75.4	**E**
35	Pacific Hwy and West Laurel St	Signal	32.1	C	51.3	D	92.8	**F**	145.2	**F**
Old Town										
37	Moore St and Old Town Ave	Signal	18.6	B	39.1	D	23.1	C	96.5	**F**
Intersections Outside of Study Communities										
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	28.9	C	48.1	D	59.9	**E**	110.4	**F**

Source: Chen Ryan Associates (October 2017)

Notes:
Bold letter indicates LOS E or F.

4.6.3 Freeway Segment Mitigation Measures

I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies operational improvements along this segment. These improvements are anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvements and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

4.6.4 Ramp Meter Mitigation Measures

I-5 SB / Sea World Drive Ramp (PM Peak Hour) – Ramp meter delays would decrease to less than 15 minutes if the ramp flow rate is increased from 444 cars per hour to 555 cars per hour. Increased ramp meter flow rates can be achieved by either reducing the ramp meter cycle length or providing additional travel lanes on the ramp.

The identified significant traffic related impact to this ramp would be fully mitigated with the implementation of this improvement. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

5.0 Adopted Community Plan (No Project)

This chapter provides a comparison of the buildout of the currently Adopted Community plan or the No Project scenario analysis results to the Existing Conditions. As stated, the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan was adopted in 1991, and the Old Town San Diego Community Plan was adopted in 1987. Since the land uses and roadway network proposed by the Preferred Plan (or an alternative) would supersede the Adopted Community Plan, only a trip generation and VMT generation comparison was conducted for the Adopted Community Plan (No Project) scenario.

5.1 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Future Year 2035 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway Pacific Highway Corridor and communities, including trips to/from and within the community. Table 5-1A and Table 5-1B displays the total VMT generated within the Midway-Pacific Highway Corridor and Old Town communities, respectively, as well as the average trip length under Base Year, and Adopted Plan conditions. VMT calculations for the both communities are provided in Appendix J.

Table 5-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	832,025	101,904	14.0%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	294,796	311,502	16,706	5.7%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.8%	5.2	5.4	0.2	3.7%
Population	4,672	11,775	7,103	152.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	71	-86	-54.8%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Adopted Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.8%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-54.8%).

Table 5-1B Vehicle Miles Traveled Comparison – Old Town – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,581	20,281	13.4%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	57,989	58,192	203	0.4%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	13.0%	5.2	5.4	0.2	3.7%
Population	834	985	151	18.1%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	174	-7	-4.0%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region). With the implementation of the Adopted Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 13.0%. However, with the population increase anticipated within the community, the daily VMT by population is anticipated to decrease (-4.0%).

Appendix A
VMT Analysis Worksheets – Base Year

2008 Base Year - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	2,357	-	2,357	3,333,368
CHULA VISTA TOTAL	3,951,266	7,048	-	7,048	3,944,218
CORONADO TOTAL	431,361	1,275	-	1,275	430,086
DEL MAR TOTAL	96,012	45	-	45	95,967
EL CAJON TOTAL	2,176,865	3,091	-	3,091	2,173,774
ENCINITAS TOTAL	2,065,242	2,987	-	2,987	2,062,255
ESCONDIDO TOTAL	2,793,535	1,506	-	1,506	2,792,029
External TOTAL	347,454	352	-	352	347,102
IMPERIAL BEACH TOTAL	119,764	49	-	49	119,715
LA MESA TOTAL	1,822,392	4,950	-	4,950	1,817,442
LEMON GROVE TOTAL	831,075	1,644	-	1,644	829,431
NATIONAL CITY TOTAL	1,647,424	6,346	-	6,346	1,641,078
OCEANSIDE TOTAL	3,208,748	779	-	779	3,207,969
POWAY TOTAL	1,105,609	492	-	492	1,105,117
OLD TOWN	38,613,579	241,420	16,727	224,693	38,372,159
SAN MARCOS TOTAL	2,020,740	250	-	250	2,020,490
SANTEE TOTAL	860,205	606	-	606	859,599
SOLANA BEACH TOTAL	567,653	1,106	-	1,106	566,547
Unincorporated TOTAL	17,458,561	9,472	-	9,472	17,449,089
VISTA TOTAL	1,728,853	99	-	99	1,728,754
REGIONWIDE TOTAL	85,182,063	151,301 437,175	16,727	269,147	84,896,189

2008 Base Year - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	10,481	-	10,481	3,325,244
CHULA VISTA TOTAL	3,951,266	30,546	-	30,546	3,920,720
CORONADO TOTAL	431,361	6,218	-	6,218	425,143
DEL MAR TOTAL	96,012	206	-	206	95,806
EL CAJON TOTAL	2,176,865	12,696	-	12,696	2,164,169
ENCINITAS TOTAL	2,065,242	12,892	-	12,892	2,052,350
ESCONDIDO TOTAL	2,793,535	6,670	-	6,670	2,786,865
External TOTAL	347,454	1,979	-	1,979	345,475
IMPERIAL BEACH TOTAL	119,764	392	-	392	119,372
LA MESA TOTAL	1,822,392	19,612	-	19,612	1,802,780
LEMON GROVE TOTAL	831,075	7,624	-	7,624	823,451
NATIONAL CITY TOTAL	1,647,424	27,517	-	27,517	1,619,907
OCEANSIDE TOTAL	3,208,748	3,821	-	3,821	3,204,927
POWAY TOTAL	1,105,609	2,103	-	2,103	1,103,506
SAN DIEGO TOTAL	38,613,579	1,087,144	176,404	910,740	37,526,435
SAN MARCOS TOTAL	2,020,740	1,069	-	1,069	2,019,671
SANTEE TOTAL	860,205	2,581	-	2,581	857,624
SOLANA BEACH TOTAL	567,653	4,696	-	4,696	562,957
Unincorporated TOTAL	17,458,561	44,980	-	44,980	17,413,581
VISTA TOTAL	1,728,853	612	-	612	1,728,241
		730,121.50			
REGIONWIDE TOTAL	85,182,063	2,013,961	176,404	1,107,435	83,898,224
	66.7%	(670,292)			

Appendix B
Daily Roadway Traffic Counts

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-094

Location: Lytton St. btwn. Rosecrans St. & Midway Dr.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	11		8					12:00	222		148				
00:15	10		5					12:15	172		138				
00:30	12		5					12:30	163		160				
00:45	7	40	8	26			66	12:45	163	720	151	597			1317
01:00	3		4					13:00	149		147				
01:15	3		5					13:15	173		160				
01:30	3		6					13:30	170		151				
01:45	9	18	6	21			39	13:45	154	646	161	619			1265
02:00	5		4					14:00	154		171				
02:15	2		5					14:15	170		216				
02:30	4		4					14:30	191		219				
02:45	5	16	2	15			31	14:45	228	743	201	807			1550
03:00	4		2					15:00	223		185				
03:15	4		6					15:15	219		212				
03:30	3		2					15:30	236		226				
03:45	12	23	4	14			37	15:45	250	928	262	885			1813
04:00	14		6					16:00	243		275				
04:15	11		6					16:15	217		322				
04:30	14		13					16:30	268		247				
04:45	24	63	12	37			100	16:45	256	984	268	1112			2096
05:00	42		26					17:00	261		243				
05:15	60		24					17:15	235		219				
05:30	93		35					17:30	192		157				
05:45	104	299	47	132			431	17:45	209	897	154	773			1670
06:00	129		56					18:00	202		134				
06:15	179		82					18:15	185		167				
06:30	223		100					18:30	160		121				
06:45	213	744	124	362			1106	18:45	120	667	106	528			1195
07:00	316		159					19:00	135		103				
07:15	286		197					19:15	129		87				
07:30	194		218					19:30	78		79				
07:45	270	1066	201	775			1841	19:45	110	452	69	338			790
08:00	239		200					20:00	85		77				
08:15	247		235					20:15	97		77				
08:30	225		205					20:30	98		72				
08:45	191	902	177	817			1719	20:45	111	391	81	307			698
09:00	176		156					21:00	69		52				
09:15	127		128					21:15	67		63				
09:30	127		117					21:30	61		45				
09:45	134	564	120	521			1085	21:45	63	260	41	201			461
10:00	133		92					22:00	52		50				
10:15	145		127					22:15	54		46				
10:30	159		143					22:30	40		44				
10:45	147	584	120	482			1066	22:45	38	184	28	168			352
11:00	153		123					23:00	30		23				
11:15	148		155					23:15	20		19				
11:30	179		126					23:30	23		21				
11:45	180	660	116	520			1180	23:45	11	84	14	77			161
Total Vol.		4979		3722			**8701**			6956		6412			**13368**

Daily Totals

NB	SB	EB	WB	Combined
11935	10134			**22069**

	AM			PM		
Split %	57.2%	42.8%	**39.4%**	52.0%	48.0%	**60.6%**
Peak Hour	07:00	07:30	**07:00**	16:30	16:00	**16:00**
Volume	1066	854	**1841**	1020	1112	**2096**
P.H.F.	0.84	0.91	**0.95**	0.95	0.86	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-086

Location: Mission Bay Dr. btwn. I-8 WB Off Ramp & I-8 EB On Ramp

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		78					12:00	130		376				
00:15	16		56					12:15	154		409				
00:30	12		54					12:30	139		403				
00:45	8	49	54	242			291	12:45	145	568	475	1663			2231
01:00	9		43					13:00	133		392				
01:15	12		40					13:15	144		423				
01:30	11		45					13:30	142		428				
01:45	10	42	47	175			217	13:45	167	586	456	1699			2285
02:00	2		44					14:00	152		410				
02:15	7		26					14:15	133		431				
02:30	5		36					14:30	126		472				
02:45	5	19	21	127			146	14:45	111	522	441	1754			2276
03:00	3		24					15:00	134		460				
03:15	1		16					15:15	138		494				
03:30	1		18					15:30	129		520				
03:45	6	11	19	77			88	15:45	126	527	506	1980			2507
04:00	7		16					16:00	133		530				
04:15	4		20					16:15	159		552				
04:30	5		22					16:30	125		568				
04:45	6	22	39	97			119	16:45	130	547	574	2224			2771
05:00	9		42					17:00	164		580				
05:15	8		57					17:15	161		643				
05:30	13		64					17:30	140		591				
05:45	18	48	159	322			370	17:45	131	596	621	2435			3031
06:00	22		125					18:00	124		601				
06:15	36		162					18:15	114		578				
06:30	45		222					18:30	141		488				
06:45	51	154	270	779			933	18:45	109	488	412	2079			2567
07:00	67		329					19:00	120		388				
07:15	68		420					19:15	109		390				
07:30	86		469					19:30	109		333				
07:45	100	321	505	1723			2044	19:45	104	442	336	1447			1889
08:00	76		440					20:00	105		334				
08:15	70		451					20:15	95		315				
08:30	98		478					20:30	95		275				
08:45	111	355	424	1793			2148	20:45	70	365	267	1191			1556
09:00	118		398					21:00	63		248				
09:15	118		390					21:15	68		196				
09:30	134		366					21:30	73		192				
09:45	163	533	374	1528			2061	21:45	60	264	198	834			1098
10:00	138		230					22:00	64		159				
10:15	118		332					22:15	51		135				
10:30	102		330					22:30	59		146				
10:45	131	489	346	1238			1727	22:45	58	232	126	566			798
11:00	114		357					23:00	24		135				
11:15	140		359					23:15	22		126				
11:30	123		383					23:30	21		87				
11:45	143	520	380	1479			1999	23:45	19	86	82	430			516
Total Vol.		2563		9580			**12143**			5223		18302			**23525**

Daily Totals

NB	SB	EB	WB	**Combined**
7786	27882			**35668**

	AM			**PM**		
Split %	21.1%	78.9%	**34.0%**	22.2%	77.8%	**66.0%**
Peak Hour	11:45	07:45	**07:45**	13:15	17:15	**17:00**
Volume	566	1874	**2218**	605	2456	**3031**
P.H.F.	0.92	0.93	**0.92**	0.91	0.95	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-088

Location: Midway Dr. btwn. Sports Arena Blvd. & Kemper St.

AM Period	NB	SB	EB		WB		
00:00			15		25		
00:15			17		26		
00:30			14		19		
00:45			12	58	8	78	136
01:00			11		16		
01:15			15		11		
01:30			9		17		
01:45			8	43	14	58	101
02:00			5		13		
02:15			6		6		
02:30			7		8		
02:45			6	24	5	32	56
03:00			3		5		
03:15			5		7		
03:30			6		4		
03:45			1	15	6	22	37
04:00			12		7		
04:15			11		8		
04:30			13		5		
04:45			19	55	11	31	86
05:00			13		17		
05:15			14		17		
05:30			28		24		
05:45			43	98	31	89	187
06:00			34		27		
06:15			43		37		
06:30			58		59		
06:45			71	206	90	213	419
07:00			82		78		
07:15			102		81		
07:30			117		100		
07:45			159	460	91	350	810
08:00			125		94		
08:15			166		113		
08:30			134		112		
08:45			143	568	137	456	1024
09:00			128		143		
09:15			133		133		
09:30			154		130		
09:45			147	562	154	560	1122
10:00			141		174		
10:15			152		152		
10:30			163		163		
10:45			139	595	139	628	1223
11:00			133		133		
11:15			135		154		
11:30			154		178		
11:45			147	569	152	617	1186
Total Vol.				3253		3134	**6387**

PM Period	NB	SB	EB		WB		
12:00			171		174		
12:15			159		166		
12:30			152		196		
12:45			158	640	182	718	1358
13:00			133		187		
13:15			139		169		
13:30			163		170		
13:45			150	585	174	700	1285
14:00			145		154		
14:15			147		165		
14:30			154		199		
14:45			155	601	185	703	1304
15:00			160		187		
15:15			155		198		
15:30			144		178		
15:45			180	639	199	762	1401
16:00			182		219		
16:15			169		193		
16:30			160		221		
16:45			180	691	204	837	1528
17:00			215		223		
17:15			209		244		
17:30			195		230		
17:45			220	839	210	907	1746
18:00			197		189		
18:15			170		216		
18:30			156		202		
18:45			181	704	186	793	1497
19:00			151		186		
19:15			154		150		
19:30			113		184		
19:45			116	534	140	660	1194
20:00			102		158		
20:15			122		131		
20:30			93		134		
20:45			81	398	131	554	952
21:00			76		103		
21:15			86		102		
21:30			62		82		
21:45			61	285	76	363	648
22:00			40		95		
22:15			36		54		
22:30			43		49		
22:45			34	153	49	247	400
23:00			32		54		
23:15			27		30		
23:30			33		40		
23:45			20	112	26	150	262
				6181		7394	**13575**

Daily Totals

NB	SB	EB	WB	Combined
		9434	10528	**19962**

	AM			PM		
Split %	50.9%	49.1%	**32.0%**	45.5%	54.5%	**68.0%**
Peak Hour	11:30	11:45	**11:45**	17:00	17:00	**17:00**
Volume	631	688	**1317**	839	907	**1746**
P.H.F.	0.92	0.88	**0.95**	0.95	0.93	**0.96**

Volumes for: STATION# on Tuesday, March 16, 2010 City: San Diego Project #: 10-4068-018
Location: Midway Dr between Kemper St & Fordham St File No. MC0214-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	16	169			24	211				
12:15	18	185			26	221				
12:30	17	191			17	210				
12:45	10	215	61	760	14	215	81	857	142	1617
1:00	6	179			14	208				
1:15	8	187			10	206				
1:30	13	171			13	172				
1:45	8	145	35	682	22	191	59	777	94	1459
2:00	7	166			14	175				
2:15	7	169			12	205				
2:30	12	177			13	177				
2:45	4	175	30	687	7	165	46	722	76	1409
3:00	16	180			7	197				
3:15	8	148			5	213				
3:30	10	170			5	203				
3:45	4	189	38	687	15	230	32	843	70	1530
4:00	7	186			9	224				
4:15	11	144			9	193				
4:30	5	174			4	181				
4:45	10	174	33	678	14	202	36	800	69	1478
5:00	8	179			16	235				
5:15	28	214			18	209				
5:30	41	166			29	230				
5:45	44	184	121	743	43	166	106	840	227	1583
6:00	30	203			29	182				
6:15	42	185			31	164				
6:30	59	190			39	198				
6:45	71	155	202	733	56	175	155	719	357	1452
7:00	76	150			65	192				
7:15	90	160			58	183				
7:30	110	158			69	164				
7:45	119	105	395	573	91	140	283	679	678	1252
8:00	129	147			86	125				
8:15	111	112			108	138				
8:30	102	113			102	124				
8:45	118	88	460	460	109	135	405	522	865	982
9:00	110	86			108	123				
9:15	129	92			123	81				
9:30	120	72			113	92				
9:45	135	50	494	300	148	80	492	376	986	676
10:00	111	46			142	69				
10:15	135	46			142	52				
10:30	163	47			138	60				
10:45	152	51	561	190	150	50	572	231	1133	421
11:00	152	37			192	45				
11:15	143	18			177	51				
11:30	182	24			190	28				
11:45	169	21	646	100	219	35	778	159	1424	259
Total	3076	6593	3076	6593	3045	7525	3045	7525	6121	14118
Combined Total	9669		9669		10570		10570		20239	
AM Peak	11:45 AM				11:45 AM					
Vol.	714				861					
P.H.F.	0.935				0.974					
PM Peak		12:30 PM				4:45 PM				
Vol.		772				876				
P.H.F.		0.898				0.932				
Percentage	31.8%	68.2%			28.8%	71.2%				

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
MIDWAY DR	[GAINES ST - RILEY ST]	03100 - 03150	1190	EAST	:	14600	6/27/1990	0985-90
				WEST	:	17700	7/20/1990	0986-90
				EAST	:	13800	6/17/1991	0917-91
				WEST	:	16900	6/17/1991	0918-91
				*TOTAL	:	30700		
				EAST	:	14300	6/9/1992	0498-92
				WEST	:	16900	6/9/1992	0499-92
				*TOTAL	:	31200		
				EAST	:	12100	6/2/1995	0663-95
				WEST	:	15100	6/2/1995	0664-95
				*TOTAL	:	27200		
				EAST	:	12600	6/22/1999	0479-99
				WEST	:	14900	6/22/1999	0479-99
				*TOTAL	:	27500		
				EAST	:	10960	6/18/2002	0629-02
				WEST	:	14250	6/25/2002	0630-02
				EAST	:	18590	6/13/2006	0068-06
				WEST	:	14360	6/13/2006	0068-06
				*TOTAL	:	32950		
				EAST	:	12720	8/12/2008	0313-08
				WEST	:	14410	8/12/2008	0313-08
				*TOTAL	:	27130		
				EAST	:	12860	6/16/2009	MC0396-0
				WEST	:	14745	6/16/2009	MC0396-0
				*TOTAL	:	27605		
MIDWAY DR	[KEMPER ST - DUKE ST]	03600 - 03800	1771	EAST	:	12200	6/18/1991	0855-91
				WEST	:	12900	6/18/1991	0856-91
				*TOTAL	:	25100		
				EAST	:	13000	5/26/1993	0418-93
				WEST	:	13300	5/26/1993	0419-93
				*TOTAL	:	26300		
				EAST	:	10800	5/13/1996	0487-96

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Midway Dr (STATION#1860/FILE#MC0443-10)	Project:	10-4169-031	11,737	11,246	0	0	22,983

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	17		24					12:00	237		211				
00:15	27		40					12:15	236		200				
00:30	23		20					12:30	267		215				
00:45	18	85	17	101			186	12:45	215	955	277	903			1858
01:00	9		21					13:00	246		225				
01:15	13		15					13:15	221		182				
01:30	18		11					13:30	225		188				
01:45	14	54	27	74			128	13:45	223	915	234	829			1744
02:00	17		20					14:00	192		203				
02:15	14		13					14:15	209		201				
02:30	6		14					14:30	183		212				
02:45	6	43	9	56			99	14:45	218	802	209	825			1627
03:00	5		3					15:00	211		199				
03:15	11		11					15:15	208		205				
03:30	16		7					15:30	213		207				
03:45	16	48	10	31			79	15:45	212	844	226	837			1681
04:00	17		12					16:00	240		230				
04:15	13		12					16:15	233		193				
04:30	18		13					16:30	247		234				
04:45	19	67	19	56			123	16:45	249	969	204	861			1830
05:00	16		29					17:00	254		209				
05:15	34		28					17:15	294		225				
05:30	38		47					17:30	264		185				
05:45	72	160	38	142			302	17:45	185	997	220	839			1836
06:00	49		58					18:00	175		205				
06:15	57		61					18:15	172		158				
06:30	80		79					18:30	148		175				
06:45	104	290	98	296			586	18:45	144	639	144	682			1321
07:00	97		100					19:00	142		175				
07:15	115		139					19:15	143		147				
07:30	143		124					19:30	127		140				
07:45	136	491	117	480			971	19:45	151	563	169	631			1194
08:00	144		128					20:00	92		127				
08:15	161		113					20:15	102		133				
08:30	129		97					20:30	67		127				
08:45	148	582	106	444			1026	20:45	76	337	120	507			844
09:00	150		107					21:00	79		121				
09:15	182		142					21:15	84		87				
09:30	179		163					21:30	58		99				
09:45	176	687	131	543			1230	21:45	55	276	77	384			660
10:00	159		127					22:00	54		76				
10:15	180		139					22:15	41		53				
10:30	184		148					22:30	35		40				
10:45	189	712	167	581			1293	22:45	31	161	48	217			378
11:00	205		182					23:00	29		41				
11:15	236		178					23:15	20		26				
11:30	265		201					23:30	34		39				
11:45	248	954	228	789			1743	23:45	23	106	32	138			244
Total Vol.	4173		3593				**7766**		7564		7653				**15217**

	NB	SB	EB	WB	Total
Daily Totals :	**11,737**	**11,246**	**0**	**0**	**22,983**

	AM			PM			
Split %	53.7%	46.3%	**33.8%**		49.7%	50.3%	**66.2%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	12:15	**16:30**
Volume	988	854	**1842**	**Volume**	1061	917	**1916**
P.H.F.	0.925	0.936	**0.955**	**P.H.F.**	0.902	0.828	**0.923**
7 - 9 Vol.	1073	924	**1997**	**4 - 6 Vol.**	1966	1700	**3666**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	584	508	**1066**	**Volume**	1061	872	**1916**
P.H.F.	0.907	0.914	**0.973**	**P.H.F.**	0.902	0.932	**0.923**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-087

Location: Mission Bay Dr. btwn. I-8 EB On Ramp & Sports Arena Blvd.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	29		33					12:00	269		213				
00:15	37		32					12:15	297		241				
00:30	25		31					12:30	289		248				
00:45	27	118	14	110			228	12:45	298	1153	252	954			2107
01:00	23		31					13:00	273		249				
01:15	27		22					13:15	314		230				
01:30	21		27					13:30	298		230				
01:45	18	89	23	103			192	13:45	298	1183	253	962			2145
02:00	22		16					14:00	303		239				
02:15	19		12					14:15	295		219				
02:30	20		19					14:30	274		205				
02:45	13	74	8	55			129	14:45	284	1156	224	887			2043
03:00	9		18					15:00	252		235				
03:15	7		9					15:15	296		260				
03:30	18		8					15:30	270		240				
03:45	22	56	11	46			102	15:45	265	1083	262	997			2080
04:00	15		11					16:00	312		251				
04:15	18		12					16:15	306		285				
04:30	16		11					16:30	296		276				
04:45	23	72	25	59			131	16:45	279	1193	257	1069			2262
05:00	28		23					17:00	360		274				
05:15	31		33					17:15	292		320				
05:30	40		25					17:30	288		289				
05:45	64	163	79	160			323	17:45	282	1222	303	1186			2408
06:00	81		60					18:00	276		298				
06:15	95		77					18:15	257		274				
06:30	132		90					18:30	252		228				
06:45	136	444	121	348			792	18:45	263	1048	225	1025			2073
07:00	177		157					19:00	260		215				
07:15	202		183					19:15	212		192				
07:30	233		192					19:30	229		180				
07:45	250	862	246	778			1640	19:45	209	910	170	757			1667
08:00	204		209					20:00	217		153				
08:15	205		199					20:15	197		153				
08:30	208		209					20:30	187		144				
08:45	240	857	200	817			1674	20:45	158	759	136	586			1345
09:00	218		232					21:00	163		140				
09:15	225		213					21:15	136		110				
09:30	262		203					21:30	165		96				
09:45	249	954	235	883			1837	21:45	140	604	98	444			1048
10:00	219		228					22:00	129		71				
10:15	241		244					22:15	111		65				
10:30	222		214					22:30	104		71				
10:45	230	912	230	916			1828	22:45	99	443	64	271			714
11:00	217		233					23:00	67		69				
11:15	214		241					23:15	67		59				
11:30	215		225					23:30	55		42				
11:45	228	874	236	935			1809	23:45	30	219	44	214			433
Total Vol.		5475		5210			**10685**			10973		9352			**20325**

Daily Totals

NB	SB	EB	WB	Combined
16448	14562			**31010**

	AM			PM		
Split %	51.2%	48.8%	**34.5%**	54.0%	46.0%	**65.5%**
Peak Hour	11:45	11:45	**11:45**	16:15	17:15	**17:00**
Volume	1083	938	**2021**	1241	1210	**2408**
P.H.F.	0.91	0.95	**0.94**	0.86	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-090

Location: Sports Arena Blvd. btwn. Midway Dr. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		21			12:00			144		148		
00:15			14		21			12:15			135		137		
00:30			6		16			12:30			163		142		
00:45			5	33	14	72	105	12:45			141	583	141	568	1151
01:00			7		10			13:00			148		167		
01:15			4		7			13:15			137		161		
01:30			4		1			13:30			156		158		
01:45			3	18	9	27	45	13:45			152	593	155	641	1234
02:00			6		9			14:00			150		152		
02:15			5		7			14:15			139		140		
02:30			2		3			14:30			140		133		
02:45			2	15	3	22	37	14:45			147	576	139	564	1140
03:00			7		5			15:00			133		146		
03:15			6		7			15:15			139		180		
03:30			6		4			15:30			163		158		
03:45			6	25	5	21	46	15:45			152	587	166	650	1237
04:00			4		6			16:00			162		169		
04:15			4		4			16:15			142		171		
04:30			6		8			16:30			171		215		
04:45			8	22	8	26	48	16:45			143	618	166	721	1339
05:00			10		7			17:00			155		213		
05:15			12		5			17:15			164		220		
05:30			25		17			17:30			155		194		
05:45			32	79	12	41	120	17:45			173	647	168	795	1442
06:00			32		20			18:00			159		197		
06:15			42		22			18:15			156		175		
06:30			62		32			18:30			178		155		
06:45			71	207	51	125	332	18:45			140	633	150	677	1310
07:00			78		62			19:00			134		152		
07:15			109		61			19:15			153		152		
07:30			115		57			19:30			119		137		
07:45			135	437	57	237	674	19:45			116	522	156	597	1119
08:00			140		65			20:00			117		123		
08:15			139		80			20:15			105		133		
08:30			122		96			20:30			82		120		
08:45			145	546	91	332	878	20:45			74	378	115	491	869
09:00			124		79			21:00			78		103		
09:15			139		109			21:15			55		104		
09:30			133		122			21:30			36		90		
09:45			154	550	126	436	986	21:45			40	209	83	380	589
10:00			147		139			22:00			29		84		
10:15			141		133			22:15			27		59		
10:30			152		130			22:30			30		68		
10:45			133	573	128	530	1103	22:45			19	105	51	262	367
11:00			130		124			23:00			14		143		
11:15			128		147			23:15			20		55		
11:30			124		152			23:30			24		26		
11:45			147	529	163	586	1115	23:45			14	72	17	241	313
Total Vol.				3034		2455	**5489**					5523		6587	**12110**

Daily Totals

NB	SB	EB	WB	Combined
		8557	9042	**17599**

	AM			PM		
Split %	55.3%	44.7%	**31.2%**	45.6%	54.4%	**68.8%**
Peak Hour	09:45	11:15	**11:45**	17:45	16:30	**16:30**
Volume	594	610	**1179**	666	814	**1447**
P.H.F.	0.96	0.94	**0.95**	0.94	0.93	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-091

Location: Sports Arena Blvd. btwn. Kemper St. & East Dr.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			26		15			12:00			122		130		
00:15			14		15			12:15			131		133		
00:30			11		15			12:30			128		139		
00:45			10	61	13	58	119	12:45			133	514	143	545	1059
01:00			5		12			13:00			130		141		
01:15			5		5			13:15			163		147		
01:30			4		3			13:30			139		154		
01:45			8	22	8	28	50	13:45			155	587	166	608	1195
02:00			9		4			14:00			154		196		
02:15			5		3			14:15			174		185		
02:30			1		3			14:30			155		174		
02:45			1	16	0	10	26	14:45			156	639	187	742	1381
03:00			4		3			15:00			166		188		
03:15			0		9			15:15			198		174		
03:30			6		9			15:30			187		154		
03:45			10	20	8	29	49	15:45			174	725	165	681	1406
04:00			12		6			16:00			188		166		
04:15			5		3			16:15			204		158		
04:30			10		10			16:30			218		162		
04:45			9	36	12	31	67	16:45			213	823	165	651	1474
05:00			14		5			17:00			237		185		
05:15			14		6			17:15			246		200		
05:30			20		29			17:30			216		166		
05:45			31	79	39	79	158	17:45			231	930	179	730	1660
06:00			27		32			18:00			222		178		
06:15			30		37			18:15			244		188		
06:30			68		48			18:30			224		171		
06:45			62	187	67	184	371	18:45			206	896	166	703	1599
07:00			78		76			19:00			213		162		
07:15			101		53			19:15			194		129		
07:30			129		77			19:30			191		115		
07:45			117	425	72	278	703	19:45			185	783	101	507	1290
08:00			126		103			20:00			163		97		
08:15			124		83			20:15			159		110		
08:30			132		93			20:30			140		88		
08:45			135	517	98	377	894	20:45			148	610	70	365	975
09:00			148		86			21:00			121		73		
09:15			147		117			21:15			131		61		
09:30			127		122			21:30			135		62		
09:45			128	550	121	446	996	21:45			112	499	51	247	746
10:00			114		120			22:00			103		56		
10:15			128		122			22:15			73		44		
10:30			133		147			22:30			103		45		
10:45			130	505	124	513	1018	22:45			110	389	48	193	582
11:00			128		128			23:00			253		80		
11:15			124		133			23:15			102		36		
11:30			141		139			23:30			55		29		
11:45			143	536	163	563	1099	23:45			29	439	22	167	606
Total Vol.				2954		2596	**5550**					7834		6139	**13973**

Daily Totals

NB	SB	EB	WB	Combined
		10788	8735	**19523**

	AM			PM		
Split %	53.2%	46.8%	**28.4%**	56.1%	43.9%	**71.6%**
Peak Hour	08:30	11:15	**11:30**	17:00	14:00	**17:00**
Volume	562	565	**1102**	930	742	**1660**
P.H.F.	0.95	0.87	**0.90**	0.95	0.95	**0.93**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
SPORTS ARENA BL	[ROSECRANS ST - EAST DR]	03100 - 03300	1211	EAST	:	14780	6/15/2005	0296-05
				WEST	:	14640	6/15/2005	0296-05
				*TOTAL	:	29420		
				EAST	:	13620	7/29/2008	0315-08
				WEST	:	13160	7/29/2008	0315-08
				*TOTAL	:	26780		
SPORTS ARENA BL	[KEMPER ST - HANCOCK ST]	03600 - 03800	1210	EAST	:	11200	6/25/1990	0976-90
				WEST	:	10300	6/25/1990	0977-90
				*TOTAL	:	21500		
				EAST	:	9400	6/18/1991	0853-91
				WEST	:	7900	6/18/1991	0854-91
				*TOTAL	:	17300		
				EAST	:	8400	9/15/1994	0672-94
				WEST	:	8600	9/15/1994	0673-94
				*TOTAL	:	17000		
				EAST	:	9600	6/17/1997	0370-97
				WEST	:	9500	6/17/1997	0371-97
				*TOTAL	:	19100		
				EAST	:	9780	6/9/2005	0292-05
				WEST	:	9590	6/9/2005	0292-05
				*TOTAL	:	19370		
				EAST	:	8105	6/15/2010	MC0511-1
				WEST	:	8655	6/15/2010	MC0511-1
				*TOTAL	:	16760		
				EAST	:	7475	1/11/2011	MC1210-1
				WEST	:	8145	1/11/2011	MC1210-1
				*TOTAL	:	15620		
SPORTS ARENA BL	[HANCOCK ST - W PT LOMA BL]	03800 - 03900	1213	EAST	:	10000	6/25/1990	1001-90
				WEST	:	11200	6/25/1990	1002-90
				*TOTAL	:	21200		
				EAST	:	10600	6/26/1991	0952-91
				WEST	:	16300	6/26/1991	0953-91

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-092

Location: Sports Arena Blvd. btwn. Rosecrans St. & Enterprise St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			44		24		
00:15			2		2			12:15			33		28		
00:30			0		0			12:30			36		24		
00:45			0	2	4	7	9	12:45			37	150	21	97	247
01:00			0		3			13:00			31		28		
01:15			2		0			13:15			31		24		
01:30			0		0			13:30			30		26		
01:45			1	3	1	4	7	13:45			36	128	22	100	228
02:00			0		4			14:00			30		20		
02:15			0		0			14:15			29		24		
02:30			2		2			14:30			20		21		
02:45			0	2	8	14	16	14:45			30	109	14	79	188
03:00			2		1			15:00			17		19		
03:15			0		1			15:15			20		22		
03:30			1		3			15:30			18		20		
03:45			3	6	3	8	14	15:45			19	74	28	89	163
04:00			0		2			16:00			25		24		
04:15			0		4			16:15			33		32		
04:30			2		0			16:30			31		39		
04:45			0	2	2	8	10	16:45			18	107	35	130	237
05:00			2		2			17:00			14		54		
05:15			0		2			17:15			9		74		
05:30			1		8			17:30			15		45		
05:45			4	7	4	16	23	17:45			21	59	50	223	282
06:00			5		5			18:00			14		21		
06:15			2		3			18:15			26		28		
06:30			3		1			18:30			13		21		
06:45			6	16	1	10	26	18:45			16	69	14	84	153
07:00			10		11			19:00			9		16		
07:15			13		10			19:15			11		13		
07:30			15		14			19:30			15		11		
07:45			15	53	8	43	96	19:45			8	43	10	50	93
08:00			13		11			20:00			6		8		
08:15			12		10			20:15			7		7		
08:30			9		14			20:30			6		5		
08:45			18	52	19	54	106	20:45			10	29	3	23	52
09:00			30		13			21:00			2		2		
09:15			15		18			21:15			3		1		
09:30			19		11			21:30			9		4		
09:45			22	86	10	52	138	21:45			4	18	1	8	26
10:00			31		14			22:00			3		5		
10:15			22		42			22:15			3		2		
10:30			22		32			22:30			11		1		
10:45			31	106	28	116	222	22:45			0	17	4	12	29
11:00			28		24			23:00			7		1		
11:15			29		25			23:15			2		5		
11:30			32		24			23:30			3		2		
11:45			33	122	16	89	211	23:45			2	14	3	11	25
Total Vol.				457		421	**878**					817		906	**1723**

Daily Totals

NB	SB	EB	WB	Combined
		1274	1327	**2601**

	AM			PM		
Split %	52.1%	47.9%	**33.8%**	47.4%	52.6%	**66.2%**
Peak Hour	11:45	10:15	**11:45**	12:00	17:00	**17:00**
Volume	146	126	**238**	150	223	**282**
P.H.F.	0.83	0.75	**0.88**	0.85	0.75	**0.85**

Volumes for: Thursday, August 19, 2010 City: San Diego Project #: 10-4243-049

Location: Kurtz St (STATION#1873/FILE#MC0742-10) between Riley St & Greenwood St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		14				12:00		130			
00:15		8				12:15		127			
00:30		15				12:30		107			
00:45		11	48		48	12:45		105	469		469
01:00		9				13:00		110			
01:15		4				13:15		91			
01:30		4				13:30		104			
01:45		6	23		23	13:45		94	399		399
02:00		5				14:00		83			
02:15		6				14:15		100			
02:30		4				14:30		89			
02:45		2	17		17	14:45		90	362		362
03:00		5				15:00		109			
03:15		5				15:15		110			
03:30		8				15:30		117			
03:45		5	23		23	15:45		115	451		451
04:00		13				16:00		145			
04:15		22				16:15		116			
04:30		15				16:30		128			
04:45		12	62		62	16:45		121	510		510
05:00		12				17:00		154			
05:15		9				17:15		113			
05:30		14				17:30		105			
05:45		18	53		53	17:45		97	469		469
06:00		23				18:00		93			
06:15		21				18:15		71			
06:30		34				18:30		53			
06:45		28	106		106	18:45		47	264		264
07:00		39				19:00		43			
07:15		45				19:15		38			
07:30		66				19:30		45			
07:45		57	207		207	19:45		27	153		153
08:00		61				20:00		30			
08:15		68				20:15		42			
08:30		60				20:30		30			
08:45		69	258		258	20:45		21	123		123
09:00		57				21:00		21			
09:15		73				21:15		25			
09:30		86				21:30		27			
09:45		77	293		293	21:45		26	99		99
10:00		92				22:00		18			
10:15		89				22:15		19			
10:30		116				22:30		18			
10:45		98	395		395	22:45		15	70		70
11:00		105				23:00		18			
11:15		102				23:15		16			
11:30		103				23:30		12			
11:45		116	426		426	23:45		10	56		56
Total Vol.			1911		**1911**				3425		**3425**

Daily Totals

NB	SB	EB	WB	Combined
	5336			**5336**

	AM		PM	
Split %	100.0%	**35.8%**	100.0%	**64.2%**
Peak Hour	11:45	**11:45**	16:15	**16:15**
Volume	480	**480**	519	**519**
P.H.F.	0.92	**0.92**	0.84	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-084

Location: Kurtz St. btwn. Rosecrans St. & Pacific Highway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		8					12:00	82		48				
00:15	8		1					12:15	54		71				
00:30	6		2					12:30	68		59				
00:45	7	23	1	12			35	12:45	58	262	88	266			528
01:00	3		9					13:00	73		68				
01:15	3		1					13:15	38		88				
01:30	2		4					13:30	54		81				
01:45	5	13	5	19			32	13:45	50	215	91	328			543
02:00	2		4					14:00	53		73				
02:15	4		2					14:15	42		80				
02:30	5		1					14:30	49		67				
02:45	7	18	4	11			29	14:45	51	195	79	299			494
03:00	7		1					15:00	56		78				
03:15	10		6					15:15	49		63				
03:30	7		2					15:30	65		55				
03:45	6	30	2	11			41	15:45	65	235	50	246			481
04:00	2		5					16:00	60		54				
04:15	11		4					16:15	61		41				
04:30	3		7					16:30	53		45				
04:45	18	34	3	19			53	16:45	58	232	65	205			437
05:00	9		8					17:00	67		51				
05:15	18		4					17:15	66		38				
05:30	23		3					17:30	49		46				
05:45	36	86	5	20			106	17:45	52	234	46	181			415
06:00	41		3					18:00	44		35				
06:15	58		19					18:15	41		54				
06:30	52		22					18:30	47		34				
06:45	72	223	24	68			291	18:45	28	160	69	192			352
07:00	50		24					19:00	30		66				
07:15	62		29					19:15	16		37				
07:30	58		33					19:30	31		45				
07:45	71	241	30	116			357	19:45	27	104	44	192			296
08:00	59		54					20:00	25		42				
08:15	59		41					20:15	27		28				
08:30	59		45					20:30	23		48				
08:45	62	239	55	195			434	20:45	19	94	23	141			235
09:00	47		42					21:00	12		33				
09:15	57		24					21:15	9		25				
09:30	48		29					21:30	12		24				
09:45	49	201	33	128			329	21:45	16	49	22	104			153
10:00	54		47					22:00	11		24				
10:15	56		37					22:15	8		20				
10:30	54		60					22:30	7		22				
10:45	64	228	31	175			403	22:45	11	37	13	79			116
11:00	63		58					23:00	8		8				
11:15	65		45					23:15	8		5				
11:30	54		65					23:30	4		6				
11:45	72	254	65	233			487	23:45	5	25	3	22			47
Total Vol.		1590		1007			**2597**			1842		2255			**4097**

Daily Totals

NB	SB	EB	WB	Combined
3432	3262			**6694**

	AM			PM		
Split %	61.2%	38.8%	**38.8%**	45.0%	55.0%	**61.2%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:15	**12:45**
Volume	276	249	**519**	262	333	**548**
P.H.F.	0.84	0.88	**0.95**	0.80	0.91	**0.94**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-001

Location: Hancock St(STATION#1878/FILE#MC0592-10) between Channel Wy & Sports Arena Blvd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	60		36				
00:15	5		3					12:15	53		44				
00:30	3		2					12:30	66		41				
00:45	0	11	1	12			23	12:45	41	220	42	163			383
01:00	0		2					13:00	33		51				
01:15	1		1					13:15	43		42				
01:30	1		1					13:30	42		33				
01:45	1	3	1	5			8	13:45	46	164	30	156			320
02:00	3		1					14:00	49		42				
02:15	0		2					14:15	56		34				
02:30	1		0					14:30	42		40				
02:45	1	5	2	5			10	14:45	42	189	37	153			342
03:00	2		3					15:00	46		40				
03:15	2		0					15:15	54		32				
03:30	1		2					15:30	51		24				
03:45	3	8	1	6			14	15:45	41	192	26	122			314
04:00	1		1					16:00	56		29				
04:15	1		4					16:15	38		19				
04:30	2		2					16:30	47		23				
04:45	2	6	8	15			21	16:45	60	201	23	94			295
05:00	3		6					17:00	51		21				
05:15	2		2					17:15	48		17				
05:30	3		2					17:30	48		23				
05:45	4	12	16	26			38	17:45	28	175	21	82			257
06:00	6		10					18:00	30		18				
06:15	7		14					18:15	39		19				
06:30	6		21					18:30	25		18				
06:45	11	30	24	69			99	18:45	24	118	14	69			187
07:00	20		27					19:00	25		21				
07:15	17		23					19:15	16		15				
07:30	21		24					19:30	11		19				
07:45	18	76	37	111			187	19:45	17	69	14	69			138
08:00	20		50					20:00	14		10				
08:15	21		36					20:15	14		9				
08:30	18		28					20:30	12		13				
08:45	21	80	35	149			229	20:45	7	47	13	45			92
09:00	29		41					21:00	11		9				
09:15	29		29					21:15	9		4				
09:30	23		27					21:30	9		9				
09:45	30	111	24	121			232	21:45	6	35	12	34			69
10:00	43		35					22:00	8		13				
10:15	39		40					22:15	6		10				
10:30	30		25					22:30	6		7				
10:45	41	153	31	131			284	22:45	4	24	3	33			57
11:00	47		28					23:00	1		2				
11:15	40		33					23:15	8		2				
11:30	38		32					23:30	4		5				
11:45	51	176	31	124			300	23:45	2	15	2	11			26
Total Vol.		671		774			**1445**			1449		1031			**2480**

Daily Totals

NB	SB	EB	WB	Combined
2120	1805			**3925**

	AM			PM		
Split %	46.4%	53.6%	**36.8%**	58.4%	41.6%	**63.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:00**
Volume	230	152	**382**	220	178	**383**
P.H.F.	0.87	0.86	**0.89**	0.93	0.87	**0.89**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-076

Location: Hancock St. btwn. Greenwood St. & Riley St. (one way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	12					12:00	72				
00:15	12					12:15	105				
00:30	5					12:30	83				
00:45	9	38			38	12:45	106	366			366
01:00	7					13:00	93				
01:15	9					13:15	89				
01:30	11					13:30	80				
01:45	9	36			36	13:45	80	342			342
02:00	10					14:00	69				
02:15	19					14:15	75				
02:30	17					14:30	77				
02:45	11	57			57	14:45	67	288			288
03:00	9					15:00	82				
03:15	10					15:15	90				
03:30	8					15:30	76				
03:45	25	52			52	15:45	91	339			339
04:00	4					16:00	67				
04:15	16					16:15	72				
04:30	7					16:30	67				
04:45	22	49			49	16:45	42	248			248
05:00	20					17:00	58				
05:15	21					17:15	54				
05:30	31					17:30	52				
05:45	54	126			126	17:45	47	211			211
06:00	42					18:00	41				
06:15	55					18:15	44				
06:30	50					18:30	35				
06:45	79	226			226	18:45	52	172			172
07:00	89					19:00	24				
07:15	88					19:15	21				
07:30	69					19:30	21				
07:45	108	354			354	19:45	32	98			98
08:00	119					20:00	33				
08:15	101					20:15	32				
08:30	105					20:30	19				
08:45	97	422			422	20:45	26	110			110
09:00	96					21:00	28				
09:15	81					21:15	17				
09:30	62					21:30	18				
09:45	92	331			331	21:45	25	88			88
10:00	98					22:00	19				
10:15	81					22:15	13				
10:30	74					22:30	20				
10:45	78	331			331	22:45	17	69			69
11:00	70					23:00	18				
11:15	72					23:15	27				
11:30	85					23:30	9				
11:45	68	295			295	23:45	9	63			63
Total Vol.		2317			**2317**		2394				**2394**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
	4711				**4711**

	AM		PM	
Split %	100.0%	**49.2%**	100.0%	**50.8%**
Peak Hour	07:45	**07:45**	12:15	**12:15**
Volume	433	**433**	387	**387**
P.H.F.	0.91	**0.91**	0.91	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-077

Location: Hancock St. btwn. Gaines St. & Rosecrans St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	4					12:00	57				
00:15	8					12:15	69				
00:30	3					12:30	64				
00:45	6	21			21	12:45	69	259			259
01:00	3					13:00	49				
01:15	4					13:15	66				
01:30	5					13:30	42				
01:45	3	15			15	13:45	60	217			217
02:00	3					14:00	47				
02:15	6					14:15	52				
02:30	7					14:30	62				
02:45	5	21			21	14:45	67	228			228
03:00	5					15:00	73				
03:15	6					15:15	78				
03:30	1					15:30	63				
03:45	8	20			20	15:45	66	280			280
04:00	4					16:00	62				
04:15	9					16:15	76				
04:30	3					16:30	78				
04:45	12	28			28	16:45	71	287			287
05:00	6					17:00	70				
05:15	12					17:15	64				
05:30	17					17:30	41				
05:45	24	59			59	17:45	48	223			223
06:00	14					18:00	64				
06:15	22					18:15	38				
06:30	27					18:30	34				
06:45	33	96			96	18:45	33	169			169
07:00	32					19:00	25				
07:15	40					19:15	20				
07:30	45					19:30	24				
07:45	38	155			155	19:45	26	95			95
08:00	65					20:00	21				
08:15	42					20:15	15				
08:30	7					20:30	20				
08:45	0	114			114	20:45	16	72			72
09:00	0					21:00	20				
09:15	5					21:15	14				
09:30	30					21:30	19				
09:45	43	78			78	21:45	9	62			62
10:00	55					22:00	11				
10:15	54					22:15	13				
10:30	42					22:30	11				
10:45	53	204			204	22:45	6	41			41
11:00	39					23:00	5				
11:15	51					23:15	13				
11:30	64					23:30	5				
11:45	59	213			213	23:45	8	31			31
Total Vol.		1024			**1024**		1964				**1964**

Daily Totals

NB	SB	EB	WB	**Combined**
2988				**2988**

	AM		PM	
Split %	100.0%	**34.3%**	100.0%	**65.7%**
Peak Hour	11:30	**11:30**	16:15	**16:15**
Volume	249	**249**	295	**295**
P.H.F.	0.90	**0.90**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Hancock St (STATION#2603/FILE#MC0428-10)	Project:	10-4169-016	0	0	5,774	3,903	9,677

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			7	9		12:00			81	65	
00:15			5	9		12:15			88	68	
00:30			6	3		12:30			94	66	
00:45			3 21	7 28	49	12:45			90 353	54 253	606
01:00			5	6		13:00			66	68	
01:15			1	7		13:15			101	71	
01:30			3	2		13:30			85	67	
01:45			4 13	1 16	29	13:45			88 340	57 263	603
02:00			2	0		14:00			60	73	
02:15			0	6		14:15			65	92	
02:30			4	1		14:30			70	53	
02:45			3 9	0 7	16	14:45			75 270	73 291	561
03:00			4	2		15:00			65	72	
03:15			2	3		15:15			70	92	
03:30			6	2		15:30			74	94	
03:45			6 18	1 8	26	15:45			77 286	95 353	639
04:00			9	2		16:00			97	154	
04:15			14	2		16:15			92	114	
04:30			18	3		16:30			88	112	
04:45			26 67	3 10	77	16:45			88 365	92 472	837
05:00			36	4		17:00			97	106	
05:15			44	4		17:15			113	74	
05:30			71	6		17:30			111	80	
05:45			80 231	7 21	252	17:45			69 390	68 328	718
06:00			113	9		18:00			68	83	
06:15			148	12		18:15			58	70	
06:30			168	15		18:30			48	85	
06:45			198 627	15 51	678	18:45			60 234	58 296	530
07:00			151	25		19:00			48	46	
07:15			168	33		19:15			46	35	
07:30			165	37		19:30			43	48	
07:45			153 637	30 125	762	19:45			27 164	53 182	346
08:00			110	38		20:00			45	57	
08:15			86	36		20:15			30	53	
08:30			97	32		20:30			47	40	
08:45			90 383	39 145	528	20:45			30 152	67 217	369
09:00			90	39		21:00			32	39	
09:15			85	41		21:15			28	26	
09:30			80	45		21:30			19	27	
09:45			92 347	34 159	506	21:45			20 99	44 136	235
10:00			70	49		22:00			18	24	
10:15			71	45		22:15			14	12	
10:30			81	52		22:30			14	11	
10:45			81 303	63 209	512	22:45			9 55	7 54	109
11:00			100	68		23:00			11	7	
11:15			89	62		23:15			13	6	
11:30			99	57		23:30			9	2	
11:45			80 368	71 258	626	23:45			9 42	6 21	63
Total Vol.			3024	1037	**4061**				2750	2866	**5616**

	NB	SB	EB	WB	Total
Daily Totals :	0	0	5,774	3,903	9,677

	AM			PM		
Split %	74.5%	25.5%	**42.0%**	49.0%	51.0%	**58.0%**
AM				**PM**		
Peak Hr.	06:30	11:45	**06:45**	**Peak Hr.**	16:45	15:45	**16:00**
Volume	685	270	**792**	**Volume**	409	475	**837**
P.H.F.	0.865	0.951	**0.930**	**P.H.F.**	0.905	0.771	**0.834**
7 - 9 Vol.	1020	270	**1290**	**4 - 6 Vol.**	755	800	**1555**
Peak Hr.	07:00	08:00	**07:00**	**Peak Hr.**	16:45	16:00	**16:00**
Volume	637	145	**762**	**Volume**	409	472	**837**
P.H.F.	0.948	0.929	**0.943**	**P.H.F.**	0.905	0.766	**0.834**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-078

Location: Hancock St. btwn. Witherby St. & Noell St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		2					12:00	19		31				
00:15	1		2					12:15	17		42				
00:30	0		2					12:30	20		34				
00:45	0	3	1	7			10	12:45	16	72	26	133			205
01:00	1		1					13:00	22		29				
01:15	0		0					13:15	18		38				
01:30	2		0					13:30	12		42				
01:45	0	3	4	5			8	13:45	20	72	38	147			219
02:00	1		1					14:00	19		33				
02:15	0		0					14:15	17		32				
02:30	0		1					14:30	10		36				
02:45	0	1	1	3			4	14:45	11	57	29	130			187
03:00	0		1					15:00	19		47				
03:15	2		1					15:15	18		22				
03:30	2		1					15:30	8		42				
03:45	1	5	7	10			15	15:45	16	61	44	155			216
04:00	1		6					16:00	29		28				
04:15	2		1					16:15	25		20				
04:30	2		0					16:30	19		27				
04:45	0	5	3	10			15	16:45	14	87	39	114			201
05:00	1		6					17:00	18		54				
05:15	2		1					17:15	15		34				
05:30	5		6					17:30	19		24				
05:45	4	12	15	28			40	17:45	12	64	29	141			205
06:00	4		21					18:00	21		21				
06:15	1		18					18:15	45		23				
06:30	4		20					18:30	11		23				
06:45	5	14	25	84			98	18:45	11	88	18	85			173
07:00	11		23					19:00	7		21				
07:15	12		23					19:15	10		22				
07:30	5		46					19:30	11		18				
07:45	14	42	23	115			157	19:45	6	34	17	78			112
08:00	18		17					20:00	17		6				
08:15	7		31					20:15	9		9				
08:30	7		45					20:30	3		10				
08:45	11	43	20	113			156	20:45	7	36	4	29			65
09:00	9		49					21:00	6		6				
09:15	13		23					21:15	4		4				
09:30	10		38					21:30	13		10				
09:45	19	51	33	143			194	21:45	7	30	4	24			54
10:00	18		27					22:00	4		8				
10:15	17		33					22:15	4		5				
10:30	27		20					22:30	7		1				
10:45	21	83	19	99			182	22:45	1	16	1	15			31
11:00	18		28					23:00	1		2				
11:15	18		23					23:15	2		1				
11:30	20		34					23:30	0		4				
11:45	11	67	31	116			183	23:45	0	3	2	9			12
Total Vol.		329		733			**1062**			620		1060			**1680**

Daily Totals

NB	SB	EB	WB	Combined
949	1793			**2742**

	AM			PM		
Split %	31.0%	69.0%	**38.7%**	36.9%	63.1%	**61.3%**
Peak Hour	10:30	08:15	**11:30**	17:30	15:00	**13:15**
Volume	84	145	**205**	97	155	**220**
P.H.F.	0.78	0.74	**0.87**	0.54	0.82	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-079

Location: Kettner Blvd. btwn. Washington St. & Vine St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		55				12:00		380			
00:15		43				12:15		381			
00:30		28				12:30		400			
00:45		37	163		163	12:45		316	1477		1477
01:00		20				13:00		342			
01:15		19				13:15		341			
01:30		10				13:30		306			
01:45		14	63		63	13:45		303	1292		1292
02:00		18				14:00		326			
02:15		9				14:15		319			
02:30		6				14:30		304			
02:45		8	41		41	14:45		316	1265		1265
03:00		10				15:00		310			
03:15		10				15:15		281			
03:30		32				15:30		325			
03:45		22	74		74	15:45		306	1222		1222
04:00		63				16:00		333			
04:15		75				16:15		470			
04:30		141				16:30		470			
04:45		232	511		511	16:45		409	1682		1682
05:00		238				17:00		460			
05:15		298				17:15		439			
05:30		239				17:30		356			
05:45		279	1054		1054	17:45		356	1611		1611
06:00		233				18:00		348			
06:15		231				18:15		335			
06:30		255				18:30		299			
06:45		265	984		984	18:45		331	1313		1313
07:00		251				19:00		280			
07:15		284				19:15		271			
07:30		309				19:30		268			
07:45		360	1204		1204	19:45		279	1098		1098
08:00		367				20:00		253			
08:15		355				20:15		267			
08:30		378				20:30		244			
08:45		382	1482		1482	20:45		239	1003		1003
09:00		356				21:00		216			
09:15		381				21:15		221			
09:30		360				21:30		180			
09:45		407	1504		1504	21:45		179	796		796
10:00		344				22:00		148			
10:15		350				22:15		156			
10:30		353				22:30		147			
10:45		375	1422		1422	22:45		119	570		570
11:00		370				23:00		119			
11:15		396				23:15		77			
11:30		400				23:30		69			
11:45		379	1545		1545	23:45		81	346		346
Total Vol.			10047		**10047**				13675		**13675**

Daily Totals

NB	SB	EB	WB	Combined
	23722			**23722**

	AM		PM	
Split %	100.0%	**42.4%**	100.0%	**57.6%**
Peak Hour	11:15	**11:15**	16:15	**16:15**
Volume	1555	**1555**	1809	**1809**
P.H.F.	0.97	**0.97**	0.96	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-080

Location: Kettner Blvd. btwn. Vine St. & Sassafras St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		53				12:00		373			
00:15		47				12:15		377			
00:30		27				12:30		403			
00:45		36	163		163	12:45		382	1535		1535
01:00		23				13:00		349			
01:15		20				13:15		341			
01:30		11				13:30		305			
01:45		15	69		69	13:45		305	1300		1300
02:00		20				14:00		343			
02:15		10				14:15		324			
02:30		6				14:30		312			
02:45		9	45		45	14:45		317	1296		1296
03:00		10				15:00		300			
03:15		9				15:15		283			
03:30		28				15:30		318			
03:45		17	64		64	15:45		297	1198		1198
04:00		54				16:00		328			
04:15		68				16:15		463			
04:30		126				16:30		469			
04:45		216	464		464	16:45		399	1659		1659
05:00		213				17:00		450			
05:15		273				17:15		428			
05:30		207				17:30		353			
05:45		242	935		935	17:45		376	1607		1607
06:00		212				18:00		342			
06:15		215				18:15		329			
06:30		234				18:30		280			
06:45		239	900		900	18:45		320	1271		1271
07:00		238				19:00		266			
07:15		249				19:15		254			
07:30		292				19:30		250			
07:45		343	1122		1122	19:45		270	1040		1040
08:00		351				20:00		249			
08:15		333				20:15		273			
08:30		342				20:30		238			
08:45		364	1390		1390	20:45		231	991		991
09:00		342				21:00		211			
09:15		362				21:15		200			
09:30		357				21:30		192			
09:45		381	1442		1442	21:45		191	794		794
10:00		349				22:00		147			
10:15		339				22:15		154			
10:30		349				22:30		138			
10:45		369	1406		1406	22:45		124	563		563
11:00		366				23:00		114			
11:15		371				23:15		75			
11:30		402				23:30		64			
11:45		348	1487		1487	23:45		81	334		334
Total Vol.			9487		**9487**				13588		**13588**

Daily Totals

NB	SB	EB	WB	Combined
	23075			**23075**

	AM		PM	
Split %	100.0%	**41.1%**	100.0%	**58.9%**
Peak Hour	10:45	**10:45**	16:15	**16:15**
Volume	1508	**1508**	1781	**1781**
P.H.F.	0.94	**0.94**	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-081

Location: Kettner Blvd. btwn. Redwood St. & Palm St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		42				12:00		280			
00:15		32				12:15		337			
00:30		30				12:30		275			
00:45		23	127		127	12:45		310	1202		1202
01:00		17				13:00		291			
01:15		12				13:15		269			
01:30		11				13:30		276			
01:45		16	56		56	13:45		280	1116		1116
02:00		9				14:00		264			
02:15		8				14:15		276			
02:30		7				14:30		267			
02:45		9	33		33	14:45		264	1071		1071
03:00		9				15:00		247			
03:15		27				15:15		275			
03:30		20				15:30		272			
03:45		53	109		109	15:45		294	1088		1088
04:00		72				16:00		414			
04:15		100				16:15		397			
04:30		168				16:30		354			
04:45		177	517		517	16:45		410	1575		1575
05:00		222				17:00		383			
05:15		190				17:15		326			
05:30		214				17:30		290			
05:45		195	821		821	17:45		304	1303		1303
06:00		182				18:00		302			
06:15		230				18:15		240			
06:30		232				18:30		272			
06:45		209	853		853	18:45		235	1049		1049
07:00		232				19:00		239			
07:15		257				19:15		214			
07:30		317				19:30		222			
07:45		317	1123		1123	19:45		200	875		875
08:00		335				20:00		212			
08:15		304				20:15		208			
08:30		326				20:30		194			
08:45		316	1281		1281	20:45		187	801		801
09:00		297				21:00		177			
09:15		314				21:15		164			
09:30		357				21:30		144			
09:45		306	1274		1274	21:45		132	617		617
10:00		302				22:00		155			
10:15		281				22:15		133			
10:30		329				22:30		122			
10:45		317	1229		1229	22:45		106	516		516
11:00		331				23:00		57			
11:15		320				23:15		57			
11:30		311				23:30		69			
11:45		318	1280		1280	23:45		47	230		230
Total Vol.			8703		**8703**				11443		**11443**

Daily Totals

NB	SB	EB	WB	Combined
	20146			**20146**

	AM		PM	
Split %	100.0%	**43.2%**	100.0%	**56.8%**
Peak Hour	10:30	**10:30**	16:00	**16:00**
Volume	1297	**1297**	1575	**1575**
P.H.F.	0.98	**0.98**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just N/o Taylor St	Project:	10-4143-036	4,318	3,139	0	0	7,457

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		6					12:00	88		58				
00:15	11		3					12:15	58		67				
00:30	7		3					12:30	68		69				
00:45	5	32	1	13			45	12:45	84	298	57	251			549
01:00	5		3					13:00	50		43				
01:15	1		2					13:15	70		52				
01:30	2		3					13:30	69		32				
01:45	4	12	1	9			21	13:45	74	263	65	192			455
02:00	3		1					14:00	75		41				
02:15	6		3					14:15	62		55				
02:30	4		0					14:30	61		44				
02:45	1	14	1	5			19	14:45	69	267	50	190			457
03:00	3		0					15:00	75		43				
03:15	2		1					15:15	66		71				
03:30	3		3					15:30	70		59				
03:45	8	16	5	9			25	15:45	96	307	61	234			541
04:00	2		7					16:00	136		52				
04:15	3		4					16:15	154		60				
04:30	10		5					16:30	129		49				
04:45	7	22	11	27			49	16:45	139	558	42	203			761
05:00	10		5					17:00	103		66				
05:15	9		12					17:15	110		69				
05:30	15		20					17:30	120		65				
05:45	24	58	19	56			114	17:45	87	420	64	264			684
06:00	28		19					18:00	63		67				
06:15	22		32					18:15	46		40				
06:30	31		47					18:30	45		43				
06:45	46	127	53	151			278	18:45	30	184	30	180			364
07:00	41		53					19:00	33		28				
07:15	31		47					19:15	33		23				
07:30	51		64					19:30	44		21				
07:45	50	173	63	227			400	19:45	32	142	17	89			231
08:00	38		61					20:00	31		18				
08:15	48		44					20:15	23		12				
08:30	44		50					20:30	33		16				
08:45	44	174	52	207			381	20:45	26	113	8	54			167
09:00	46		61					21:00	34		15				
09:15	60		53					21:15	33		8				
09:30	64		62					21:30	31		8				
09:45	56	226	59	235			461	21:45	33	131	8	39			170
10:00	59		59					22:00	38		8				
10:15	59		58					22:15	40		11				
10:30	79		52					22:30	20		9				
10:45	81	278	40	209			487	22:45	25	123	11	39			162
11:00	58		54					23:00	30		8				
11:15	79		55					23:15	13		6				
11:30	86		77					23:30	14		4				
11:45	73	296	49	235			531	23:45	27	84	3	21			105
Total Vol.		1428		1383			**2811**			2890		1756			**4646**

	NB	SB	EB	WB	Total
Daily Totals :	**4,318**	**3,139**	**0**	**0**	**7,457**

	AM			PM			
Split %	50.8%	49.2%	**37.7%**	62.2%	37.8%		**62.3%**
AM				**PM**			
Peak Hr.	11:15	11:30	**11:15**	**Peak Hr.**	16:00	17:15	**16:00**
Volume	326	251	**565**	**Volume**	558	265	**761**
P.H.F.	0.926	0.815	**0.867**	**P.H.F.**	0.906	0.960	**0.889**
7 - 9 Vol.	347	434	**781**	**4 - 6 Vol.**	978	467	**1445**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:00	17:00	**16:00**
Volume	187	235	**419**	**Volume**	558	264	**761**
P.H.F.	0.917	0.918	**0.911**	**P.H.F.**	0.906	0.957	**0.889**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just S/o Taylor St	Project: 10-4143-037	8,122	5,199	0	0	13,321

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		3					12:00	120		82				
00:15	11		2					12:15	111		80				
00:30	11		5					12:30	103		82				
00:45	10	38	8	18			56	12:45	105	439	93	337			776
01:00	4		5					13:00	101		91				
01:15	3		5					13:15	96		86				
01:30	4		2					13:30	108		84				
01:45	2	13	2	14			27	13:45	121	426	85	346			772
02:00	4		4					14:00	108		84				
02:15	7		0					14:15	133		73				
02:30	3		1					14:30	150		84				
02:45	0	14	5	10			24	14:45	170	561	82	323			884
03:00	4		2					15:00	188		85				
03:15	4		2					15:15	194		81				
03:30	6		4					15:30	251		112				
03:45	12	26	6	14			40	15:45	224	857	90	368			1225
04:00	4		8					16:00	284		90				
04:15	1		6					16:15	263		88				
04:30	7		13					16:30	288		97				
04:45	9	21	26	53			74	16:45	289	1124	83	358			1482
05:00	23		19					17:00	283		82				
05:15	20		26					17:15	322		83				
05:30	34		34					17:30	242		75				
05:45	44	121	86	165			286	17:45	175	1022	82	322			1344
06:00	33		66					18:00	151		72				
06:15	53		109					18:15	113		58				
06:30	77		111					18:30	94		53				
06:45	70	233	115	401			634	18:45	80	438	57	240			678
07:00	91		121					19:00	83		44				
07:15	89		133					19:15	62		40				
07:30	86		120					19:30	54		42				
07:45	85	351	115	489			840	19:45	52	251	33	159			410
08:00	87		95					20:00	61		31				
08:15	95		82					20:15	50		38				
08:30	93		83					20:30	40		28				
08:45	96	371	95	355			726	20:45	39	190	28	125			315
09:00	92		77					21:00	28		26				
09:15	89		72					21:15	39		16				
09:30	104		82					21:30	33		17				
09:45	91	376	57	288			664	21:45	31	131	18	77			208
10:00	94		59					22:00	30		11				
10:15	101		68					22:15	37		16				
10:30	99		80					22:30	23		19				
10:45	110	404	91	298			702	22:45	24	114	16	62			176
11:00	113		71					23:00	25		14				
11:15	148		82					23:15	19		8				
11:30	138		84					23:30	11		13				
11:45	132	531	100	337			868	23:45	15	70	5	40			110
Total Vol.		2499		2442			**4941**			5623		2757			**8380**

	NB	SB	EB	WB	Total
Daily Totals :	8,122	5,199	0	0	13,321

	AM			PM			
Split %	50.6%	49.4%	**37.1%**		67.1%	32.9%	**62.9%**
AM				**PM**			
Peak Hr.	11:15	06:45	**11:15**	**Peak Hr.**	16:30	15:30	**16:30**
Volume	538	489	**886**	**Volume**	1182	380	**1527**
P.H.F.	0.909	0.919	**0.955**	**P.H.F.**	0.918	0.848	**0.943**
7 - 9 Vol.	722	844	**1566**	**4 - 6 Vol.**	2146	680	**2826**
Peak Hr.	08:00	07:00	**07:00**	**Peak Hr.**	16:30	16:00	**16:30**
Volume	371	489	**840**	**Volume**	1182	358	**1527**
P.H.F.	0.966	0.919	**0.946**	**P.H.F.**	0.918	0.923	**0.943**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-045

Location: Pacific Hy (STATION#2653/FILE#MC1190-10) between Sports Arena Blvd & Kurtz St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	12		12					12:00	164		209				
00:15	7		9					12:15	168		221				
00:30	10		9					12:30	157		269				
00:45	7	36	13	43			79	12:45	157	646	247	946			1592
01:00	12		22					13:00	181		246				
01:15	14		10					13:15	168		233				
01:30	4		10					13:30	173		215				
01:45	6	36	10	52			88	13:45	146	668	211	905			1573
02:00	5		7					14:00	154		209				
02:15	13		4					14:15	155		209				
02:30	6		0					14:30	159		215				
02:45	10	34	6	17			51	14:45	165	633	224	857			1490
03:00	6		9					15:00	174		204				
03:15	13		2					15:15	194		231				
03:30	9		16					15:30	224		256				
03:45	11	39	7	34			73	15:45	196	788	243	934			1722
04:00	9		12					16:00	218		253				
04:15	20		27					16:15	194		252				
04:30	15		28					16:30	227		296				
04:45	33	77	27	94			171	16:45	232	871	287	1088			1959
05:00	17		36					17:00	223		268				
05:15	35		41					17:15	274		233				
05:30	51		64					17:30	256		204				
05:45	86	189	91	232			421	17:45	195	948	195	900			1848
06:00	56		90					18:00	139		191				
06:15	77		98					18:15	112		153				
06:30	90		126					18:30	91		156				
06:45	145	368	151	465			833	18:45	91	433	146	646			1079
07:00	130		128					19:00	77		127				
07:15	141		146					19:15	62		99				
07:30	150		178					19:30	57		98				
07:45	162	583	193	645			1228	19:45	55	251	92	416			667
08:00	183		188					20:00	62		83				
08:15	180		192					20:15	43		69				
08:30	163		144					20:30	52		74				
08:45	148	674	156	680			1354	20:45	47	204	68	294			498
09:00	145		127					21:00	50		77				
09:15	149		145					21:15	33		71				
09:30	138		143					21:30	50		72				
09:45	165	597	156	571			1168	21:45	39	172	60	280			452
10:00	141		150					22:00	28		43				
10:15	135		169					22:15	40		60				
10:30	158		133					22:30	30		44				
10:45	137	571	169	621			1192	22:45	24	122	38	185			307
11:00	173		166					23:00	28		28				
11:15	190		175					23:15	23		22				
11:30	152		204					23:30	17		47				
11:45	149	664	212	757			1421	23:45	18	86	20	117			203
Total Vol.		3868		4211			**8079**			5822		7568			**13390**

Daily Totals

NB	SB	EB	WB	Combined
9690	11779			**21469**

	AM			PM		
Split %	47.9%	52.1%	**37.6%**	43.5%	56.5%	**62.4%**
Peak Hour	07:45	11:45	**11:45**	16:45	16:15	**16:30**
Volume	688	911	**1549**	985	1103	**2040**
P.H.F.	0.94	0.85	**0.91**	0.92	0.93	**0.98**

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-001
Location: Pacific Hwy between Barnett Ave & Enterprise St File No. MC0305-10

Start	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	0			16	195				
12:15	0	0			12	204				
12:30	0	0			15	196				
12:45	0	0			16	189	59	784		
1:00	0	0			9	198				
1:15	0	0			7	175				
1:30	0	0			8	195				
1:45	0	0			6	177	30	745		
2:00	0	0			12	212				
2:15	0	0			5	200				
2:30	0	0			3	282				
2:45	0	0			5	219	25	913		
3:00	0	0			8	260				
3:15	0	0			6	206				
3:30	0	0			4	278				
3:45	0	0			8	253	26	997		
4:00	0	0			13	300				
4:15	0	0			19	259				
4:30	0	0			28	343				
4:45	0	0			15	308	75	1210		
5:00	0	0			20	290				
5:15	0	0			27	236				
5:30	0	0			38	207				
5:45	0	0			33	196	118	929		
6:00	0	0			45	209				
6:15	0	0			35	173				
6:30	0	0			53	176				
6:45	0	0			66	190	199	748		
7:00	0	0			85	167				
7:15	0	0			92	167				
7:30	0	0			97	149				
7:45	0	0			102	165	376	648		
8:00	0	0			98	136				
8:15	0	0			108	152				
8:30	0	0			105	135				
8:45	0	0			101	122	412	545		
9:00	0	0			107	160				
9:15	0	0			110	124				
9:30	0	0			124	132	0			
9:45	0	0			132	114	473	530		
10:00	0	0			139	95				
10:15	0	0			146	89				
10:30	0	0			139	79				
10:45	0	0			160	74	584	337		
11:00	0	0			167	49				
11:15	0	0			165	34				
11:30	0	0			191	58				
11:45	0	0			147	28	670	169		
Total	0	0	0	0	3047	8555	3047	8555	0	0
Combined Total	0		0		11602		11602		0	
AM Peak					11:45 AM					
Vol.					742					
P.H.F.					0.909					
PM Peak						4:00 PM				
Vol.						1210				
P.H.F.						0.882				
Percentage					26.3%	73.7%				

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-073

Location: Pacific Highway btwn. Barnett Ave. & Washington St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	40		69					12:00	471		401				
00:15	35		43					12:15	456		459				
00:30	44		31					12:30	424		443				
00:45	22	141	36	179			320	12:45	417	1768	470	1773			3541
01:00	19		33					13:00	382		438				
01:15	21		33					13:15	391		482				
01:30	15		20					13:30	431		426				
01:45	17	72	18	104			176	13:45	378	1582	478	1824			3406
02:00	22		22					14:00	369		459				
02:15	16		17					14:15	379		493				
02:30	14		19					14:30	398		524				
02:45	30	82	15	73			155	14:45	439	1585	525	2001			3586
03:00	22		19					15:00	445		582				
03:15	31		14					15:15	440		555				
03:30	30		25					15:30	449		709				
03:45	56	139	25	83			222	15:45	482	1816	721	2567			4383
04:00	46		30					16:00	459		775				
04:15	100		87					16:15	431		699				
04:30	108		104					16:30	434		748				
04:45	158	412	133	354			766	16:45	464	1788	649	2871			4659
05:00	208		139					17:00	443		697				
05:15	322		166					17:15	479		583				
05:30	289		185					17:30	425		560				
05:45	355	1174	210	700			1874	17:45	407	1754	534	2374			4128
06:00	347		228					18:00	335		488				
06:15	420		221					18:15	310		404				
06:30	494		185					18:30	301		387				
06:45	543	1804	215	849			2653	18:45	282	1228	339	1618			2846
07:00	607		242					19:00	221		353				
07:15	573		260					19:15	201		308				
07:30	546		319					19:30	205		288				
07:45	613	2339	302	1123			3462	19:45	190	817	262	1211			2028
08:00	592		308					20:00	160		249				
08:15	550		353					20:15	169		244				
08:30	496		411					20:30	165		243				
08:45	476	2114	304	1376			3490	20:45	126	620	224	960			1580
09:00	404		322					21:00	121		204				
09:15	375		296					21:15	112		198				
09:30	335		312					21:30	124		186				
09:45	417	1531	304	1234			2765	21:45	126	483	154	742			1225
10:00	355		304					22:00	109		146				
10:15	380		358					22:15	104		142				
10:30	346		343					22:30	113		112				
10:45	380	1461	326	1331			2792	22:45	101	427	87	487			914
11:00	360		354					23:00	62		80				
11:15	398		369					23:15	79		66				
11:30	412		400					23:30	53		94				
11:45	454	1624	408	1531			3155	23:45	63	257	62	302			559
Total Vol.		12893		8937			**21830**			14125		18730			**32855**

Daily Totals

NB	SB	EB	WB	Combined
27018	27667			**54685**

	AM			PM		
Split %	59.1%	40.9%	**39.9%**	43.0%	57.0%	**60.1%**
Peak Hour	07:00	11:45	**07:45**	15:15	15:45	**15:45**
Volume	2339	1711	**3625**	1830	2943	**4749**
P.H.F.	0.95	0.93	**0.99**	0.95	0.95	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-074

Location: Pacific Highway btwn. Washington St. & Sassafras St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	14		6					12:00	145		67				
00:15	12		6					12:15	148		92				
00:30	15		2					12:30	147		88				
00:45	10	51	5	19			70	12:45	139	579	75	322			901
01:00	7		7					13:00	130		90				
01:15	9		2					13:15	120		92				
01:30	6		5					13:30	115		80				
01:45	8	30	2	16			46	13:45	133	498	91	353			851
02:00	5		2					14:00	124		77				
02:15	3		1					14:15	116		72				
02:30	4		6					14:30	130		102				
02:45	2	14	3	12			26	14:45	143	513	94	345			858
03:00	6		5					15:00	117		83				
03:15	7		2					15:15	114		98				
03:30	1		2					15:30	109		65				
03:45	7	21	5	14			35	15:45	146	486	95	341			827
04:00	6		2					16:00	117		102				
04:15	11		8					16:15	131		87				
04:30	10		13					16:30	130		96				
04:45	14	41	16	39			80	16:45	116	494	81	366			860
05:00	18		14					17:00	128		118				
05:15	22		21					17:15	175		94				
05:30	20		28					17:30	134		95				
05:45	24	84	16	79			163	17:45	125	562	80	387			949
06:00	27		16					18:00	110		97				
06:15	33		15					18:15	87		73				
06:30	59		31					18:30	97		64				
06:45	58	177	37	99			276	18:45	73	367	54	288			655
07:00	56		32					19:00	81		50				
07:15	55		36					19:15	88		55				
07:30	89		67					19:30	82		61				
07:45	91	291	56	191			482	19:45	66	317	67	233			550
08:00	82		40					20:00	59		50				
08:15	84		66					20:15	62		43				
08:30	89		66					20:30	79		47				
08:45	100	355	49	221			576	20:45	46	246	47	187			433
09:00	112		71					21:00	41		50				
09:15	79		60					21:15	52		29				
09:30	103		75					21:30	54		29				
09:45	119	413	73	279			692	21:45	45	192	28	136			328
10:00	108		53					22:00	49		29				
10:15	120		81					22:15	53		21				
10:30	100		62					22:30	45		12				
10:45	126	454	74	270			724	22:45	46	193	12	74			267
11:00	117		73					23:00	32		13				
11:15	136		83					23:15	25		9				
11:30	137		79					23:30	24		12				
11:45	150	540	83	318			858	23:45	13	94	10	44			138
Total Vol.		2471		1557			**4028**			4541		3076			**7617**

Daily Totals

NB	SB	EB	WB	Combined
7012	4633			**11645**

	AM			PM		
Split %	61.3%	38.7%	**34.6%**	59.6%	40.4%	**65.4%**
Peak Hour	11:45	11:45	**11:45**	12:00	16:30	**17:00**
Volume	590	330	**920**	579	389	**949**
P.H.F.	0.98	0.90	**0.96**	0.98	0.82	**0.88**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-044

Location: Pacific Hy (STATION#2657/FILE#MC1189-10) between Palm St & Sassafras St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	38		24					12:00	169		184				
00:15	17		20					12:15	154		151				
00:30	31		22					12:30	168		189				
00:45	26	112	31	97			209	12:45	150	641	178	702			1343
01:00	38		22					13:00	157		165				
01:15	26		20					13:15	170		172				
01:30	17		9					13:30	182		181				
01:45	8	89	8	59			148	13:45	149	658	178	696			1354
02:00	11		8					14:00	171		133				
02:15	6		3					14:15	154		140				
02:30	7		5					14:30	168		165				
02:45	4	28	3	19			47	14:45	165	658	152	590			1248
03:00	2		7					15:00	151		123				
03:15	1		1					15:15	170		153				
03:30	3		8					15:30	149		137				
03:45	7	13	16	32			45	15:45	192	662	142	555			1217
04:00	14		18					16:00	154		173				
04:15	15		33					16:15	156		172				
04:30	19		49					16:30	168		174				
04:45	30	78	71	171			249	16:45	159	637	222	741			1378
05:00	28		79					17:00	167		235				
05:15	30		83					17:15	199		199				
05:30	51		76					17:30	178		194				
05:45	51	160	75	313			473	17:45	141	685	191	819			1504
06:00	55		79					18:00	139		172				
06:15	50		91					18:15	115		147				
06:30	63		105					18:30	92		139				
06:45	63	231	121	396			627	18:45	110	456	121	579			1035
07:00	67		117					19:00	107		129				
07:15	80		131					19:15	92		104				
07:30	93		146					19:30	63		94				
07:45	112	352	151	545			897	19:45	78	340	85	412			752
08:00	116		143					20:00	84		102				
08:15	121		168					20:15	77		73				
08:30	105		144					20:30	73		96				
08:45	124	466	138	593			1059	20:45	91	325	74	345			670
09:00	102		114					21:00	84		76				
09:15	157		158					21:15	90		75				
09:30	119		149					21:30	93		76				
09:45	142	520	131	552			1072	21:45	85	352	64	291			643
10:00	117		134					22:00	94		62				
10:15	155		156					22:15	84		62				
10:30	161		133					22:30	53		51				
10:45	144	577	139	562			1139	22:45	53	284	28	203			487
11:00	164		153					23:00	52		26				
11:15	148		166					23:15	46		23				
11:30	149		196					23:30	37		16				
11:45	155	616	189	704			1320	23:45	31	166	9	74			240
Total Vol.		3242		4043			**7285**			5864		6007			**11871**

Daily Totals

	NB	SB	EB	WB	Combined
	9106	10050			**19156**

	AM			PM		
Split %	44.5%	55.5%	**38.0%**	49.4%	50.6%	**62.0%**
Peak Hour	11:45	11:15	**11:45**	16:45	16:45	**16:45**
Volume	646	735	**1359**	703	850	**1553**
P.H.F.	0.96	0.94	**0.95**	0.91	0.90	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-069

Location: Congress St. btwn. Taylor St. & Twiggs St.

AM Period	NB		SB		EB	WB	PM Period	NB		SB		EB	WB	
00:00	6		4				12:00	45		34				
00:15	4		5				12:15	32		23				
00:30	2		3				12:30	28		24				
00:45	5	17	2	14		31	12:45	37	142	31	112			254
01:00	2		6				13:00	37		38				
01:15	1		2				13:15	32		37				
01:30	2		0				13:30	40		27				
01:45	1	6	1	9		15	13:45	37	146	47	149			295
02:00	2		1				14:00	32		38				
02:15	0		0				14:15	38		40				
02:30	1		4				14:30	33		42				
02:45	1	4	1	6		10	14:45	44	147	44	164			311
03:00	2		0				15:00	37		43				
03:15	0		1				15:15	41		47				
03:30	1		2				15:30	34		40				
03:45	1	4	1	4		8	15:45	34	146	37	167			313
04:00	3		2				16:00	44		40				
04:15	2		1				16:15	35		26				
04:30	3		5				16:30	41		32				
04:45	2	10	1	9		19	16:45	32	152	36	134			286
05:00	3		0				17:00	57		27				
05:15	6		4				17:15	52		34				
05:30	4		4				17:30	47		40				
05:45	11	24	3	11		35	17:45	40	196	40	141			337
06:00	11		4				18:00	36		39				
06:15	5		12				18:15	34		55				
06:30	7		6				18:30	50		46				
06:45	11	34	14	36		70	18:45	37	157	63	203			360
07:00	16		20				19:00	28		58				
07:15	16		14				19:15	31		36				
07:30	27		20				19:30	35		27				
07:45	19	78	29	83		161	19:45	24	118	26	147			265
08:00	26		15				20:00	41		24				
08:15	17		20				20:15	39		19				
08:30	21		13				20:30	49		28				
08:45	25	89	43	91		180	20:45	38	167	16	87			254
09:00	26		31				21:00	39		18				
09:15	30		17				21:15	49		20				
09:30	27		37				21:30	39		11				
09:45	18	101	34	119		220	21:45	21	148	13	62			210
10:00	21		36				22:00	15		17				
10:15	24		25				22:15	16		11				
10:30	23		33				22:30	18		7				
10:45	19	87	29	123		210	22:45	11	60	6	41			101
11:00	25		32				23:00	10		7				
11:15	29		28				23:15	9		4				
11:30	20		37				23:30	11		6				
11:45	28	102	25	122		224	23:45	7	37	6	23			60
Total Vol.		556		627		**1183**			1616		1430			**3046**

Daily Totals

NB	SB	EB	WB	Combined
2172	2057			**4229**

	AM			PM		
Split %	47.0%	53.0%	**28.0%**	53.1%	46.9%	**72.0%**
Peak Hour	11:45	09:30	**11:15**	17:00	18:15	**18:15**
Volume	133	132	**246**	196	222	**371**
P.H.F.	0.74	0.89	**0.78**	0.86	0.88	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-070

Location: Congress St. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	8		6					12:00	49		47				
00:15	1		6					12:15	34		25				
00:30	1		5					12:30	36		25				
00:45	4	14	3	20			34	12:45	30	149	43	140			289
01:00	2		3					13:00	42		51				
01:15	0		2					13:15	24		42				
01:30	1		0					13:30	38		42				
01:45	1	4	1	6			10	13:45	30	134	36	171			305
02:00	1		0					14:00	22		43				
02:15	0		1					14:15	26		30				
02:30	1		3					14:30	31		33				
02:45	2	4	1	5			9	14:45	38	117	39	145			262
03:00	0		1					15:00	32		33				
03:15	4		3					15:15	30		40				
03:30	1		1					15:30	30		48				
03:45	1	6	0	5			11	15:45	32	124	51	172			296
04:00	0		1					16:00	42		46				
04:15	2		1					16:15	27		34				
04:30	1		4					16:30	30		32				
04:45	2	5	2	8			13	16:45	36	135	40	152			287
05:00	4		3					17:00	56		35				
05:15	5		2					17:15	54		35				
05:30	5		4					17:30	41		38				
05:45	10	24	3	12			36	17:45	35	186	45	153			339
06:00	12		5					18:00	29		42				
06:15	5		12					18:15	39		55				
06:30	9		7					18:30	44		55				
06:45	11	37	14	38			75	18:45	37	149	57	209			358
07:00	16		13					19:00	30		65				
07:15	17		16					19:15	31		48				
07:30	26		21					19:30	31		36				
07:45	19	78	24	74			152	19:45	39	131	15	164			295
08:00	19		17					20:00	59		14				
08:15	13		21					20:15	64		12				
08:30	22		17					20:30	67		19				
08:45	23	77	36	91			168	20:45	46	236	16	61			297
09:00	27		31					21:00	52		20				
09:15	34		24					21:15	54		21				
09:30	29		32					21:30	49		14				
09:45	33	123	28	115			238	21:45	36	191	18	73			264
10:00	32		29					22:00	31		13				
10:15	27		31					22:15	21		4				
10:30	24		36					22:30	14		12				
10:45	13	96	13	109			205	22:45	9	75	8	37			112
11:00	54		18					23:00	11		8				
11:15	35		29					23:15	5		3				
11:30	28		43					23:30	9		6				
11:45	38	155	26	116			271	23:45	6	31	6	23			54
Total Vol.		623		599			**1222**			1658		1500			**3158**

Daily Totals

	NB	SB	EB	WB	Combined
	2281	2099			**4380**

	AM			PM		
Split %	51.0%	49.0%	**27.9%**	52.5%	47.5%	**72.1%**
Peak Hour	11:45	11:15	**11:15**	20:00	18:15	**18:15**
Volume	157	145	**295**	236	232	**382**
P.H.F.	0.80	0.77	**0.77**	0.88	0.89	**0.96**

Prepared by NDS/ATD

Volumes for: Thursday, October 28, 2010 | **City: San Diego**

Location: Congress St (STATION#2466/FILE#MC0940-10) | **Project: 10-4300-021**

Daily Totals	NB	SB	EB	WB	Total
	1,891	2,392	0	0	4,283

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		3					12:00	42		38				
00:15	2		4					12:15	37		35				
00:30	3		1					12:30	36		45				
00:45	2	7	0	8	15			12:45	39	154	58	176			330
01:00	0		5					13:00	30		39				
01:15	1		1					13:15	29		47				
01:30	4		3					13:30	37		39				
01:45	0	5	1	10	15			13:45	28	124	54	179			303
02:00	2		0					14:00	19		37				
02:15	0		2					14:15	23		40				
02:30	0		1					14:30	27		46				
02:45	0	2	0	3	5			14:45	34	103	41	164			267
03:00	1		3					15:00	19		36				
03:15	2		5					15:15	36		32				
03:30	5		2					15:30	30		44				
03:45	3	11	4	14	25			15:45	30	115	56	168			283
04:00	0		2					16:00	33		47				
04:15	1		0					16:15	34		38				
04:30	1		0					16:30	46		65				
04:45	2	4	3	5	9			16:45	58	171	58	208			379
05:00	2		0					17:00	48		55				
05:15	2		3					17:15	45		46				
05:30	7		3					17:30	48		54				
05:45	6	17	5	11	28			17:45	40	181	39	194			375
06:00	3		13					18:00	37		44				
06:15	14		12					18:15	52		36				
06:30	10		13					18:30	23		53				
06:45	22	49	17	55	104			18:45	31	143	41	174			317
07:00	11		13					19:00	18		39				
07:15	17		25					19:15	23		42				
07:30	23		35					19:30	16		31				
07:45	17	68	38	111	179			19:45	25	82	40	152			234
08:00	34		18					20:00	16		32				
08:15	23		17					20:15	17		24				
08:30	31		36					20:30	23		26				
08:45	41	129	32	103	232			20:45	15	71	36	118			189
09:00	24		28					21:00	13		30				
09:15	39		28					21:15	9		12				
09:30	30		31					21:30	14		29				
09:45	22	115	31	118	233			21:45	15	51	30	101			152
10:00	30		30					22:00	14		18				
10:15	33		38					22:15	6		16				
10:30	23		19					22:30	7		14				
10:45	36	122	28	115	237			22:45	3	30	10	58			88
11:00	27		33					23:00	3		17				
11:15	26		28					23:15	0		7				
11:30	29		29					23:30	2		3				
11:45	49	131	27	117	248			23:45	1	6	3	30			36
Total Vol.		660		670	**1330**					1231		1722			**2953**

	NB	SB	EB	WB	Total
Daily Totals :	**1,891**	**2,392**	**0**	**0**	**4,283**

	AM			PM			
Split %	49.6%	50.4%	**31.1%**	41.7%	58.3%		**68.9%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	164	145	**309**	**Volume**	199	224	**421**
P.H.F.	0.837	0.806	**0.954**	**P.H.F.**	0.858	0.862	**0.907**
7 - 9 Vol.	197	214	**411**	**4 - 6 Vol.**	352	402	**754**
Peak Hr.	08:00	07:15	**08:00**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	129	116	**232**	**Volume**	199	224	**421**
P.H.F.	0.787	0.763	**0.795**	**P.H.F.**	0.858	0.862	**0.907**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-067

Location: San Diego Ave. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		0					12:00	22		32				
00:15	2		2					12:15	20		39				
00:30	2		1					12:30	17		38				
00:45	3	11	6	9			20	12:45	19	78	37	146			224
01:00	1		4					13:00	13		38				
01:15	1		3					13:15	18		38				
01:30	2		0					13:30	18		34				
01:45	1	5	0	7			12	13:45	17	66	36	146			212
02:00	6		3					14:00	19		33				
02:15	1		0					14:15	33		39				
02:30	1		1					14:30	30		34				
02:45	0	8	0	4			12	14:45	35	117	31	137			254
03:00	0		0					15:00	28		34				
03:15	0		1					15:15	24		38				
03:30	2		1					15:30	29		42				
03:45	0	2	0	2			4	15:45	33	114	40	154			268
04:00	1		0					16:00	30		43				
04:15	1		3					16:15	32		39				
04:30	0		1					16:30	22		34				
04:45	0	2	2	6			8	16:45	36	120	25	141			261
05:00	2		3					17:00	51		27				
05:15	2		1					17:15	60		26				
05:30	6		0					17:30	55		30				
05:45	3	13	1	5			18	17:45	41	207	31	114			321
06:00	2		0					18:00	46		43				
06:15	5		5					18:15	27		36				
06:30	7		1					18:30	38		43				
06:45	5	19	7	13			32	18:45	47	158	40	162			320
07:00	12		5					19:00	29		23				
07:15	10		5					19:15	36		34				
07:30	19		13					19:30	28		21				
07:45	12	53	17	40			93	19:45	31	124	13	91			215
08:00	24		16					20:00	39		15				
08:15	11		18					20:15	34		15				
08:30	22		18					20:30	23		17				
08:45	37	94	23	75			169	20:45	25	121	14	61			182
09:00	31		23					21:00	29		24				
09:15	22		20					21:15	26		13				
09:30	26		20					21:30	19		14				
09:45	35	114	23	86			200	21:45	29	103	7	58			161
10:00	37		28					22:00	23		10				
10:15	28		28					22:15	14		8				
10:30	22		26					22:30	18		7				
10:45	20	107	26	108			215	22:45	19	74	15	40			114
11:00	24		24					23:00	6		7				
11:15	29		20					23:15	9		7				
11:30	22		22					23:30	4		4				
11:45	20	95	19	85			180	23:45	3	22	3	21			43
Total Vol.		523		440			**963**			1304		1271			**2575**

Daily Totals

NB	SB	EB	WB	Combined
1827	1711			**3538**

	AM			PM		
Split %	54.3%	45.7%	**27.2%**	50.6%	49.4%	**72.8%**
Peak Hour	09:30	11:45	**09:45**	17:00	15:30	**17:15**
Volume	126	128	**227**	207	164	**332**
P.H.F.	0.85	0.82	**0.87**	0.86	0.95	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-068

Location: San Diego Ave. btwn. Conde St. & Arista St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		2					12:00	25		29				
00:15	3		3					12:15	21		33				
00:30	1		1					12:30	28		30				
00:45	2	11	6	12			23	12:45	32	106	28	120			226
01:00	3		7					13:00	30		24				
01:15	2		3					13:15	33		21				
01:30	3		4					13:30	29		14				
01:45	3	11	2	16			27	13:45	28	120	19	78			198
02:00	2		2					14:00	32		22				
02:15	1		1					14:15	30		20				
02:30	2		0					14:30	33		24				
02:45	0	5	1	4			9	14:45	39	134	41	107			241
03:00	0		0					15:00	31		52				
03:15	0		1					15:15	44		49				
03:30	1		1					15:30	40		43				
03:45	1	2	0	2			4	15:45	35	150	40	184			334
04:00	2		1					16:00	30		45				
04:15	2		1					16:15	34		47				
04:30	1		2					16:30	32		51				
04:45	6	11	1	5			16	16:45	44	140	55	198			338
05:00	1		5					17:00	54		58				
05:15	3		2					17:15	72		60				
05:30	7		3					17:30	69		52				
05:45	7	18	5	15			33	17:45	61	256	28	198			454
06:00	6		3					18:00	45		48				
06:15	11		1					18:15	33		49				
06:30	14		4					18:30	37		38				
06:45	13	44	19	27			71	18:45	46	161	53	188			349
07:00	24		14					19:00	45		39				
07:15	27		12					19:15	35		42				
07:30	21		18					19:30	38		47				
07:45	35	107	21	65			172	19:45	30	148	46	174			322
08:00	34		15					20:00	36		39				
08:15	23		22					20:15	33		33				
08:30	26		13					20:30	28		38				
08:45	43	126	19	69			195	20:45	28	125	36	146			271
09:00	33		22					21:00	25		45				
09:15	24		30					21:15	24		45				
09:30	38		26					21:30	21		28				
09:45	47	142	13	91			233	21:45	15	85	32	150			235
10:00	35		29					22:00	25		30				
10:15	30		21					22:15	13		13				
10:30	28		19					22:30	16		19				
10:45	29	122	22	91			213	22:45	14	68	23	85			153
11:00	22		16					23:00	9		15				
11:15	20		19					23:15	10		9				
11:30	24		14					23:30	5		11				
11:45	29	95	21	70			165	23:45	3	27	8	43			70
Total Vol.		694		467			**1161**			1520		1671			**3191**

Daily Totals

NB	SB	EB	WB	Combined
2214	2138			**4352**

	AM			PM		
Split %	59.8%	40.2%	**26.7%**	47.6%	52.4%	**73.3%**
Peak Hour	09:30	11:45	**09:15**	17:00	16:45	**16:45**
Volume	150	113	**242**	256	225	**464**
P.H.F.	0.80	0.86	**0.95**	0.89	0.94	**0.88**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: San Diego Ave (STATION#2460/FILE#MC0424-10)	Project:	10-4169-012	5,458	4,702	0	0	10,160

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		16					12:00	106		60				
00:15	7		16					12:15	82		76				
00:30	7		8					12:30	87		72				
00:45	1	20	10	50			70	12:45	92	367	70	278			645
01:00	6		5					13:00	83		69				
01:15	4		4					13:15	86		82				
01:30	3		2					13:30	73		66				
01:45	1	14	1	12			26	13:45	84	326	71	288			614
02:00	2		5					14:00	90		70				
02:15	2		3					14:15	92		83				
02:30	8		5					14:30	111		82				
02:45	0	12	2	15			27	14:45	105	398	87	322			720
03:00	1		2					15:00	99		83				
03:15	4		0					15:15	92		93				
03:30	2		5					15:30	103		87				
03:45	3	10	3	10			20	15:45	113	407	86	349			756
04:00	2		9					16:00	108		86				
04:15	1		2					16:15	123		82				
04:30	4		1					16:30	135		94				
04:45	5	12	3	15			27	16:45	131	497	82	344			841
05:00	3		9					17:00	146		97				
05:15	5		11					17:15	162		100				
05:30	10		9					17:30	119		98				
05:45	11	29	7	36			65	17:45	123	550	100	395			945
06:00	11		9					18:00	122		77				
06:15	16		16					18:15	122		63				
06:30	33		14					18:30	115		77				
06:45	29	89	22	61			150	18:45	96	455	67	284			739
07:00	48		25					19:00	121		90				
07:15	34		28					19:15	82		78				
07:30	50		31					19:30	85		80				
07:45	52	184	32	116			300	19:45	68	356	69	317			673
08:00	58		27					20:00	68		82				
08:15	52		28					20:15	71		65				
08:30	45		32					20:30	65		77				
08:45	78	233	50	137			370	20:45	47	251	105	329			580
09:00	62		39					21:00	31		86				
09:15	59		36					21:15	29		74				
09:30	73		39					21:30	38		101				
09:45	80	274	43	157			431	21:45	27	125	93	354			479
10:00	69		33					22:00	33		106				
10:15	90		49					22:15	27		100				
10:30	81		57					22:30	23		61				
10:45	85	325	57	196			521	22:45	19	102	56	323			425
11:00	79		55					23:00	11		35				
11:15	109		56					23:15	12		19				
11:30	90		59					23:30	5		24				
11:45	110	388	48	218			606	23:45	6	34	18	96			130
Total Vol.		1590		1023			**2613**			3868		3679			**7547**

	NB	SB	EB	WB	Total
Daily Totals :	**5,458**	**4,702**	**0**	**0**	**10,160**

	AM			PM			
Split %	60.8%	39.2%	**25.7%**	51.3%	48.7%		**74.3%**
AM				**PM**			
Peak Hr.	11:15	11:45	**11:45**	**Peak Hr.**	16:30	21:30	**16:30**
Volume	415	256	**641**	**Volume**	574	400	**947**
P.H.F.	0.943	0.842	**0.965**	**P.H.F.**	0.886	0.943	**0.904**
7 - 9 Vol.	417	253	**670**	**4 - 6 Vol.**	1047	739	**1786**
Peak Hr.	08:00	08:00	**08:00**	**Peak Hr.**	16:30	17:00	**16:30**
Volume	233	137	**370**	**Volume**	574	395	**947**
P.H.F.	0.747	0.685	**0.723**	**P.H.F.**	0.886	0.988	**0.904**

Prepared by NDS/ATD

VOLUME

San Diego Ave from Old Town Ave to Witherby St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_004

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	8		2				10		12:00	56		35				91	
00:15	8		7				15		12:15	97		35				132	
00:30	5		3				8		12:30	63		45				108	
00:45	3	24	3	15			6	39	12:45	60	276	54	169			114	445
01:00	2		1				3		13:00	60		44				104	
01:15	4		1				5		13:15	69		39				108	
01:30	1		2				3		13:30	53		30				83	
01:45	2	9	3	7			5	16	13:45	61	243	34	147			95	390
02:00	1		2				3		14:00	39		36				75	
02:15	2		2				4		14:15	48		45				93	
02:30	1		0				1		14:30	53		29				82	
02:45	0	4	2	6			2	10	14:45	58	198	34	144			92	342
03:00	3		0				3		15:00	49		31				80	
03:15	1		0				1		15:15	52		37				89	
03:30	0		1				1		15:30	46		40				86	
03:45	1	5	0	1			1	6	15:45	50	197	32	140			82	337
04:00	1		2				3		16:00	53		29				82	
04:15	2		2				4		16:15	44		33				77	
04:30	4		1				5		16:30	49		38				87	
04:45	3	10	4	9			7	19	16:45	53	199	41	141			94	340
05:00	5		5				10		17:00	59		52				111	
05:15	7		2				9		17:15	60		48				108	
05:30	10		3				13		17:30	53		51				104	
05:45	10	32	3	13			13	45	17:45	47	219	40	191			87	410
06:00	23		4				27		18:00	57		42				99	
06:15	20		8				28		18:15	71		38				109	
06:30	28		9				37		18:30	61		42				103	
06:45	26	97	10	31			36	128	18:45	47	236	44	166			91	402
07:00	26		15				41		19:00	65		45				110	
07:15	39		12				51		19:15	48		36				84	
07:30	52		16				68		19:30	33		42				75	
07:45	77	194	26	69			103	263	19:45	37	183	19	142			56	325
08:00	41		30				71		20:00	34		21				55	
08:15	63		15				78		20:15	44		23				67	
08:30	64		24				88		20:30	29		30				59	
08:45	41	209	28	97			69	306	20:45	22	129	18	92			40	221
09:00	46		33				79		21:00	30		23				53	
09:15	52		26				78		21:15	30		34				64	
09:30	33		35				68		21:30	32		23				55	
09:45	61	192	28	122			89	314	21:45	17	109	17	97			34	206
10:00	45		32				77		22:00	14		16				30	
10:15	45		22				67		22:15	16		13				29	
10:30	47		31				78		22:30	17		12				29	
10:45	44	181	34	119			78	300	22:45	9	56	10	51			19	107
11:00	51		29				80		23:00	14		7				21	
11:15	76		33				109		23:15	15		8				23	
11:30	49		35				84		23:30	7		7				14	
11:45	54	230	32	129			86	359	23:45	4	40	6	28			10	68
TOTALS		1187		618				1805	TOTALS		2085		1508				3593
SPLIT %		65.8%		34.2%				33.4%	SPLIT %		58.0%		42.0%				66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Peak Hour	11:45	11:45	11:45	PM Peak Hour	12:15	16:45	12:15
AM Pk Volume	270	147	417	PM Pk Volume	280	192	458
Pk Hr Factor	0.696	0.817	0.790	Pk Hr Factor	0.722	0.923	0.867
7 - 9 Volume	403	166	569	4 - 6 Volume	418	332	750
7 - 9 Peak Hour	07:45	08:00	07:45	4 - 6 Peak Hour	16:45	16:45	16:45
7 - 9 Pk Volume	245	97	340	4 - 6 Pk Volume	225	192	417
Pk Hr Factor	0.795	0.808	0.825	Pk Hr Factor	0.938	0.923	0.939

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-064

Location: Juan St. btwn. Taylor St. & Mason St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		1			12:00			32		28		
00:15			1		2			12:15			30		24		
00:30			0		1			12:30			29		41		
00:45			1	5	3	7	12	12:45			28	119	45	138	257
01:00			0		0			13:00			32		50		
01:15			3		2			13:15			30		39		
01:30			0		0			13:30			33		35		
01:45			4	7	3	5	12	13:45			41	136	44	168	304
02:00			0		5			14:00			45		46		
02:15			0		2			14:15			48		58		
02:30			1		0			14:30			48		57		
02:45			0	1	0	7	8	14:45			45	186	62	223	409
03:00			2		0			15:00			47		59		
03:15			3		1			15:15			46		70		
03:30			1		0			15:30			38		56		
03:45			0	6	0	1	7	15:45			54	185	73	258	443
04:00			0		4			16:00			47		66		
04:15			1		1			16:15			63		75		
04:30			2		1			16:30			63		52		
04:45			3	6	1	7	13	16:45			66	239	61	254	493
05:00			6		4			17:00			54		69		
05:15			2		7			17:15			50		57		
05:30			3		5			17:30			65		62		
05:45			8	19	14	30	49	17:45			59	228	48	236	464
06:00			6		14			18:00			69		50		
06:15			12		9			18:15			50		50		
06:30			22		18			18:30			44		48		
06:45			20	60	25	66	126	18:45			44	207	46	194	401
07:00			22		31			19:00			44		50		
07:15			21		36			19:15			44		29		
07:30			27		32			19:30			45		34		
07:45			34	104	44	143	247	19:45			34	167	48	161	328
08:00			30		39			20:00			36		28		
08:15			30		52			20:15			22		54		
08:30			26		48			20:30			26		31		
08:45			23	109	46	185	294	20:45			25	109	57	170	279
09:00			34		27			21:00			22		49		
09:15			37		40			21:15			15		25		
09:30			51		31			21:30			16		31		
09:45			33	155	38	136	291	21:45			10	63	25	130	193
10:00			53		49			22:00			11		27		
10:15			48		43			22:15			3		20		
10:30			36		33			22:30			8		19		
10:45			43	180	29	154	334	22:45			8	30	7	73	103
11:00			33		49			23:00			5		13		
11:15			55		38			23:15			3		5		
11:30			49		34			23:30			3		6		
11:45			36	173	20	141	314	23:45			4	15	7	31	46
Total Vol.				825		882	**1707**					1684		2036	**3720**

Daily Totals

NB	SB	EB	W8	**Combined**
		2509	2918	**5427**

	AM			**PM**		
Split %	48.3%	51.7%	**31.5%**	45.3%	54.7%	**68.5%**
Peak Hour	09:30	08:00	**09:30**	16:15	15:30	**16:15**
Volume	185	185	**346**	246	270	**503**
P.H.F.	0.87	0.89	**0.85**	0.93	0.90	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-065

Location: Juan St. btwn. Twiggs St. & Harney St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		4			12:00			39		19		
00:15			0		1			12:15			34		23		
00:30			1		2			12:30			38		20		
00:45			0	3	1	8	11	12:45			42	153	22	84	237
01:00			0		0			13:00			40		18		
01:15			1		4			13:15			43		30		
01:30			0		0			13:30			46		32		
01:45			1	2	2	6	8	13:45			35	164	16	96	260
02:00			1		3			14:00			40		26		
02:15			0		1			14:15			35		27		
02:30			0		0			14:30			44		17		
02:45			0	1	0	4	5	14:45			49	168	27	97	265
03:00			1		1			15:00			49		26		
03:15			1		2			15:15			47		27		
03:30			1		1			15:30			39		22		
03:45			0	3	0	4	7	15:45			40	175	32	107	282
04:00			0		2			16:00			54		32		
04:15			1		2			16:15			58		36		
04:30			1		2			16:30			64		30		
04:45			2	4	2	8	12	16:45			65	241	22	120	361
05:00			3		8			17:00			69		50		
05:15			0		5			17:15			59		52		
05:30			1		2			17:30			63		63		
05:45			7	11	13	28	39	17:45			50	241	41	206	447
06:00			5		7			18:00			70		68		
06:15			10		16			18:15			46		35		
06:30			9		19			18:30			49		57		
06:45			19	43	31	73	116	18:45			38	203	37	197	400
07:00			28		41			19:00			33		53		
07:15			30		41			19:15			41		37		
07:30			38		54			19:30			25		36		
07:45			29	125	53	189	314	19:45			20	119	30	156	275
08:00			33		46			20:00			28		37		
08:15			29		42			20:15			26		35		
08:30			25		52			20:30			27		40		
08:45			23	110	45	185	295	20:45			15	96	20	132	228
09:00			38		43			21:00			16		27		
09:15			30		47			21:15			10		19		
09:30			29		48			21:30			11		25		
09:45			30	127	55	193	320	21:45			8	45	15	86	131
10:00			33		51			22:00			9		14		
10:15			32		56			22:15			7		13		
10:30			44		53			22:30			3		15		
10:45			38	147	71	231	378	22:45			4	23	6	48	71
11:00			39		43			23:00			0		5		
11:15			33		49			23:15			4		7		
11:30			40		41			23:30			2		5		
11:45			34	146	36	169	315	23:45			3	9	7	24	33
Total Vol.				722		1098	**1820**					1637		1353	**2990**

Daily Totals

NB	SB	EB	WB	Combined
		2359	2451	**4810**

	AM			PM		
Split %	39.7%	60.3%	**37.8%**	54.7%	45.3%	**62.2%**
Peak Hour	10:30	10:00	**10:00**	16:30	17:15	**17:15**
Volume	154	231	**378**	257	224	**466**
P.H.F.	0.88	0.81	**0.87**	0.93	0.82	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-066

Location: Juan St. btwn. Harney St. & San Juan Rd.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			1	0		12:00			28	21	
00:15			0	1		12:15			32	24	
00:30			0	2		12:30			30	29	
00:45			0 1	0 3	4	12:45			33 123	30 104	227
01:00			0	3		13:00			29	32	
01:15			1	0		13:15			30	28	
01:30			0	0		13:30			32	21	
01:45			0 1	1 4	5	13:45			24 115	20 101	216
02:00			1	2		14:00			28	26	
02:15			0	1		14:15			27	37	
02:30			0	0		14:30			31	20	
02:45			0 1	0 3	4	14:45			28 114	30 113	227
03:00			0	0		15:00			28	26	
03:15			2	1		15:15			29	33	
03:30			1	0		15:30			22	26	
03:45			0 3	0 1	4	15:45			20 99	24 109	208
04:00			0	2		16:00			19	28	
04:15			1	1		16:15			21	28	
04:30			2	1		16:30			17	24	
04:45			2 5	2 6	11	16:45			15 72	32 112	184
05:00			2	3		17:00			11	31	
05:15			0	3		17:15			15	21	
05:30			0	2		17:30			19	22	
05:45			2 4	7 15	19	17:45			20 65	23 97	162
06:00			2	8		18:00			15	19	
06:15			9	11		18:15			25	22	
06:30			6	11		18:30			24	20	
06:45			12 29	13 43	72	18:45			29 93	17 78	171
07:00			13	27		19:00			22	19	
07:15			18	24		19:15			20	13	
07:30			20	32		19:30			21	11	
07:45			24 75	39 122	197	19:45			14 77	10 53	130
08:00			29	28		20:00			19	14	
08:15			22	25		20:15			13	18	
08:30			20	43		20:30			11	13	
08:45			24 95	29 125	220	20:45			10 53	11 56	109
09:00			26	21		21:00			14	10	
09:15			26	22		21:15			9	8	
09:30			32	25		21:30			7	6	
09:45			28 112	39 107	219	21:45			7 37	6 30	67
10:00			24	29		22:00			5	9	
10:15			29	31		22:15			5	6	
10:30			28	18		22:30			6	5	
10:45			24 105	27 105	210	22:45			2 18	2 22	40
11:00			29	25		23:00			0	2	
11:15			33	19		23:15			3	3	
11:30			30	24		23:30			1	0	
11:45			32 124	18 86	210	23:45			1 5	0 5	10
Total Vol.			555	620	**1175**				871	880	**1751**

Daily Totals

NB	SB	EB	WB	Combined
		1426	1500	**2926**

	AM			PM		
Split %	47.2%	52.8%	**40.2%**	49.7%	50.3%	**59.8%**
Peak Hour	11:00	07:45	**09:30**	12:15	12:30	**12:30**
Volume	124	135	**237**	124	119	**241**
P.H.F.	0.94	0.78	**0.88**	0.94	0.93	**0.96**

Prepared by NDS/ATD

VOLUME

Channel Way between W Mission Bay Dr & Hancock St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Period	NB		SB		EB		WB		TOTAL	
00:00					1		7		8	
00:15					0		1		1	
00:30					0		3		3	
00:45					0	1	2	13	2	14
01:00					1		0		1	
01:15					0		1		1	
01:30					1		2		3	
01:45					0	2	0	3	0	5
02:00					1		0		1	
02:15					0		0		0	
02:30					0		0		0	
02:45					0	1	0		0	1
03:00					1		1		2	
03:15					1		2		3	
03:30					0		0		0	
03:45					0	2	0	3	0	5
04:00					1		0		1	
04:15					1		1		2	
04:30					0		1		1	
04:45					0	2	2	4	2	6
05:00					0		1		1	
05:15					0		1		1	
05:30					1		3		4	
05:45					2	3	5	10	7	13
06:00					3		4		7	
06:15					1		6		7	
06:30					2		2		4	
06:45					3	9	7	19	10	28
07:00					3		5		8	
07:15					4		3		7	
07:30					5		10		15	
07:45					6	18	10	28	16	46
08:00					5		7		12	
08:15					6		12		18	
08:30					7		10		17	
08:45					4	22	10	39	14	61
09:00					6		10		16	
09:15					4		7		11	
09:30					8		12		20	
09:45					9	27	11	40	20	67
10:00					8		12		20	
10:15					10		13		23	
10:30					7		12		19	
10:45					5	30	8	45	13	75
11:00					4		14		18	
11:15					9		12		21	
11:30					7		17		24	
11:45					7	27	20	63	27	90
TOTALS						144		267		411
SPLIT %						35.0%		65.0%		32.1%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					4		9		13	
12:15					7		23		30	
12:30					14		11		25	
12:45					10	35	4	47	14	82
13:00					9		15		24	
13:15					6		22		28	
13:30					12		7		19	
13:45					8	35	13	57	21	92
14:00					4		24		28	
14:15					9		16		25	
14:30					10		22		32	
14:45					7	30	14	76	21	106
15:00					7		22		29	
15:15					5		17		22	
15:30					4		29		33	
15:45					9	25	27	95	36	120
16:00					8		30		38	
16:15					6		26		32	
16:30					11		28		39	
16:45					7	32	23	107	30	139
17:00					9		28		37	
17:15					7		29		36	
17:30					4		18		22	
17:45					8	28	18	93	26	121
18:00					6		14		20	
18:15					5		13		18	
18:30					3		12		15	
18:45					2	16	9	48	11	64
19:00					2		9		11	
19:15					3		11		14	
19:30					2		11		13	
19:45					0	7	7	38	7	45
20:00					1		6		7	
20:15					3		6		9	
20:30					2		6		8	
20:45					1	7	4	22	5	29
21:00					6		6		12	
21:15					2		7		9	
21:30					1		5		6	
21:45					2	11	7	25	9	36
22:00					2		3		5	
22:15					1		6		7	
22:30					4		2		6	
22:45					1	8	4	15	5	23
23:00					3		0		3	
23:15					2		2		4	
23:30					3		1		4	
23:45					0	8	1	4	1	12
TOTALS						242		627		869
SPLIT %						27.8%		72.2%		67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Peak Hour	09:30	11:30	11:45	PM Peak Hour	12:15	15:30	15:45
AM Pk Volume	35	69	95	PM Pk Volume	40	112	145
Pk Hr Factor	0.875	0.750	0.792	Pk Hr Factor	0.714	0.933	0.929
7 - 9 Volume	40	67	107	4 - 6 Volume	60	200	260
7 - 9 Peak Hour	07:45	07:30	07:45	4 - 6 Peak Hour	16:30	16:30	16:30
7 - 9 Pk Volume	24	39	63	4 - 6 Pk Volume	34	108	142
Pk Hr Factor	0.857	0.813	0.875	Pk Hr Factor	0.773	0.931	0.910

Prepared by NDS/ATD

VOLUME

Kemper St from Kenyon St to Midway Dr

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		10				13		12:00	91		101				192	
00:15	4		3				7		12:15	104		110				214	
00:30	3		8				11		12:30	75		93				168	
00:45	3	13	7	28			10	41	12:45	79	349	119	423			198	772
01:00	2		4				6		13:00	85		101				186	
01:15	5		5				10		13:15	85		118				203	
01:30	3		8				11		13:30	82		106				188	
01:45	1	11	2	19			3	30	13:45	72	324	92	417			164	741
02:00	2		2				4		14:00	57		105				162	
02:15	1		4				5		14:15	102		96				198	
02:30	1		5				6		14:30	79		114				193	
02:45	2	6	3	14			5	20	14:45	62	300	87	402			149	702
03:00	7		1				8		15:00	59		83				142	
03:15	1		4				5		15:15	82		86				168	
03:30	4		4				8		15:30	73		79				152	
03:45	1	13	3	12			4	25	15:45	70	284	80	328			150	612
04:00	0		4				4		16:00	68		83				151	
04:15	3		0				3		16:15	66		112				178	
04:30	1		3				4		16:30	70		106				176	
04:45	9	13	2	9			11	22	16:45	68	272	107	408			175	680
05:00	2		0				2		17:00	72		102				174	
05:15	11		3				14		17:15	75		117				192	
05:30	10		4				14		17:30	75		111				186	
05:45	14	37	5	12			19	49	17:45	73	295	93	423			166	718
06:00	19		3				22		18:00	64		98				162	
06:15	26		7				33		18:15	62		93				155	
06:30	50		14				64		18:30	67		92				159	
06:45	44	139	24	48			68	187	18:45	73	266	76	359			149	625
07:00	58		42				100		19:00	45		67				112	
07:15	64		22				86		19:15	44		52				96	
07:30	61		35				96		19:30	49		56				105	
07:45	57	240	40	139			97	379	19:45	40	178	51	226			91	404
08:00	57		42				99		20:00	50		49				99	
08:15	58		39				97		20:15	39		47				86	
08:30	61		46				107		20:30	29		53				82	
08:45	72	248	42	169			114	417	20:45	25	143	45	194			70	337
09:00	66		57				123		21:00	32		36				68	
09:15	84		63				147		21:15	25		35				60	
09:30	81		72				153		21:30	21		25				46	
09:45	61	292	60	252			121	544	21:45	10	88	40	136			50	224
10:00	91		77				168		22:00	16		28				44	
10:15	89		91				180		22:15	17		24				41	
10:30	64		68				132		22:30	10		27				37	
10:45	69	313	77	313			146	626	22:45	10	53	12	91			22	144
11:00	76		68				144		23:00	12		18				30	
11:15	75		71				146		23:15	9		12				21	
11:30	77		92				169		23:30	5		15				20	
11:45	89	317	79	310			168	627	23:45	5	31	7	52			12	83
TOTALS		1642		1325				2967	TOTALS		2583		3459				6042
SPLIT %		55.3%		44.7%				32.9%	SPLIT %		42.8%		57.2%				67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Peak Hour	11:30	11:45	11:30	PM Peak Hour	12:00	12:45	12:45
AM Pk Volume	361	383	743	PM Pk Volume	349	444	775
Pk Hr Factor	0.868	0.870	0.868	Pk Hr Factor	0.839	0.933	0.954
7 - 9 Volume	488	308	796	4 - 6 Volume	567	831	1398
7 - 9 Peak Hour	08:00	08:00	08:00	4 - 6 Peak Hour	17:00	16:45	16:45
7 - 9 Pk Volume	248	169	417	4 - 6 Pk Volume	295	437	727
Pk Hr Factor	0.861	0.918	0.914	Pk Hr Factor	0.983	0.934	0.947

Prepared by NDS/ATD

VOLUME

Kemper St from Midway Dr to Sports Arena Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_002

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		5						8		12:00	87		116						203	
00:15	1		3						4		12:15	93		107						200	
00:30	4		4						8		12:30	86		119						205	
00:45	1	9	3	15					4	24	12:45	72	338	110	452					182	790
01:00	1		2						3		13:00	74		66						140	
01:15	1		3						4		13:15	80		114						194	
01:30	0		2						2		13:30	84		103						187	
01:45	0	2	3	10					3	12	13:45	67	305	70	353					137	658
02:00	1		2						3		14:00	76		78						154	
02:15	0		1						1		14:15	72		96						168	
02:30	1		0						1		14:30	69		82						151	
02:45	1	3	4	7					5	10	14:45	61	278	73	329					134	607
03:00	1		0						1		15:00	62		68						130	
03:15	1		0						1		15:15	65		73						138	
03:30	1		3						4		15:30	61		72						133	
03:45	2	5	0	3					2	8	15:45	61	249	93	306					154	555
04:00	2		4						6		16:00	51		108						159	
04:15	3		1						4		16:15	66		92						158	
04:30	2		4						6		16:30	65		87						152	
04:45	3	10	3	12					6	22	16:45	69	251	77	364					146	615
05:00	5		2						7		17:00	66		90						156	
05:15	3		1						4		17:15	54		82						136	
05:30	12		5						17		17:30	59		73						132	
05:45	10	30	7	15					17	45	17:45	47	226	107	352					154	578
06:00	16		8						24		18:00	44		90						134	
06:15	20		11						31		18:15	59		92						151	
06:30	26		15						41		18:30	47		73						120	
06:45	21	83	33	67					54	150	18:45	42	192	52	307					94	499
07:00	38		27						65		19:00	47		51						98	
07:15	26		29						55		19:15	41		34						75	
07:30	45		43						88		19:30	52		48						100	
07:45	53	162	44	143					97	305	19:45	41	181	49	182					90	363
08:00	46		51						97		20:00	46		41						87	
08:15	43		64						107		20:15	18		32						50	
08:30	56		59						115		20:30	31		44						75	
08:45	61	206	62	236					123	442	20:45	21	116	18	135					39	251
09:00	63		76						139		21:00	23		22						45	
09:15	61		75						136		21:15	12		24						36	
09:30	70		56						126		21:30	11		26						37	
09:45	47	241	68	275					115	516	21:45	7	53	25	97					32	150
10:00	74		74						148		22:00	11		22						33	
10:15	77		108						185		22:15	11		23						34	
10:30	74		75						149		22:30	10		20						30	
10:45	80	305	99	356					179	661	22:45	8	40	14	79					22	119
11:00	75		86						161		23:00	3		9						12	
11:15	92		97						189		23:15	3		7						10	
11:30	80		102						182		23:30	3		6						9	
11:45	81	328	86	371					167	699	23:45	1	10	4	26					5	36
TOTALS		1384		1510						2894	TOTALS		2239		2982						5221
SPLIT %		47.8%		52.2%						35.7%	SPLIT %		42.9%		57.1%						64.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Peak Hour	11:45	11:45	11:45		PM Peak Hour	12:00	12:00	12:00
AM Pk Volume	347	428	775		PM Pk Volume	338	452	790
Pk Hr Factor	0.933	0.899	0.945		Pk Hr Factor	0.909	0.950	0.963
7 - 9 Volume	368	379	747		4 - 6 Volume	477	716	1193
7 - 9 Peak Hour	08:00	08:00	08:00		4 - 6 Peak Hour	16:15	16:00	16:00
7 - 9 Pk Volume	206	236	442		4 - 6 Pk Volume	266	364	615
Pk Hr Factor	0.844	0.922	0.898		Pk Hr Factor	0.964	0.843	0.967

Table 3-2. Roadway Segment Level of Service
Existing Conditions

Roadway	Segment	Class	Lanes	LOS E Capacity	Existing		
					ADT	V/C	LOS
Rosecrans Street	From Pacific Highway to Sports Arena Blvd.	Major	4	40,000	15,503	0.39	B
	From Sports Arena Blvd. to Midway Dr.	Major	6	50,000	59,120	1.18	F
	From Midway Dr. to Lytton St.	Major	6	50,000	46,384	0.93	E
	From Lytton St. to Roosevelt Rd.	Major	5	45,000	42,513	0.94	E
	From Laning Rd. to Nimitz Blvd.	Major	4	40,000	34,259	0.86	D
	From Nimitz Blvd. to N. Harbor Dr.	Major	4	40,000	36,450	0.91	E
	From N. Harbor Dr. to Canon St.	Major	4	40,000	34,390	0.86	D
	From Canon St. to Talbot St.	Major (1)	2	27,000	17,850	0.66	C
	From Talbot St. to Kellogg St.	Major (1)	2	27,000	15,200	0.56	B
Camino Del Rio	North of Sports Arena Blvd.	Prime	7	70,000	50,700	0.72	C
Pacific Highway	North of Rosecrans St.	Major (2)	2	20,000	5,818	0.29	A
	South of Rosecrans St.	Prime	6	60,000	13,070	0.22	A
Sports Arena Blvd.	Northwest of Rosecrans St.	Major	5	45,000	26,780	0.60	C
Midway Drive	Northwest of Rosecrans St.	Major	4	40,000	27,130	0.68	C
	Southeast of Rosecrans St.	Major	4	40,000	29,440	0.74	C
Lytton Street	Northwest of Rosecrans St.	Major (2)	2	20,000	11,797	0.59	C
	Southeast of Rosecrans St.	Major	4	40,000	19,650	0.49	B
Nimitz Boulevard	Northwest of Rosecrans St.	Major	4	40,000	17,264	0.43	B
	Southeast of Rosecrans St.	Major	4	40,000	12,020	0.30	A
North Harbor Drive	Rosecrans St. to Scott Rd.	Major	4	40,000	6,321	0.16	A
Canon Street	Northwest of Rosecrans St.	Collector	2	15,000	12,870	0.86	D
Talbot Street	Northwest of Rosecrans St.	Collector	2	8,000	5,950	0.74	D

(1) LOS E Capacity has been estimated based on results of the Highway Capacity Manual Urban Street Methodology.
(2) Since a published standard capacity for a 2-Lane Major does not exist, capacity is assumed to be half of a 4-Lane Major.

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
CAM RIO	[HANCOCK ST - MOORE ST]	03800W - 03700W	1032	SOUTH	:	35800	6/10/1992	0493-92
				*TOTAL	:	64900		
				NORTH	:	27610	7/27/2005	0408-05
				SOUTH	:	32160	7/27/2005	0408-05
				*TOTAL	:	59770		
				EAST	:	27290	9/16/2008	0346-08
				WEST	:	28560	9/16/2008	0346-08
				*TOTAL	:	55852		
CAM RIO	[SPORTS ARENA BL - KURTZ ST]	03899W - 03850W	9369	NORTH	:	24400	6/4/1987	1019-87
				SOUTH	:	28700	6/4/1987	1020-87
				*TOTAL	:	53100		
				NORTH	:	23900	6/25/1990	1005-90
				SOUTH	:	29100	6/25/1990	1006-90
				*TOTAL	:	53000		
				NORTH	:	24200	6/20/1991	0934-91
				SOUTH	:	30200	6/20/1991	0935-91
				*TOTAL	:	54400		
				NORTH	:	25780	7/25/2002	0814-02
				SOUTH	:	27180	7/25/2002	0815-02
				*TOTAL	:	52960		
				NORTH	:	23720	9/10/2008	0405-08
				SOUTH	:	26980	9/10/2008	0405-08
				*TOTAL	:	50700		
CAM RIO N	[CAM ARR - MSS CTR RD]	00750 - 01200	6721	EAST	:	4400	9/27/1990	1924-90
				WEST	:	5300	9/27/1990	1925-90
				*TOTAL	:	9700		
				EAST	:	3400	10/14/1993	0900-93
				WEST	:	4400	10/25/1993	0901-93
				EAST	:	3700	10/17/1996	1006-96
				WEST	:	4200	10/17/1996	1007-96
				*TOTAL	:	7900		

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION	WK-DAY VOLUME	STARTING DATE	FILE NUMBER
ROSECRANS ST	[MALAGA ST - MADRID ST]	03050 - 03200	9371	SOUTH	20220	7/21/2005	0668-05
				*TOTAL	39770		
				NORTH	21650	9/9/2008	0407-08
				SOUTH	21120	9/9/2008	0407-08
				*TOTAL	42770		
ROSECRANS ST	[MIDWAY DR - SPORTS ARENA BL]	03500 - 03650	9370	NORTH	26900	6/2/1987	0986-87
				SOUTH	27300	6/2/1987	0987-87
				*TOTAL	54200		
				NORTH	28100	6/6/1988	1008-88
				SOUTH	28200	6/6/1988	1009-88
				*TOTAL	56300		
				NORTH	26700	6/25/1990	1009-90
				SOUTH	26700	6/25/1990	1010-90
				*TOTAL	53400		
				NORTH	27400	6/20/1991	0936-91
				SOUTH	28200	6/20/1991	0937-91
				*TOTAL	55600		
				NORTH	31110	7/16/2002	0674-02
				SOUTH	27000	7/16/2002	0675-02
				*TOTAL	58110		
				NORTH	28720	9/9/2008	0406-08
				SOUTH	30400	9/9/2008	0406-08
				*TOTAL	59120		
ROSECRANS ST	[SPORTS ARENA BL - KURTZ ST]	03650 - 03750	1882	NORTH	12000	6/2/1987	0992-87
				SOUTH	9500	6/2/1987	0993-87
				*TOTAL	21500		
				NORTH	14300	6/28/1988	1133-88
				SOUTH	10800	6/28/1988	1134-88
				*TOTAL	25100		
				NORTH	12700	6/9/1989	0693-89
				SOUTH	8300	6/9/1989	0694-89
				*TOTAL	21000		

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-002
Location: Barnett Ave between Midway St & Pacific Hwy File No. MC0306-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	52	359			34	402				
12:15	31	417			34	411				
12:30	30	405			28	417				
12:45	27	395	140	1576	26	388	122	1618	262	3194
1:00	34	408			23	374				
1:15	17	433			19	370				
1:30	30	493			24	400				
1:45	22	479	103	1813	29	364	95	1508	198	3321
2:00	27	414			20	374				
2:15	18	421			15	358				
2:30	19	460			23	397				
2:45	9	475	73	1770	11	443	69	1572	142	3342
3:00	20	477			19	398				
3:15	19	538			14	486				
3:30	23	597			31	495				
3:45	12	701	74	2313	30	501	94	1880	168	4193
4:00	16	663			22	505				
4:15	25	661			26	485				
4:30	54	576			33	518				
4:45	46	572	141	2472	77	513	158	2021	299	4493
5:00	58	583			76	502				
5:15	76	575			113	592				
5:30	88	597			166	575				
5:45	140	567	362	2322	228	515	583	2184	945	4506
6:00	118	565			198	479				
6:15	169	443			345	473				
6:30	208	422			376	463				
6:45	207	451	702	1881	474	454	1393	1869	2095	3750
7:00	275	459			485	441				
7:15	342	422			481	397				
7:30	361	411			493	400				
7:45	339	412	1317	1704	525	362	1984	1600	3301	3304
8:00	331	407			515	322				
8:15	344	362			536	312				
8:30	419	374			473	311				
8:45	351	357	1445	1500	448	266	1972	1211	3417	2711
9:00	355	382			341	314				
9:15	297	365			337	289				
9:30	264	345			342	257				
9:45	246	302	1162	1394	348	265	1368	1125	2530	2519
10:00	289	320			286	260				
10:15	264	310			288	233				
10:30	296	272			304	233				
10:45	292	263	1141	1165	341	262	1219	988	2360	2153
11:00	302	284			348	229				
11:15	356	286			384	241				
11:30	331	263			412	226				
11:45	338	194	1327	1027	383	174	1527	870	2854	1897
Total	7987	20937	7987	20937	10584	18446	10584	18446	18571	39383
Combined Total	28924		28924		29030		29030		57954	
AM Peak	11:45 AM				7:30 AM					
Vol.	1519				2069					
P.H.F.	0.911				0.965					
PM Peak		3:30 PM				5:00 PM				
Vol.		2622				2184				
P.H.F.		0.935				0.922				
Percentage	27.6%	72.4%			36.5%	63.5%				

Day: TUESDAY
Date: 5/11/10

Classification Report / Prepared by: National Data & Surveying Services
Location: Washington St from Pacific Hwy & Frontage Rd

City: San Diego
Project #: 10-4143-030

SUMMARY

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	30	4	2	1	1	0	0	1	0	0	0	0	39
01:00	0	46	8	0	3	0	0	2	1	0	0	0	0	60
02:00	0	43	7	0	1	2	0	2	5	0	0	0	0	60
03:00	2	67	14	2	7	0	0	5	9	0	0	0	0	106
04:00	2	116	37	0	18	1	0	6	5	0	0	0	0	185
05:00	6	271	56	8	24	6	0	15	15	0	3	0	0	404
06:00	9	350	55	21	32	6	0	16	6	0	2	0	0	497
07:00	10	425	49	20	24	5	0	14	8	0	1	0	0	556
08:00	11	475	81	25	35	9	0	18	7	0	3	0	0	664
09:00	4	474	78	15	36	5	0	17	9	0	2	0	0	640
10:00	5	510	65	29	28	2	0	21	7	0	1	0	0	668
11:00	6	526	83	27	31	5	0	20	8	0	3	0	0	709
12:00 PM	6	503	81	29	34	8	0	22	2	0	3	0	0	688
13:00	12	536	68	19	25	1	0	21	4	0	1	0	0	687
14:00	5	563	78	17	30	5	0	14	4	0	2	0	0	718
15:00	7	603	86	22	14	1	0	12	1	0	0	0	0	746
16:00	7	702	82	33	22	7	0	22	1	0	0	0	0	876
17:00	9	636	62	23	23	4	0	16	3	0	0	0	0	776
18:00	4	433	48	8	23	4	0	11	4	0	0	0	0	535
19:00	5	325	34	6	18	2	0	8	3	0	0	0	0	401
20:00	1	250	23	3	5	2	0	0	3	0	0	0	0	287
21:00	1	179	24	1	2	0	0	2	2	0	0	0	0	211
22:00	3	75	14	2	2	0	0	0	1	0	0	0	0	97
23:00	0	59	4	1	2	0	0	0	0	0	0	0	0	66
Totals	**115**	**8197**	**1141**	**313**	**440**	**76**		**264**	**109**		**21**			**10676**
% of Totals	1%	77%	11%	3%	4%	1%		2%	1%		0%			100%
	55	3333	537	149	240	42	0	136	81	0	15	0	0	4588
% AM	1%	31%	5%	1%	2%	0%		1%	1%		0%			43%
AM Peak Hour	08:00	11:00	11:00	10:00	09:00	08:00		10:00	05:00		05:00			11:00
Volume	11	526	83	29	36	9		21	15		3			709
	60	4864	604	164	200	34	0	128	28	0	6	0	0	6088
% PM	1%	46%	6%	2%	2%	0%		1%	0%		0%			57%
PM Peak Hour	13:00	16:00	15:00	16:00	12:00	12:00		12:00	13:00		12:00			16:00
Volume	12	702	86	33	34	8		22	4		3			876

Peak Period Totals	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1220 ⟷	11%	1375 ⟷	13%	1652 ⟷	15%	6429 ⟷	60%

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-106

Location: Washington St. btwn. Frontage St. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		6			12:00			133		132		
00:15			13		8			12:15			133		119		
00:30			12		4			12:30			117		128		
00:45			10	47	2	20	67	12:45			128	511	121	500	1011
01:00			11		6			13:00			143		139		
01:15			7		4			13:15			148		114		
01:30			4		1			13:30			128		109		
01:45			2	24	3	14	38	13:45			129	548	115	477	1025
02:00			4		4			14:00			126		106		
02:15			1		2			14:15			110		110		
02:30			1		1			14:30			158		126		
02:45			6	12	4	11	23	14:45			156	550	117	459	1009
03:00			3		2			15:00			142		121		
03:15			2		7			15:15			141		143		
03:30			3		11			15:30			129		124		
03:45			1	9	7	27	36	15:45			159	571	97	485	1056
04:00			3		6			16:00			134		128		
04:15			4		9			16:15			133		97		
04:30			4		9			16:30			180		108		
04:45			12	23	19	43	66	16:45			136	583	118	451	1034
05:00			19		19			17:00			144		121		
05:15			13		33			17:15			123		108		
05:30			20		47			17:30			119		96		
05:45			24	76	63	162	238	17:45			80	466	55	380	846
06:00			28		70			18:00			68		49		
06:15			20		62			18:15			68		59		
06:30			31		111			18:30			67		53		
06:45			35	114	104	347	461	18:45			68	271	50	211	482
07:00			48		107			19:00			72		44		
07:15			68		112			19:15			65		43		
07:30			75		106			19:30			64		37		
07:45			71	262	138	463	725	19:45			65	266	42	166	432
08:00			87		117			20:00			59		42		
08:15			89		135			20:15			45		31		
08:30			96		123			20:30			50		37		
08:45			103	375	119	494	869	20:45			33	187	28	138	325
09:00			89		125			21:00			55		22		
09:15			89		116			21:15			39		31		
09:30			106		112			21:30			36		25		
09:45			80	364	98	451	815	21:45			37	167	23	101	268
10:00			101		95			22:00			34		15		
10:15			97		80			22:15			29		20		
10:30			89		98			22:30			36		14		
10:45			114	401	111	384	785	22:45			26	125	14	63	188
11:00			112		113			23:00			17		7		
11:15			135		113			23:15			29		10		
11:30			124		121			23:30			21		13		
11:45			113	484	120	467	951	23:45			17	84	7	37	121
Total Vol.				2191		2883	**5074**					4329		3468	**7797**

Daily Totals

NB	SB	EB	WB	Combined
		6520	6351	**12871**

	AM			PM		
Split %	43.2%	56.8%	**39.4%**	55.5%	44.5%	**60.6%**
Peak Hour	11:15	07:45	**11:30**	15:45	12:15	**14:30**
Volume	505	513	**995**	606	507	**1104**
P.H.F.	0.94	0.93	**0.94**	0.84	0.91	**0.97**

Prepared by NDS/ATO

VOLUME

Vine St from California St to Kettner Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0		0		0	12:00	6		0		6
00:15	0		0		0	12:15	7		1		8
00:30	0		0		0	12:30	1		1		2
00:45	0		0		0	12:45	0	14	0	2	0 16
01:00	0		0		0	13:00	2		1		3
01:15	0		0		0	13:15	1		3		4
01:30	0		0		0	13:30	2		1		3
01:45	0		0		0	13:45	4	9	0	5	4 14
02:00	0		0		0	14:00	5		2		7
02:15	0		0		0	14:15	9		2		11
02:30	0		0		0	14:30	8		3		11
02:45	0		0		0	14:45	4	26	2	9	6 35
03:00	0		0		0	15:00	2		2		4
03:15	0		0		0	15:15	0		4		4
03:30	0		0		0	15:30	1		2		3
03:45	0		0		0	15:45	2	5	1	9	3 14
04:00	1		0		1	16:00	1		3		4
04:15	0		0		0	16:15	2		5		7
04:30	0		0		0	16:30	4		6		10
04:45	0	1	0		0 1	16:45	5	12	3	17	8 29
05:00	0		0		0	17:00	3		2		5
05:15	0		1		1	17:15	1		2		3
05:30	0		0		0	17:30	2		1		3
05:45	4	4	0	1	4 5	17:45	1	7	0	5	1 12
06:00	1		0		1	18:00	2		1		3
06:15	3		1		4	18:15	1		0		1
06:30	0		1		1	18:30	0		1		1
06:45	2	6	0	2	2 8	18:45	0	3	0	2	0 5
07:00	0		1		1	19:00	1		1		2
07:15	0		2		2	19:15	1		1		2
07:30	4		2		6	19:30	0		0		0
07:45	1	5	2	7	3 12	19:45	1	3	1	3	2 6
08:00	5		1		6	20:00	1		1		2
08:15	4		1		5	20:15	1		5		6
08:30	2		0		2	20:30	2		0		2
08:45	2	13	0	2	2 15	20:45	0	4	0	6	0 10
09:00	3		1		4	21:00	0		0		0
09:15	3		3		6	21:15	0		0		0
09:30	5		0		5	21:30	0		0		0
09:45	1	12	2	6	3 18	21:45	1	1	0		1 1
10:00	5		3		8	22:00	1		0		1
10:15	2		0		2	22:15	2		1		3
10:30	5		2		7	22:30	0		0		0
10:45	2	14	1	6	3 20	22:45	0	3	0	1	0 4
11:00	3		1		4	23:00	0		0		0
11:15	2		0		2	23:15	2		0		2
11:30	5		2		7	23:30	0		0		0
11:45	4	14	2	5	6 19	23:45	1	3	0		1 3
TOTALS		69		29	98	TOTALS		90		59	149
SPLIT %		70.4%		29.6%	39.7%	SPLIT %		60.4%		39.6%	60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Peak Hour	11:30	09:15	11:30	PM Peak Hour	13:45	16:00	14:00
AM Pk Volume	22	8	27	PM Pk Volume	26	17	35
Pk Hr Factor	0.786	0.667	0.844	Pk Hr Factor	0.722	0.708	0.795
7 - 9 Volume	18	9	27	4 - 6 Volume	19	22	41
7 - 9 Peak Hour	07:30	07:00	07:30	4 - 6 Peak Hour	16:15	16:00	16:15
7 - 9 Pk Volume	14	7	20	4 - 6 Pk Volume	14	17	30
Pk Hr Factor	0.700	0.875	0.833	Pk Hr Factor	0.700	0.708	0.750

Prepared by NDS/ATD

Volumes for: Thursday, May 26, 2011	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Sassafras St between Kettner Blvd & Pacific Hy	Project: 11-4109-048	0	0	3,496	5,220	8,716

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			19		2			12:00			82		94		
00:15			15		1			12:15			77		75		
00:30			15		2			12:30			67		83		
00:45			17	66	1	6	72	12:45			73	299	74	326	625
01:00			13		2			13:00			53		91		
01:15			10		4			13:15			59		65		
01:30			2		5			13:30			66		54		
01:45			4	29	3	14	43	13:45			53	231	68	278	509
02:00			2		1			14:00			48		65		
02:15			3		1			14:15			59		72		
02:30			4		3			14:30			47		58		
02:45			1	10	1	6	16	14:45			78	232	70	265	497
03:00			1		0			15:00			57		54		
03:15			1		3			15:15			49		85		
03:30			1		4			15:30			44		63		
03:45			0	3	2	9	12	15:45			46	196	66	268	464
04:00			6		6			16:00			52		73		
04:15			6		9			16:15			55		57		
04:30			11		31			16:30			54		68		
04:45			10	33	42	88	121	16:45			56	217	65	263	480
05:00			8		59			17:00			60		54		
05:15			15		84			17:15			69		52		
05:30			11		92			17:30			67		67		
05:45			15	49	74	309	358	17:45			58	254	52	225	479
06:00			17		81			18:00			55		62		
06:15			20		84			18:15			40		50		
06:30			19		118			18:30			38		58		
06:45			28	84	100	383	467	18:45			32	165	55	225	390
07:00			23		104			19:00			53		44		
07:15			32		109			19:15			45		35		
07:30			24		125			19:30			67		51		
07:45			33	112	114	452	564	19:45			42	207	67	197	404
08:00			31		106			20:00			50		43		
08:15			47		127			20:15			33		40		
08:30			35		104			20:30			45		35		
08:45			42	155	121	458	613	20:45			40	168	53	171	339
09:00			34		94			21:00			49		33		
09:15			33		85			21:15			38		44		
09:30			36		101			21:30			30		41		
09:45			32	135	99	379	514	21:45			38	155	30	148	303
10:00			35		78			22:00			35		36		
10:15			49		82			22:15			35		29		
10:30			53		80			22:30			35		16		
10:45			53	190	79	319	509	22:45			49	154	14	95	249
11:00			72		83			23:00			39		22		
11:15			51		60			23:15			27		13		
11:30			62		67			23:30			19		8		
11:45			63	248	78	288	536	23:45			19	104	5	48	152

Total Vol.			1114		2711	3825					2382		2991	5373
									NB	SB	EB		WB	Total
								Daily Totals :	0	0	3,496		5,220	8,716
			AM								PM			
Split %			29.1%		70.9%	43.9%					44.3%		55.7%	56.1%
ADT								PHF						
Peak Hr.			11:00		07:00	11:00		Peak Hr.			12:00		12:00	12:00
Volume			268		472	613		Volume			299		326	625
P.H.F.			0.953		0.929	0.879		P.H.F.			0.913		0.837	0.888
7 - 9 Vol.			267		518	1177		4 - 6 Vol.			471		488	959
Peak Hr.			10:00		07:30	08:00		Peak Hr.			17:00		16:30	16:45
Volume			155		472	613		Volume			254		263	480
P.H.F.			0.774		0.929	0.879		P.H.F.			0.913		0.911	0.914

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-109

Location: Laurel St. btwn. Pacific Highway & Kettner Blvd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			36		20			12:00			181		168		
00:15			37		14			12:15			240		195		
00:30			33		17			12:30			239		194		
00:45			18	124	12	63	187	12:45			201	861	200	757	1618
01:00			14		2			13:00			217		210		
01:15			11		8			13:15			173		183		
01:30			13		2			13:30			185		183		
01:45			9	47	5	17	64	13:45			204	779	139	715	1494
02:00			11		2			14:00			280		171		
02:15			4		2			14:15			185		163		
02:30			5		5			14:30			228		163		
02:45			3	23	6	15	38	14:45			175	868	136	633	1501
03:00			4		3			15:00			219		151		
03:15			6		6			15:15			205		145		
03:30			3		20			15:30			186		148		
03:45			4	17	14	43	60	15:45			219	829	158	602	1431
04:00			8		24			16:00			185		163		
04:15			2		45			16:15			203		139		
04:30			23		81			16:30			269		164		
04:45			47	80	147	297	377	16:45			212	869	155	621	1490
05:00			89		195			17:00			219		140		
05:15			130		199			17:15			206		154		
05:30			155		189			17:30			175		116		
05:45			139	513	191	774	1287	17:45			154	754	133	543	1297
06:00			126		151			18:00			157		167		
06:15			105		172			18:15			155		149		
06:30			120		137			18:30			187		214		
06:45			87	438	131	591	1029	18:45			177	676	159	689	1365
07:00			96		147			19:00			170		169		
07:15			100		143			19:15			186		154		
07:30			118		142			19:30			179		180		
07:45			133	447	183	615	1062	19:45			167	702	181	684	1386
08:00			136		188			20:00			207		157		
08:15			161		205			20:15			217		160		
08:30			149		172			20:30			212		147		
08:45			167	613	173	738	1351	20:45			212	848	138	602	1450
09:00			160		191			21:00			186		145		
09:15			173		186			21:15			157		146		
09:30			162		227			21:30			155		145		
09:45			165	660	221	825	1485	21:45			195	693	102	538	1231
10:00			187		221			22:00			135		99		
10:15			210		212			22:15			138		118		
10:30			246		228			22:30			124		109		
10:45			216	859	207	868	1727	22:45			162	559	94	420	979
11:00			218		223			23:00			120		84		
11:15			210		183			23:15			171		72		
11:30			195		216			23:30			124		47		
11:45			192	815	216	838	1653	23:45			74	489	36	239	728
Total Vol.				4636		5684	**10320**					8927		7043	**15970**

Daily Totals

NB	SB	EB	WB	Combined
		13563	12727	**26290**

	AM			PM		
Split %	44.9%	55.1%	**39.3%**	55.9%	44.1%	**60.7%**
Peak Hour	10:15	09:45	**10:15**	16:30	12:15	**12:15**
Volume	890	882	**1760**	906	799	**1696**
P.H.F.	0.90	0.97	**0.93**	0.84	0.95	**0.97**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
TAYLOR ST	[HOTEL CR S - SD 008 R-A, E]	-	2631	EAST	:	7170	6/30/2010	MC0522-1
				WEST	:	7425	6/30/2010	MC0522-1
				*TOTAL	:	14595		
TAYLOR ST	[PACIFIC HY - CONGRESS ST]	04000 - 04010	2493	EAST	:	10500	7/22/1997	0524-97
				WEST	:	11900	7/22/1997	0525-97
				*TOTAL	:	22400		
				EAST	:	9300	6/2/1999	0330-99
				WEST	:	8000	6/2/1999	0330-99
				*TOTAL	:	17300		
				EAST	:	12230	6/20/2002	0648-02
				WEST	:	14880	6/20/2002	0649-02
				*TOTAL	:	27110		
				EAST	:	11780	6/15/2005	0315-05
				WEST	:	10230	6/15/2005	0315-05
				*TOTAL	:	22010		
				EAST	:	11990	8/20/2008	0336-08
				WEST	:	10060	8/20/2008	0336-08
				*TOTAL	:	22050		
TAYLOR ST	[PACIFIC HY - SN DIEGO AV]	04000 - 04010	2625	EAST	:	11700	3/8/1990	0341-90
				WEST	:	9700	3/8/1990	0342-90
				*TOTAL	:	21400		
				EAST	:	11000	3/15/1991	0420-91
				WEST	:	8400	3/15/1991	0421-91
				*TOTAL	:	19400		
				EAST	:	10100	11/3/1994	0810-94
				WEST	:	7500	11/3/1994	0811-94
				*TOTAL	:	17600		
				EAST	:	12500	6/18/1996	0666-96
				WEST	:	7000	6/18/1996	0667-96
				*TOTAL	:	19500		
TAYLOR ST	[CALHOUN ST - JUAN ST]	04030 - 04100	2491	NORTH	:	11300	9/21/1994	0700-94
				SOUTH	:	7700	9/21/1994	0701-94

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-099

Location: Taylor St. btwn. Congress St. & Juan St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		6					12:00	129		107				
00:15	9		9					12:15	140		116				
00:30	10		3					12:30	142		130				
00:45	3	40	7	25			65	12:45	149	560	93	446			1006
01:00	4		0					13:00	135		110				
01:15	3		1					13:15	149		99				
01:30	3		0					13:30	155		129				
01:45	4	14	0	1			15	13:45	140	579	96	434			1013
02:00	6		5					14:00	144		104				
02:15	3		3					14:15	141		95				
02:30	8		3					14:30	152		90				
02:45	1	18	1	12			30	14:45	164	601	87	376			977
03:00	3		1					15:00	185		92				
03:15	2		3					15:15	145		84				
03:30	2		9					15:30	193		119				
03:45	1	8	5	18			26	15:45	229	752	91	386			1138
04:00	5		3					16:00	214		117				
04:15	3		9					16:15	107		111				
04:30	7		12					16:30	117		123				
04:45	6	21	8	32			53	16:45	111	549	113	464			1013
05:00	7		14					17:00	134		122				
05:15	10		24					17:15	102		71				
05:30	13		27					17:30	119		105				
05:45	18	48	51	116			164	17:45	101	456	99	397			853
06:00	22		55					18:00	81		98				
06:15	28		69					18:15	87		66				
06:30	45		73					18:30	110		57				
06:45	49	144	99	296			440	18:45	76	354	69	290			644
07:00	53		125					19:00	82		49				
07:15	75		130					19:15	80		48				
07:30	85		111					19:30	80		46				
07:45	62	275	124	490			765	19:45	70	312	47	190			502
08:00	102		144					20:00	89		54				
08:15	124		110					20:15	75		40				
08:30	112		170					20:30	56		42				
08:45	91	429	224	648			1077	20:45	58	278	31	167			445
09:00	87		184					21:00	61		33				
09:15	115		207					21:15	49		37				
09:30	92		108					21:30	50		23				
09:45	92	386	103	602			988	21:45	41	201	32	125			326
10:00	85		75					22:00	39		22				
10:15	99		92					22:15	38		22				
10:30	101		101					22:30	33		18				
10:45	104	389	95	363			752	22:45	19	129	11	73			202
11:00	118		95					23:00	24		16				
11:15	142		101					23:15	16		12				
11:30	151		103					23:30	16		4				
11:45	121	532	112	411			943	23:45	20	76	11	43			119
Total Vol.		2304		3014			**5318**			4847		3391			**8238**

Daily Totals

NB	SB	EB	WB	Combined
7151	6405			**13556**

	AM			PM		
Split %	43.3%	56.7%	**39.2%**	58.8%	41.2%	**60.8%**
Peak Hour	11:15	08:30	**08:30**	15:15	16:15	**15:15**
Volume	543	785	**1190**	781	469	**1192**
P.H.F.	0.90	0.88	**0.92**	0.85	0.95	**0.90**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-003

Location: Taylor St (STATION#2490/FILE#MC0594-10) between Juan St & Sunset St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	20		8					12:00	203		143				
00:15	23		6					12:15	172		164				
00:30	10		9					12:30	153		132				
00:45	5	58	6	29			87	12:45	172	700	139	578			1278
01:00	15		2					13:00	205		130				
01:15	3		7					13:15	187		139				
01:30	7		4					13:30	179		136				
01:45	2	27	5	18			45	13:45	164	735	134	539			1274
02:00	4		0					14:00	163		125				
02:15	1		1					14:15	175		113				
02:30	3		3					14:30	199		131				
02:45	4	12	6	10			22	14:45	191	728	116	485			1213
03:00	2		2					15:00	196		110				
03:15	4		5					15:15	223		136				
03:30	1		6					15:30	231		132				
03:45	1	8	6	19			27	15:45	213	863	128	506			1369
04:00	4		4					16:00	238		143				
04:15	3		8					16:15	263		116				
04:30	7		6					16:30	257		152				
04:45	7	21	13	31			52	16:45	284	1042	129	540			1582
05:00	12		24					17:00	249		143				
05:15	15		40					17:15	300		135				
05:30	18		30					17:30	231		145				
05:45	21	66	59	153			219	17:45	186	966	133	556			1522
06:00	16		52					18:00	189		138				
06:15	32		83					18:15	179		117				
06:30	40		85					18:30	159		113				
06:45	51	139	107	327			466	18:45	100	627	85	453			1080
07:00	59		112					19:00	142		93				
07:15	59		132					19:15	131		85				
07:30	69		121					19:30	93		88				
07:45	103	290	148	513			803	19:45	125	491	70	336			827
08:00	79		123					20:00	97		67				
08:15	124		132					20:15	99		73				
08:30	99		127					20:30	117		53				
08:45	92	394	149	531			925	20:45	94	407	44	237			644
09:00	87		173					21:00	94		50				
09:15	103		141					21:15	106		29				
09:30	88		136					21:30	86		43				
09:45	101	379	120	570			949	21:45	98	384	33	155			539
10:00	118		116					22:00	76		26				
10:15	112		120					22:15	78		26				
10:30	113		126					22:30	49		29				
10:45	123	466	130	492			958	22:45	36	239	21	102			341
11:00	120		123					23:00	39		12				
11:15	162		132					23:15	24		16				
11:30	148		149					23:30	32		8				
11:45	155	585	164	568			1153	23:45	12	107	11	47			154
Total Vol.		2445		3261			**5706**			7289		4534			**11823**

Daily Totals

NB	SB	EB	WB	Combined
9734	7795			**17529**

	AM			PM		
Split %	42.8%	57.2%	**32.6%**	61.7%	38.3%	**67.4%**
Peak Hour	11:45	11:30	**11:30**	16:30	12:00	**16:30**
Volume	683	620	**1298**	1090	578	**1649**
P.H.F.	0.84	0.95	**0.94**	0.91	0.88	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-100

Location: Taylor St. btwn. Morena Blvd. & I-8 EB Ramps - Hotel Circle

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		7					12:00	118		114				
00:15	7		8					12:15	94		128				
00:30	7		4					12:30	89		124				
00:45	4	27	8	27			54	12:45	98	399	119	485			884
01:00	5		1					13:00	93		105				
01:15	4		1					13:15	102		93				
01:30	0		2					13:30	125		108				
01:45	6	15	0	4			19	13:45	109	429	110	416			845
02:00	4		1					14:00	115		91				
02:15	1		4					14:15	125		99				
02:30	0		1					14:30	121		85				
02:45	3	8	1	7			15	14:45	133	494	84	359			853
03:00	1		2					15:00	147		96				
03:15	1		1					15:15	148		94				
03:30	2		5					15:30	188		100				
03:45	0	4	0	8			12	15:45	189	672	99	389			1061
04:00	5		3					16:00	191		116				
04:15	0		8					16:15	201		113				
04:30	4		10					16:30	196		105				
04:45	1	10	12	33			43	16:45	211	799	113	447			1246
05:00	4		10					17:00	212		100				
05:15	3		21					17:15	205		96				
05:30	8		29					17:30	183		122				
05:45	15	30	41	101			131	17:45	138	738	98	416			1154
06:00	13		61					18:00	112		100				
06:15	17		73					18:15	86		104				
06:30	16		83					18:30	102		108				
06:45	28	74	113	330			404	18:45	79	379	74	386			765
07:00	28		124					19:00	90		51				
07:15	33		132					19:15	78		40				
07:30	43		129					19:30	72		43				
07:45	43	147	132	517			664	19:45	70	310	46	180			490
08:00	56		152					20:00	73		42				
08:15	74		129					20:15	59		51				
08:30	53		252					20:30	48		34				
08:45	74	257	261	794			1051	20:45	56	236	32	159			395
09:00	62		243					21:00	53		27				
09:15	54		249					21:15	62		24				
09:30	73		144					21:30	50		19				
09:45	62	251	128	764			1015	21:45	33	198	21	91			289
10:00	66		113					22:00	27		18				
10:15	63		96					22:15	28		13				
10:30	82		98					22:30	31		11				
10:45	64	275	96	403			678	22:45	23	109	19	61			170
11:00	84		89					23:00	16		10				
11:15	81		122					23:15	17		18				
11:30	127		113					23:30	10		5				
11:45	86	378	98	422			800	23:45	11	54	12	45			99
Total Vol.		1476		3410			**4886**			4817		3434			**8251**

Daily Totals

NB	SB	EB	WB	Combined
6293	6844			**13137**

	AM			PM		
Split %	30.2%	69.8%	**37.2%**	58.4%	41.6%	**62.8%**
Peak Hour	11:30	08:30	**08:30**	16:30	12:00	**16:15**
Volume	425	1005	**1248**	824	485	**1251**
P.H.F.	0.84	0.96	**0.93**	0.97	0.95	**0.97**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Twiggs St (STATION#1589/FILE#MC05334-10)	Project:	10-4169-122	0	0	840	1,240	2,080

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB		
00:00			2	2		12:00			21	19		
00:15			1	3		12:15			16	28		
00:30			2	2		12:30			11	20		
00:45			2	7	0	7	14	12:45			13	61	26	93	154
01:00			3	1		13:00			10	19		
01:15			1	1		13:15			15	23		
01:30			1	1		13:30			12	18		
01:45			0	5	1	4	9	13:45			16	53	14	74	127
02:00			1	1		14:00			13	19		
02:15			0	1		14:15			11	21		
02:30			0	1		14:30			8	22		
02:45			0	1	0	3	4	14:45			14	46	21	83	129
03:00			0	0		15:00			9	26		
03:15			0	0		15:15			12	25		
03:30			1	0		15:30			10	20		
03:45			0	1	1	1	2	15:45			19	50	15	86	136
04:00			1	0		16:00			21	17		
04:15			0	0		16:15			15	23		
04:30			1	0		16:30			23	16		
04:45			0	2	1	1	3	16:45			16	75	22	78	153
05:00			0	0		17:00			17	21		
05:15			0	1		17:15			17	27		
05:30			0	0		17:30			25	27		
05:45			1	1	1	2	3	17:45			24	83	32	107	190
06:00			0	2		18:00			17	36		
06:15			3	1		18:15			23	29		
06:30			3	4		18:30			25	31		
06:45			6	12	1	8	20	18:45			18	83	30	126	209
07:00			3	3		19:00			17	32		
07:15			4	1		19:15			24	30		
07:30			5	5		19:30			12	25		
07:45			10	22	3	12	34	19:45			13	66	21	108	174
08:00			9	7		20:00			9	17		
08:15			6	4		20:15			12	14		
08:30			8	15		20:30			7	18		
08:45			9	32	7	33	65	20:45			15	43	16	65	108
09:00			8	13		21:00			8	13		
09:15			11	9		21:15			7	21		
09:30			7	13		21:30			10	19		
09:45			9	35	13	48	83	21:45			8	33	17	70	103
10:00			10	17		22:00			8	24		
10:15			8	21		22:15			9	16		
10:30			11	17		22:30			6	15		
10:45			10	39	20	75	114	22:45			2	25	6	61	86
11:00			12	13		23:00			6	2		
11:15			13	29		23:15			4	4		
11:30			10	18		23:30			3	2		
11:45			15	50	24	84	134	23:45			2	15	3	11	26
Total Vol.			207		278	**485**					633		962	**1595**

	NB	SB	EB	WB	Total
Daily Totals :	**0**	**0**	**840**	**1,240**	**2,080**

	AM			PM		
Split %	42.7%	57.3%	**23.3%**	39.7%	60.3%	**76.7%**
AM				**PM**		
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	17:30	17:45	**17:45**
Volume	63	91	**154**	**Volume**	89	128	**217**
P.H.F.	0.750	0.813	**0.875**	**P.H.F.**	0.890	0.889	**0.969**
7 - 9 Vol.	54	45	**99**	**4 - 6 Vol.**	158	185	**343**
Peak Hr.	07:45	08:00	**08:00**	**Peak Hr.**	17:00	17:00	**17:00**
Volume	33	33	**65**	**Volume**	83	107	**190**
P.H.F.	0.825	0.550	**0.707**	**P.H.F.**	0.830	0.836	**0.848**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-101

Location: Twiggs St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			4	2		12:00			22	25	
00:15			1	2		12:15			21	32	
00:30			2	1		12:30			21	39	
00:45			2	1		12:45			23	38	
			9	6	15				87	134	221
01:00			1	0		13:00			19	33	
01:15			1	0		13:15			23	28	
01:30			4	0		13:30			15	42	
01:45			1	0		13:45			27	41	
			7	0	7				84	144	228
02:00			0	0		14:00			23	26	
02:15			0	0		14:15			11	28	
02:30			1	0		14:30			16	26	
02:45			0	1		14:45			16	33	
			1	1	2				66	113	179
03:00			0	1		15:00			20	31	
03:15			1	1		15:15			22	29	
03:30			3	0		15:30			29	28	
03:45			2	0		15:45			26	36	
			6	2	8				97	124	221
04:00			1	1		16:00			12	24	
04:15			0	0		16:15			19	24	
04:30			1	1		16:30			22	30	
04:45			1	0		16:45			26	28	
			3	2	5				79	106	185
05:00			2	4		17:00			38	23	
05:15			1	0		17:15			33	19	
05:30			1	1		17:30			37	12	
05:45			5	4		17:45			22	21	
			9	9	18				130	75	205
06:00			4	1		18:00			37	19	
06:15			6	1		18:15			22	25	
06:30			7	3		18:30			31	21	
06:45			6	4		18:45			36	16	
			23	9	32				126	81	207
07:00			8	4		19:00			26	18	
07:15			6	8		19:15			24	16	
07:30			7	11		19:30			18	17	
07:45			16	7		19:45			27	16	
			37	30	67				95	67	162
08:00			12	9		20:00			25	14	
08:15			11	11		20:15			22	16	
08:30			27	12		20:30			19	14	
08:45			20	13		20:45			22	13	
			70	45	115				88	57	145
09:00			15	11		21:00			23	26	
09:15			23	10		21:15			10	10	
09:30			11	10		21:30			13	2	
09:45			22	15		21:45			15	7	
			71	46	117				61	45	106
10:00			12	11		22:00			7	14	
10:15			18	18		22:15			15	5	
10:30			17	15		22:30			13	7	
10:45			34	13		22:45			7	2	
			81	57	138				42	28	70
11:00			22	18		23:00			6	3	
11:15			35	14		23:15			9	2	
11:30			31	15		23:30			5	6	
11:45			31	9		23:45			4	4	
			119	56	175				24	15	39
Total Vol.			436	263	**699**				979	989	**1968**

Daily Totals

NB	SB	EB	WB	Combined
		1415	1252	**2667**

	AM			PM		
Split %	62.4%	37.6%	**26.2%**	49.7%	50.3%	**73.8%**
Peak Hour	10:45	11:45	**11:45**	16:45	13:00	**13:00**
Volume	122	105	**200**	134	144	**228**
P.H.F.	0.87	0.67	**0.83**	0.88	0.86	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-102

Location: Harney St. btwn. Congress St. & San Diego Ave.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			1		2			12:00			7		10		
00:15			1		2			12:15			23		17		
00:30			8		2			12:30			17		8		
00:45			1	11	2	8	19	12:45			16	63	10	45	108
01:00			0		2			13:00			13		14		
01:15			3		0			13:15			5		6		
01:30			0		0			13:30			8		13		
01:45			0	3	0	2	5	13:45			14	40	9	42	82
02:00			0		0			14:00			11		8		
02:15			0		0			14:15			8		11		
02:30			0		0			14:30			13		11		
02:45			0	0	0	0		14:45			18	50	13	43	93
03:00			1		2			15:00			7		13		
03:15			0		2			15:15			10		13		
03:30			0		0			15:30			17		15		
03:45			0	1	0	4	5	15:45			21	55	13	54	109
04:00			0		0			16:00			16		16		
04:15			0		0			16:15			12		14		
04:30			0		1			16:30			13		11		
04:45			1	1	1	2	3	16:45			7	48	3	44	92
05:00			1		0			17:00			19		19		
05:15			2		2			17:15			22		19		
05:30			0		1			17:30			18		16		
05:45			1	4	4	7	11	17:45			5	64	14	68	132
06:00			2		3			18:00			21		14		
06:15			0		4			18:15			10		11		
06:30			1		8			18:30			28		21		
06:45			2	5	7	22	27	18:45			17	76	15	61	137
07:00			1		3			19:00			23		17		
07:15			3		11			19:15			16		15		
07:30			4		6			19:30			18		16		
07:45			4	12	11	31	43	19:45			22	79	15	63	142
08:00			4		11			20:00			12		13		
08:15			3		6			20:15			7		5		
08:30			4		11			20:30			9		3		
08:45			8	19	16	44	63	20:45			8	36	7	28	64
09:00			4		6			21:00			8		7		
09:15			3		3			21:15			13		12		
09:30			9		7			21:30			12		12		
09:45			6	22	2	18	40	21:45			13	46	9	40	86
10:00			10		6			22:00			5		10		
10:15			19		13			22:15			9		7		
10:30			7		3			22:30			8		7		
10:45			5	41	10	32	73	22:45			7	29	2	26	55
11:00			14		11			23:00			10		7		
11:15			7		9			23:15			7		4		
11:30			13		10			23:30			4		0		
11:45			16	50	14	44	94	23:45			3	24	2	13	37
Total Vol.				169		214	**383**					610		527	**1137**

Daily Totals

NB	SB	EB	WB	Combined
		779	741	**1520**

	AM			PM		
Split %	44.1%	55.9%	**25.2%**	53.6%	46.4%	**74.8%**
Peak Hour	11:45	11:30	**11:45**	18:30	17:00	**18:30**
Volume	63	51	**112**	84	68	**152**
P.H.F.	0.68	0.75	**0.70**	0.75	0.89	**0.78**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-103

Location: Harney St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		3			12:00			18		15		
00:15			1		3			12:15			34		13		
00:30			0		3			12:30			21		26		
00:45			2	6	1	10	16	12:45			23	96	14	68	164
01:00			1		1			13:00			15		27		
01:15			0		2			13:15			20		21		
01:30			0		0			13:30			15		32		
01:45			0	1	0	3	4	13:45			13	63	33	113	176
02:00			1		1			14:00			32		18		
02:15			0		1			14:15			27		18		
02:30			0		1			14:30			8		29		
02:45			0	1	0	3	4	14:45			19	86	44	109	195
03:00			0		2			15:00			18		27		
03:15			1		0			15:15			12		37		
03:30			0		1			15:30			12		30		
03:45			0	1	1	4	5	15:45			22	64	35	129	193
04:00			0		0			16:00			18		28		
04:15			0		1			16:15			24		22		
04:30			1		1			16:30			22		21		
04:45			2	3	5	7	10	16:45			30	94	25	96	190
05:00			0		0			17:00			19		23		
05:15			0		3			17:15			24		21		
05:30			1		4			17:30			29		18		
05:45			0	1	7	14	15	17:45			20	92	22	84	176
06:00			0		8			18:00			29		11		
06:15			1		10			18:15			24		12		
06:30			3		11			18:30			24		14		
06:45			1	5	17	46	51	18:45			25	102	11	48	150
07:00			4		7			19:00			17		28		
07:15			6		18			19:15			18		17		
07:30			6		19			19:30			18		19		
07:45			6	22	30	74	96	19:45			11	64	24	88	152
08:00			7		24			20:00			10		22		
08:15			13		19			20:15			7		18		
08:30			8		19			20:30			2		17		
08:45			8	36	28	90	126	20:45			10	29	11	68	97
09:00			5		22			21:00			9		18		
09:15			4		24			21:15			8		11		
09:30			5		20			21:30			7		2		
09:45			9	23	12	78	101	21:45			3	27	7	38	65
10:00			6		19			22:00			6		11		
10:15			16		22			22:15			3		10		
10:30			1		37			22:30			5		9		
10:45			12	35	23	101	136	22:45			2	16	4	34	50
11:00			25		18			23:00			2		6		
11:15			12		22			23:15			0		3		
11:30			21		18			23:30			3		2		
11:45			24	82	22	80	162	23:45			2	7	2	13	20
Total Vol.				216		510	**726**					740		888	**1628**

Daily Totals

NB	SB	EB	WB	Combined
		956	1398	**2354**

	AM			PM		
Split %	29.8%	70.2%	**30.8%**	45.5%	54.5%	**69.2%**
Peak Hour	11:30	10:00	**11:45**	16:45	14:45	**14:45**
Volume	97	101	**173**	102	138	**199**
P.H.F.	0.71	0.68	**0.92**	0.85	0.78	**0.79**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-104

Location: Old Town Ave. btwn. I-5 SB Ramps & I-5 NB Ramps

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		14			12:00			147		97		
00:15			4		4			12:15			109		64		
00:30			9		9			12:30			131		102		
00:45			10	35	16	43	78	12:45			133	520	112	375	895
01:00			7		4			13:00			129		113		
01:15			6		4			13:15			135		102		
01:30			6		1			13:30			118		105		
01:45			4	23	1	10	33	13:45			117	499	71	391	890
02:00			9		5			14:00			120		97		
02:15			8		4			14:15			142		98		
02:30			1		2			14:30			119		99		
02:45			4	22	2	13	35	14:45			123	504	91	385	889
03:00			8		4			15:00			162		95		
03:15			3		8			15:15			140		111		
03:30			4		4			15:30			153		122		
03:45			3	18	4	20	38	15:45			162	617	107	435	1052
04:00			7		7			16:00			168		144		
04:15			2		6			16:15			149		101		
04:30			7		7			16:30			179		106		
04:45			8	24	12	32	56	16:45			169	665	102	453	1118
05:00			10		10			17:00			158		121		
05:15			10		14			17:15			180		74		
05:30			9		6			17:30			145		92		
05:45			27	56	8	38	94	17:45			153	636	78	365	1001
06:00			25		22			18:00			132		84		
06:15			20		24			18:15			122		71		
06:30			34		10			18:30			106		50		
06:45			44	123	38	94	217	18:45			104	464	56	261	725
07:00			51		30			19:00			100		49		
07:15			71		26			19:15			83		59		
07:30			83		50			19:30			85		54		
07:45			91	296	33	139	435	19:45			66	334	58	220	554
08:00			88		44			20:00			69		54		
08:15			90		40			20:15			53		39		
08:30			76		48			20:30			53		41		
08:45			91	345	52	184	529	20:45			48	223	51	185	408
09:00			84		58			21:00			44		50		
09:15			91		63			21:15			47		52		
09:30			105		47			21:30			39		38		
09:45			99	379	63	231	610	21:45			33	163	35	175	338
10:00			89		67			22:00			37		39		
10:15			83		56			22:15			30		27		
10:30			120		60			22:30			24		35		
10:45			118	410	53	236	646	22:45			27	118	21	122	240
11:00			115		53			23:00			25		15		
11:15			123		56			23:15			18		25		
11:30			113		69			23:30			18		30		
11:45			113	464	75	253	717	23:45			9	70	8	78	148
Total Vol.				2195		1293	**3488**					4813		3445	**8258**

Daily Totals

NB	SB	EB	WB	Combined
		7008	4738	**11746**

	AM			PM		
Split %	62.9%	37.1%	**29.7%**	58.3%	41.7%	**70.3%**
Peak Hour	11:45	11:45	**11:45**	16:30	15:15	**16:00**
Volume	500	338	**838**	686	484	**1118**
P.H.F.	0.85	0.83	**0.86**	0.95	0.84	**0.90**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-105

Location: Old Town Ave. btwn. I-5 NB Ramps & Jefferson St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		18			12:00			56		37		
00:15			4		11			12:15			36		61		
00:30			8		14			12:30			56		29		
00:45			4	24	9	52	76	12:45			44	192	51	178	370
01:00			7		8			13:00			60		35		
01:15			5		9			13:15			58		34		
01:30			1		3			13:30			32		43		
01:45			1	14	4	24	38	13:45			58	208	33	145	353
02:00			2		4			14:00			47		36		
02:15			0		2			14:15			38		41		
02:30			1		1			14:30			46		42		
02:45			1	4	0	7	11	14:45			48	179	46	165	344
03:00			3		1			15:00			80		34		
03:15			0		0			15:15			84		37		
03:30			1		3			15:30			56		55		
03:45			1	5	0	4	9	15:45			52	272	53	179	451
04:00			2		3			16:00			55		53		
04:15			3		2			16:15			62		47		
04:30			2		5			16:30			47		58		
04:45			1	8	5	15	23	16:45			63	227	61	219	446
05:00			0		9			17:00			49		57		
05:15			2		7			17:15			39		61		
05:30			1		11			17:30			54		41		
05:45			1	4	16	43	47	17:45			65	207	50	209	416
06:00			6		12			18:00			41		67		
06:15			16		23			18:15			31		72		
06:30			16		27			18:30			39		42		
06:45			17	55	27	89	144	18:45			60	171	38	219	390
07:00			19		32			19:00			33		56		
07:15			33		42			19:15			30		58		
07:30			27		63			19:30			32		55		
07:45			42	121	63	200	321	19:45			28	123	63	232	355
08:00			51		47			20:00			24		49		
08:15			45		38			20:15			21		48		
08:30			45		40			20:30			24		58		
08:45			54	195	43	168	363	20:45			21	90	55	210	300
09:00			45		28			21:00			14		64		
09:15			41		33			21:15			19		58		
09:30			43		46			21:30			22		58		
09:45			75	204	42	149	353	21:45			20	75	43	223	298
10:00			43		38			22:00			21		36		
10:15			61		31			22:15			14		28		
10:30			43		38			22:30			8		27		
10:45			66	213	34	141	354	22:45			11	54	21	112	166
11:00			52		40			23:00			10		28		
11:15			58		38			23:15			8		12		
11:30			56		41			23:30			5		19		
11:45			70	236	45	164	400	23:45			3	26	11	70	96
Total Vol.				1083		1056	**2139**					1824		2161	**3985**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			2907	3217	**6124**

	AM			**PM**		
Split %	50.6%	49.4%	**34.9%**	45.8%	54.2%	**65.1%**
Peak Hour	11:15	07:15	**11:30**	15:00	16:30	**15:00**
Volume	240	215	**402**	272	237	**451**
P.H.F.	0.86	0.85	**0.87**	0.81	0.97	**0.93**

Appendix C
Peak Hour Arterial Analysis Worksheets – Existing Conditions

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	11.6	84.3	0.81	34.5	B
Total	II		72.7	11.6	84.3	0.81	34.5	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.1	34.5	0.17	17.6	D
Rosecrans St.	II	40	72.7	51.1	123.8	0.81	23.5	C
Total	II		92.1	66.2	158.3	0.98	22.2	C

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	31.3	97.6	0.55	20.4	C
Total	III		66.3	31.3	97.6	0.55	20.4	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	57.1	88.7	0.25	10.1	E
Total	III		31.6	57.1	88.7	0.25	10.1	E

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	46.2	106.0	0.50	16.9	D
East Dr	III	35	22.9	5.0	27.9	0.19	24.6	B
Kemper Street	III	35	39.9	21.5	61.4	0.33	19.5	C
Sports Arena	III	35	34.5	47.0	81.5	0.29	12.7	E
Total	III		157.1	119.7	276.8	1.31	17.0	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	21.7	56.2	0.29	18.4	C
East Drive	III	35	39.9	4.7	44.6	0.33	26.8	B
Rosecrans St.	III	35	22.9	43.2	66.1	0.19	10.4	E
Barnett Ave	III	35	59.8	25.2	85.0	0.50	21.1	C
Total	III		157.1	94.8	251.9	1.31	18.7	C

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	13.0	30.6	0.08	9.4	D
San Diego Ave	IV	25	25.0	24.3	49.3	0.11	8.3	E
Total	IV		42.6	37.3	79.9	0.19	8.7	E

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.6	26.3	0.07	9.7	D
Moore St	IV	25	25.0	5.9	30.9	0.11	13.2	C
Total	IV		43.7	13.5	57.2	0.18	11.6	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	12.4	29.5	0.13	16.3	D
Nimitz Blvd	III	35	22.4	42.3	64.7	0.19	10.4	E
Laning Rd	III	35	34.5	8.8	43.3	0.29	23.9	C
Barnett Ave	III	35	97.9	42.2	140.1	0.95	24.5	B
Midway Dr	III	35	58.8	23.7	82.5	0.49	21.4	C
Rosecrans St	III	35	16.7	17.3	34.0	0.13	13.8	E
Total	III		247.4	146.7	394.1	2.18	19.9	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	32.4	49.1	0.13	9.5	F
Lytton St	III	35	58.8	48.2	107.0	0.49	16.5	D
Laning Rd	III	35	97.9	7.9	105.8	0.95	32.4	A
Lowell St	III	35	34.5	35.2	69.7	0.29	14.8	D
Hugo St	III	35	22.4	5.5	27.9	0.19	24.1	B
Total	III		230.3	129.2	359.5	2.05	20.5	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	11.1	25.3	0.05	7.6	E
Total	IV		14.2	11.1	25.3	0.05	7.6	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	5.7	21.8	0.06	10.0	D
Total	IV		16.1	5.7	21.8	0.06	10.0	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	9.8	25.5	0.10	13.4	C
Juan St	IV	35	11.2	11.0	22.2	0.07	11.0	D
	IV	35	18.3	6.1	24.4	0.13	19.3	B
Total	IV		45.2	26.9	72.1	0.29	14.7	C

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	14.6	32.3	0.11	11.9	D
	IV	35	18.3	9.0	27.3	0.13	17.2	C
Congress St	IV	35	11.2	7.1	18.3	0.07	13.4	C
Pacific Highway	IV	35	15.7	20.1	35.8	0.10	9.6	D
Total	IV		62.9	50.8	113.7	0.40	12.7	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	9.8	45.9	0.30	23.6	C
Total	III		36.1	9.8	45.9	0.30	23.6	C

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	13.9	56.1	0.35	22.6	C
Sports Arena	III	35	36.1	46.0	82.1	0.30	13.2	E
Total	III		78.3	59.9	138.2	0.65	17.0	D

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	21.7	94.4	0.81	30.8	B
Total	II		72.7	21.7	94.4	0.81	30.8	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.9	35.3	0.17	17.2	D
Rosecrans St.	II	40	72.7	71.5	144.2	0.81	20.2	D
Total	II		92.1	87.4	179.5	0.98	19.6	D

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	16.7	83.0	0.55	24.0	C
Total	III		66.3	16.7	83.0	0.55	24.0	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	69.2	100.8	0.25	8.9	F
Total	III		31.6	69.2	100.8	0.25	8.9	F

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	71.5	131.3	0.50	13.7	E
East Dr	III	35	22.9	12.7	35.6	0.19	19.3	C
Kemper Street	III	35	39.9	28.0	67.9	0.33	17.6	D
Sport Arena Blvd	III	35	34.5	42.8	77.3	0.29	13.4	E
Total	III		157.1	155.0	312.1	1.31	15.1	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	16.0	50.5	0.29	20.5	C
East Drive	III	35	39.9	14.3	54.2	0.33	22.1	C
Rosecrans St.	III	35	22.9	62.4	85.3	0.19	8.0	F
Barnett Ave	III	35	59.8	32.4	92.2	0.50	19.5	C
Total	III		157.1	125.1	282.2	1.31	16.7	D

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	81.1	98.7	0.08	2.9	F
San Diego Ave	IV	25	25.0	13.9	38.9	0.11	10.5	D
Total	IV		42.6	95.0	137.6	0.19	5.1	F

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.9	26.6	0.07	9.6	D
Moore St	IV	25	25.0	5.3	30.3	0.11	13.5	C
Total	IV		43.7	13.2	56.9	0.18	11.7	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	15.4	32.5	0.13	14.8	D
Nimitz Blvd	III	35	22.4	46.5	68.9	0.19	9.8	F
Laning Rd	III	35	34.5	6.1	40.6	0.29	25.5	B
Barnett Ave	III	35	97.9	37.7	135.6	0.95	25.3	B
Midway Dr	III	35	58.8	20.1	78.9	0.49	22.3	C
Rosecrans St	III	35	16.7	30.8	47.5	0.13	9.9	F
Total	III		247.4	156.6	404.0	2.18	19.4	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	45.1	61.8	0.13	7.6	F
Lytton St	III	35	58.8	27.4	86.2	0.49	20.5	C
Laning Rd	III	35	97.9	5.7	103.6	0.95	33.1	A
Lowell St	III	35	34.5	62.9	97.4	0.29	10.6	E
Hugo St	III	35	22.4	4.1	26.5	0.19	25.4	B
Total	III		230.3	145.2	375.5	2.05	19.6	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	8.6	22.8	0.05	8.5	E
Total	IV		14.2	8.6	22.8	0.05	8.5	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	4.0	20.1	0.06	10.9	D
Total	IV		16.1	4.0	20.1	0.06	10.9	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	12.1	27.8	0.10	12.3	D
Juan St	IV	35	11.2	17.5	28.7	0.07	8.5	E
	IV	35	18.3	7.9	26.2	0.13	17.9	C
Total	IV		45.2	37.5	82.7	0.29	12.8	D

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	15.7	33.4	0.11	11.6	D
	IV	35	18.3	8.7	27.0	0.13	17.4	C
Congress St	IV	35	11.2	6.8	18.0	0.07	13.6	C
Pacific Highway	IV	35	15.7	24.8	40.5	0.10	8.5	E
Total	IV		62.9	56.0	118.9	0.40	12.1	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	34.0	70.1	0.30	15.5	D
Total	III		36.1	34.0	70.1	0.30	15.5	D

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	70.4	112.6	0.35	11.3	E
W Point Loma Blvd	III	35	36.1	65.8	101.9	0.30	10.6	E
Total	III		78.3	136.2	214.5	0.65	11.0	E

Appendix D
Peak Hour Intersection Counts

Vehicle Intersection Counts

(1)

10

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

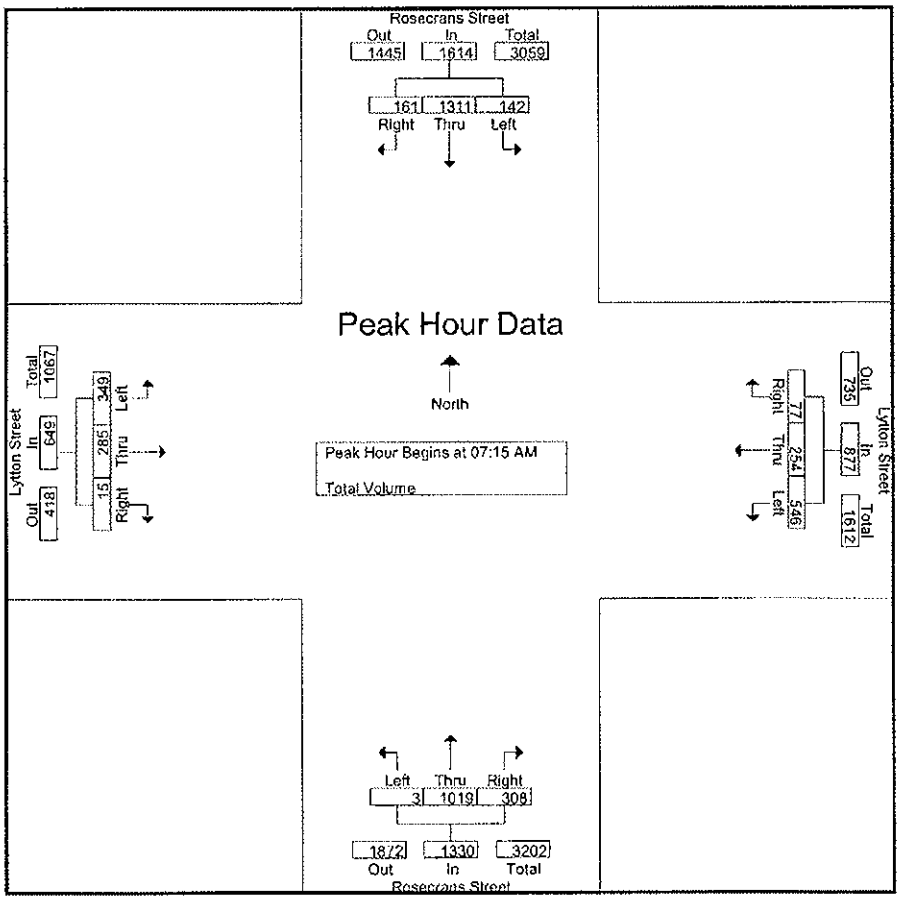
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
Total	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
07:00 AM	25	334	78	437	151	94	4	249	2	160	38	200	51	55	12	118	1004
07:15 AM	35	363	54	452	145	71	9	225	0	263	62	325	100	80	3	183	1185
07:30 AM	36	262	32	330	147	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	38	327	37	402	135	70	27	232	1	247	85	333	101	88	6	195	1162
Total	134	1286	201	1621	578	295	60	933	3	901	259	1163	336	284	23	643	4360
08:00 AM	33	359	38	430	119	53	21	193	2	278	87	367	64	56	4	124	1114
08:15 AM	35	349	60	444	103	72	25	200	3	285	77	365	55	59	1	115	1124
08:30 AM	20	269	46	335	96	52	20	168	1	321	88	410	69	49	1	119	1032
Grand Total	244	2561	409	3214	1059	533	131	1723	10	1976	532	2518	586	502	32	1120	8575
Apprch %	7.6	79.7	12.7		61.5	30.9	7.6		0.4	78.5	21.1		52.3	44.8	2.9		
Total %	2.8	29.9	4.8	37.5	12.3	6.2	1.5	20.1	0.1	23	6.2	29.4	6.8	5.9	0.4	13.1	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	**363**	**54**	**452**	145	71	9	225	0	263	62	325	100	80	3	183	**1185**
07:30 AM	36	262	32	330	**147**	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	**38**	327	37	402	135	70	**27**	**232**	1	247	85	333	**101**	**88**	**6**	**195**	1162
08:00 AM	33	359	38	430	119	53	21	193	**2**	**278**	**87**	**367**	64	56	4	124	1114
Total Volume	142	1311	161	1614	546	254	77	877	3	1019	308	1330	349	285	15	649	4470
% App. Total	8.8	81.2	10		62.3	29	8.8		0.2	76.6	23.2		53.8	43.9	2.3		
PHF	.934	.903	.745	.893	.929	.894	.713	.945	.375	.916	.885	.906	.864	.810	.625	.832	.943

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	25	334	78	437	151	94	4	249	1	247	85	333	100	80	3	183
+15 mins.	35	363	54	452	145	71	9	225	2	278	87	367	84	61	2	147
+30 mins.	36	262	32	330	147	60	20	227	3	285	77	365	101	88	6	195
+45 mins.	38	327	37	402	135	70	27	232	1	321	88	410	64	56	4	124
Total Volume	134	1286	201	1621	578	295	60	933	7	1131	337	1475	349	285	15	649
% App. Total	8.3	79.3	12.4		62	31.6	6.4		0.5	76.7	22.8		53.8	43.9	2.3	
PHF	.882	.886	.644	.897	.957	.785	.556	.937	.583	.881	.957	.899	.864	.810	.625	.832

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

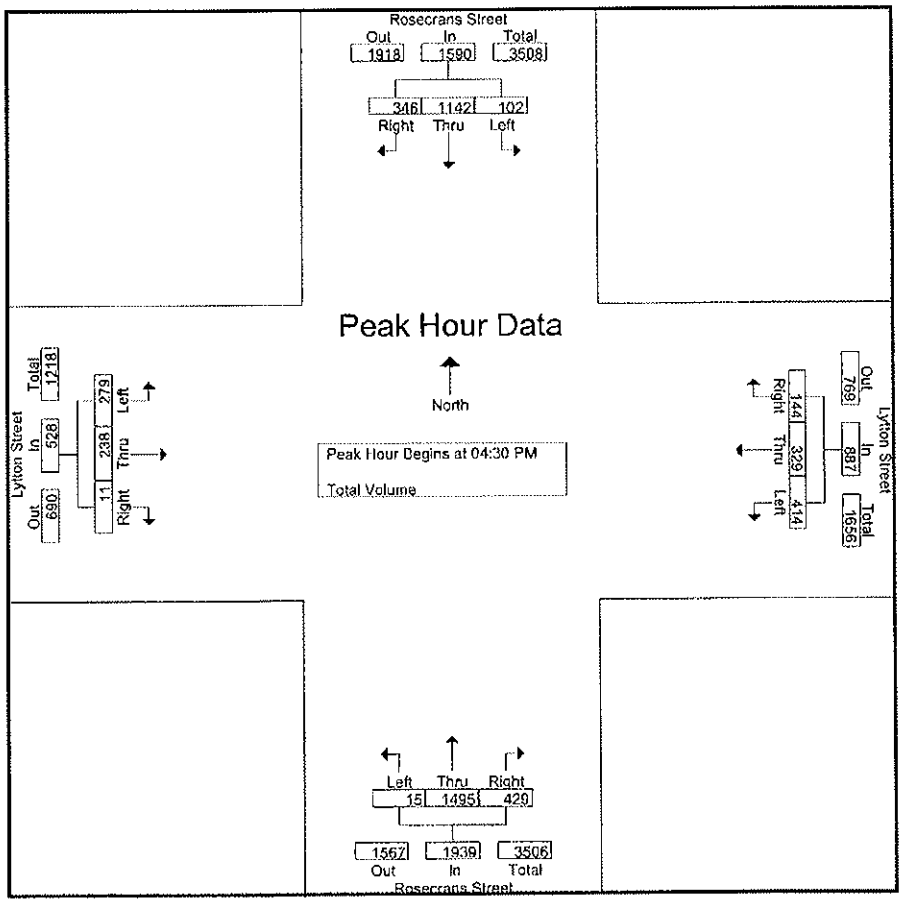
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	250	40	312	108	107	17	232	3	405	98	506	60	81	2	143	1193
04:15 PM	14	255	52	321	116	71	24	211	5	376	107	488	54	43	3	100	1120
04:30 PM	29	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	313	73	409	107	77	42	226	3	347	98	448	70	61	1	132	1215
Total	88	1088	240	1416	424	335	122	881	15	1470	411	1896	249	238	8	495	4688
05:00 PM	22	273	71	366	103	81	37	221	1	433	119	553	76	62	3	141	1281
05:15 PM	28	286	127	441	111	91	26	228	7	373	104	484	68	62	5	135	1288
05:30 PM	14	314	84	412	71	76	28	175	3	362	69	434	55	60	2	117	1138
05:45 PM	11	307	42	360	85	82	25	192	2	307	69	378	50	42	6	98	1028
Total	75	1180	324	1579	370	330	116	816	13	1475	361	1849	249	226	16	491	4735
Grand Total	163	2268	564	2995	794	665	238	1697	28	2945	772	3745	498	464	24	986	9423
Apprch %	5.4	75.7	18.8		46.8	39.2	14		0.7	78.6	20.6		50.5	47.1	2.4		
Total %	1.7	24.1	6	31.8	8.4	7.1	2.5	18	0.3	31.3	8.2	39.7	5.3	4.9	0.3	10.5	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**29**	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	**313**	73	409	107	77	**42**	226	3	347	98	448	70	61	1	132	1215
05:00 PM	22	273	71	366	103	81	37	221	1	**433**	**119**	**553**	**76**	**62**	3	**141**	1281
05:15 PM	28	286	**127**	**441**	**111**	**91**	26	**228**	7	373	104	484	68	62	**5**	135	**1288**
Total Volume	102	1142	346	1590	414	329	144	887	15	1495	429	1939	279	238	11	528	4944
% App. Total	6.4	71.8	21.8		46.7	37.1	16.2		0.8	77.1	22.1		52.8	45.1	2.1		
PHF	.879	.912	.681	.901	.932	.904	.857	.973	.536	.863	.901	.877	.918	.960	.550	.936	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	23	313	73	409	93	80	39	212	5	376	107	488	65	53	2	120
+15 mins.	22	273	71	366	107	77	42	226	4	342	108	454	70	61	1	132
+30 mins.	28	286	127	441	103	81	37	221	3	347	98	448	76	62	3	141
+45 mins.	14	314	84	412	111	91	26	228	1	433	119	553	68	62	5	135
Total Volume	87	1186	355	1628	414	329	144	887	13	1498	432	1943	279	238	11	528
% App. Total	5.3	72.9	21.8		46.7	37.1	16.2		0.7	77.1	22.2		52.8	45.1	2.1	
PHF	.777	.944	.699	.923	.932	.904	.857	.973	.650	.865	.908	.878	.918	.960	.550	.936

(2A)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		66								108		182	356
7:15 AM		59								91		196	346
7:30 AM		70								97		242	409
7:45 AM		73								124		289	486
8:00 AM		83								109		256	448
8:15 AM		80								122		267	469
8:30 AM		108								83		205	396
8:45 AM		97								86		215	398

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	636	0	0	0	0	0	0	0	820	0	1852	3308
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	30.69%	0.00%	69.31%	

[illegible]													
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

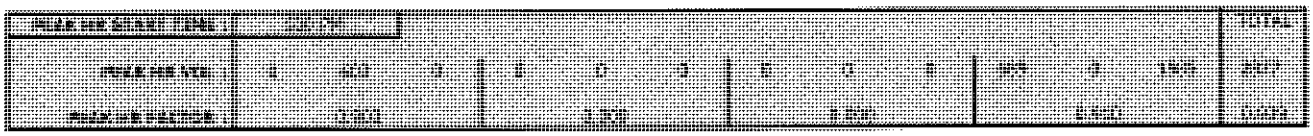
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SDUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		149								167		252	568
4:15 PM		150								176		297	623
4:30 PM		149								168		301	618
4:45 PM		144								157		363	664
5:00 PM		155								161		336	652
5:15 PM		141								180		445	766
5:30 PM		167								167		430	764
5:45 PM		140								181		374	695
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1195	0	0	0	0	0	0	0	1357	0	2798	5350
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	32.66%	0.00%	67.34%	



CONTROL :

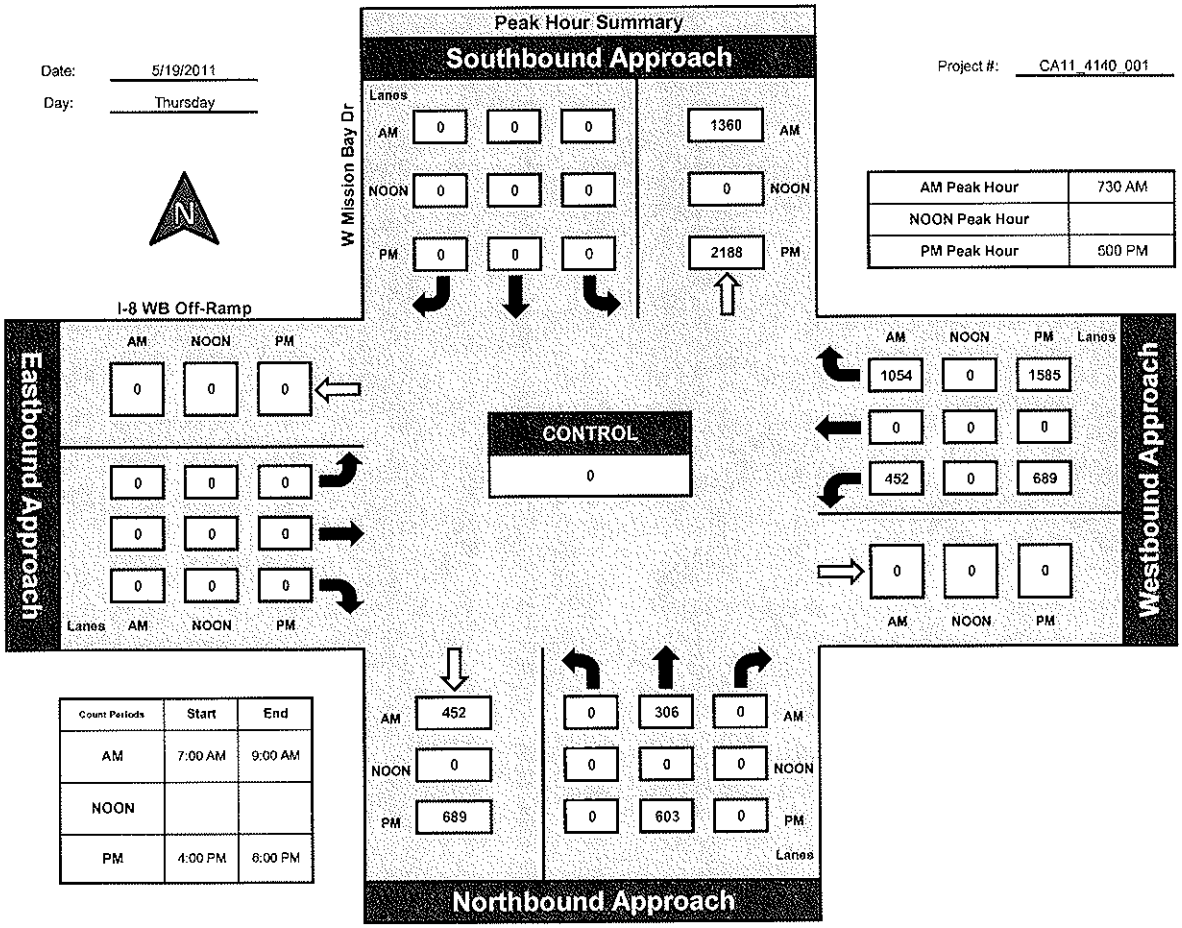
ITM Peak Hour Summary

Prepared by:

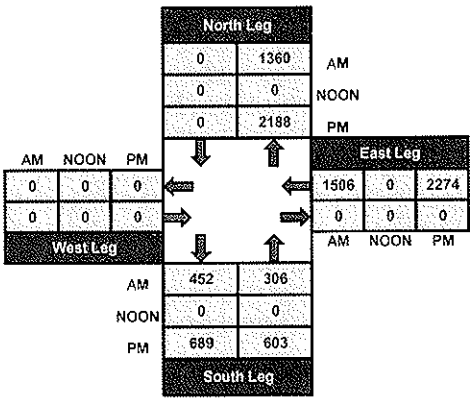
NDS

National Data & Surveying Services

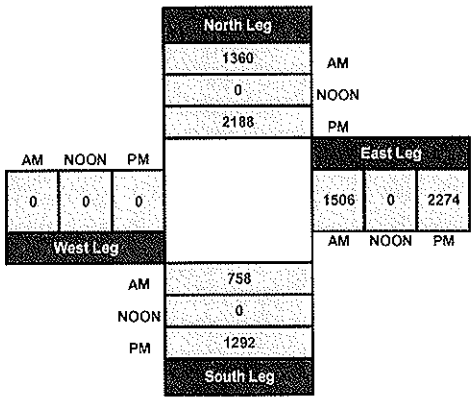
W Mission Bay Dr and I-8 WB Off-Ramp , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(2B)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	57	130		154	6			2				349
7:15 AM	0	67	130		163	2			3				365
7:30 AM	2	63	167		199	3			2				436
7:45 AM	2	80	166		211	9			3				471
8:00 AM	7	76	131		218	4			4				440
8:15 AM	1	86	163		225	1			4				480
8:30 AM	6	103	158		205	7			4				483
8:45 AM	3	101	145		220	0			4				473
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	633	1190	0	1595	32	0	0	26	0	0	0	3497
APPROACH %'s :	1.14%	34.33%	64.53%	0.00%	98.03%	1.97%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	6	152	187		252	9			6				612
4:15 PM	1	146	184		274	10			5				620
4:30 PM	7	154	174		280	16			4				635
4:45 PM	3	152	147		277	13			3				595
5:00 PM	5	147	174		310	15			5				656
5:15 PM	5	145	126		278	16			8				578
5:30 PM	3	164	154		314	10			0				645
5:45 PM	4	141	161		306	13			7				632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	1201	1307	0	2291	102	0	0	38	0	0	0	4973
APPROACH %'s :	1.34%	47.25%	51.42%	0.00%	95.74%	4.26%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sport Arena Blvd and I-8 EB On-Ramp , City of San Diego

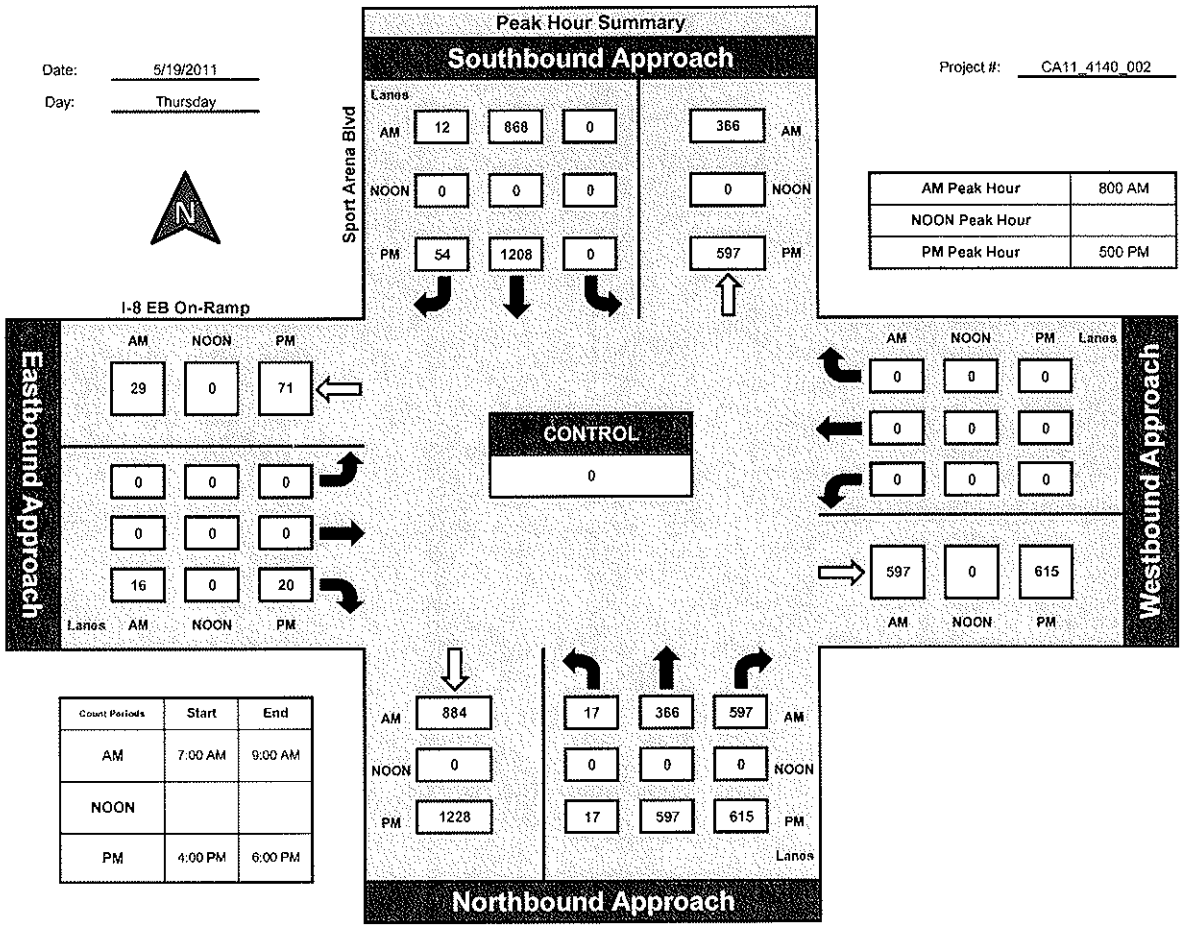
Date: 5/19/2011

Day: Thursday

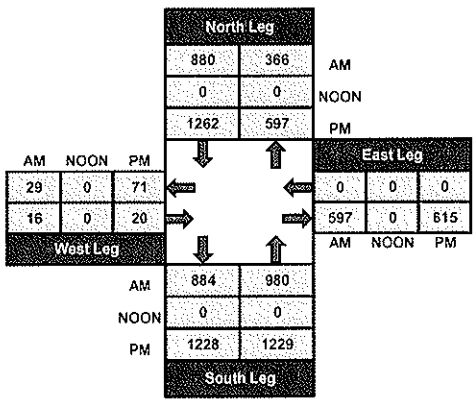
Project #: CA11_4140_002

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

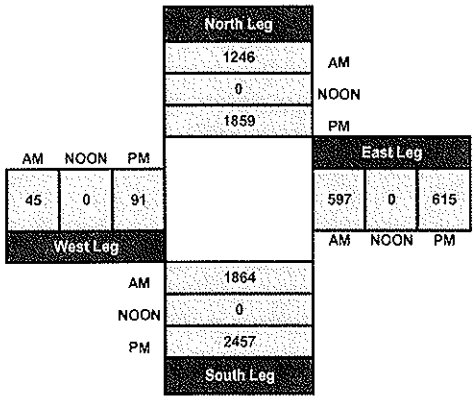
Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Total Ins & Outs



Total Volume Per Leg



③

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001

Day: THURSDAY

City: City of San Diego

Date: 6/9/2011

AM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
7:00 AM						3		137			157	2	299
7:15 AM						6		178			220	0	404
7:30 AM						4		164			250	3	421
7:45 AM						5		217			216	3	441
8:00 AM						8		204			214	1	427
8:15 AM						8		231			245	3	487
8:30 AM						13		190			226	3	432
8:45 AM						7		200			184	5	396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	54	0	1521	0	0	1712	20	3307
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	98.85%	1.15%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001 **Day:** THURSDAY

City: City of San Diego **Date:** 6/9/2011

PM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
4:00 PM						29		266			334	6	635
4:15 PM						21		321			283	10	635
4:30 PM						35		287			319	5	646
4:45 PM						26		291			308	4	629
5:00 PM						36		324			306	9	675
5:15 PM						39		348			308	7	702
5:30 PM						17		334			246	3	600
5:45 PM						16		306			300	10	632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	219	0	2477	0	0	2404	54	5154
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	97.80%	2.20%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

ITM Peak Hour Summary

Prepared by:

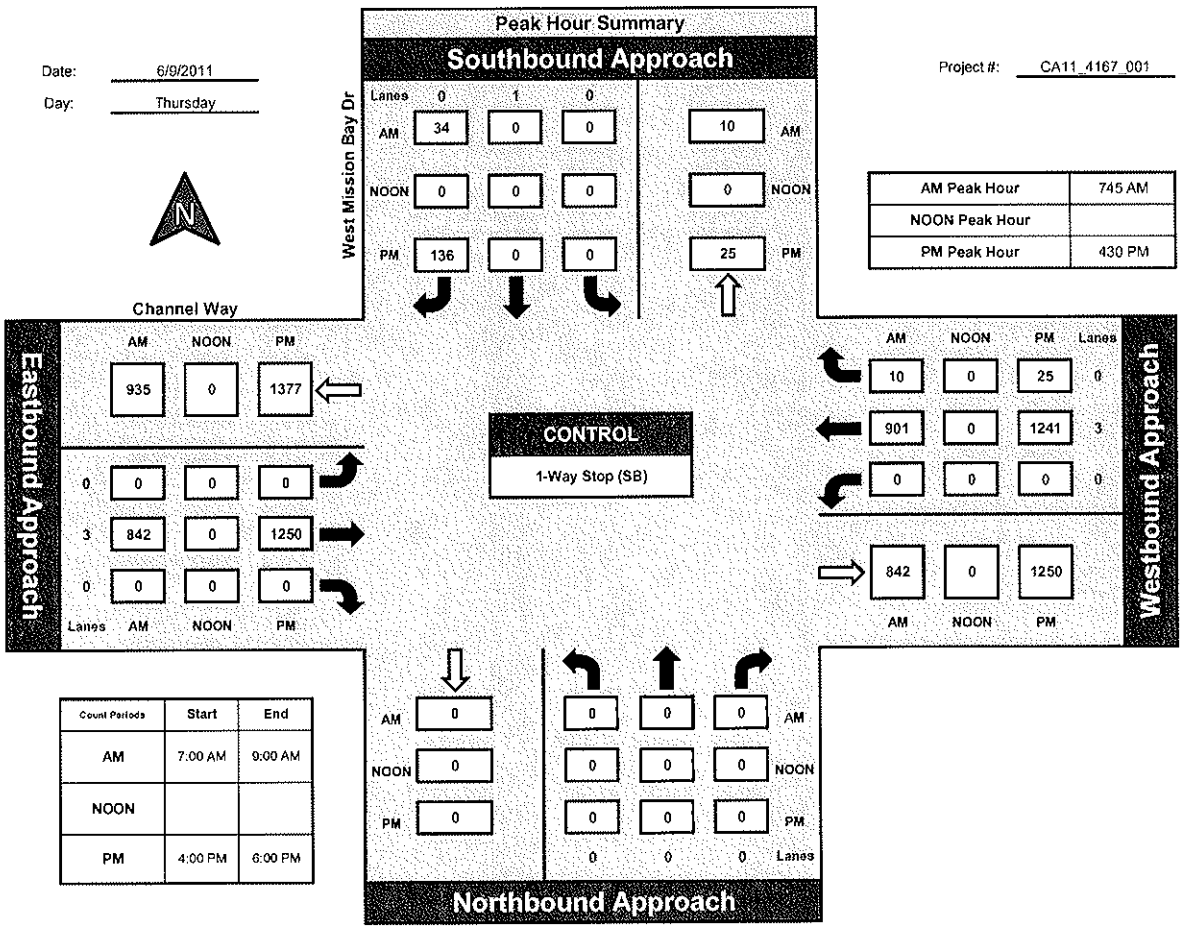
National Data & Surveying Services

West Mission Bay Dr and Channel Way , City of San Diego

Date: 6/9/2011

Day: Thursday

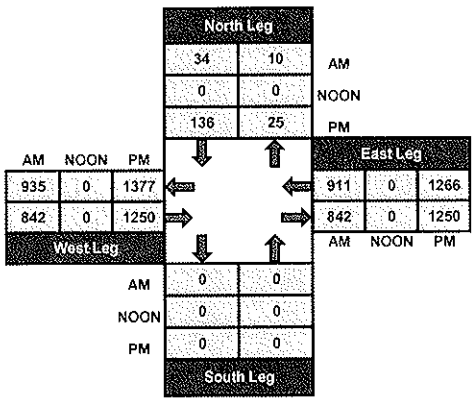
Project #: CA11_4167_001



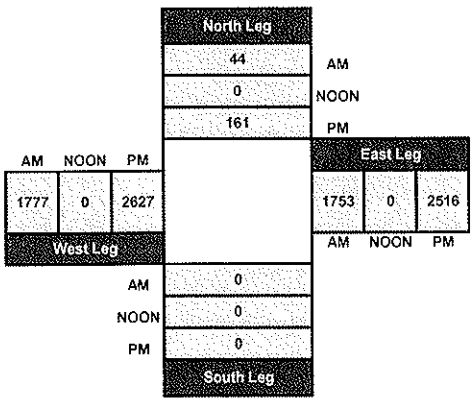
AM Peak Hour	7:45 AM
NOON Peak Hour	
PM Peak Hour	4:30 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(4)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	22	53	0	55	61	34	88	34	48	3	20	38	456
7:15 AM	29	62	1	61	81	49	135	50	57	2	20	45	592
7:30 AM	29	99	1	71	81	68	146	50	62	2	12	47	668
7:45 AM	29	67	2	79	97	54	121	73	62	3	23	47	657
8:00 AM	36	82	4	68	92	44	103	45	66	5	21	46	612
8:15 AM	25	70	8	79	118	36	98	42	51	3	36	52	618
8:30 AM	36	73	4	72	99	51	121	41	60	3	35	56	651
8:45 AM	52	102	3	79	119	40	90	49	67	5	33	69	708
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	258	608	23	564	748	376	902	384	473	26	200	400	4962
APPROACH %'s :	29.02%	68.39%	2.59%	33.41%	44.31%	22.27%	51.28%	21.83%	26.89%	4.15%	31.95%	63.90%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	76	141	4	45	135	46	84	56	86	8	47	103	831
4:15 PM	90	140	2	61	142	54	73	54	76	10	62	97	861
4:30 PM	79	110	6	67	126	62	84	52	66	6	79	133	870
4:45 PM	73	107	4	65	136	52	85	60	59	7	74	98	820
5:00 PM	77	118	7	77	184	74	85	56	70	9	81	134	972
5:15 PM	94	114	3	62	113	65	92	46	75	11	88	104	867
5:30 PM	102	123	10	87	161	79	92	54	68	7	51	82	916
5:45 PM	86	81	10	86	136	76	81	50	74	12	83	90	865
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	677	934	46	550	1133	508	676	428	574	70	565	841	7002
APPROACH %'s :	40.86%	56.37%	2.78%	25.10%	51.71%	23.19%	40.29%	25.51%	34.21%	4.74%	38.28%	56.98%	
[illegible]													

CONTROL :

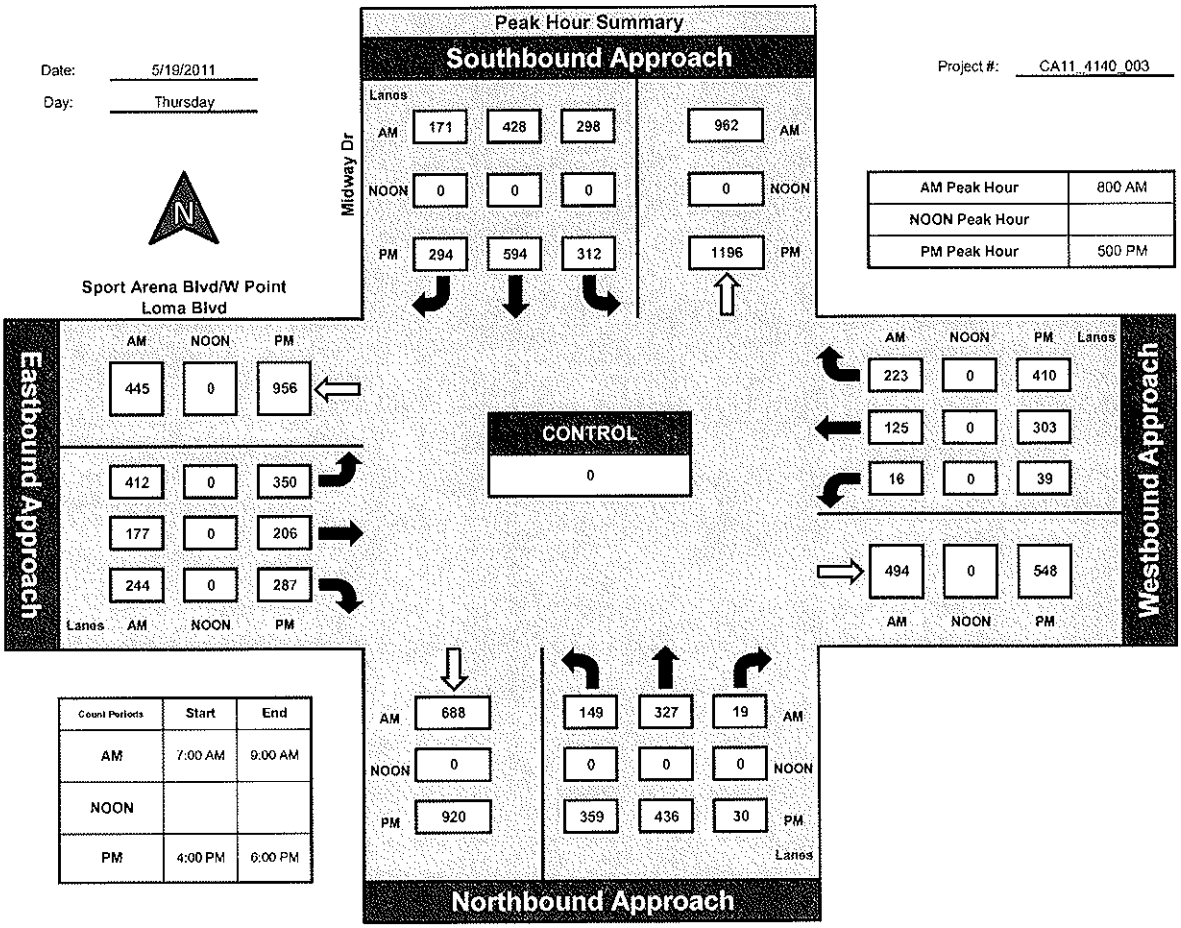
ITM Peak Hour Summary

Prepared by:

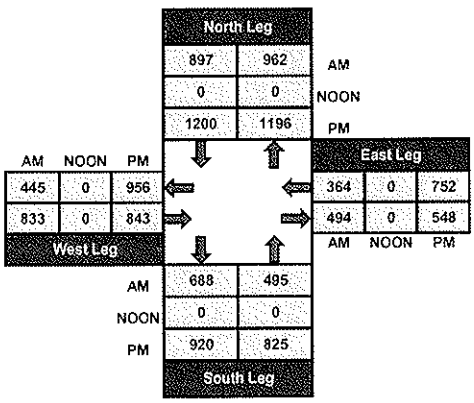
NDS

National Data & Surveying Services

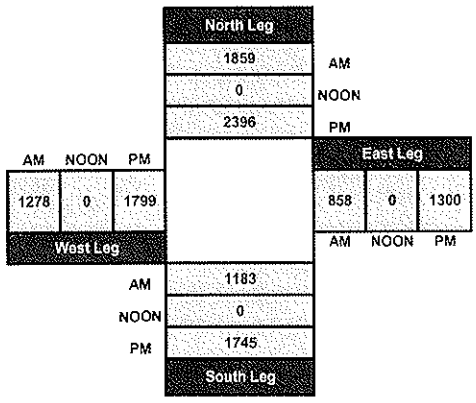
Midway Dr and Sport Arena Blvd/W Point Loma Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(5)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	18	23	3	9	3	3	57	13	9	56	10	224
7:15 AM	28	16	20	4	6	6	12	69	17	6	33	6	223
7:30 AM	26	20	28	5	9	5	18	86	16	11	56	9	289
7:45 AM	29	30	23	8	7	13	14	87	13	10	53	11	298
8:00 AM	19	22	14	6	11	12	16	91	21	21	68	7	308
8:15 AM	29	21	21	5	17	13	14	105	15	9	68	11	328
8:30 AM	24	30	34	8	10	11	18	103	20	18	84	6	366
8:45 AM	25	22	22	6	11	17	14	91	14	16	89	11	338
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	200	179	185	45	80	80	109	689	129	100	507	71	2374
APPROACH %'s :	35.46%	31.74%	32.80%	21.95%	39.02%	39.02%	11.76%	74.33%	13.92%	14.75%	74.78%	10.47%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	47	28	38	12	31	12	34	140	26	62	158	15	603
4:15 PM	26	38	35	9	34	19	32	118	24	70	140	16	561
4:30 PM	26	32	39	9	28	26	37	130	25	55	175	16	598
4:45 PM	41	29	47	15	42	10	23	91	53	49	138	11	549
5:00 PM	56	33	41	19	26	22	33	130	29	59	142	14	604
5:15 PM	47	31	31	9	35	28	34	151	27	59	174	17	643
5:30 PM	42	29	38	10	38	14	32	128	31	58	167	17	604
5:45 PM	49	15	28	9	39	18	29	122	29	47	146	9	540
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	334	235	297	92	273	149	254	1010	244	459	1240	115	4702
APPROACH %'s :	38.57%	27.14%	34.30%	17.90%	53.11%	28.99%	16.84%	66.98%	16.18%	25.30%	68.36%	6.34%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

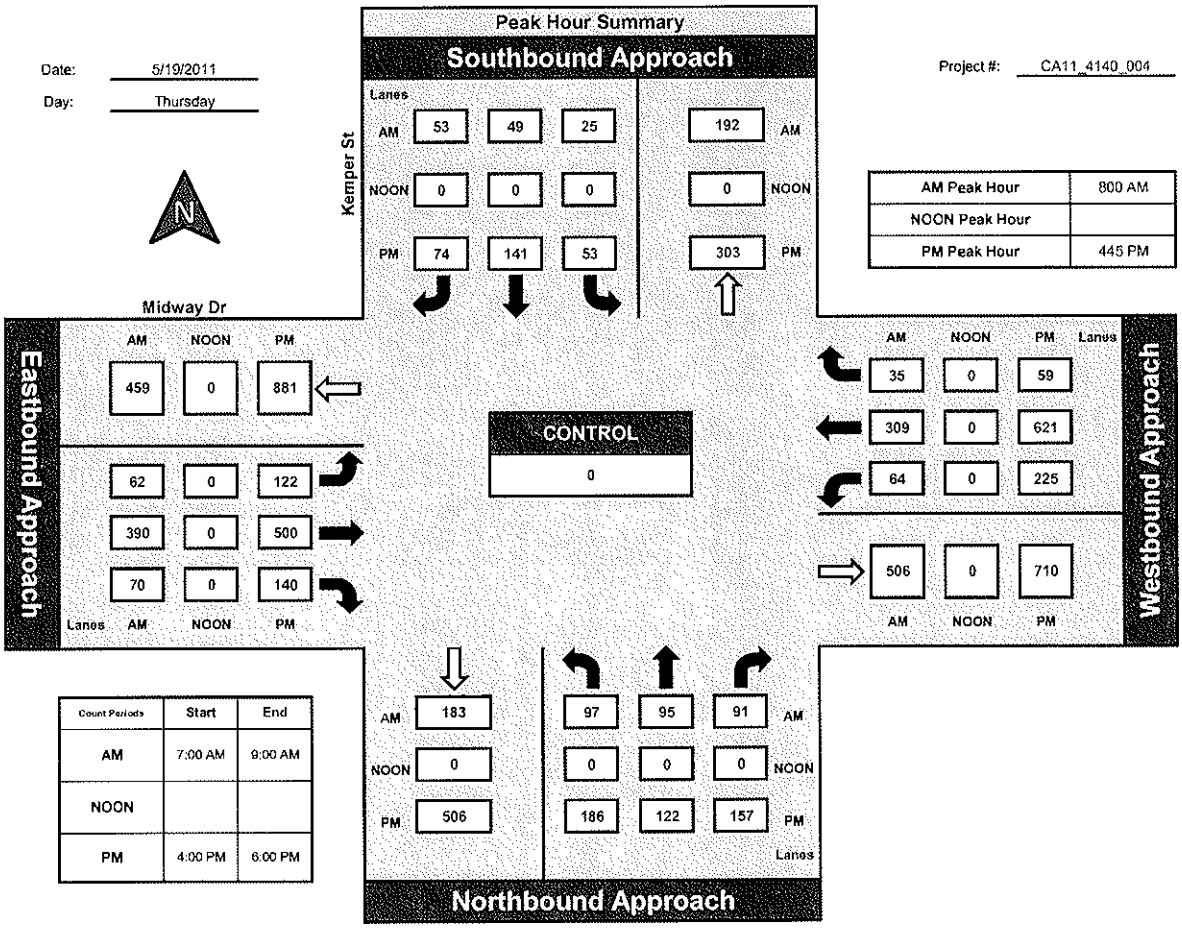
National Data & Surveying Services

Kemper St and Midway Dr , City of San Diego

Date: 5/19/2011

Day: Thursday

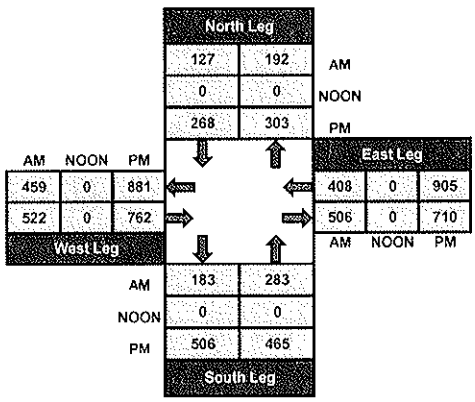
Project #: CA11_4140_004



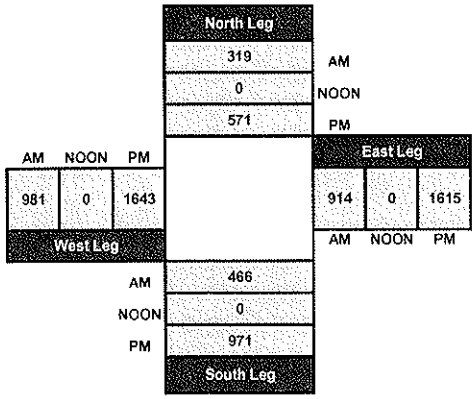
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(6)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	4	0	3	4	0	1	4	106	3	4	81	2	212
7:15 AM	1	2	1	1	0	2	3	102	2	2	90	4	210
7:30 AM	4	0	1	1	0	4	1	132	1	5	126	7	282
7:45 AM	3	0	1	1	1	4	1	114	2	7	132	11	277
8:00 AM	6	1	0	2	0	3	1	131	3	7	148	13	315
8:15 AM	7	1	3	4	1	3	4	139	5	6	158	12	343
8:30 AM	3	0	1	7	0	4	5	148	2	6	183	23	382
8:45 AM	3	1	1	3	1	5	6	119	0	6	140	20	305
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	5	11	23	3	26	25	991	18	43	1058	92	2326
APPROACH %'s :	65.96%	10.64%	23.40%	44.23%	5.77%	50.00%	2.42%	95.84%	1.74%	3.60%	88.68%	7.71%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	3	4	1	12	1	10	19	203	1	8	273	39	574
4:15 PM	4	2	1	12	4	13	11	205	4	6	242	34	538
4:30 PM	7	4	2	20	2	20	14	221	4	8	267	35	604
4:45 PM	3	1	3	16	2	16	11	170	5	6	240	34	507
5:00 PM	6	0	4	11	0	10	7	217	2	7	284	44	592
5:15 PM	8	1	5	22	0	6	14	197	5	6	246	51	561
5:30 PM	1	3	2	14	3	19	23	219	4	5	278	27	598
5:45 PM	4	0	5	14	1	7	9	186	9	1	242	27	505
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	36	15	23	121	13	101	108	1618	34	47	2072	291	4479
APPROACH %'s :	48.65%	20.27%	31.08%	51.49%	5.53%	42.98%	6.14%	91.93%	1.93%	1.95%	85.98%	12.07%	



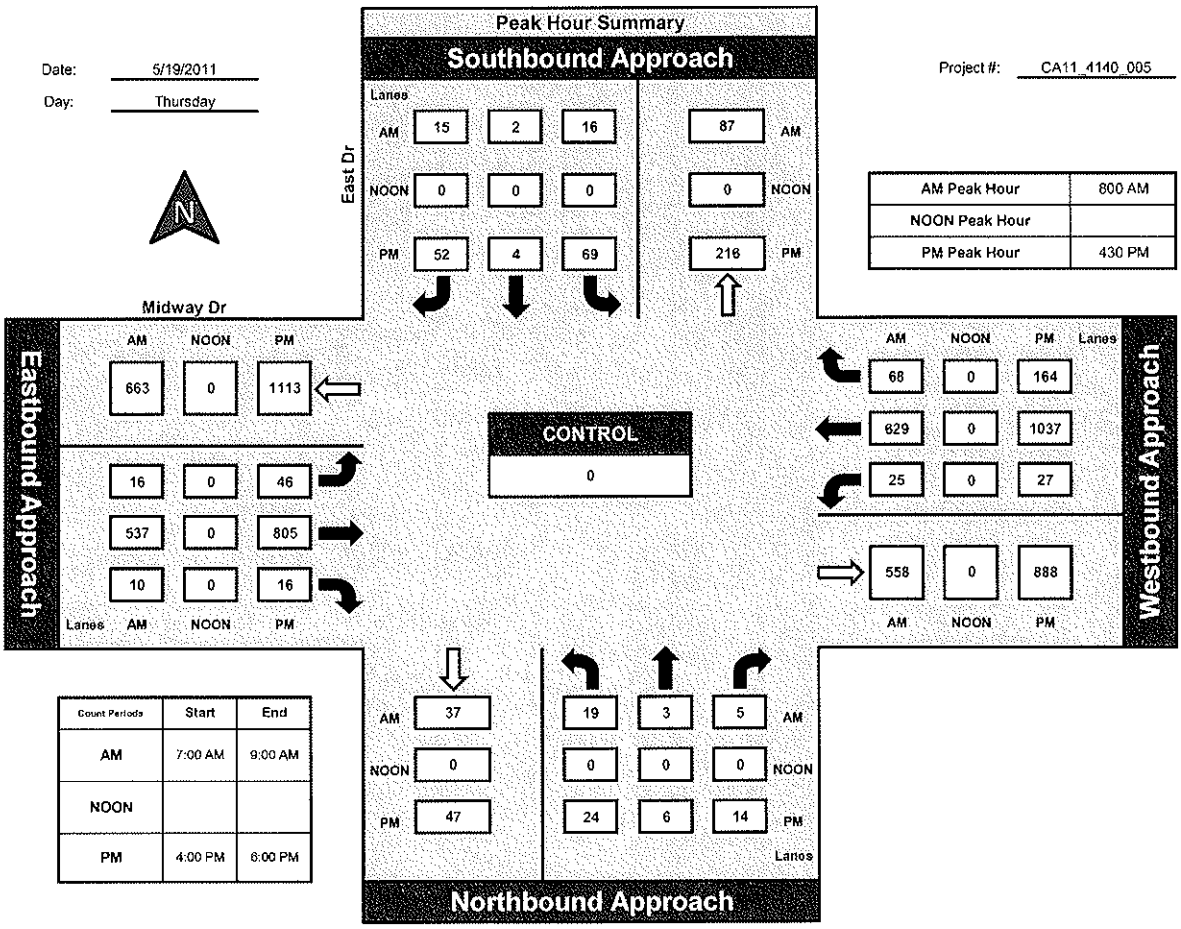
CONTROL :

ITM Peak Hour Summary

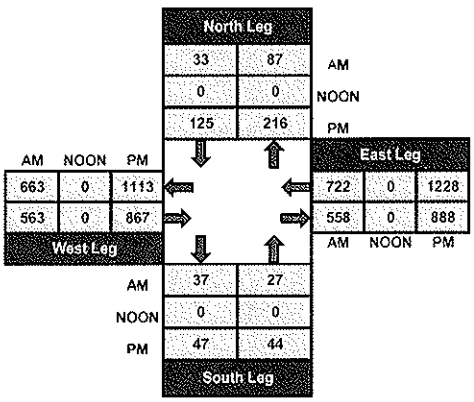
Prepared by:

National Data & Surveying Services

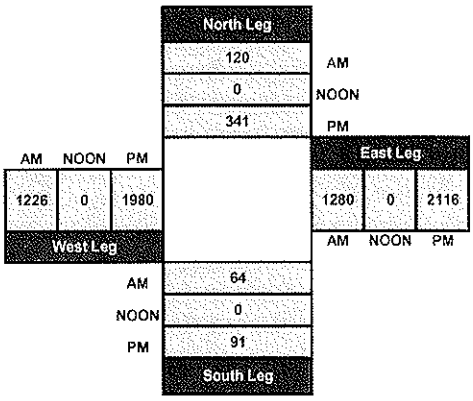
East Dr and Midway Dr , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(7)

8

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

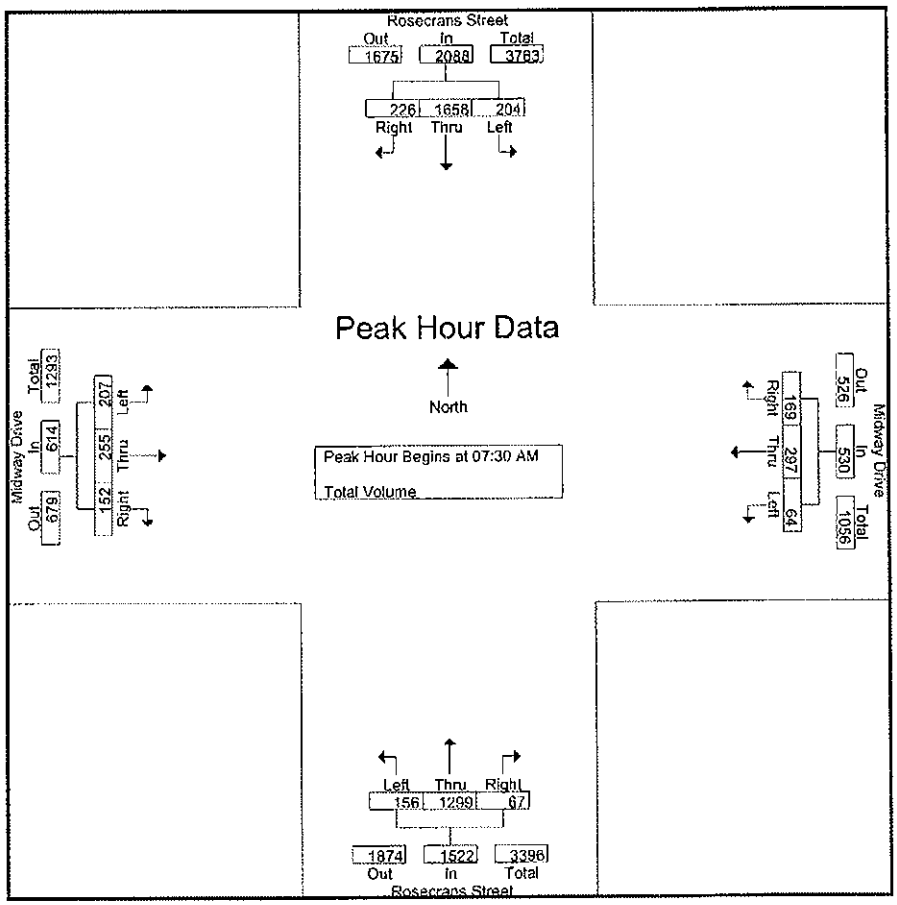
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
Total	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
07:00 AM	78	384	31	493	14	44	32	90	24	246	17	287	27	46	28	101	971
07:15 AM	67	472	45	584	18	54	25	97	17	283	13	313	45	59	16	120	1114
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
Total	259	1695	192	2146	62	240	127	429	104	1196	51	1351	165	238	115	518	4444
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
08:30 AM	58	310	55	423	15	88	45	148	33	332	20	385	55	77	35	167	1123
Grand Total	467	3165	378	4010	121	525	296	942	245	2328	131	2704	376	483	253	1112	8768
Apprch %	11.6	78.9	9.4		12.8	55.7	31.4		9.1	86.1	4.8		33.8	43.4	22.8		
Total %	5.3	36.1	4.3	45.7	1.4	6	3.4	10.7	2.8	26.6	1.5	30.8	4.3	5.5	2.9	12.7	

	Rosecrans Street Southbound				Midwny Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
Total Volume	204	1658	226	2088	64	297	169	530	156	1299	67	1522	207	255	152	614	4754
% App. Total	9.8	79.4	10.8		12.1	56	31.9		10.2	85.3	4.4		33.7	41.5	24.8		
PHF	.718	.856	.831	.877	.762	.773	.716	.844	.780	.931	.698	.926	.772	.951	.905	.914	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	67	472	45	584	20	72	36	128	34	**349**	11	394	44	67	33	144
+15 mins.	**71**	355	48	474	13	59	**59**	131	29	318	10	357	**67**	62	39	**168**
+30 mins.	43	**484**	**68**	**595**	**21**	**96**	40	**157**	**50**	286	**24**	360	47	60	**42**	149
+45 mins.	48	417	57	522	15	88	45	148	43	346	22	**411**	55	77	35	167
Total Volume	229	1728	218	2175	69	315	180	564	156	1299	67	1522	213	266	149	628
% App. Total	10.5	79.4	10		12.2	55.9	31.9		10.2	85.3	4.4		33.9	42.4	23.7	
PHF	.806	.893	.801	.914	.821	.820	.763	.898	.780	.931	.698	.926	.795	.864	.887	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

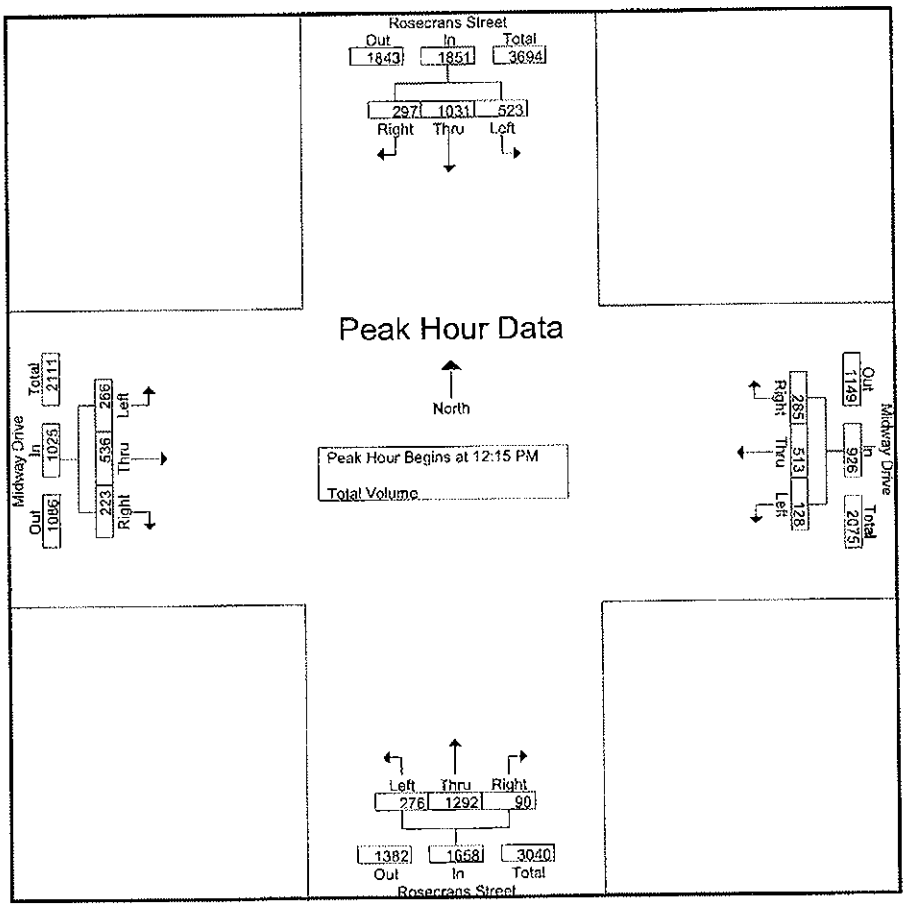
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	123	255	86	464	28	107	62	197	76	270	16	362	90	110	46	246	1269
11:45 AM	131	222	49	402	34	145	55	234	89	319	20	428	50	108	43	201	1265
Total	254	477	135	866	62	252	117	431	165	589	36	790	140	218	89	447	2534
12:00 PM	152	299	69	520	46	120	68	234	49	287	22	358	56	102	42	200	1312
12:15 PM	120	237	76	433	34	143	77	254	73	282	24	379	72	144	68	284	1350
12:30 PM	120	288	84	492	37	120	77	234	76	377	22	475	56	126	55	237	1438
12:45 PM	131	233	68	432	27	144	76	247	63	308	19	390	69	130	58	257	1326
Total	523	1057	297	1877	144	527	298	969	261	1254	87	1602	253	502	223	978	5426
01:00 PM	152	273	69	494	30	106	55	191	64	325	25	414	69	136	42	247	1346
01:15 PM	135	211	73	419	35	102	43	180	72	288	24	384	51	107	36	194	1177
Grand Total	1064	2018	574	3656	271	987	513	1771	562	2456	172	3190	513	963	390	1866	10483
Apprch %	29.1	55.2	15.7		15.3	55.7	29		17.6	77	5.4		27.5	51.6	20.9		
Total %	10.1	19.3	5.5	34.9	2.6	9.4	4.9	16.9	5.4	23.4	1.6	30.4	4.9	9.2	3.7	17.8	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	120	237	76	433	34	143	77	**254**	73	282	24	379	**72**	**144**	**68**	**284**	1350
12:30 PM	120	**288**	**84**	492	**37**	120	77	234	**76**	**377**	**22**	**475**	56	126	55	237	**1438**
12:45 PM	131	233	68	432	27	**144**	76	247	63	308	19	390	69	130	58	257	1326
01:00 PM	**152**	273	69	**494**	30	106	55	191	64	325	**25**	414	69	136	42	247	1346
Total Volume	523	1031	297	1851	128	513	285	926	276	1292	90	1658	266	536	223	1025	5460
% App. Total	28.3	55.7	16		13.8	55.4	30.8		16.6	77.9	5.4		26	52.3	21.8		
PHF	.860	.895	.884	.937	.865	.891	.925	.911	.908	.857	.900	.873	.924	.931	.820	.902	.949

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

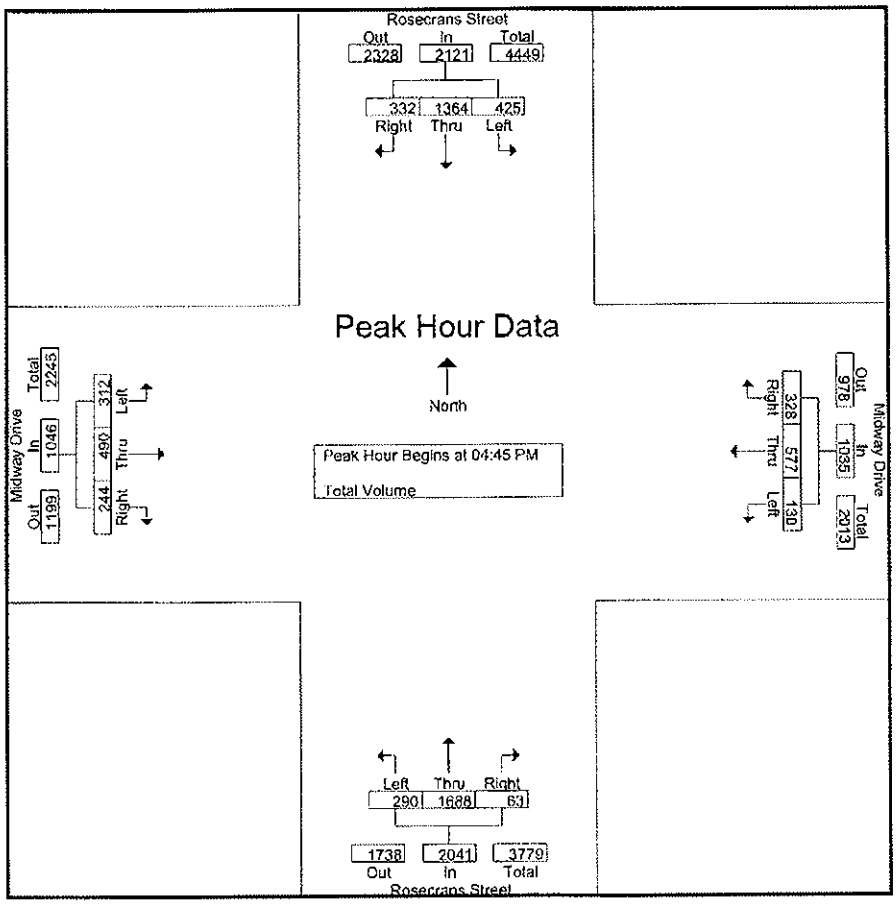
Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				12:30 PM				12:15 PM			
+0 mins.	**152**	**299**	69	**520**	**46**	120	68	234	**76**	**377**	22	**475**	**72**	**144**	**68**	**284**
+15 mins.	120	237	76	433	34	143	77	**254**	63	308	19	390	56	126	55	237
+30 mins.	120	288	**84**	492	37	120	77	234	64	325	**25**	414	69	130	58	257
+45 mins.	131	233	68	432	27	**144**	76	247	72	288	24	384	69	136	42	247
Total Volume	523	1057	297	1877	144	527	298	969	275	1298	90	1663	266	536	223	1025
% App. Total	27.9	56.3	15.8		14.9	54.4	30.8		16.5	78.1	5.4		26	52.3	21.8	
PHF	.860	.884	.884	.902	.783	.915	.968	.954	.905	.861	.900	.875	.924	.931	.820	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	116	330	90	536	40	133	95	268	62	427	17	506	60	109	80	249
+15 mins.	120	332	81	533	23	129	90	242	69	455	14	538	84	108	52	244
+30 mins.	99	344	89	532	38	154	84	276	67	424	13	504	86	129	46	261
+45 mins.	90	358	72	520	39	152	83	274	75	434	14	523	82	144	66	292
Total Volume	425	1364	332	2121	140	568	352	1060	273	1740	58	2071	312	490	244	1046
% App. Total	20	64.3	15.7		13.2	53.6	33.2		13.2	84	2.8		29.8	46.8	23.3	
PHF	.885	.953	.922	.989	.875	.922	.926	.960	.910	.956	.853	.962	.907	.851	.763	.896

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	106	301	72	479	34	138	80	252	62	427	17	506	75	117	42	234	1471
04:15 PM	107	324	78	509	33	128	96	257	69	455	14	538	77	111	52	240	1544
04:30 PM	103	285	80	468	40	133	95	268	67	424	13	504	72	131	56	259	1499
04:45 PM	116	330	90	536	23	129	90	242	75	434	14	523	60	109	80	249	1550
Total	432	1240	320	1992	130	528	361	1019	273	1740	58	2071	284	468	230	982	6064
05:00 PM	120	332	81	533	38	154	84	276	69	398	20	487	84	108	52	244	1540
05:15 PM	99	344	89	532	39	152	83	274	71	432	14	517	86	129	46	261	1584
05:30 PM	90	358	72	520	30	142	71	243	75	424	15	514	82	144	66	292	1569
05:45 PM	121	327	67	515	37	119	62	218	71	350	20	441	64	119	52	235	1409
Total	430	1361	309	2100	144	567	300	1011	286	1604	69	1959	316	500	216	1032	6102
Grand Total	862	2601	629	4092	274	1095	661	2030	559	3344	127	4030	600	968	446	2014	12166
Apprch %	21.1	63.6	15.4		13.5	53.9	32.6		13.9	83	3.2		29.8	48.1	22.1		
Total %	7.1	21.4	5.2	33.6	2.3	9	5.4	16.7	4.6	27.5	1	33.1	4.9	8	3.7	16.6	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	116	330	**90**	**536**	23	129	**90**	242	**75**	**434**	14	**523**	60	109	**80**	249	1550
05:00 PM	**120**	332	81	533	38	**154**	84	**276**	69	398	**20**	487	84	108	52	244	1540
05:15 PM	99	344	89	532	**39**	152	83	274	71	432	14	517	**86**	129	46	261	**1584**
05:30 PM	90	**358**	72	520	30	142	71	243	75	424	15	514	82	**144**	66	**292**	1569
Total Volume	425	1364	332	2121	130	577	328	1035	290	1688	63	2041	312	490	244	1046	6243
% App. Total	20	64.3	15.7		12.6	55.7	31.7		14.2	82.7	3.1		29.8	46.8	23.3		
PHF	.885	.953	.922	.989	.833	.937	.911	.938	.967	.972	.788	.976	.907	.851	.763	.896	.985

(9)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		85	4		87							17	193
7:15 AM		92	8		75							14	189
7:30 AM		118	2		117							10	247
7:45 AM		118	6		99							20	243
8:00 AM		114	8		112							21	255
8:15 AM		129	4		118							20	271
8:30 AM		149	7		150							24	330
8:45 AM		141	6		130							17	294

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	946	45	0	888	0	0	0	0	0	0	143	2022
APPROACH %'s :	0.00%	95.46%	4.54%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		172	4		203							63	442
4:15 PM		185	4		182							44	415
4:30 PM		169	1		228							71	469
4:45 PM		186	2		222							52	462
5:00 PM		220	1		232							53	506
5:15 PM		190	2		183							52	427
5:30 PM		164	1		206							43	414
5:45 PM		151	1		170							30	352
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1437	16	0	1626	0	0	0	0	0	0	408	3487
APPROACH %'s :	0.00%	98.90%	1.10%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
[illegible]													
[illegible]													

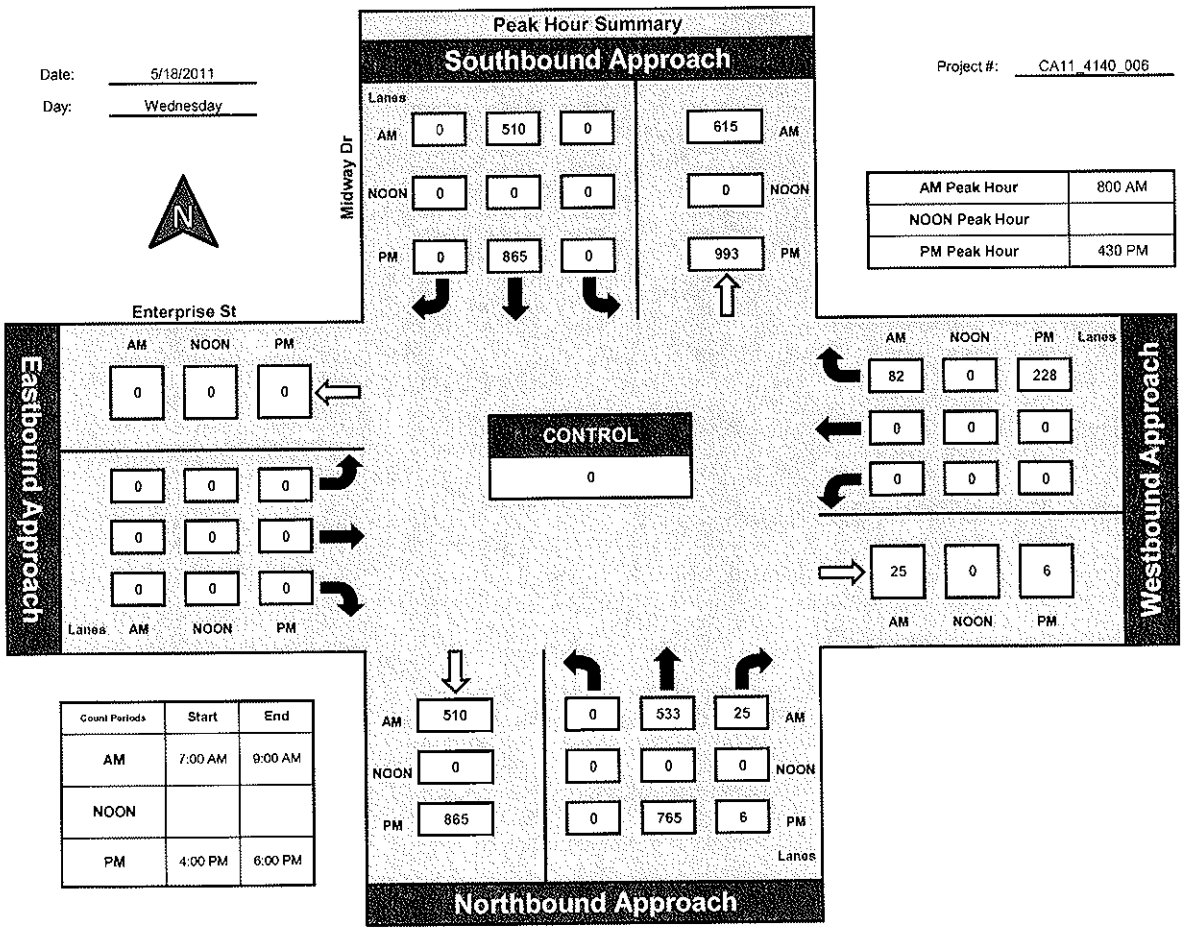
CONTROL :

ITM Peak Hour Summary

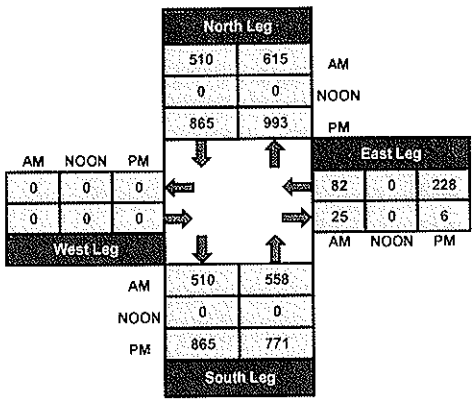
Prepared by:

National Data & Surveying Services

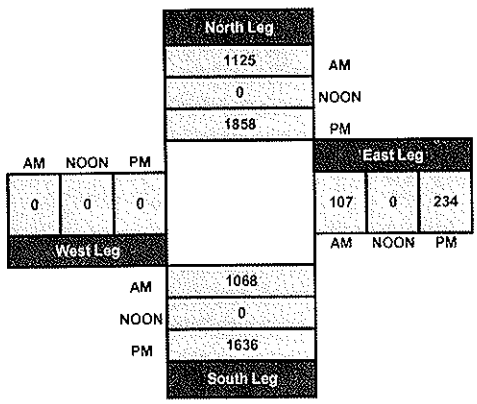
Midway Dr and Enterprise St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(10)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				65		21		160			380	84	710
7:15 AM				55		21		210			329	105	720
7:30 AM				95		21		186			248	115	665
7:45 AM				87		13		189			338	129	756
8:00 AM				89		19		210			314	119	751
8:15 AM				102		19		227			306	132	786
8:30 AM				119		28		210			253	152	762
8:45 AM				108		25		170			204	151	658

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	720	0	167	0	1562	0	0	2372	987	5808
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	81.17%	0.00%	18.83%	0.00%	100.00%	0.00%	0.00%	70.62%	29.38%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

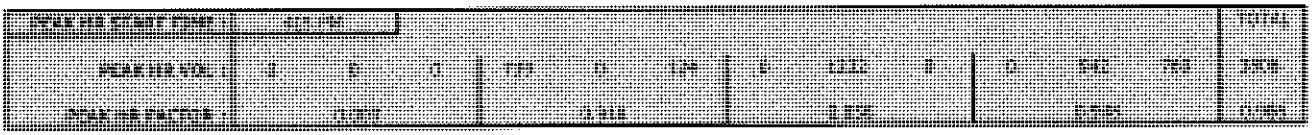
City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				172		27		333			223	175	930
4:15 PM				159		27		359			230	190	965
4:30 PM				192		32		310			227	170	931
4:45 PM				187		31		293			255	188	954
5:00 PM				201		34		270			230	221	956
5:15 PM				157		25		278			211	189	860
5:30 PM				175		31		216			206	169	797
5:45 PM				148		17		180			193	149	687

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	1391	0	224	0	2239	0	0	1775	1451	7080
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	86.13%	0.00%	13.87%	0.00%	100.00%	0.00%	0.00%	55.02%	44.98%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

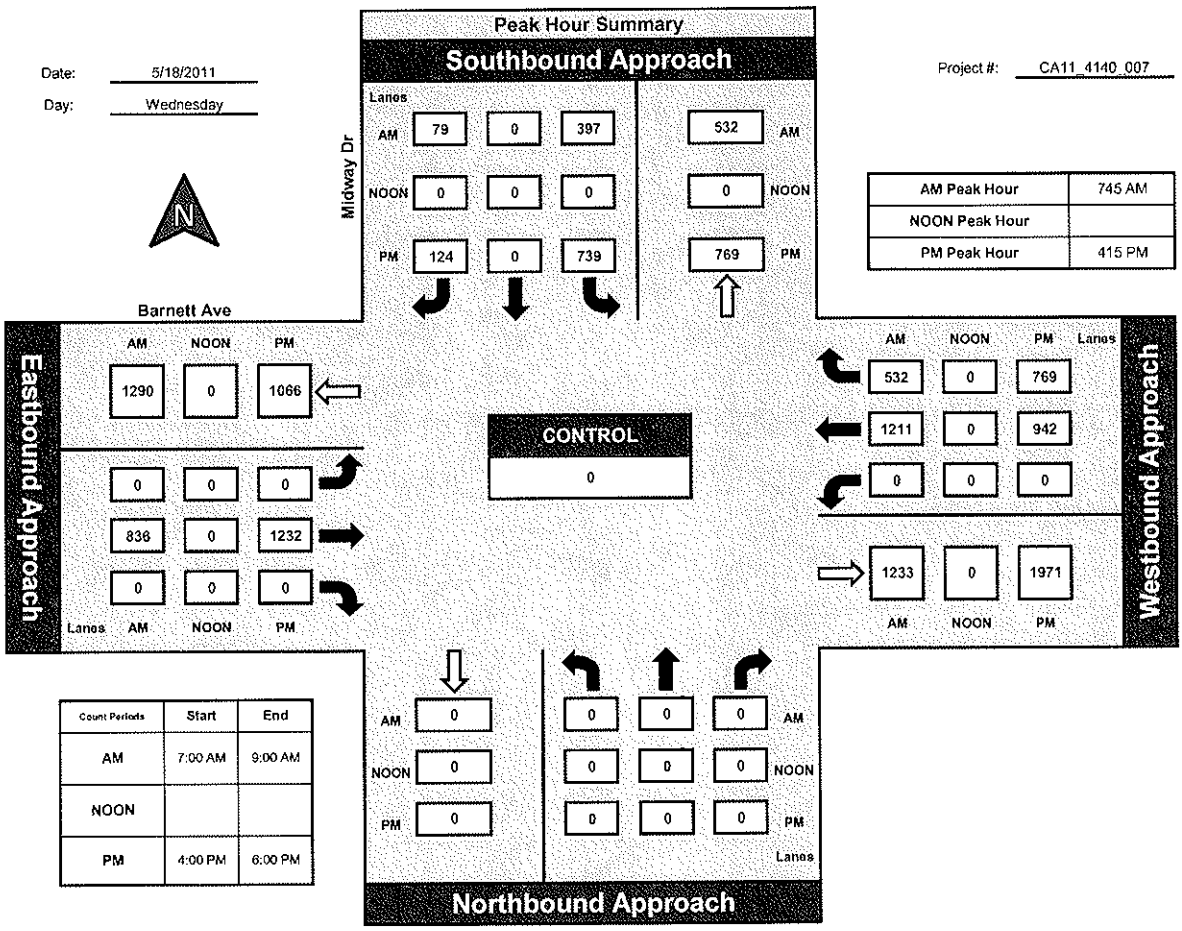
National Data & Surveying Services

Midway Dr and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

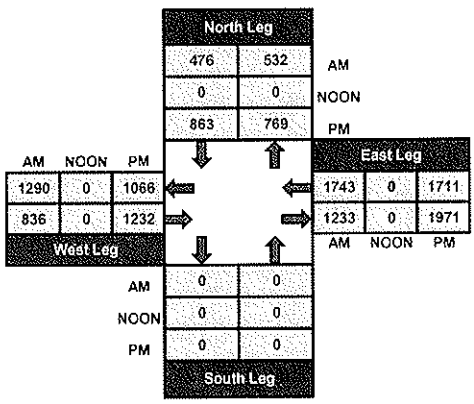
Project #: CA11_4140_007



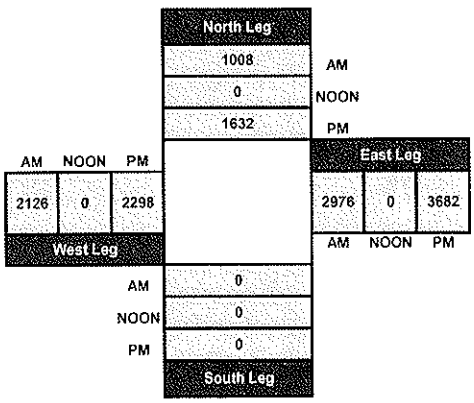
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

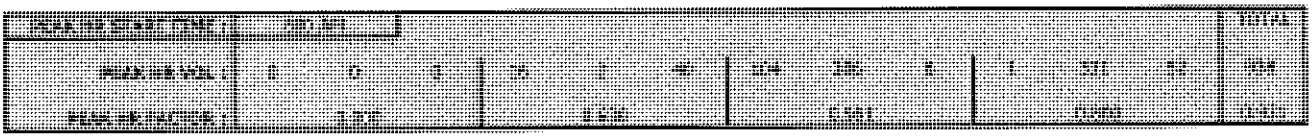
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				7	0	11	24	66	1	0	47	9	165
7:15 AM				7	1	18	30	83	0	0	36	6	181
7:30 AM				8	0	8	36	74	1	0	54	18	199
7:45 AM				3	0	16	32	99	2	0	68	15	235
8:00 AM				1	0	13	33	95	1	1	69	12	225
8:15 AM				8	1	14	25	99	0	0	78	14	239
8:30 AM				3	0	8	25	93	3	0	80	10	222
8:45 AM				4	1	5	21	99	2	0	104	16	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	41	3	93	226	708	10	1	536	100	1718
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	29.93%	2.19%	67.88%	23.94%	75.00%	1.06%	0.16%	84.14%	15.70%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

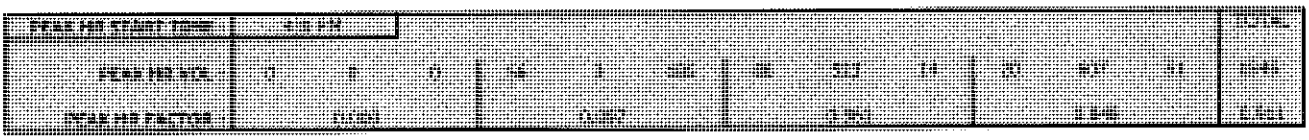
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				9	0	24	13	83	0	1	109	9	248
4:15 PM				12	0	36	13	105	2	4	121	11	304
4:30 PM				15	1	43	21	131	4	7	150	16	388
4:45 PM				14	0	48	25	130	7	5	177	18	424
5:00 PM				13	2	53	22	127	3	2	128	8	358
5:15 PM				14	0	41	18	135	0	6	152	9	375
5:30 PM				11	0	27	23	123	2	2	137	9	334
5:45 PM				12	2	35	28	136	5	3	149	8	378
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	100	5	307	163	970	23	30	1123	88	2809
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	24.27%	1.21%	74.51%	14.10%	83.91%	1.99%	2.42%	90.49%	7.09%	



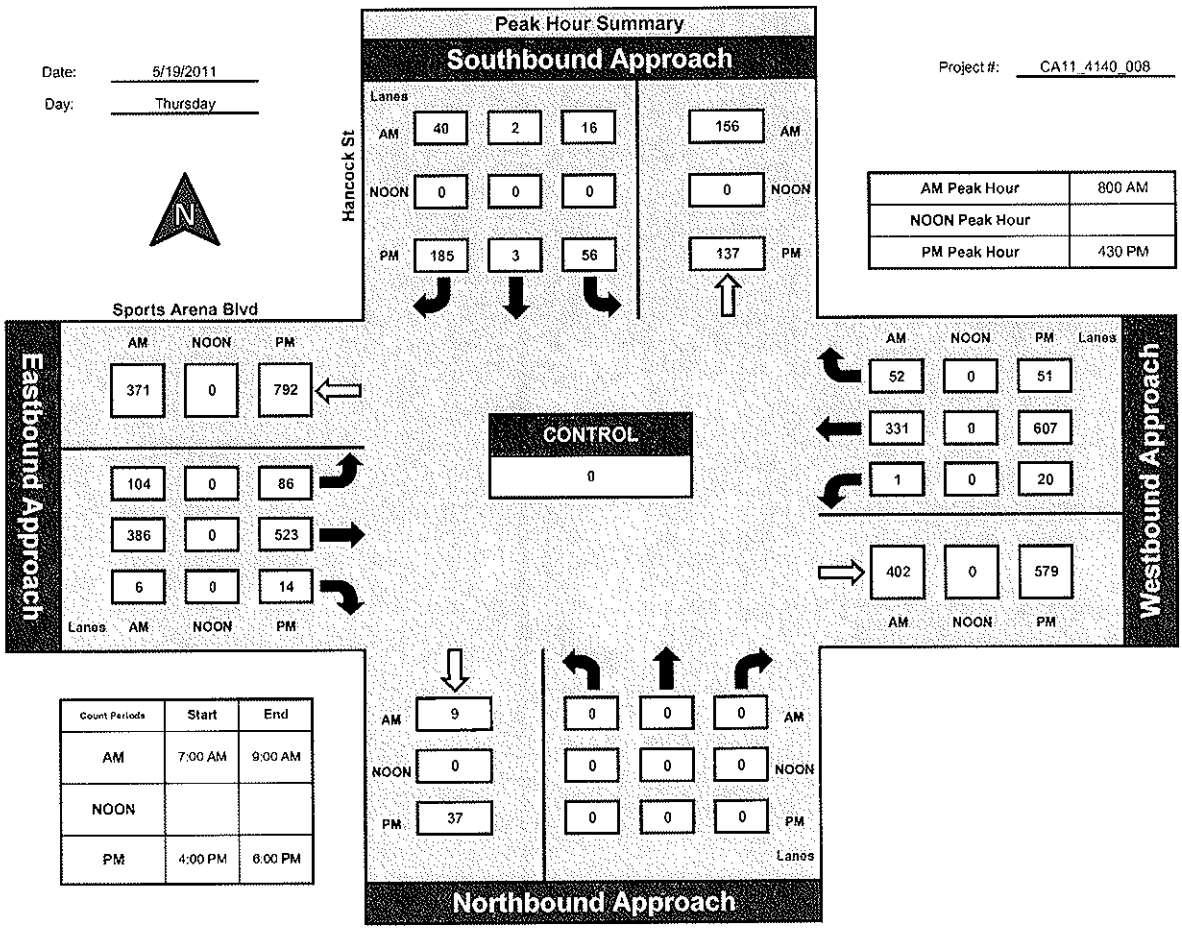
CONTROL :

ITM Peak Hour Summary

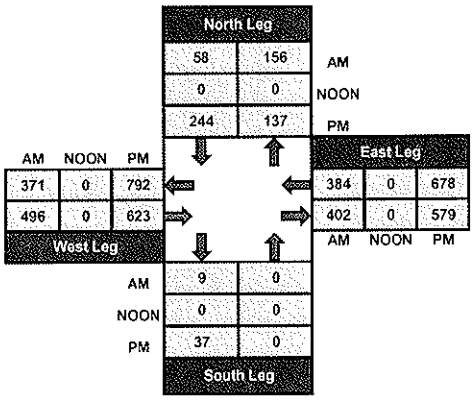
Prepared by:

National Data & Surveying Services

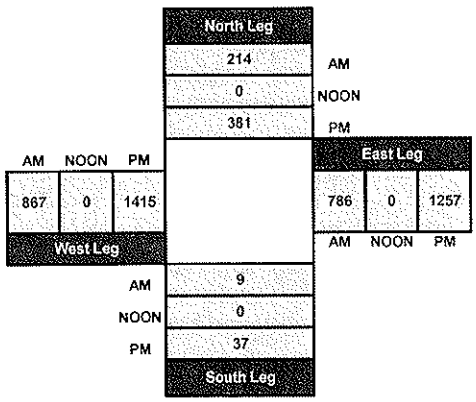
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		1		0				0	0			1
7:15 AM	0		1		0				0	0			1
7:30 AM	1		2		1				0	0			4
7:45 AM	0		1		0				0	0			1
8:00 AM	0		0		1				0	1			2
8:15 AM	0		2		1				1	0			4
8:30 AM	2		0		1				1	1			5
8:45 AM	0		0		0				0	0			

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	7	0	4	0	0	0	2	2	0	0	18
APPROACH %'s :	30.00%	0.00%	70.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

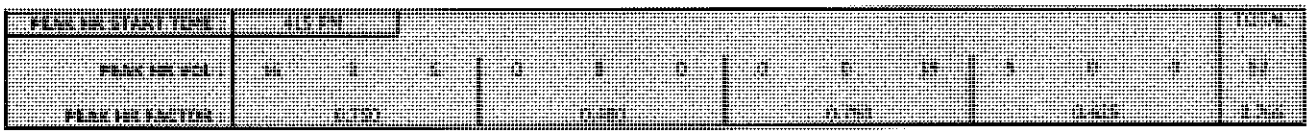
Project ID: CA11_4140_008 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		1		1				2	0			4
4:15 PM	5		2		0				2	2			11
4:30 PM	4		1		5				6	1			17
4:45 PM	4		2		0				5	2			13
5:00 PM	3		0		3				5	0			11
5:15 PM	2		0		0				1	1			4
5:30 PM	1		2		1				2	1			7
5:45 PM	3		2		2				3	2			12

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	0	10	0	12	0	0	0	26	9	0	0	79
APPROACH %'s :	68.75%	0.00%	31.25%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



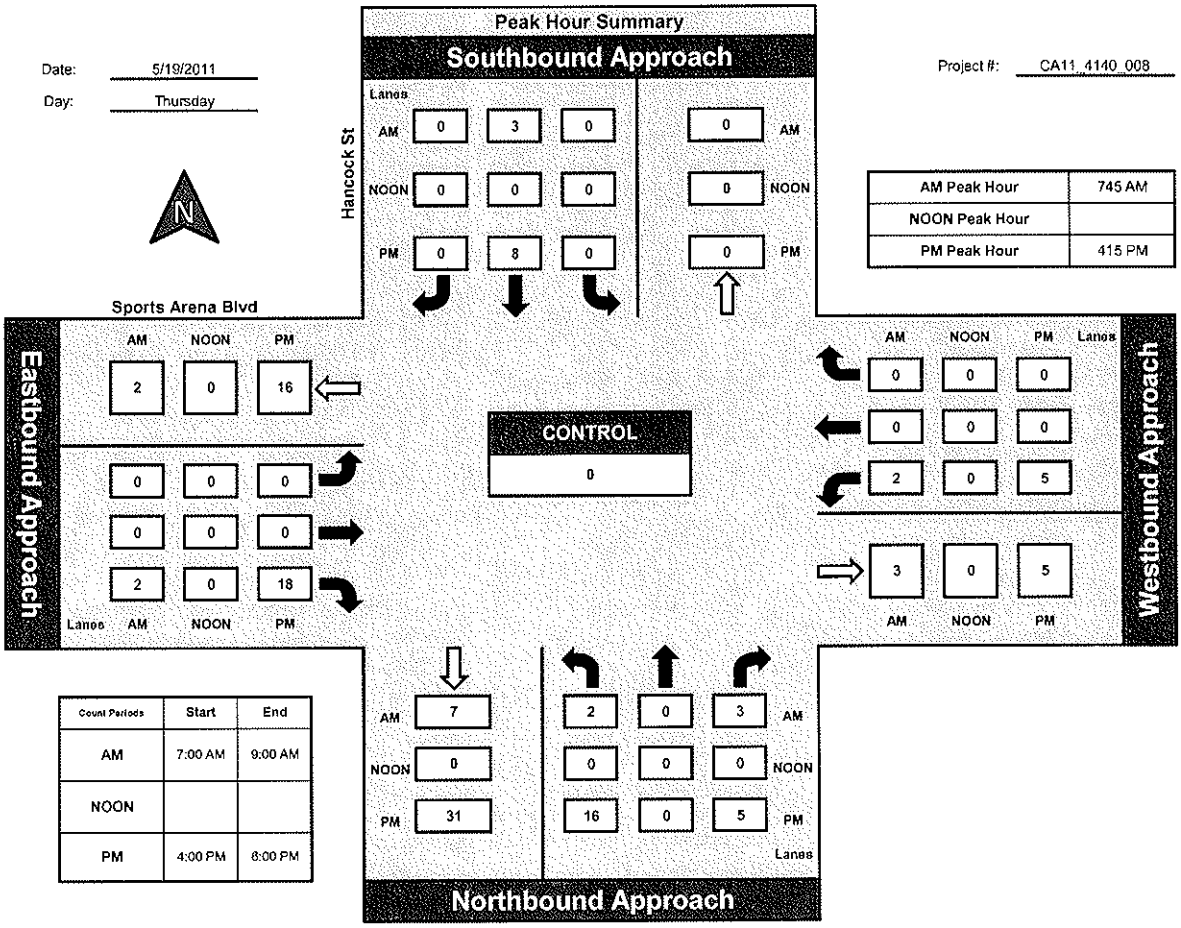
CONTROL :

ITM Peak Hour Summary

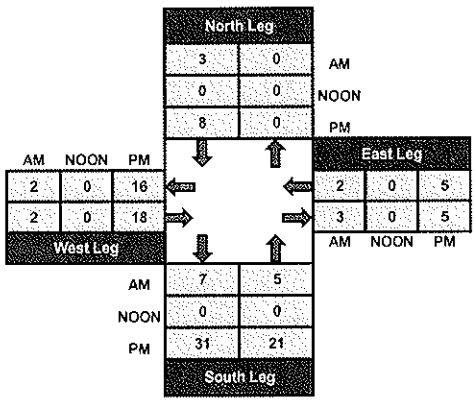
Prepared by:

National Data & Surveying Services

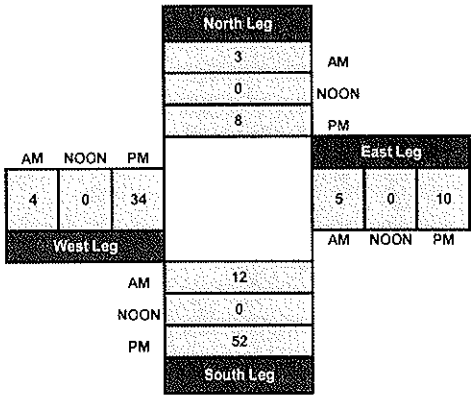
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(12)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	1	30	1	2	5	7	79	6	20	57	6	229
7:15 AM	13	2	20	3	5	3	4	90	15	14	49	9	227
7:30 AM	17	6	39	4	3	6	9	74	7	29	74	11	279
7:45 AM	12	10	22	7	4	13	9	68	16	27	57	10	255
8:00 AM	12	6	15	11	4	15	19	64	17	28	50	22	263
8:15 AM	23	8	19	10	6	23	20	71	11	24	44	20	279
8:30 AM	16	15	34	8	6	32	17	65	28	34	51	23	329
8:45 AM	23	11	27	17	7	30	12	81	20	30	82	15	355
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	131	59	206	61	37	127	97	592	120	206	464	116	2216
APPROACH %'s :	33.08%	14.90%	52.02%	27.11%	16.44%	56.44%	11.99%	73.18%	14.83%	26.21%	59.03%	14.76%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	74	40	110	36	20	83	65	290	72	116	279	76	1261
PEAK HR FACTOR :	0.803			0.782			0.906			0.906			0.907

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

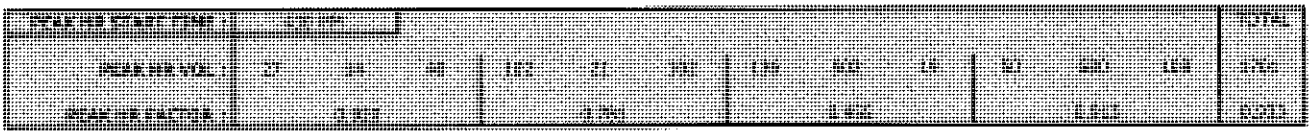
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	2	10	33	2	23	27	95	2	18	135	29	377
4:15 PM	6	3	8	28	5	23	35	106	10	8	139	29	400
4:30 PM	10	3	9	33	6	33	44	112	4	19	150	33	456
4:45 PM	6	5	10	22	5	19	25	125	6	9	158	18	408
5:00 PM	8	3	11	24	4	23	34	130	8	11	137	25	418
5:15 PM	3	3	10	23	6	27	33	135	1	11	135	32	419
5:30 PM	8	0	9	22	3	22	27	123	5	13	140	21	393
5:45 PM	5	5	8	28	6	21	21	136	5	10	119	35	399
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	47	24	75	213	37	191	246	962	41	99	1113	222	3270
APPROACH %'s :	32.19%	16.44%	51.37%	48.30%	8.39%	43.31%	19.70%	77.02%	3.28%	6.90%	77.62%	15.48%	



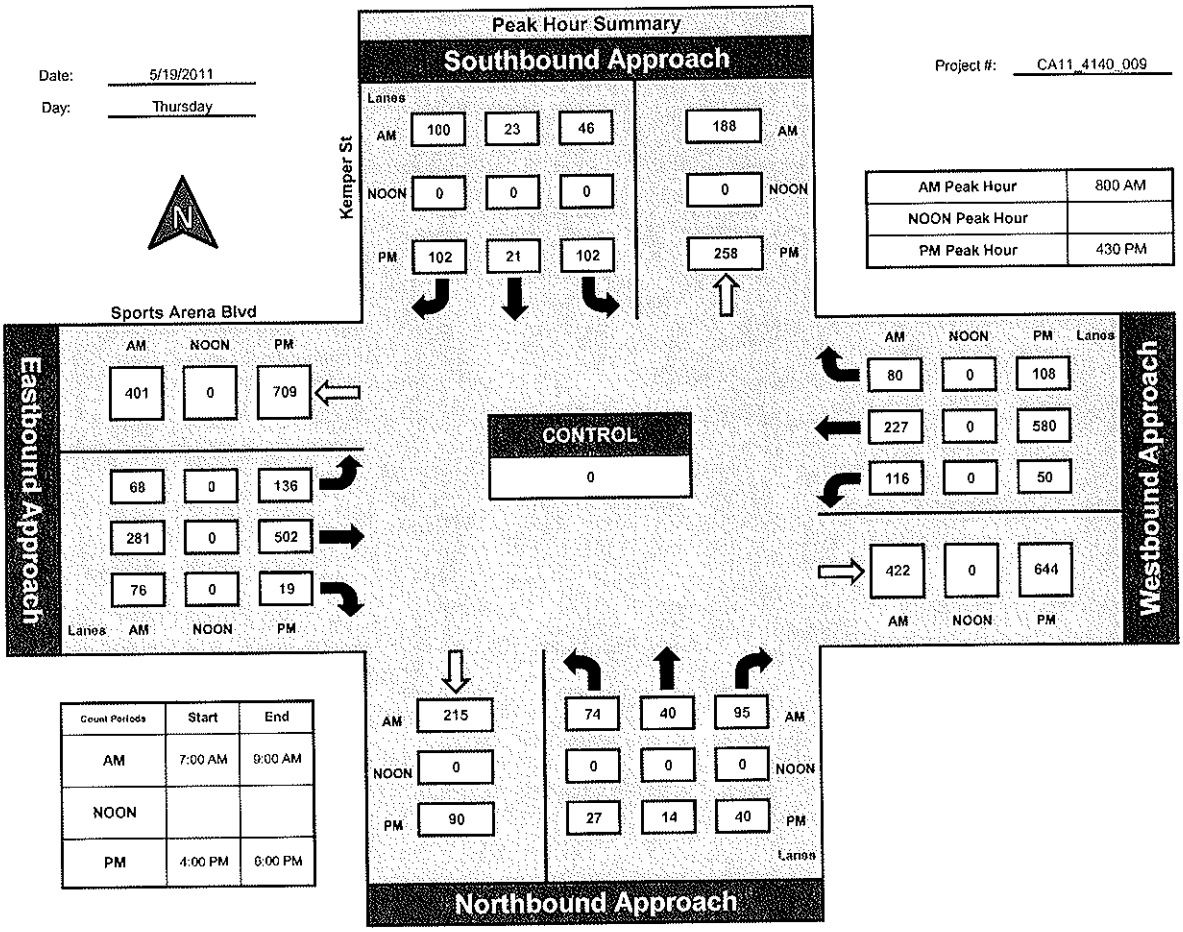
CONTROL :

ITM Peak Hour Summary

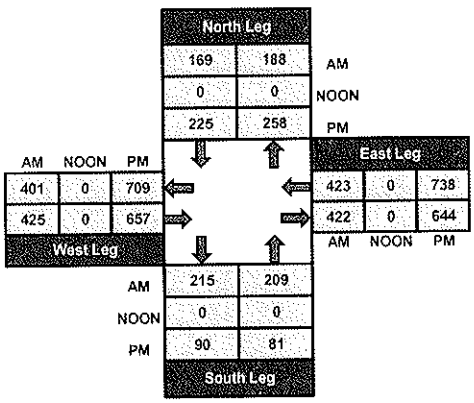
Prepared by:

National Data & Surveying Services

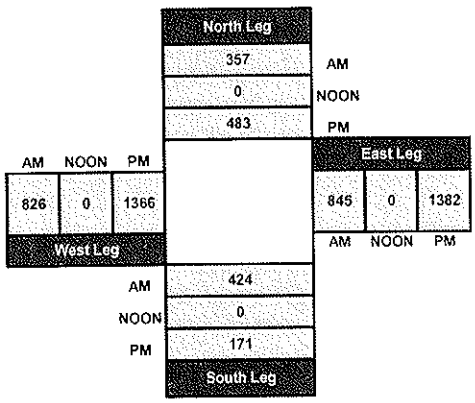
Kemper St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(13)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_010

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	0	1	2	0	4	11	69	12	1	63	1	171
7:15 AM	4	0	4	2	2	4	16	74	11	2	73	5	197
7:30 AM	5	0	1	7	0	5	14	87	15	1	96	2	233
7:45 AM	7	0	3	1	0	8	12	81	10	2	87	3	214
8:00 AM	7	1	0	5	0	7	20	65	11	4	78	2	200
8:15 AM	4	0	3	4	1	10	23	75	7	2	82	5	216
8:30 AM	6	3	2	5	1	11	16	66	9	2	92	11	224
8:45 AM	9	1	3	11	1	12	13	76	12	2	106	7	253
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	49	5	17	37	5	61	125	593	87	16	677	36	1708
APPROACH %'s :	69.01%	7.04%	23.94%	35.92%	4.85%	59.22%	15.53%	73.66%	10.81%	2.19%	92.87%	4.94%	
PEAK HR START TIME	[illegible]												
PEAK HR VOL	[illegible]												
PEAK HR FACTOR	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

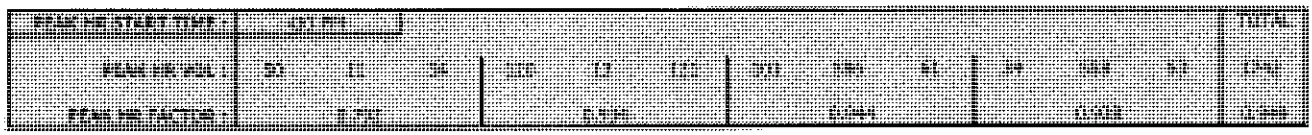
National Data & Surveying Services

Project ID: CA11_4140_010 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	12	3	7	18	3	37	35	146	10	4	136	13	424
4:15 PM	8	9	8	22	3	40	25	139	17	9	131	14	425
4:30 PM	17	4	9	25	2	36	25	152	17	8	146	18	459
4:45 PM	7	2	4	33	3	32	24	129	15	7	138	8	402
5:00 PM	15	3	9	33	5	24	24	162	12	6	143	11	447
5:15 PM	11	2	12	29	3	29	28	143	17	13	131	16	434
5:30 PM	11	2	9	20	0	24	13	149	19	10	130	13	400
5:45 PM	13	0	10	33	3	23	25	131	21	9	131	17	416
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	94	25	68	213	22	245	199	1151	128	66	1086	110	3407
APPROACH %'s :	50.27%	13.37%	36.36%	44.38%	4.58%	51.04%	13.46%	77.88%	8.66%	5.23%	86.05%	8.72%	



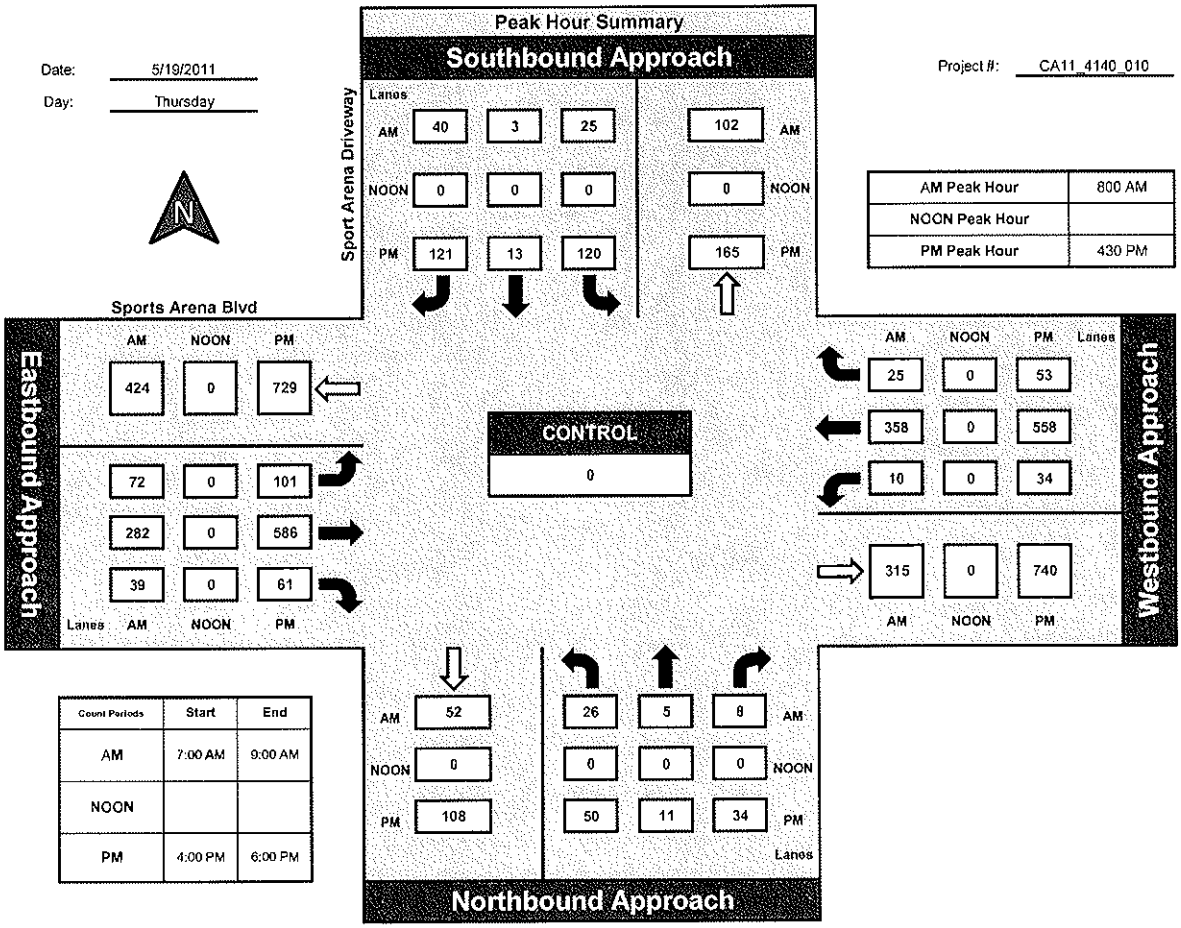
CONTROL :

ITM Peak Hour Summary

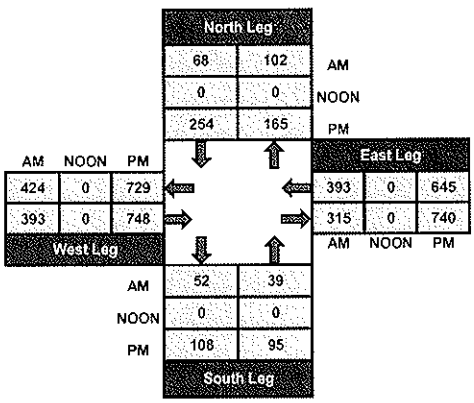
Prepared by:

National Data & Surveying Services

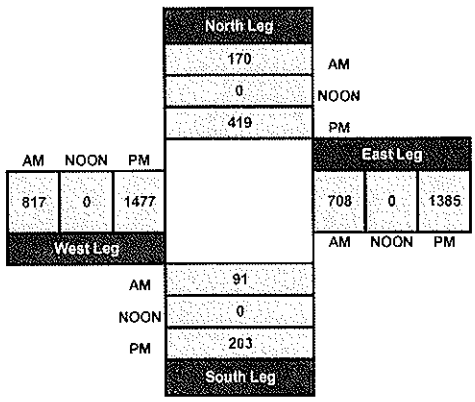
Sport Arena Driveway and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(14)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	0	5			0	3	77	1	7	98	10	203
7:15 AM	2	0	6			0	7	83	5	5	117	8	233
7:30 AM	1	0	2			0	7	122	9	8	121	9	279
7:45 AM	1	1	9			0	6	105	9	11	139	5	286
8:00 AM	3	0	10			1	5	108	6	6	135	10	284
8:15 AM	3	0	8			0	8	146	5	9	144	8	331
8:30 AM	3	0	5			0	11	131	6	8	161	9	334
8:45 AM	4	0	11			1	6	139	9	18	149	9	346
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	1	56	0	0	2	53	911	50	72	1064	68	2296
APPROACH %'s :	25.00%	1.32%	73.68%	0.00%	0.00%	100.00%	5.23%	89.84%	4.93%	5.98%	88.37%	5.65%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]			[illegible]			[illegible]			[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	5	1	21			1	11	196	23	26	179	5	468
4:15 PM	8	1	14			4	5	183	25	26	198	3	467
4:30 PM	3	1	11			0	5	202	33	30	217	2	504
4:45 PM	8	2	10			0	1	193	29	41	177	1	462
5:00 PM	6	1	20			1	0	189	24	18	190	0	449
5:15 PM	7	0	19			0	1	175	22	25	221	0	470
5:30 PM	8	1	24			1	3	181	20	30	194	0	462
5:45 PM	12	1	20			3	0	193	15	24	194	1	463
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	57	8	139	0	0	10	26	1512	191	220	1570	12	3745
APPROACH %'s :	27.94%	3.92%	68.14%	0.00%	0.00%	100.00%	1.50%	87.45%	11.05%	12.21%	87.13%	0.67%	
PEAK HR START TIME :	4:0 PM												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

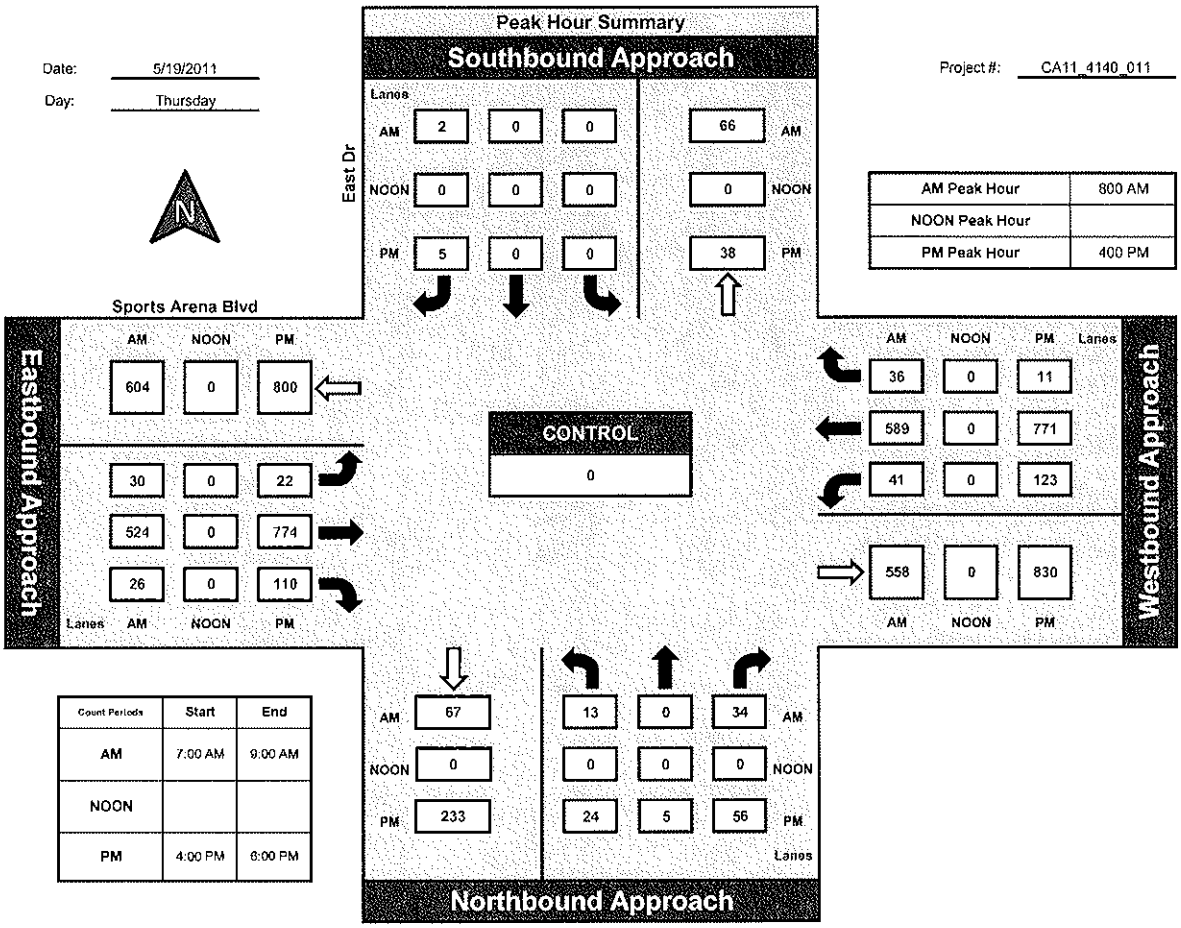
National Data & Surveying Services

East Dr and Sports Arena Blvd , City of San Diego

Date: 5/19/2011

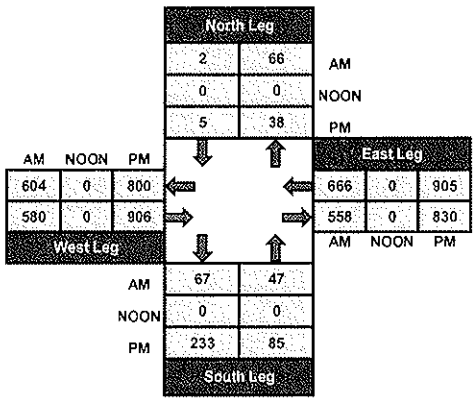
Day: Thursday

Project #: CA11_4140_011

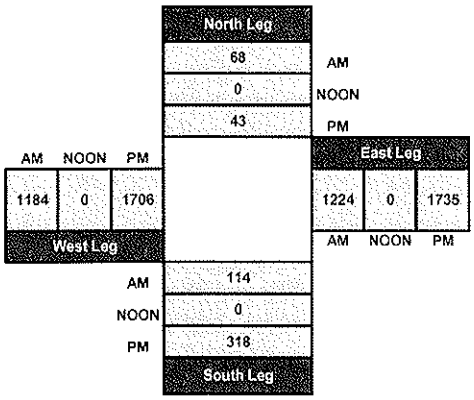


AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Total Ins & Outs



Total Volume Per Leg



(15)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

(15)

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

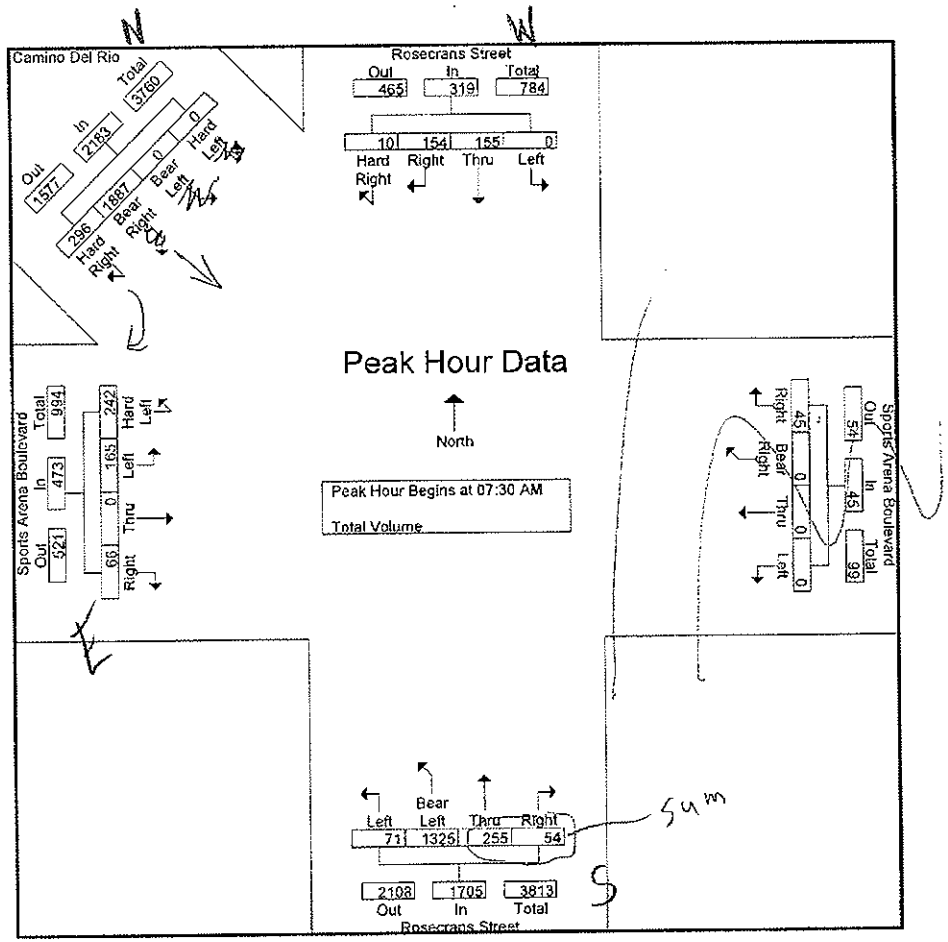
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
06:45 AM	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
Total	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
07:00 AM	0	25	23	1	49	0	0	0	8	8	20	227	39	4	290	42	30	0	15	87	0	0	504	54	558	992
07:15 AM	0	31	36	1	68	0	0	0	13	13	15	292	57	8	372	53	33	0	9	95	0	0	495	65	560	1108
07:30 AM	0	36	28	2	66	0	0	0	10	10	25	343	56	9	433	80	51	0	17	148	0	0	419	54	473	1130
07:45 AM	0	47	48	3	98	0	0	0	9	9	14	310	67	21	412	54	41	0	18	113	0	0	525	80	605	1237
Total	0	139	135	7	281	0	0	0	40	40	74	1172	219	42	1507	229	155	0	59	443	0	0	1943	253	2196	4467
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	74	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	15	15	23	351	58	13	445	50	43	0	18	111	0	0	454	88	542	1202
08:30 AM	0	45	44	4	93	0	0	0	18	18	27	322	64	9	422	62	37	0	16	115	0	0	352	67	419	1067
Grand Total	0	278	283	16	577	0	0	0	88	88	151	2378	457	85	3071	432	295	0	118	845	0	0	3653	542	4195	8776
Apprch %	0	48.2	49	2.8		0	0	0	100		4.9	77.4	14.9	2.8		51.1	34.9	0	14		0	0	87.1	12.9		
Total %	0	3.2	3.2	0.2	6.6	0	0	0	1	1	1.7	27.1	5.2	1	35	4.9	3.4	0	1.3	9.6	0	0	41.6	6.2	47.8	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:30 AM																										
07:30 AM	0	36	28	2	66	0	0	0	10	10	**25**	343	56	9	433	**80**	**51**	0	17	**148**	0	0	419	54	473	1130
07:45 AM	0	**47**	**48**	3	**98**	0	0	0	9	9	14	310	67	**21**	412	54	41	0	**18**	113	0	0	**525**	80	**605**	**1237**
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	**74**	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	**15**	**15**	23	**351**	58	13	445	50	43	0	18	111	0	0	454	**88**	542	1202
Total Volume	0	155	154	10	319	0	0	0	45	45	71	1325	255	54	1705	242	165	0	66	473	0	0	1887	296	2183	4725
% App. Total	0	48.6	48.3	3.1		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	86.4	13.6		
PHF	.000	.824	.802	.625	.814	.000	.000	.000	.750	.750	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.899	.841	.902	.955

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					07:45 AM					07:30 AM					07:30 AM					07:15 AM				
+0 mins.	0	47	48	3	98	0	0	0	9	9	25	343	56	9	433	80	51	0	17	148	0	0	495	65	560
+15 mins.	0	34	31	1	66	0	0	0	11	11	14	310	67	21	412	54	41	0	18	113	0	0	419	54	473
+30 mins.	0	38	47	4	89	0	0	0	15	15	9	321	74	11	415	58	30	0	13	101	0	0	525	80	605
+45 mins.	0	45	44	4	93	0	0	0	18	18	23	351	58	13	445	50	43	0	18	111	0	0	489	74	563
Total Volume	0	164	170	12	346	0	0	0	53	53	71	1325	255	54	1705	242	165	0	66	473	0	0	1928	273	2201
% App. Total	0	47.4	49.1	3.5		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	87.6	12.4	
PHF	.000	.872	.885	.750	.883	.000	.000	.000	.736	.736	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.918	.853	.910

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

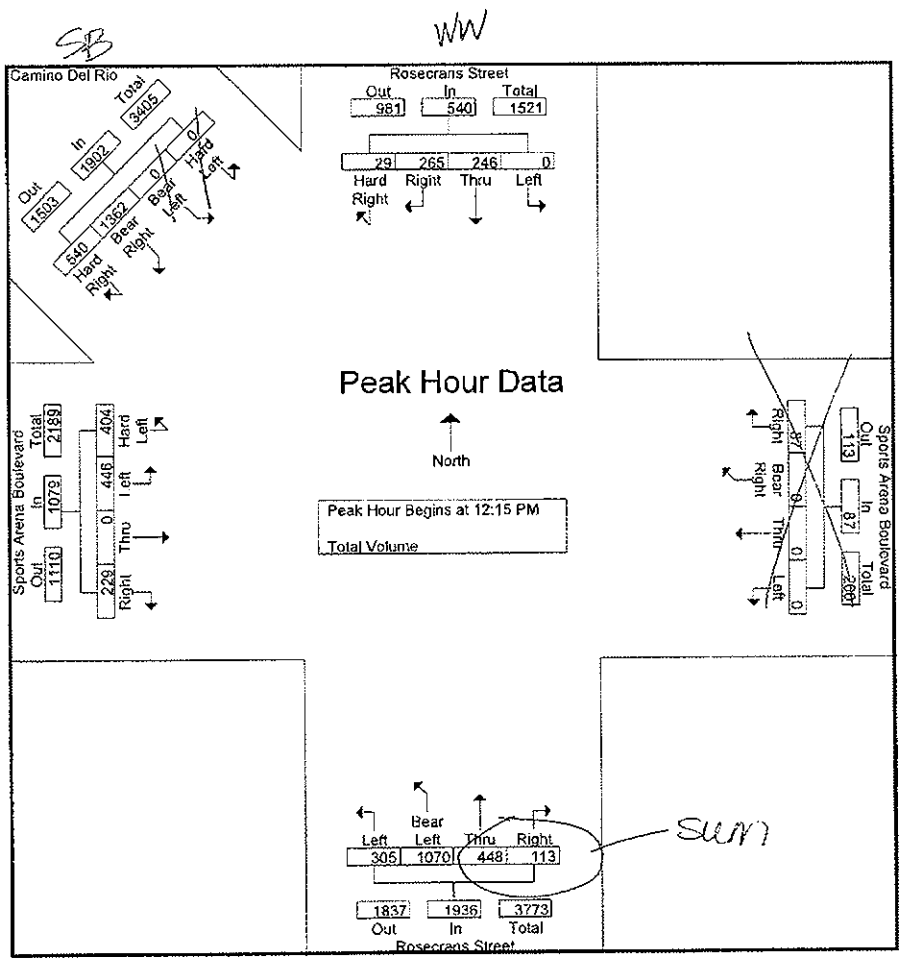
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
11:30 AM	0	55	87	6	148	0	0	0	25	25	81	228	100	26	435	86	79	0	48	213	0	0	328	132	460	1281
11:45 AM	0	47	93	7	147	0	0	0	23	23	79	246	104	18	447	84	86	0	53	223	0	0	377	161	538	1378
Total	0	102	180	13	295	0	0	0	48	48	160	474	204	44	882	170	165	0	101	436	0	0	705	293	998	2659
12:00 PM	0	73	90	2	165	0	0	0	19	19	71	252	99	9	431	93	105	0	59	257	0	0	328	146	474	1346
12:15 PM	0	66	70	7	143	0	0	0	17	17	93	231	105	23	452	78	93	0	68	239	0	0	353	159	512	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	299	122	27	525	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	10	118	0	0	0	23	23	75	241	116	38	470	95	105	0	43	243	0	0	339	119	458	1312
Total	0	245	284	21	550	0	0	0	81	81	316	1023	442	97	1878	376	418	0	224	1018	0	0	1364	556	1920	5447
01:00 PM	0	74	71	10	155	0	0	0	25	25	60	299	105	25	489	121	133	0	64	318	0	0	326	130	456	1443
01:15 PM	0	51	61	5	117	0	0	0	21	21	48	221	94	18	381	87	122	0	41	250	0	0	330	119	449	1218
Grand Total	0	472	596	49	1117	0	0	0	175	175	584	2017	845	184	3630	754	838	0	430	2022	0	0	2725	1098	3823	10767
Apprch %	0	42.3	53.4	4.4		0	0	0	100		16.1	55.6	23.3	5.1		37.3	41.4	0	21.3		0	0	71.3	28.7		
Total %	0	4.4	5.5	0.5	10.4	0	0	0	1.6	1.6	5.4	18.7	7.8	1.7	33.7	7	7.8	0	4	18.8	0	0	25.3	10.2	35.5	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 12:15 PM																										
12:15 PM	0	66	70	7	143	0	0	0	17	17	**93**	231	105	23	452	78	93	0	**68**	239	0	0	**353**	**159**	**512**	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	**299**	**122**	27	**525**	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	**10**	118	0	0	0	23	23	75	241	116	**38**	470	95	105	0	43	243	0	0	339	119	458	1312
01:00 PM	0	**74**	**71**	10	**155**	0	0	0	**25**	**25**	60	299	105	25	489	**121**	**133**	0	64	**318**	0	0	326	130	456	**1443**
Total Volume	0	246	265	29	540	0	0	0	87	87	305	1070	448	113	1936	404	446	0	229	1079	0	0	1362	540	1902	5544
% App. Total	0	45.6	49.1	5.4		0	0	0	100		15.8	55.3	23.1	5.8		37.4	41.3	0	21.2		0	0	71.6	28.4		
PHF	.000	.831	.933	.725	.871	.000	.000	.000	.870	.870	.820	.895	.918	.743	.922	.835	.838	.000	.842	.848	.000	.000	.965	.849	.929	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:30 AM					12:30 PM					12:15 PM					12:30 PM					11:45 AM				
+0 mins.	0	55	87	6	148	0	0	0	22	22	**93**	231	105	23	452	110	115	0	54	279	0	0	377	**161**	**538**
+15 mins.	0	47	**93**	7	147	0	0	0	23	23	77	**299**	**122**	27	**525**	95	105	0	43	243	0	0	328	146	474
+30 mins.	0	**73**	90	2	**165**	0	0	0	**25**	**25**	75	241	116	38	470	**121**	**133**	0	**64**	**318**	0	0	353	159	512
+45 mins.	0	66	70	7	143	0	0	0	21	21	60	299	105	25	489	87	122	0	41	250	0	0	344	132	476
Total Volume	0	241	340	22	603	0	0	0	91	91	305	1070	448	113	1936	413	475	0	202	1090	0	0	1402	598	2000
% App. Total	0	40	56.4	3.6		0	0	0	100		15.8	55.3	23.1	5.8		37.9	43.6	0	18.5		0	0	70.1	29.9	
PHF	.000	.825	.914	.786	.914	.000	.000	.000	.910	.910	.820	.895	.918	.743	.922	.853	.893	.000	.789	.857	.000	.000	.930	.929	.929

Counts Unlimited Inc.
25286 Jadyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

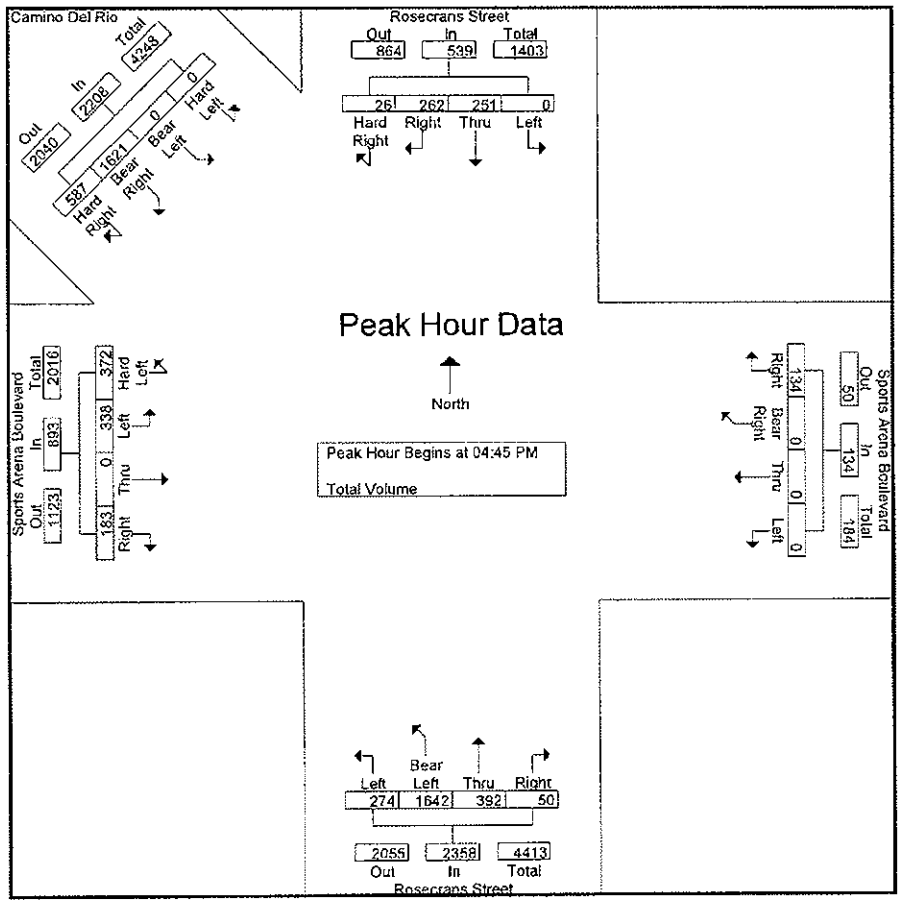
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
04:00 PM	0	47	67	9	123	0	0	0	29	29	50	417	101	17	585	117	81	0	46	244	0	0	384	134	518	1499
04:15 PM	0	60	83	5	148	0	0	0	45	45	60	488	90	21	659	82	84	0	34	200	0	0	403	104	507	1559
04:30 PM	0	51	87	7	145	0	0	0	47	47	54	407	106	18	585	85	78	0	30	193	0	0	368	129	497	1467
04:45 PM	0	55	53	8	116	0	0	0	35	35	58	430	98	19	605	100	90	0	48	238	0	0	425	136	561	1555
Total	0	213	290	29	532	0	0	0	156	156	222	1742	395	75	2434	384	333	0	158	875	0	0	1580	503	2083	6080
05:00 PM	0	61	62	7	130	0	0	0	38	38	62	387	109	12	570	92	78	0	49	219	0	0	397	165	562	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	74	433	92	12	611	87	81	0	40	208	0	0	407	148	555	1557
05:30 PM	0	61	80	6	147	0	0	0	24	24	80	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
05:45 PM	0	62	74	9	145	0	0	0	24	24	63	338	83	16	500	87	85	0	51	223	0	0	381	134	515	1407
Total	0	258	283	27	568	0	0	0	123	123	279	1550	377	47	2253	359	333	0	186	878	0	0	1577	585	2162	5984
Grand Total	0	471	573	56	1100	0	0	0	279	279	501	3292	772	122	4687	743	666	0	344	1753	0	0	3157	1088	4245	12064
Apprch %	0	42.8	52.1	5.1		0	0	0	100		10.7	70.2	16.5	2.6		42.4	38	0	19.6		0	0	74.4	25.6		
Total %	0	3.9	4.7	0.5	9.1	0	0	0	2.3	2.3	4.2	27.3	6.4	1	38.9	6.2	5.5	0	2.9	14.5	0	0	26.2	9	35.2	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 04:45 PM																										
04:45 PM	0	55	53	**8**	116	0	0	0	35	35	58	430	98	**19**	605	**100**	**90**	0	48	**238**	0	0	**425**	136	561	1555
05:00 PM	0	61	62	7	130	0	0	0	**38**	**38**	62	387	**109**	12	570	92	78	0	**49**	219	0	0	397	**165**	**562**	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	**74**	**433**	92	12	**611**	87	81	0	40	208	0	0	407	148	555	**1557**
05:30 PM	0	61	**80**	6	**147**	0	0	0	24	24	**80**	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
Total Volume	0	251	262	26	539	0	0	0	134	134	274	1642	392	50	2358	372	338	0	183	893	0	0	1621	587	2208	6132
% App. Total	0	46.6	48.6	4.8		0	0	0	100		11.6	69.6	16.6	2.1		41.7	37.8	0	20.5		0	0	73.4	26.6		
PHF	.000	.848	.819	.813	.917	.000	.000	.000	.882	.882	.856	.948	.899	.658	.965	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982	.985

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					04:15 PM					04:00 PM					04:45 PM					04:45 PM				
+0 mins.	0	61	62	7	130	0	0	0	45	45	50	417	101	17	585	**100**	**90**	0	48	**238**	0	0	425	136	561
+15 mins.	0	**74**	67	5	146	0	0	0	**47**	**47**	**60**	**488**	90	**21**	**659**	92	78	0	**49**	219	0	0	397	**165**	**562**
+30 mins.	0	61	**80**	6	**147**	0	0	0	35	35	54	407	**106**	18	585	87	81	0	40	208	0	0	407	148	555
+45 mins.	0	62	74	9	145	0	0	0	38	38	58	430	98	19	605	93	89	0	46	228	0	0	392	138	530
Total Volume	0	258	283	27	568	0	0	0	165	165	222	1742	395	75	2434	372	338	0	183	893	0	0	1621	587	2208
% App. Total	0	45.4	49.8	4.8		0	0	0	100		9.1	71.6	16.2	3.1		41.7	37.8	0	20.5		0	0	73.4	26.6	
PHF	.000	.872	.884	.750	.966	.000	.000	.000	.878	.878	.925	.892	.932	.893	.923	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982

(17)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		134			120	3			2				259
7:15 AM		137			103	5			7				252
7:30 AM		130			110	3			3				246
7:45 AM		182			135	5			10				332
8:00 AM		183			156	4			10				353
8:15 AM		175			134	6			7				322
8:30 AM		138			143	9			10				300
8:45 AM		147			130	6			14				297

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1226	0	0	1031	41	0	0	63	0	0	0	2361
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	96.18%	3.82%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		228			224	4			32				488
4:15 PM		210			202	6			26				444
4:30 PM		211			222	3			30				466
4:45 PM		203			196	6			29				434
5:00 PM		206			234	7			33				480
5:15 PM		190			181	1			32				404
5:30 PM		142			171	3			22				338
5:45 PM		125			180	2			13				320

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1515	0	0	1610	32	0	0	217	0	0	0	3374
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	98.05%	1.95%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[illegible]													
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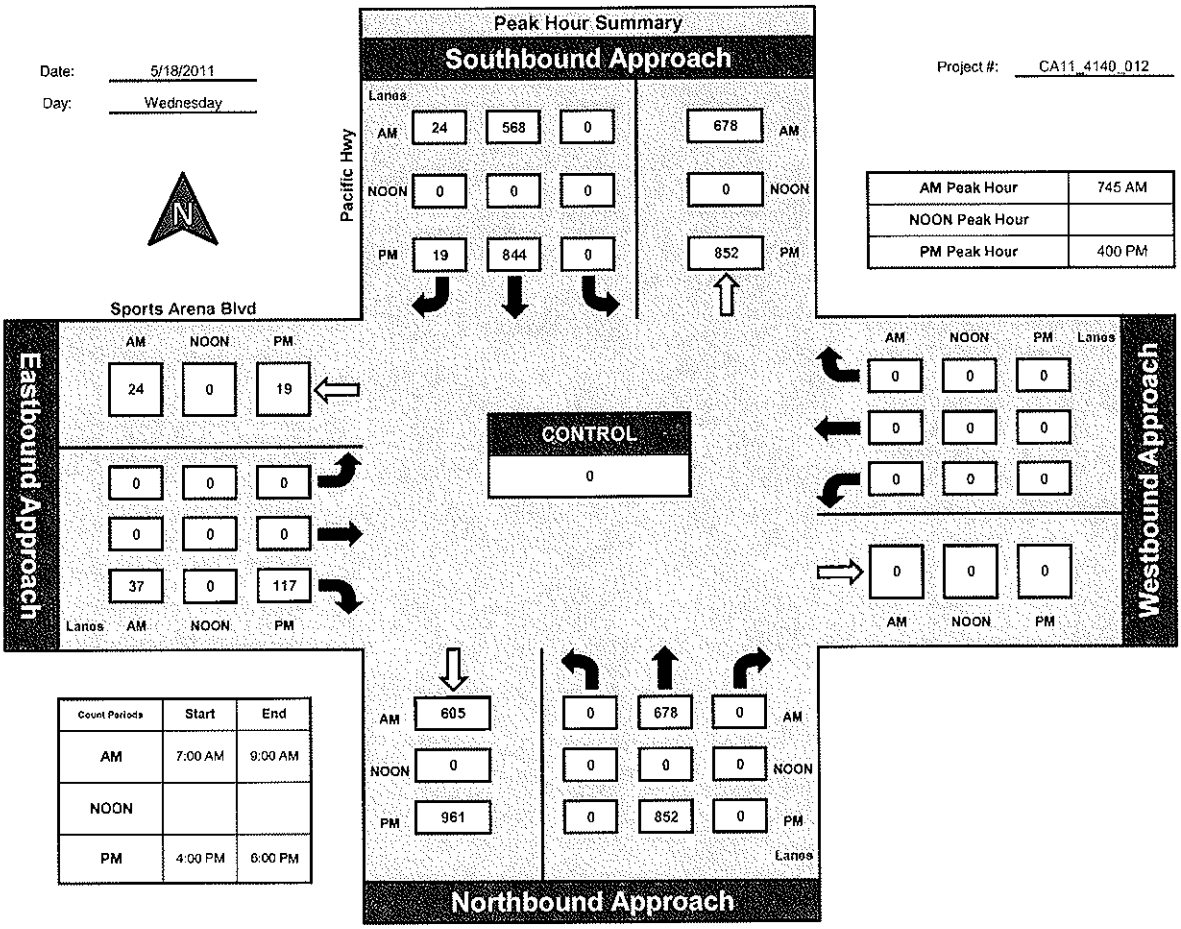
CONTROL :

ITM Peak Hour Summary

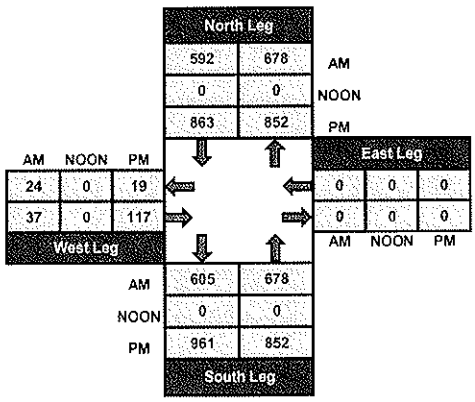
Prepared by:

National Data & Surveying Services

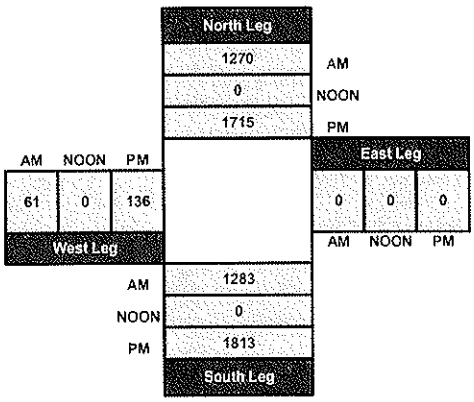
Pacific Hwy and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(18)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

Day: THURSDAY

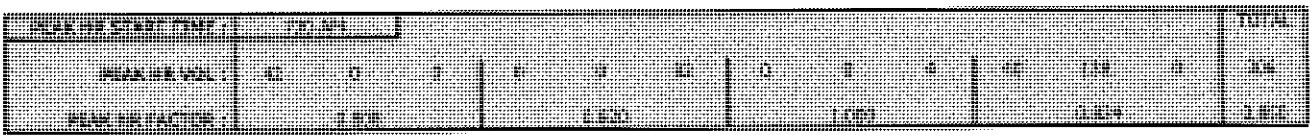
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0					5	0		0	0	6		11
7:15 AM	1					18	0		1	10	28		58
7:30 AM	13					18	0		1	13	32		77
7:45 AM	10					19	0		1	5	32		67
8:00 AM	10					25	0		1	16	38		90
8:15 AM	9					20	0		1	6	36		72
8:30 AM	17					14	1		2	12	30		76
8:45 AM	9					18	0		0	13	26		66

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	69	0	0	0	0	137	1	0	7	75	228	0	517
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	12.50%	0.00%	87.50%	24.75%	75.25%	0.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

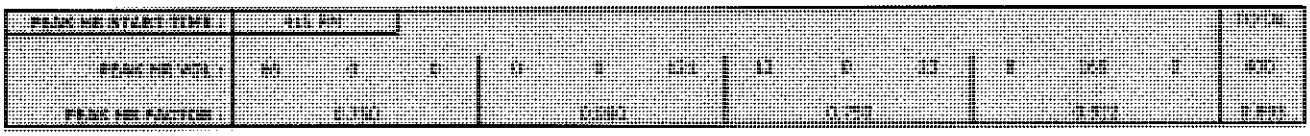
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	8					13	1		0	0	21		43
4:15 PM	22					32	5		7	3	42		111
4:30 PM	22					34	2		6	2	46		112
4:45 PM	9					23	3		3	3	41		82
5:00 PM	13					32	3		7	0	40		95
5:15 PM	11					22	1		10	0	43		87
5:30 PM	10					16	2		8	1	26		63
5:45 PM	11					13	2		12	0	32		70
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	106	0	0	0	0	185	19	0	53	9	291	0	663
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	26.39%	0.00%	73.61%	3.00%	97.00%	0.00%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

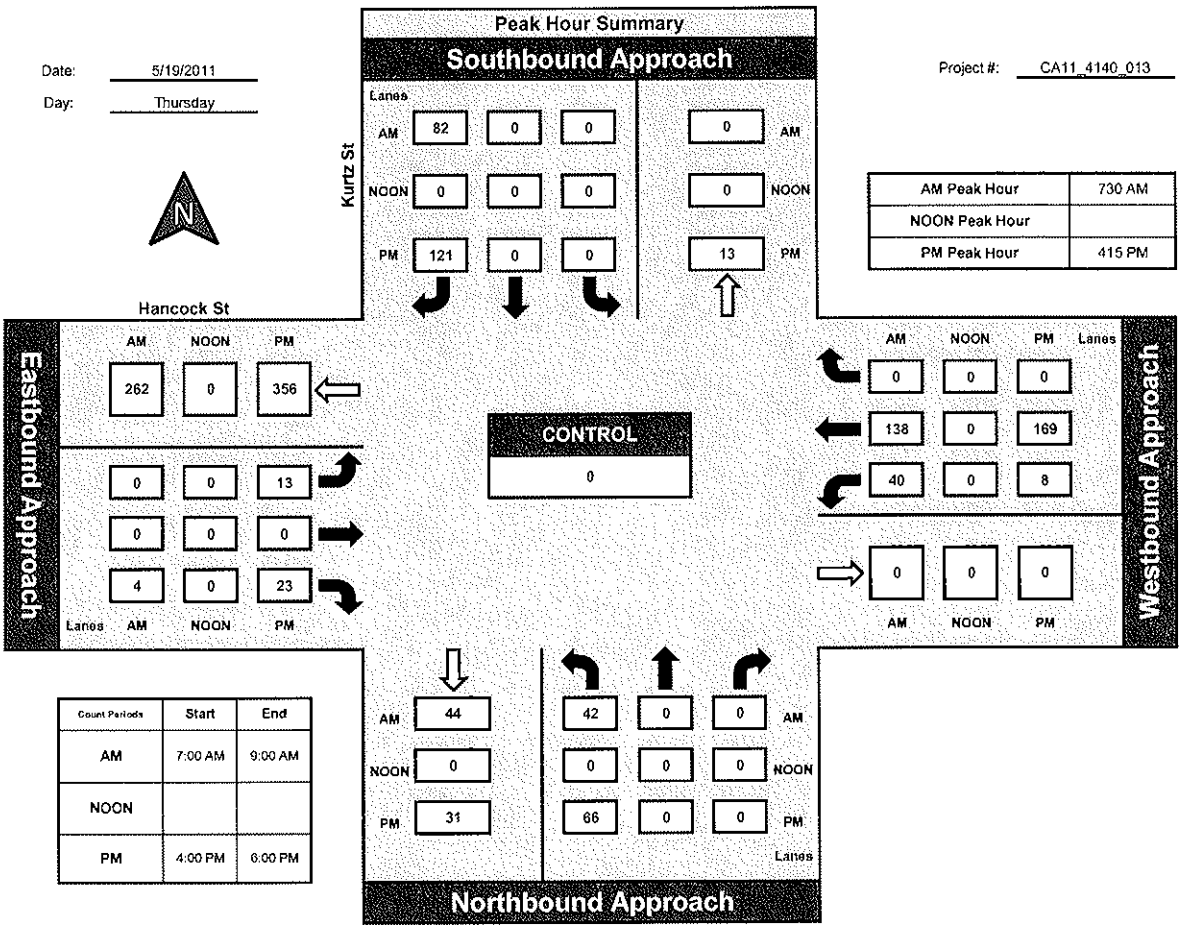
National Data & Surveying Services

Kurtz St and Hancock St , City of San Diego

Date: 5/19/2011

Day: Thursday

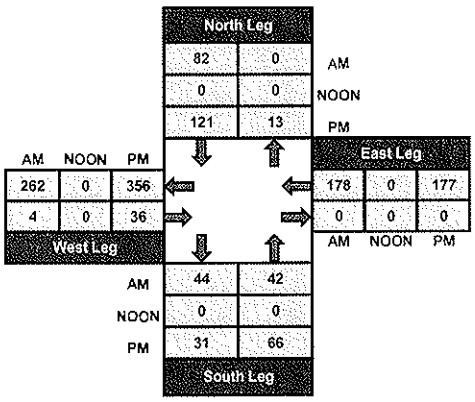
Project #: CA11_4140_013



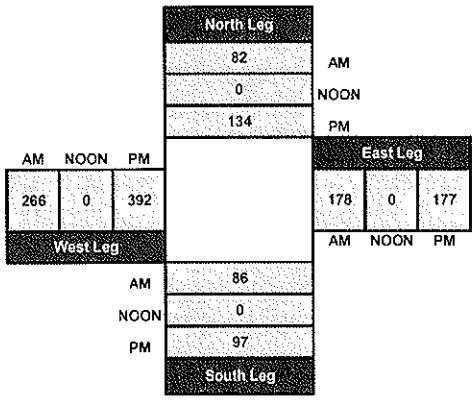
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

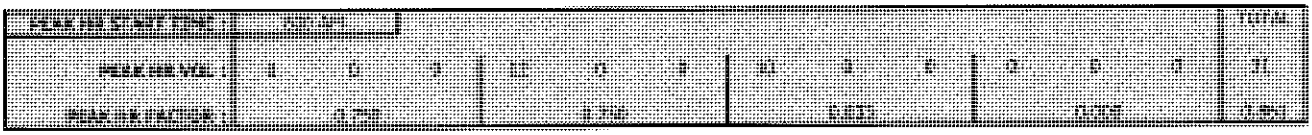
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM			3	0			1						4
7:15 AM			2	3			0						5
7:30 AM			1	1			3						5
7:45 AM			2	1			3						6
8:00 AM			1	4			1						6
8:15 AM			2	3			3						8
8:30 AM			3	3			3						9
8:45 AM			3	2			3						8

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	17	17	0	0	17	0	0	0	0	0	51
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM			4	2			3						9
4:15 PM			0	3			2						5
4:30 PM			2	1			1						4
4:45 PM			3	0			3						6
5:00 PM			2	1			2						5
5:15 PM			2	0			0						2
5:30 PM			2	1			0						3
5:45 PM			1	0			1						2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	16	8	0	0	12	0	0	0	0	0	36
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

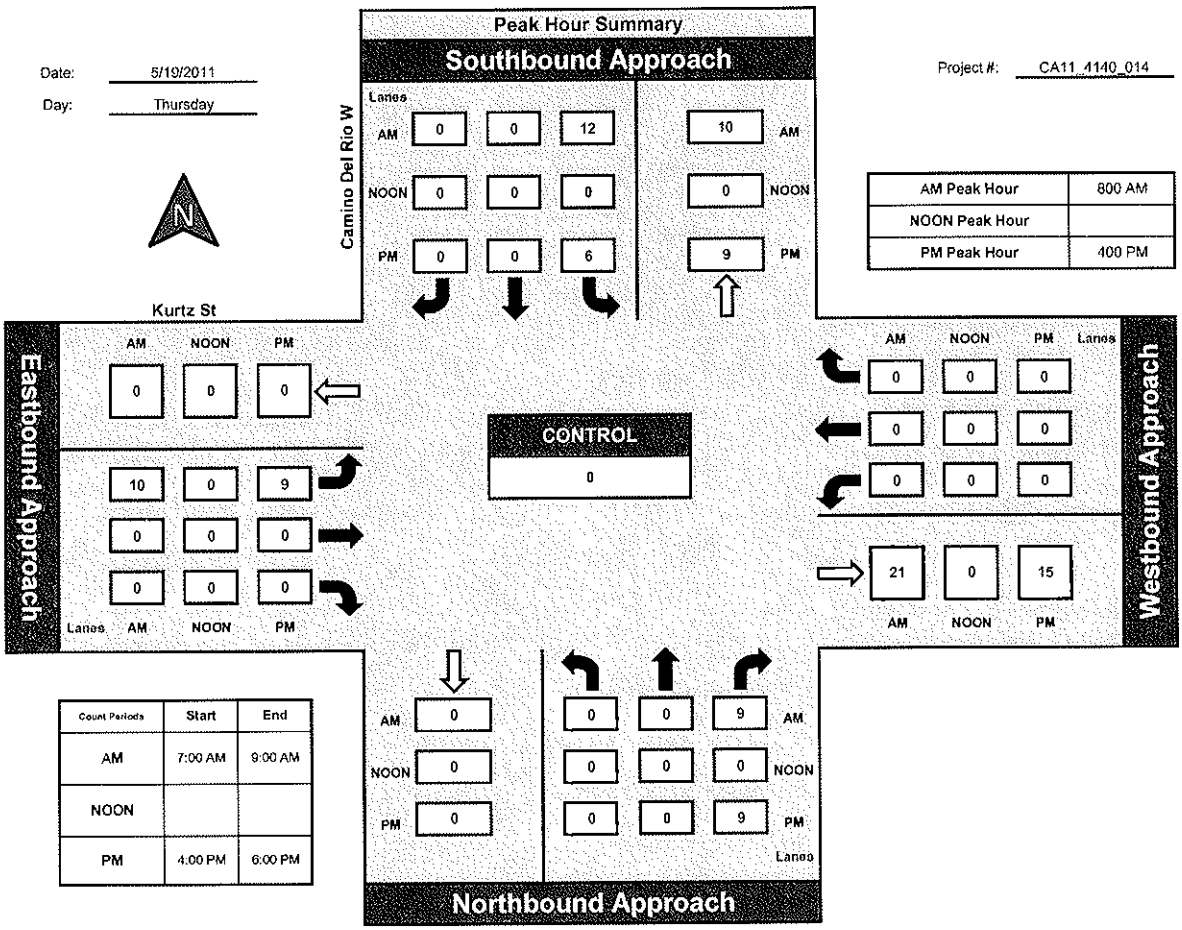
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

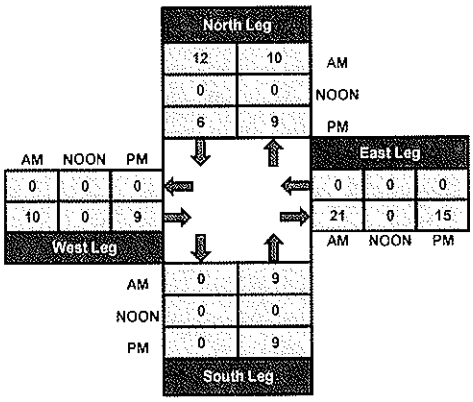
Project #: CA11_4140_014



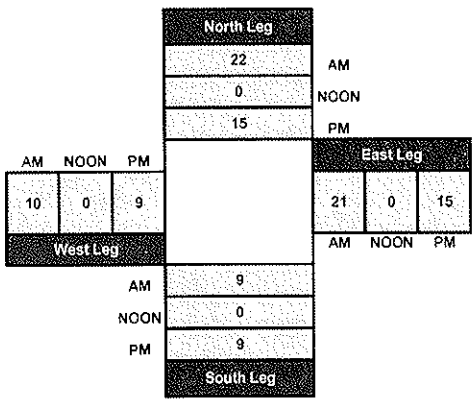
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				2									2
7:15 AM				1									1
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				2									2
8:15 AM				4									4
8:30 AM				2									2
8:45 AM				3									3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	17	0	0	0	0	0	0	0	0	17
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				5									5
4:15 PM				2									2
4:30 PM				3									3
4:45 PM				6									6
5:00 PM				0									
5:15 PM				3									3
5:30 PM				5									5
5:45 PM				4									4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	28	0	0	0	0	0	0	0	0	28
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

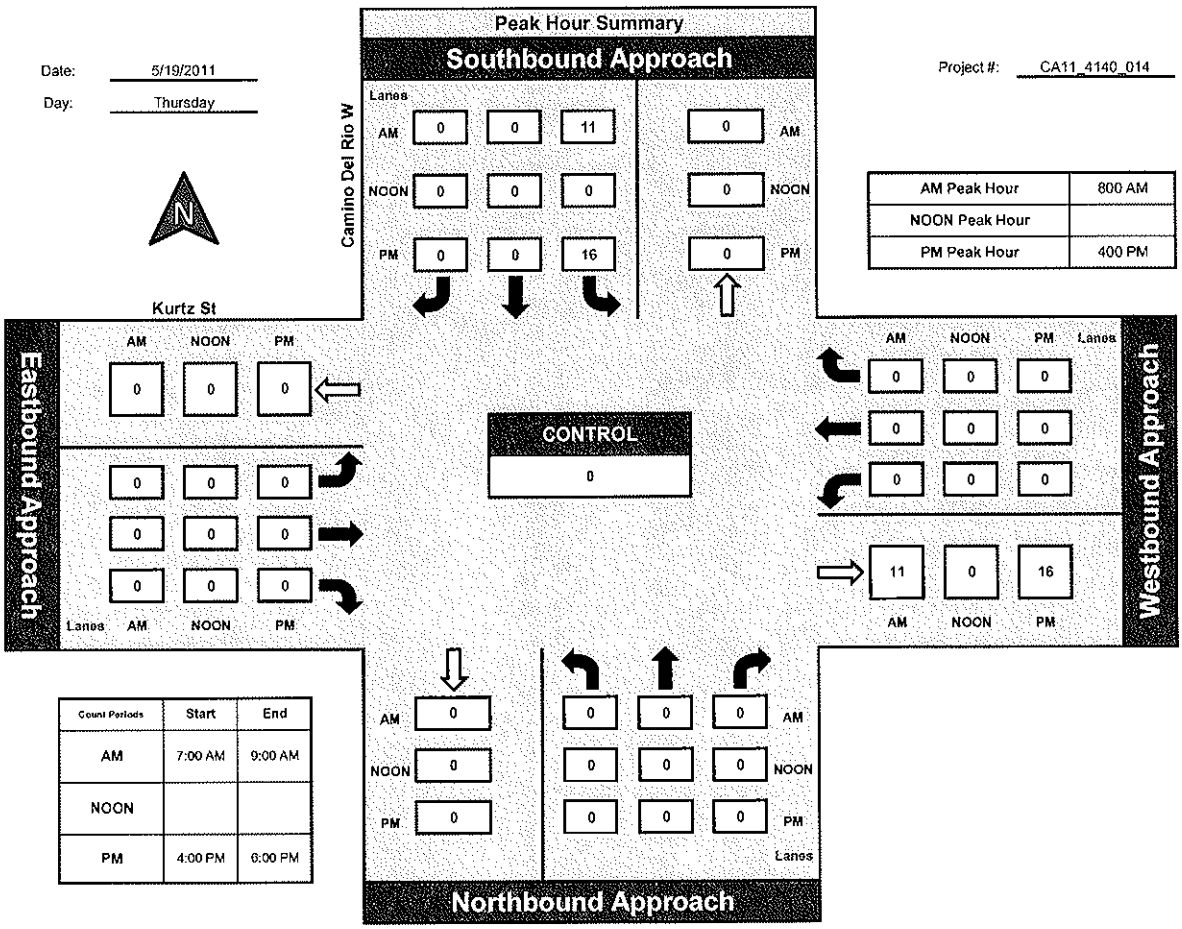
CONTROL :

ITM Peak Hour Summary

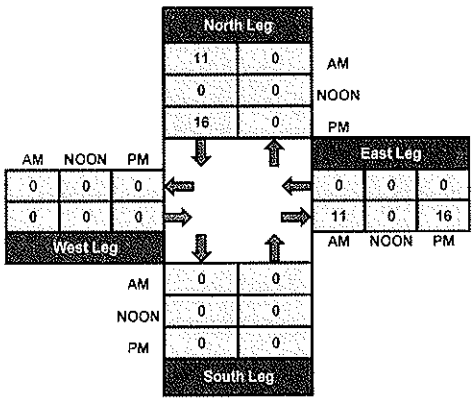
Prepared by:

National Data & Surveying Services

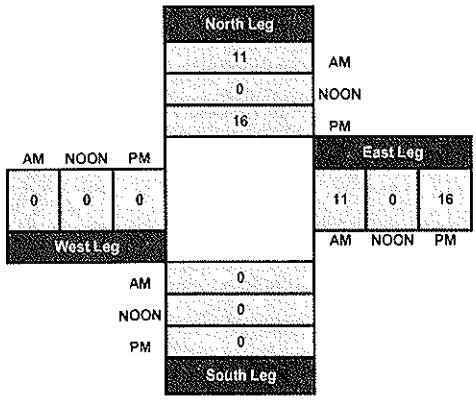
Camino Del Rio W and Kurtz St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

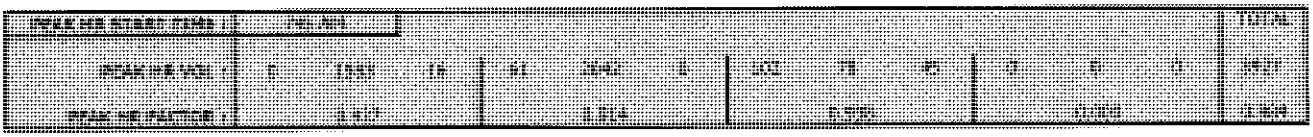
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		217	1	12	475		26	6	6				743
7:15 AM		330	2	8	521		18	13	9				901
7:30 AM		425	1	17	498		28	17	5				991
7:45 AM		386	5	5	524		22	15	17				974
8:00 AM		348	2	13	562		23	26	11				985
8:15 AM		427	4	18	468		25	20	8				970
8:30 AM		422	5	25	488		32	17	9				998
8:45 AM		368	4	23	479		38	23	18				953

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2923	24	121	4015	0	212	137	83	0	0	0	7515
APPROACH %'s :	0.00%	99.19%	0.81%	2.93%	97.07%	0.00%	49.07%	31.71%	19.21%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

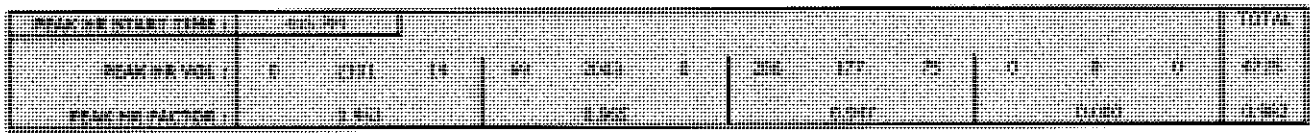
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		500	3	22	447		68	36	14				1090
4:15 PM		547	2	22	510		67	34	21				1203
4:30 PM		553	2	19	466		82	41	16				1179
4:45 PM		495	8	20	498		63	51	21				1156
5:00 PM		506	2	8	529		74	51	17				1187
5:15 PM		489	2	9	531		67	36	20				1154
5:30 PM		417	11	9	507		62	23	12				1041
5:45 PM		438	2	13	563		42	31	12				1101

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3945	32	122	4051	0	525	303	133	0	0	0	9111
APPROACH %'s :	0.00%	99.20%	0.80%	2.92%	97.08%	0.00%	54.63%	31.53%	13.84%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

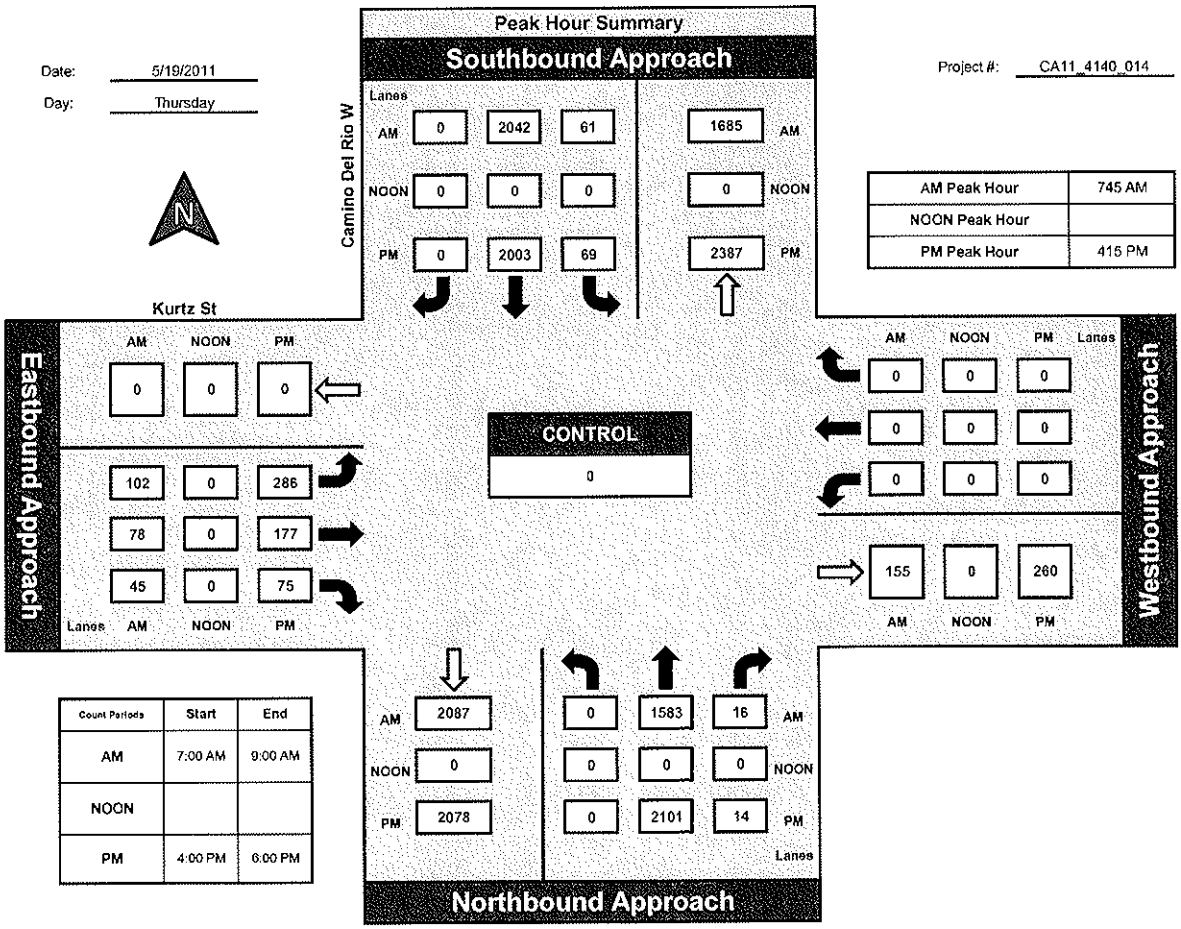
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

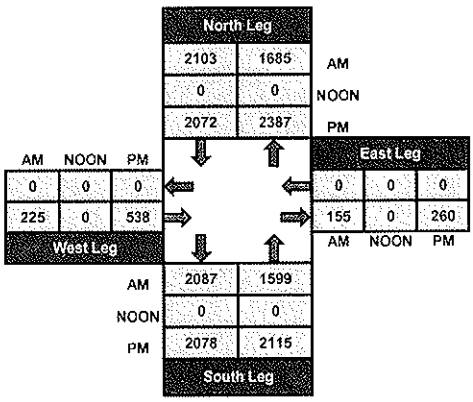
Project #: CA11_4140_014



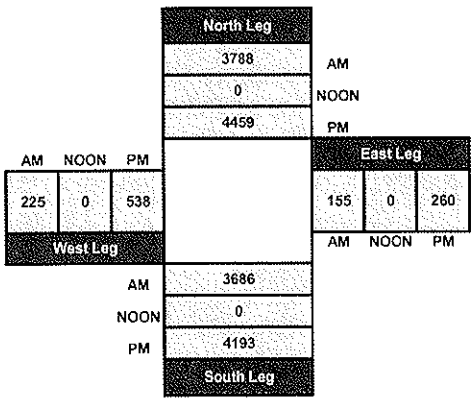
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(20)

6

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

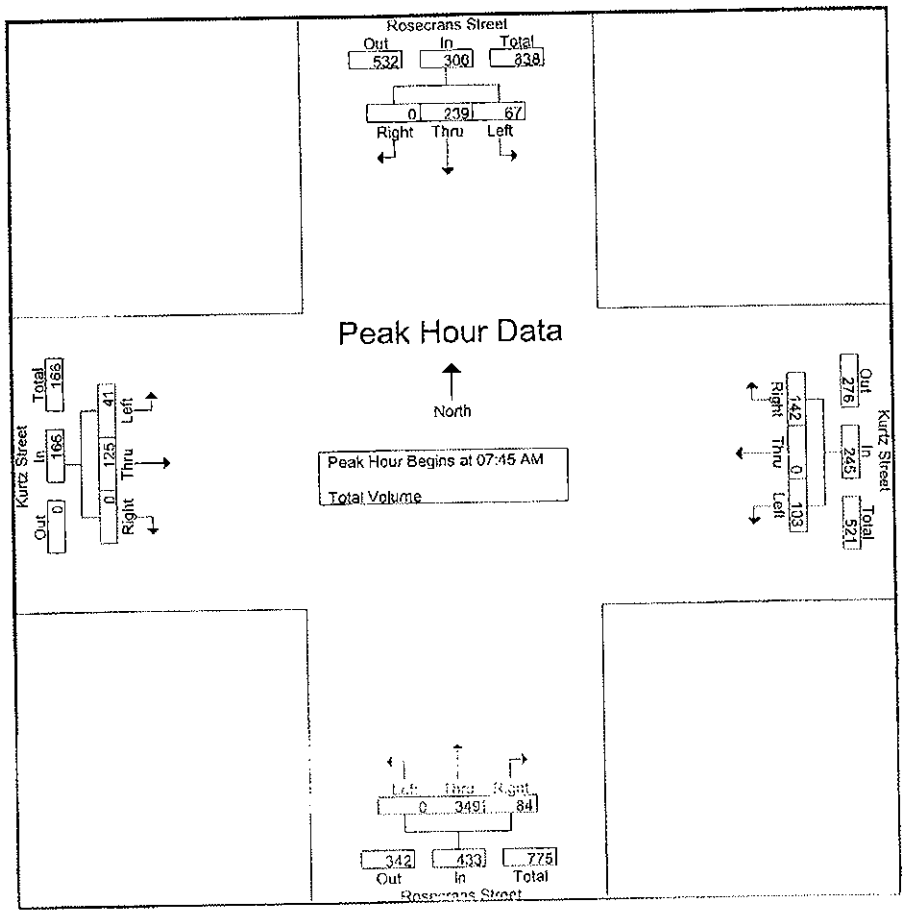
	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
Total	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
07:00 AM	18	36	0	54	17	0	28	45	0	50	23	73	6	26	0	32	204
07:15 AM	28	42	0	70	19	0	33	52	0	68	22	90	4	31	0	35	247
07:30 AM	19	58	0	77	16	0	35	51	0	77	29	106	10	35	0	45	279
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
Total	85	206	0	291	73	0	131	204	0	287	93	380	30	118	0	148	1023
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Grand Total	153	399	0	552	178	0	276	454	0	601	178	779	69	244	0	313	2098
Apprch %	27.7	72.3	0		39.2	0	60.8		0	77.2	22.8		22	78	0		
Total %	7.3	19	0	26.3	8.5	0	13.2	21.6	0	28.6	8.5	37.1	3.3	11.6	0	14.9	

	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	41	125	0	166	1150
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		24.7	75.3	0		
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.946	.913	.975	.854	.744	.000	.767	.913

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	20	70	0	90	21	0	35	56	0	92	19	111	10	35	0	45
+15 mins.	18	44	0	62	18	0	38	56	0	80	23	103	10	26	0	36
+30 mins.	15	61	0	76	36	0	38	74	0	91	20	111	11	26	0	37
+45 mins.	14	64	0	78	28	0	31	59	0	86	22	108	12	42	0	54
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	43	129	0	172
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		25	75	0	
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.948	.913	.975	.896	.768	.000	.796

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

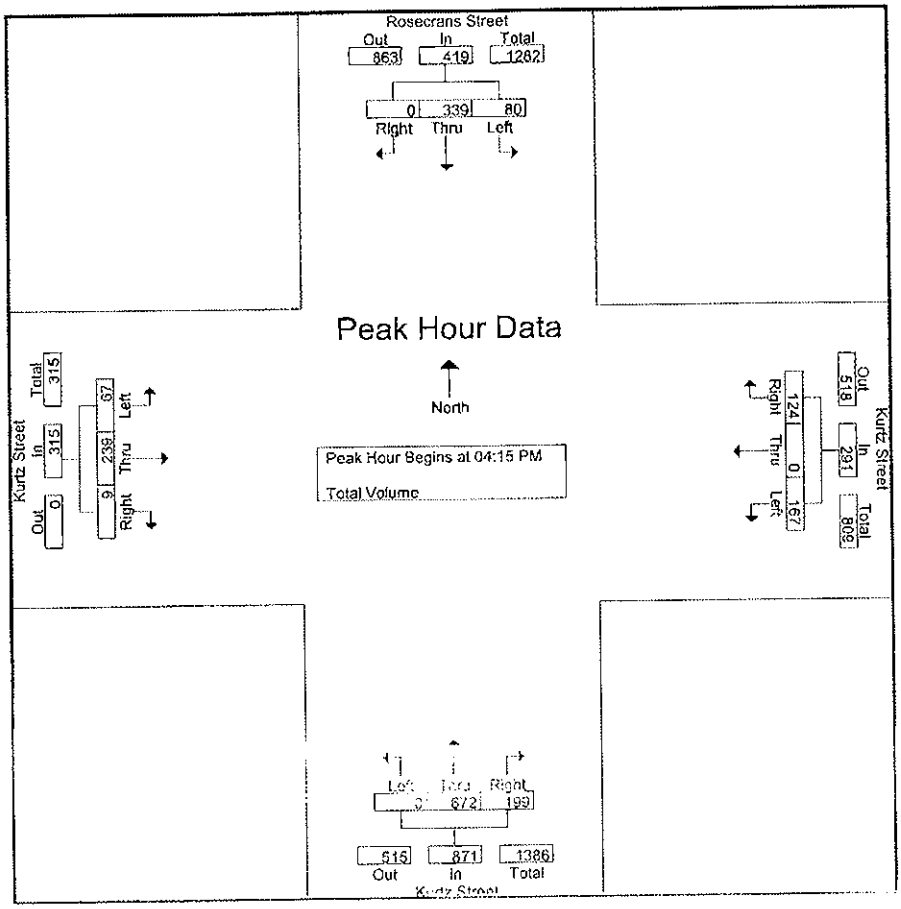
	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	19	88	0	107	34	0	32	66	0	167	48	215	12	60	3	75	463
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
Total	85	342	0	427	170	0	132	302	0	660	205	865	60	228	8	296	1890
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
05:15 PM	10	93	0	103	40	0	35	75	0	150	47	197	15	44	4	63	438
05:30 PM	17	100	0	117	36	0	27	63	0	151	49	200	23	40	2	65	445
05:45 PM	11	105	0	116	45	0	20	65	0	133	45	178	12	35	3	50	409
Total	52	383	0	435	152	0	106	258	0	613	183	796	69	190	13	272	1761
Grand Total	137	725	0	862	322	0	238	560	0	1273	388	1661	129	418	21	568	3651
Apprch %	15.9	84.1	0		57.5	0	42.5		0	76.6	23.4		22.7	73.6	3.7		
Total %	3.8	19.9	0	23.6	8.8	0	6.5	15.3	0	34.9	10.6	45.5	3.5	11.4	0.6	15.6	

	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
Total Volume	80	339	0	419	167	0	124	291	0	672	199	871	67	239	9	315	1896
% App. Total	19.1	80.9	0		57.4	0	42.6		0	77.2	22.8		21.3	75.9	2.9		
PHF	.714	.808	.000	.927	.819	.000	.800	.856	.000	.938	.843	.976	.698	.841	.563	.838	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM								04:15 PM							
+0 mins.	14	85	0	99	34	0	32	66	0	165	51	216	12	60	2	74
+15 mins.	10	93	0	103	49	0	36	85	0	152	59	211	13	53	2	68
+30 mins.	17	100	0	117	51	2	25	76	0	174	47	221	21	55	1	77
+45 mins.	11	105	0	116	36	0	39	75	0	179	42	221	19	71	4	94
Total Volume	52	383	0	435	170	0	132	302	0	672	199	871	67	239	9	315
% App. Total	12	88	0		56.3	0	43.7		0	77.2	22.8		21.3	75.9	2.9	
PHF	.765	.912	.000	.929	.833	.000	.846	.888	.000	.939	.843	.976	.698	.842	.563	.838

(21)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	54	78			77	3			43				255
7:15 AM	57	76			71	2			42				248
7:30 AM	55	84			69	1			44				253
7:45 AM	78	101			91	1			58				329
8:00 AM	68	107			95	1			67				338
8:15 AM	89	99			80	4			65				337
8:30 AM	59	84			87	3			57				290
8:45 AM	56	80			66	2			73				277

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	516	709	0	0	636	17	0	0	449	0	0	0	2327
APPROACH %'s :	42.12%	57.88%	0.00%	0.00%	97.40%	2.60%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

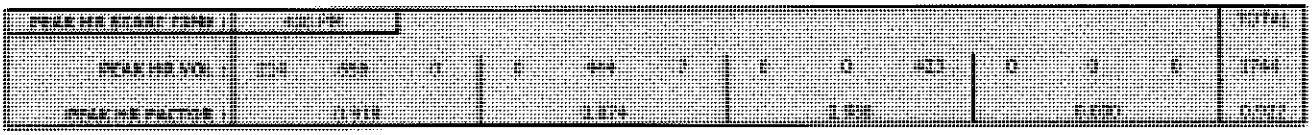
Project ID: CA11_4140_015 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	59	178			127	2			107				473
4:15 PM	38	185			100	3			106				432
4:30 PM	67	146			123	1			104				441
4:45 PM	50	147			94	1			106				398
5:00 PM	36	176			120	2			125				459
5:15 PM	47	137			69	3			110				366
5:30 PM	44	96			83	5			91				319
5:45 PM	39	90			86	1			103				319

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	380	1155	0	0	802	18	0	0	852	0	0	0	3207
APPROACH %'s :	24.76%	75.24%	0.00%	0.00%	97.80%	2.20%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

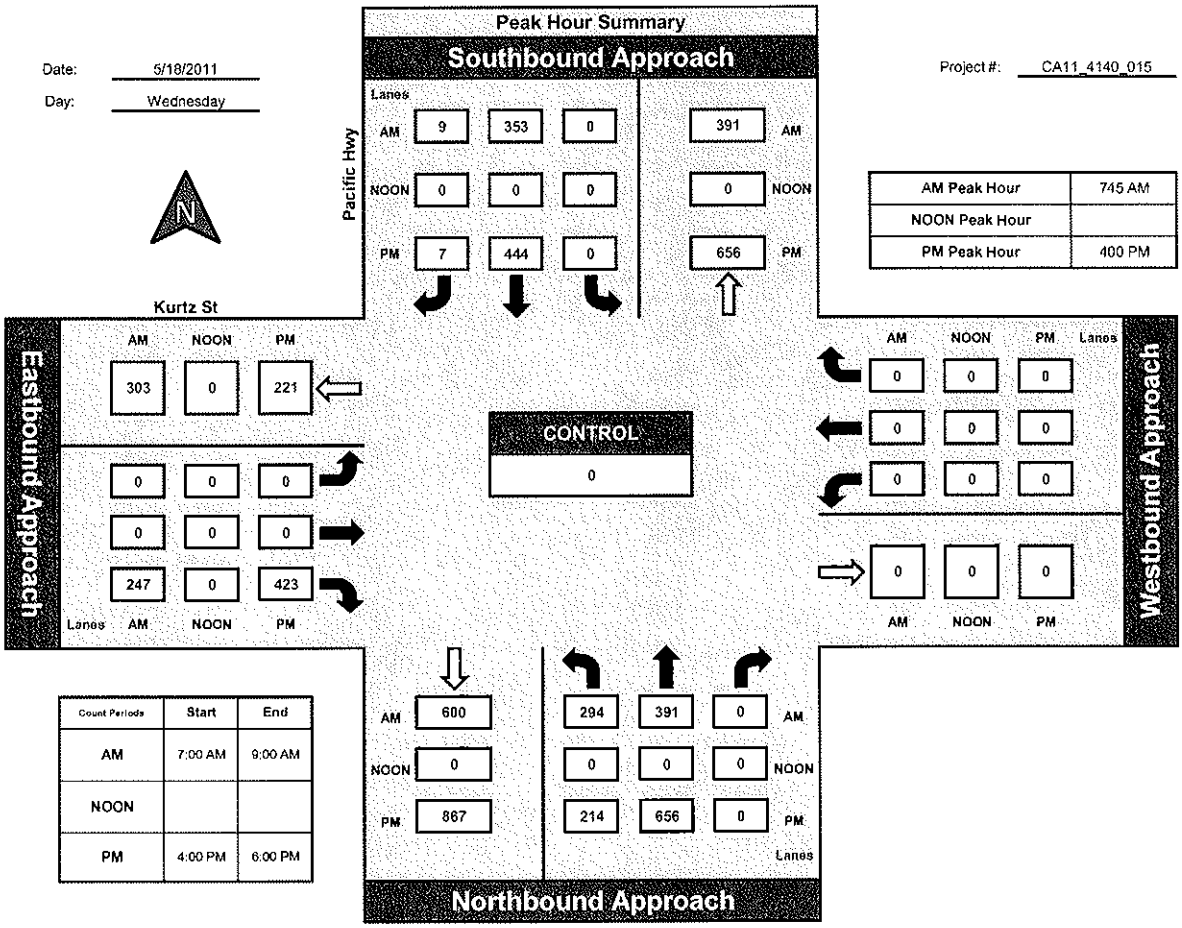
National Data & Surveying Services

Pacific Hwy and Kurtz St , City of San Diego

Date: 5/18/2011

Day: Wednesday

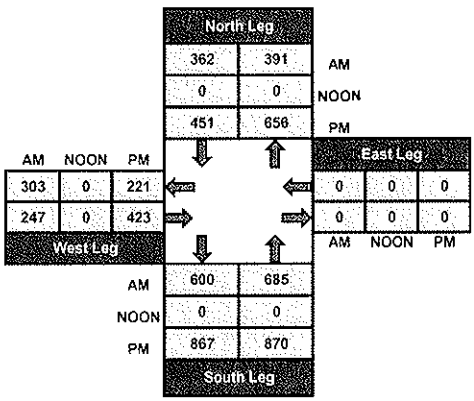
Project #: CA11_4140_015



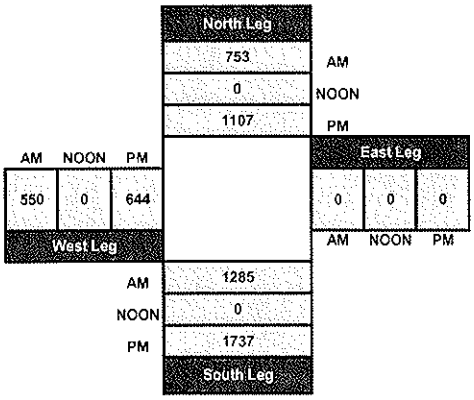
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(23)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

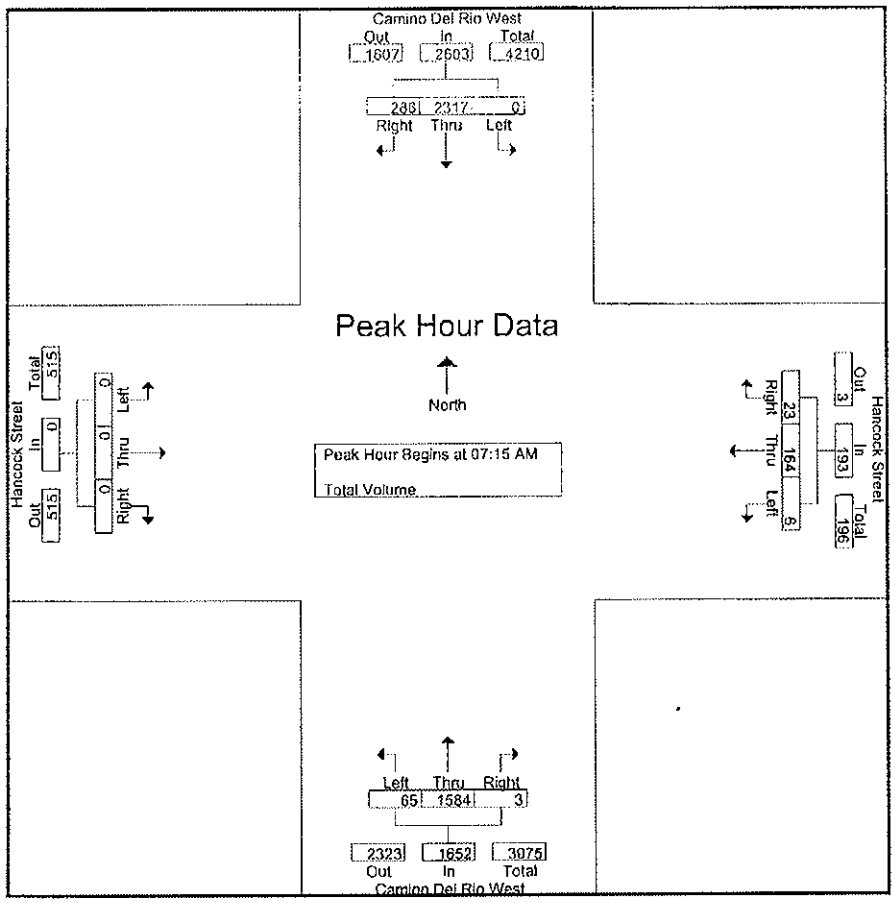
	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
Total	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
07:00 AM	0	589	35	624	9	12	8	29	15	279	9	303	0	0	0	0	956
07:15 AM	0	618	39	657	0	30	11	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	3	41	3	47	10	455	0	465	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	3	443	0	0	0	0	1146
Total	0	2311	214	2525	14	122	25	161	56	1498	12	1566	0	0	0	0	4252
08:00 AM	0	595	107	702	1	54	6	61	24	365	0	389	0	0	0	0	1152
08:15 AM	0	515	70	585	2	47	7	56	14	389	1	404	0	0	0	0	1045
08:30 AM	0	425	94	519	6	54	17	77	16	411	0	427	0	0	0	0	1023
Grand Total	0	4371	517	4888	32	289	63	384	124	2888	22	3034	0	0	0	0	8306
Apprch %	0	89.4	10.6		8.3	75.3	16.4		4.1	95.2	0.7		0	0	0		
Total %	0	52.6	6.2	58.8	0.4	3.5	0.8	4.6	1.5	34.8	0.3	36.5	0	0	0	0	

	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**618**	39	657	0	30	**11**	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	**3**	41	3	47	10	**455**	0	**465**	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	**3**	443	0	0	0	0	1146
08:00 AM	0	595	**107**	**702**	1	**54**	6	**61**	**24**	365	0	389	0	0	0	0	**1152**
Total Volume	0	2317	286	2603	6	164	23	193	65	1584	3	1652	0	0	0	0	4448
% App. Total	0	89	11		3.1	85	11.9		3.9	95.9	0.2		0	0	0		
PHF	.000	.937	.668	.927	.500	.759	.523	.791	.677	.870	.250	.888	.000	.000	.000	.000	.965

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				06:45 AM			
+0 mins.	0	618	39	657	2	39	3	44	10	455	0	465	0	0	0	0
+15 mins.	0	525	60	585	1	54	6	61	15	425	3	443	0	0	0	0
+30 mins.	0	579	80	659	2	47	7	56	24	365	0	389	0	0	0	0
+45 mins.	0	595	107	702	6	54	17	77	14	389	1	404	0	0	0	0
Total Volume	0	2317	286	2603	11	194	33	238	63	1634	4	1701	0	0	0	0
% App. Total	0	89	11		4.6	81.5	13.9		3.7	96.1	0.2		0	0	0	
PHF	.000	.937	.668	.927	.458	.898	.485	.773	.656	.898	.333	.915	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

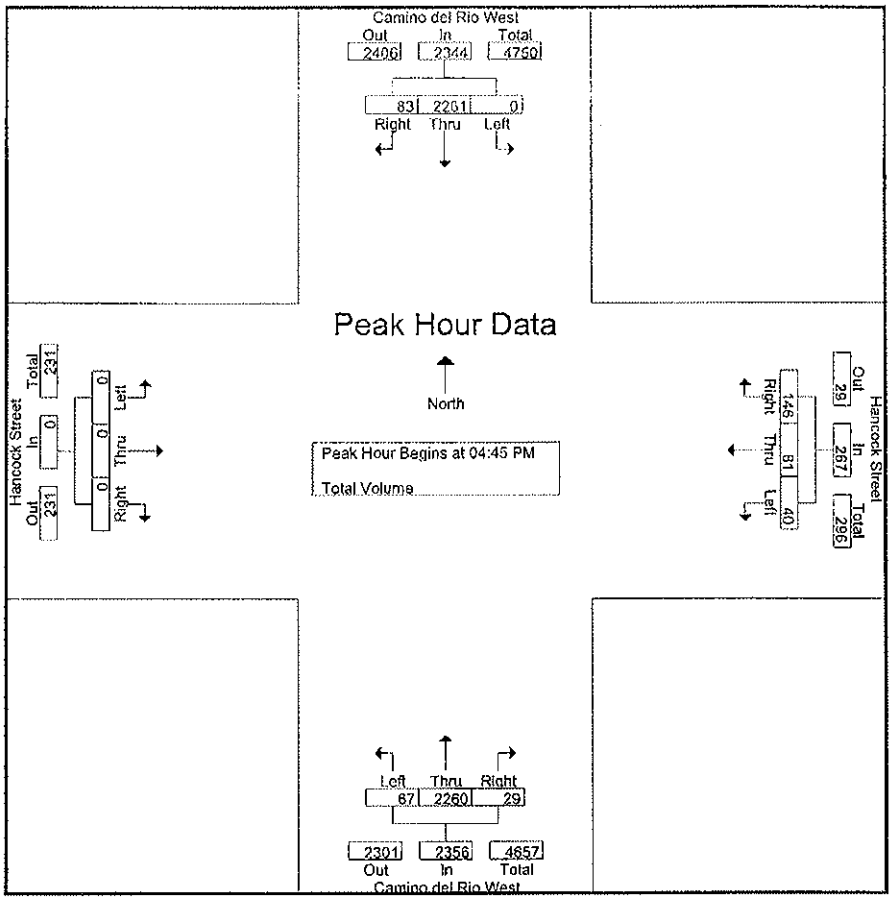
	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	476	31	507	1	34	14	49	17	585	5	607	0	0	0	0	1163
04:15 PM	0	523	30	553	5	23	34	62	11	525	5	541	0	0	0	0	1156
04:30 PM	0	532	25	557	9	21	33	63	11	569	2	582	0	0	0	0	1202
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
Total	0	2061	112	2173	29	97	118	244	68	2264	21	2353	0	0	0	0	4770
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
05:45 PM	0	538	23	561	8	21	27	56	15	489	7	511	0	0	0	0	1128
Total	0	2269	80	2349	34	83	136	253	53	2164	27	2244	0	0	0	0	4846
Grand Total	0	4330	192	4522	63	180	254	497	121	4428	48	4597	0	0	0	0	9616
Apprch %	0	95.8	4.2		12.7	36.2	51.1		2.6	96.3	1		0	0	0		
Total %	0	45	2	47	0.7	1.9	2.6	5.2	1.3	46	0.5	47.8	0	0	0	0	

	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
Total Volume	0	2261	83	2344	40	81	146	267	67	2260	29	2356	0	0	0	0	4967
% App. Total	0	96.5	3.5		15	30.3	54.7		2.8	95.9	1.2		0	0	0		
PHF	.000	.971	.798	.975	.714	.653	.869	.845	.578	.959	.518	.945	.000	.000	.000	.000	.983

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	0	570	20	590	5	23	34	62	11	569	2	582	0	0	0	0
+15 mins.	0	579	18	597	9	21	33	63	29	585	9	623	0	0	0	0
+30 mins.	0	582	19	601	14	19	37	70	11	525	14	550	0	0	0	0
+45 mins.	0	538	23	561	6	31	42	79	19	589	4	612	0	0	0	0
Total Volume	0	2269	80	2349	34	94	146	274	70	2268	29	2367	0	0	0	0
% App. Total	0	96.6	3.4		12.4	34.3	53.3		3	95.8	1.2		0	0	0	
PHF	.000	.975	.870	.977	.607	.758	.869	.867	.603	.963	.518	.950	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

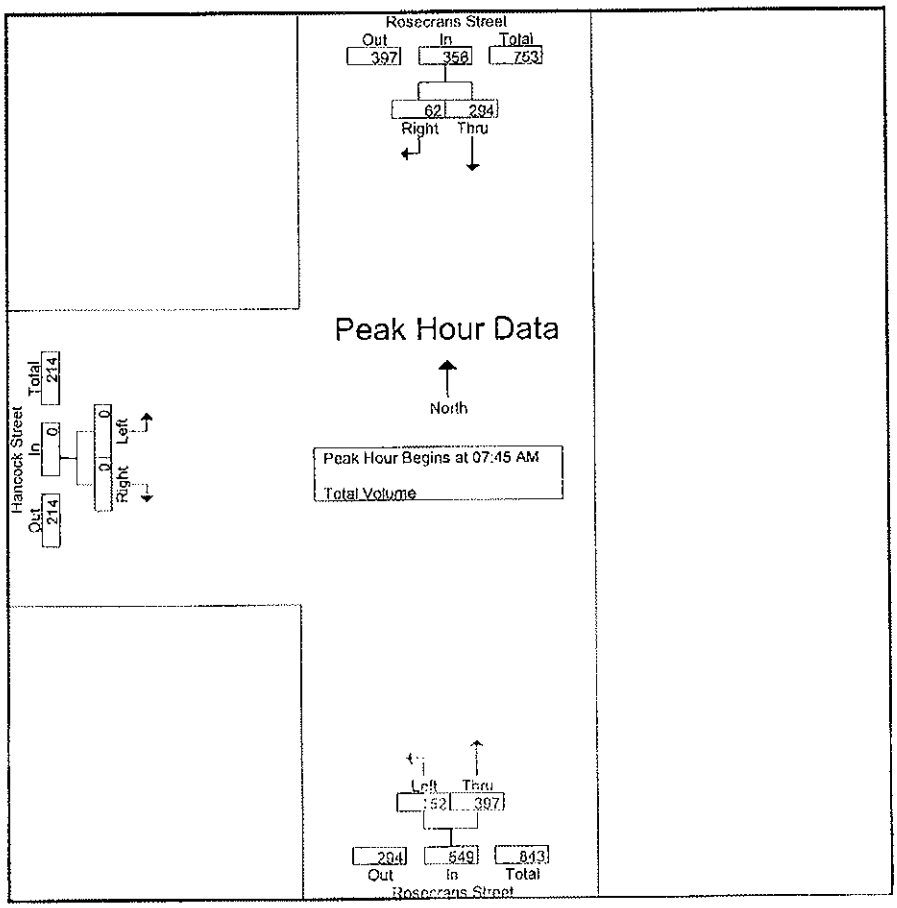
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:45 AM	46	6	52	40	70	110	0	0	0	162
Total	46	6	52	40	70	110	0	0	0	162
07:00 AM	50	5	55	23	59	82	0	0	0	137
07:15 AM	66	13	79	25	93	118	0	0	0	197
07:30 AM	72	19	91	27	101	128	0	0	0	219
07:45 AM	87	14	101	27	116	143	0	0	0	244
Total	275	51	326	102	369	471	0	0	0	797
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Grand Total	528	105	633	267	720	987	0	0	0	1620
Apprch %	83.4	16.6		27.1	72.9		0	0		
Total %	32.6	6.5	39.1	16.5	44.4	60.9	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	87	14	101	27	116	143	0	0	0	244
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Total Volume	294	62	356	152	397	549	0	0	0	905
% App. Total	82.6	17.4		27.7	72.3		0	0		
PHF	.845	.861	.881	.844	.856	.960	.000	.000	.000	.927

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:45 AM			06:45 AM		
+0 mins.	72	19	91	27	116	143	0	0	0
+15 mins.	87	14	101	45	85	130	0	0	0
+30 mins.	60	18	78	44	99	143	0	0	0
+45 mins.	70	16	86	36	97	133	0	0	0
Total Volume	289	67	356	152	397	549	0	0	0
% App. Total	81.2	18.8		27.7	72.3		0	0	
PHF	.830	.882	.881	.844	.856	.960	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

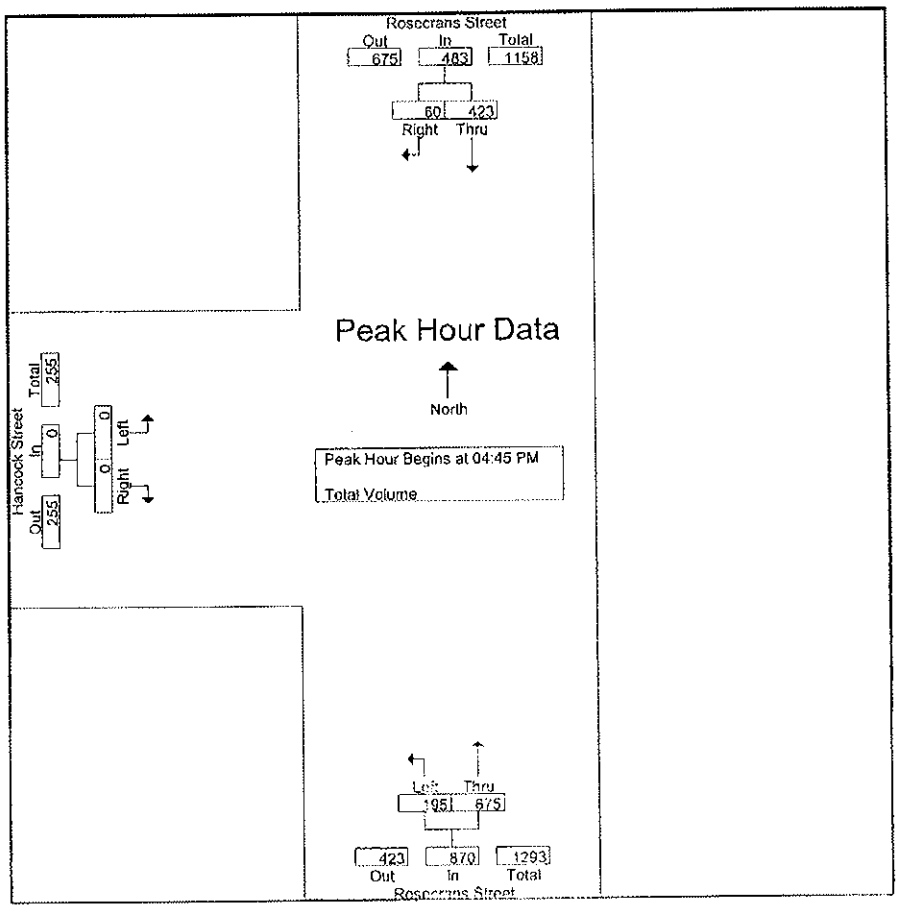
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	104	18	122	48	157	205	0	0	0	327
04:15 PM	109	17	126	53	153	206	0	0	0	332
04:30 PM	106	20	126	44	158	202	0	0	0	328
04:45 PM	89	14	103	51	187	238	0	0	0	341
Total	408	69	477	196	655	851	0	0	0	1328
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
05:45 PM	117	12	129	31	138	169	0	0	0	298
Total	451	58	509	175	626	801	0	0	0	1310
Grand Total	859	127	986	371	1281	1652	0	0	0	2638
Apprch %	87.1	12.9		22.5	77.5		0	0		
Total %	32.6	4.8	37.4	14.1	48.6	62.6	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	89	14	103	51	187	238	0	0	0	341
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
Total Volume	423	60	483	195	675	870	0	0	0	1353
% App. Total	87.6	12.4		22.4	77.6		0	0		
PHF	.896	.882	.901	.956	.902	.914	.000	.000	.00	.990

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			04:00 PM		
+0 mins.	107	17	124	44	158	202	0	0	0
+15 mins.	109	13	122	51	187	238	0	0	0
+30 mins.	118	16	134	51	167	218	0	0	0
+45 mins.	117	12	129	48	168	216	0	0	0
Total Volume	451	58	509	194	680	874	0	0	0
% App. Total	88.6	11.4		22.2	77.8		0	0	
PHF	.956	.853	.950	.951	.909	.918	.000	.000	.000

(25)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				12			37	101				14	164
7:15 AM				16			46	158				24	244
7:30 AM				15			58	111				31	215
7:45 AM				17			60	103				32	212
8:00 AM				12			86	117				23	238
8:15 AM				10			66	76				18	170
8:30 AM				14			43	62				37	156
8:45 AM				22			58	66				27	173
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	118	0	0	454	794	0	0	0	206	1572
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	36.38%	63.62%	0.00%	0.00%	0.00%	100.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021

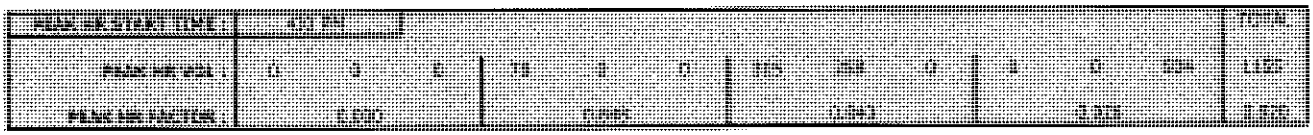
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				11			54	46				124	235
4:15 PM				18			66	63				107	254
4:30 PM				15			66	68				136	285
4:45 PM				17			78	58				116	269
5:00 PM				23			83	50				131	287
5:15 PM				23			88	82				121	314
5:30 PM				14			79	45				54	192
5:45 PM				23			124	38				75	260
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	144	0	0	638	450	0	0	0	864	2096
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	58.64%	41.36%	0.00%	0.00%	0.00%	100.00%	



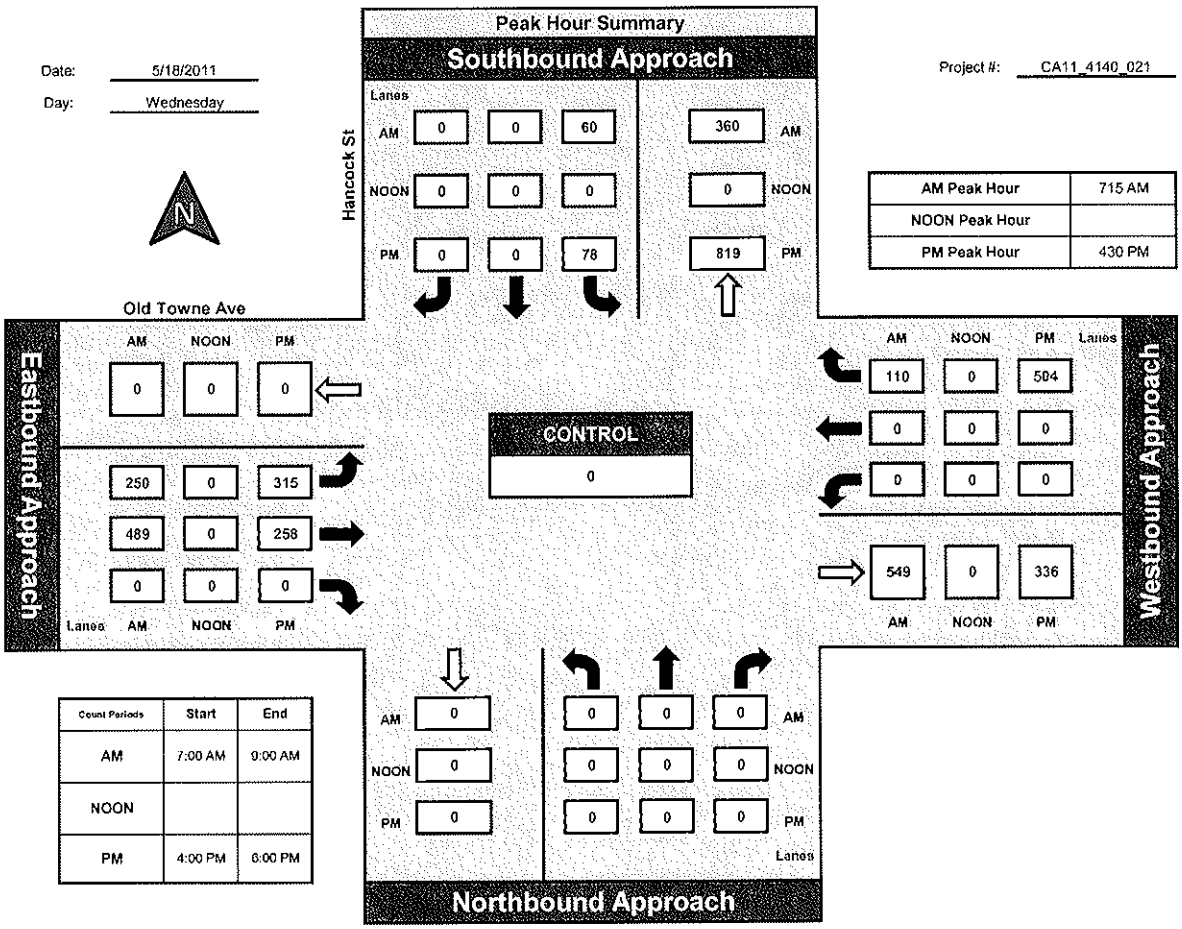
CONTROL :

ITM Peak Hour Summary

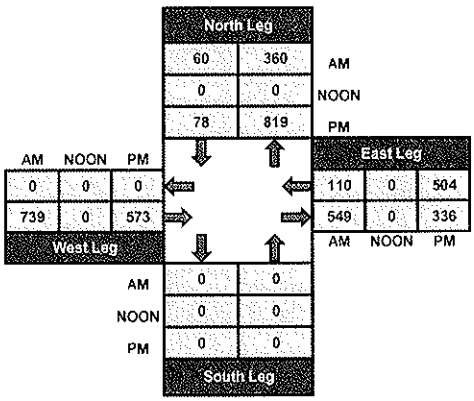
Prepared by:

National Data & Surveying Services

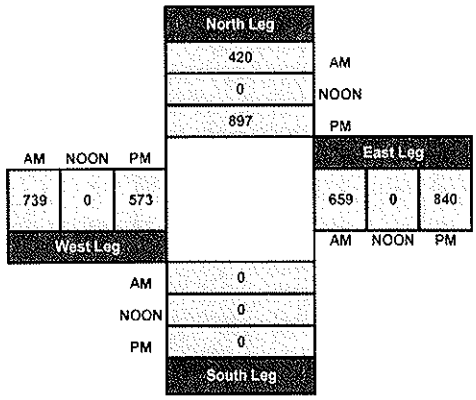
Hancock St and Old Towne Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(26)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	13	2	7	1	0	1	5	21	91	2	2	0	145
7:15 AM	19	1	9	0	1	0	1	21	141	2	3	2	200
7:30 AM	35	0	5	0	0	0	1	24	110	0	1	0	176
7:45 AM	23	1	8	0	0	1	2	33	81	0	3	1	153
8:00 AM	16	0	13	0	0	0	3	45	79	5	12	0	173
8:15 AM	9	0	10	0	1	0	0	21	67	4	4	0	116
8:30 AM	28	1	7	0	1	1	0	27	55	0	12	0	132
8:45 AM	14	1	7	0	2	2	1	33	47	1	7	0	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	6	66	1	5	5	13	225	671	14	44	3	1210
APPROACH %'s :	68.56%	2.62%	28.82%	9.09%	45.45%	45.45%	1.43%	24.75%	73.82%	22.95%	72.13%	4.92%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	120	0	18	0	0	0	2	27	31	1	8	0	207
4:15 PM	79	0	19	0	1	5	2	43	32	2	19	1	203
4:30 PM	116	1	14	0	1	5	1	42	39	4	19	0	242
4:45 PM	97	2	12	1	2	5	1	32	44	2	12	0	210
5:00 PM	100	2	7	1	1	3	1	33	41	2	26	0	217
5:15 PM	109	2	17	2	2	0	5	47	48	2	18	0	252
5:30 PM	42	0	11	0	1	1	1	30	28	2	5	0	121
5:45 PM	60	1	11	1	0	1	0	36	27	1	20	0	158
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	723	8	109	5	8	20	13	290	290	16	127	1	1610
APPROACH %'s :	86.07%	0.95%	12.98%	15.15%	24.24%	60.61%	2.19%	48.90%	48.90%	11.11%	88.19%	0.69%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

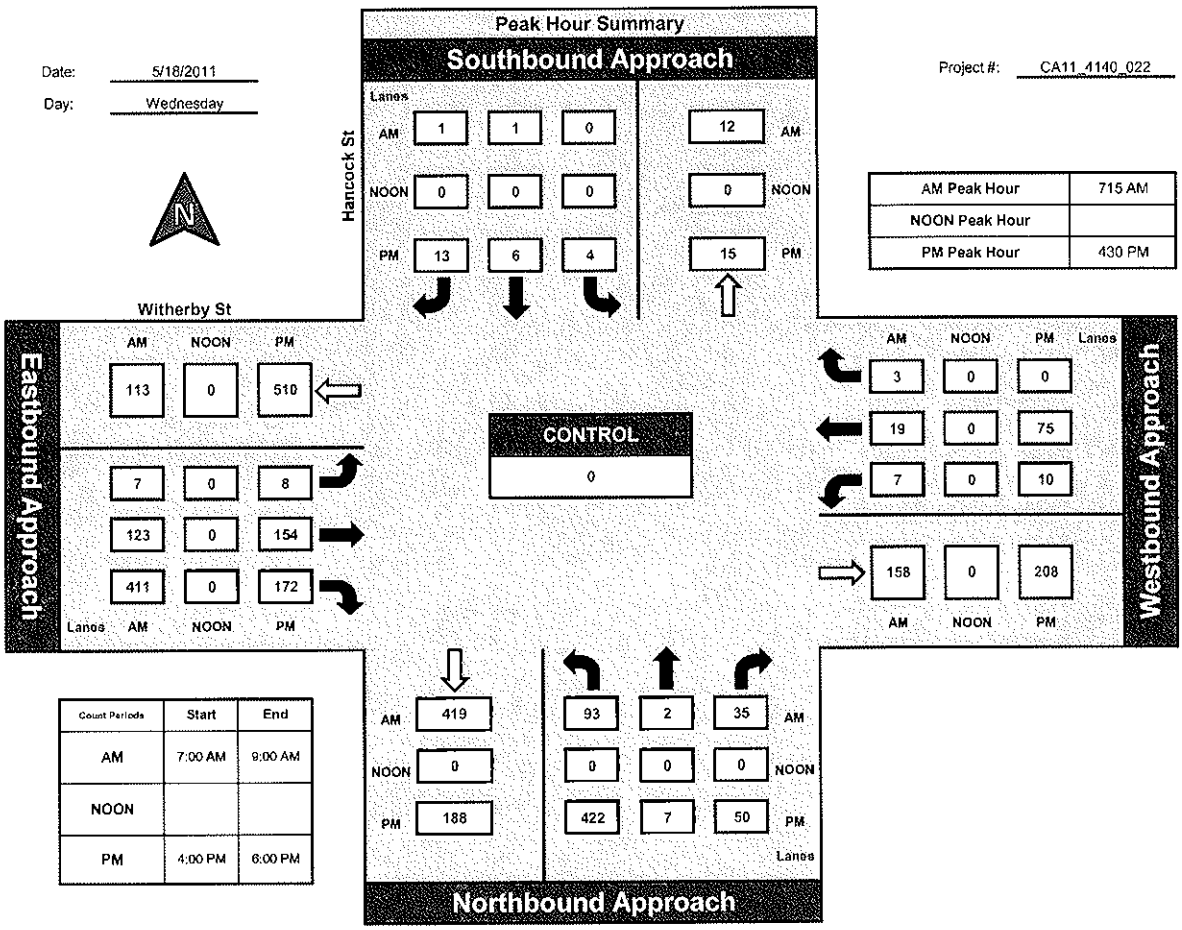
National Data & Surveying Services

Hancock St and Witherby St , City of San Diego

Date: 5/18/2011

Day: Wednesday

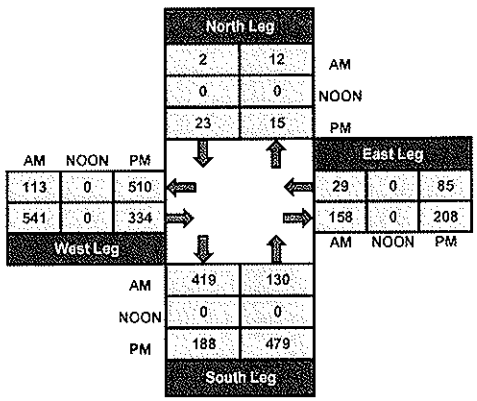
Project #: CA11_4140_022



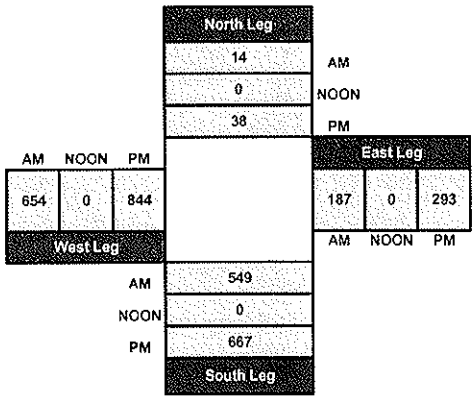
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(28)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					235	2			1	6			244
7:15 AM					216	4			1	3			224
7:30 AM					268	1			4	5			278
7:45 AM					355	7			2	6			370
8:00 AM					323	1			2	5			331
8:15 AM					367	5			5	7			384
8:30 AM					359	1			1	10			371
8:45 AM					346	1			2	12			361

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	2469	22	0	0	18	54	0	0	2563
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.12%	0.88%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

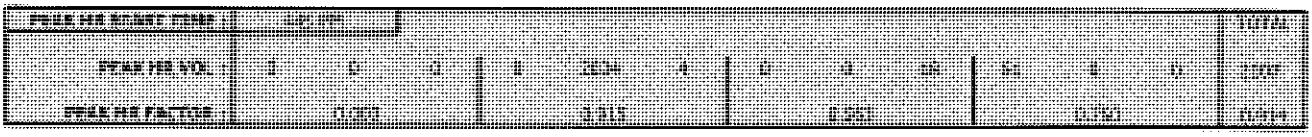
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					291	1			1	9			302
4:15 PM					344	4			7	6			361
4:30 PM					388	2			7	10			407
4:45 PM					477	0			7	17			501
5:00 PM					556	1			8	11			576
5:15 PM					536	1			3	7			547
5:30 PM					465	2			0	16			483
5:45 PM					381	2			0	13			396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3438	13	0	0	33	89	0	0	3573
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.62%	0.38%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



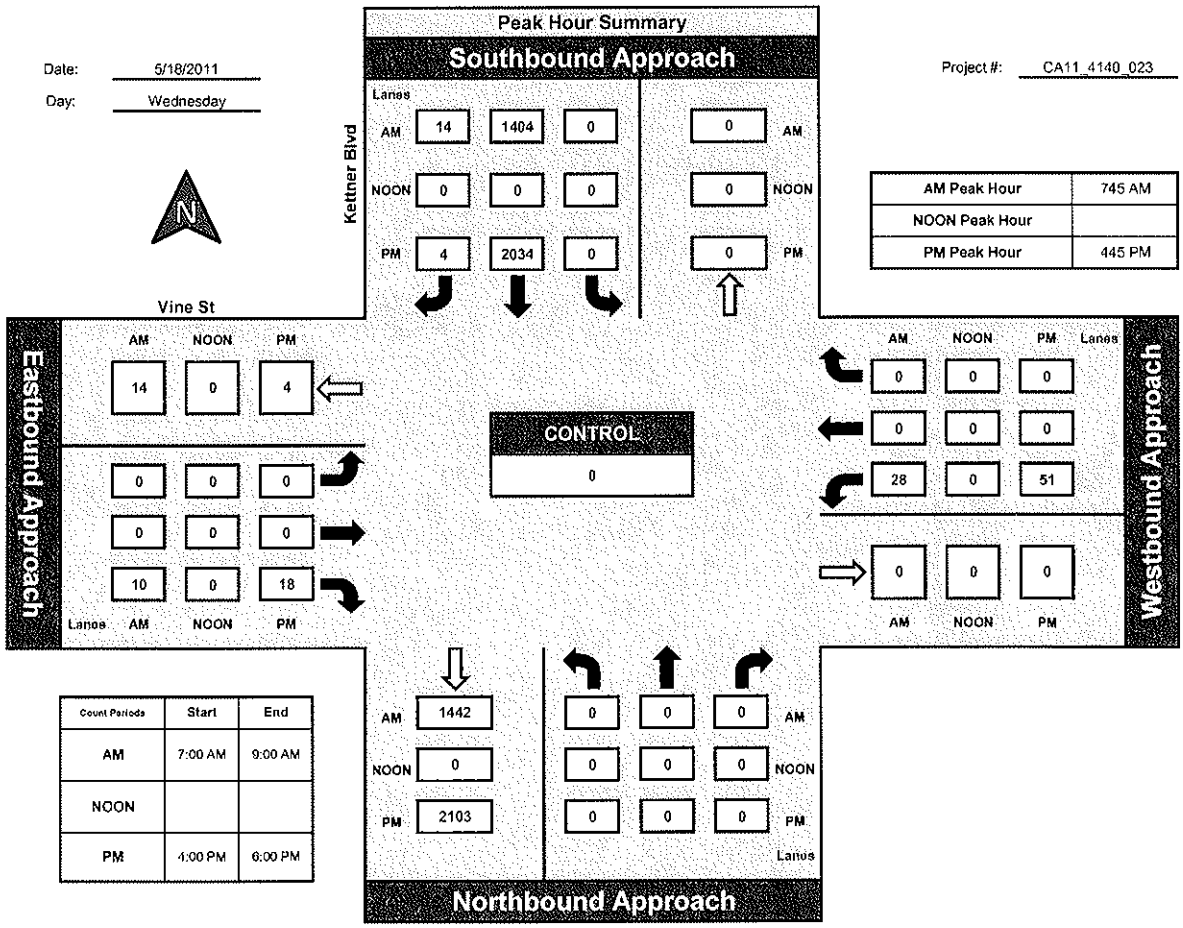
CONTROL :

ITM Peak Hour Summary

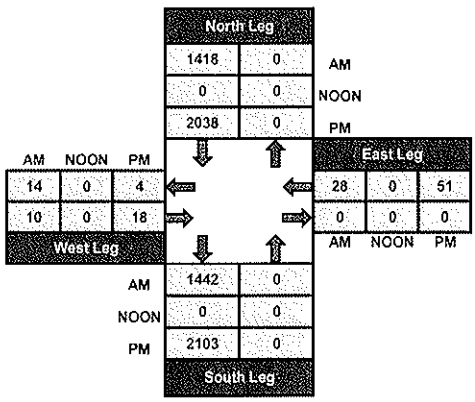
Prepared by:

National Data & Surveying Services

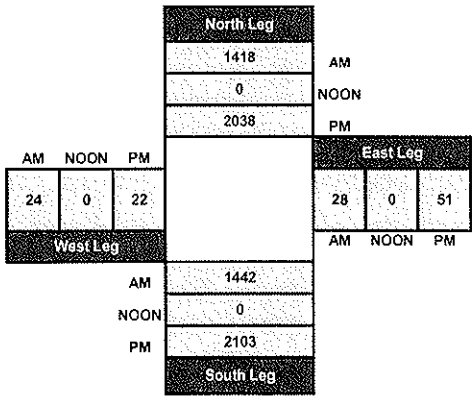
Kettner Blvd and Vine St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(31)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_018

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	450					19			222				691
7:15 AM	410					7			265				682
7:30 AM	358					15			272				645
7:45 AM	444					22			274				740
8:00 AM	413					18			286				717
8:15 AM	418					17			312				747
8:30 AM	390					16			309				715
8:45 AM	341					15			274				630

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3224	0	0	0	0	129	0	0	2214	0	0	0	5567
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]													
[redacted]													
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

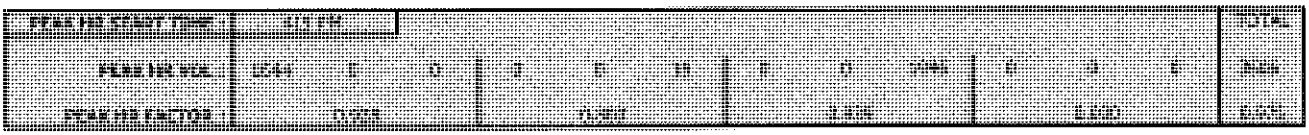
Project ID: CA11_4140_018 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	376					1			501				878
4:15 PM	404					3			518				925
4:30 PM	371					4			498				873
4:45 PM	426					5			470				901
5:00 PM	443					4			460				907
5:15 PM	405					2			436				843
5:30 PM	351					2			384				737
5:45 PM	333					2			309				644

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3109	0	0	0	0	23	0	0	3576	0	0	0	6708
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_018

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
	73	0	AM
	0	0	NOON
	16	0	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
1738	0	1660		0	0	0
1181	0	1946		0	0	0

	South Leg	
AM	1181	1665
NOON	0	0
PM	1946	1644

Total Volume Per Leg

	North Leg	
	73	AM
	0	NOON
	16	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
2919	0	3606		0	0	0

	South Leg
AM	2846
NOON	0
PM	3590

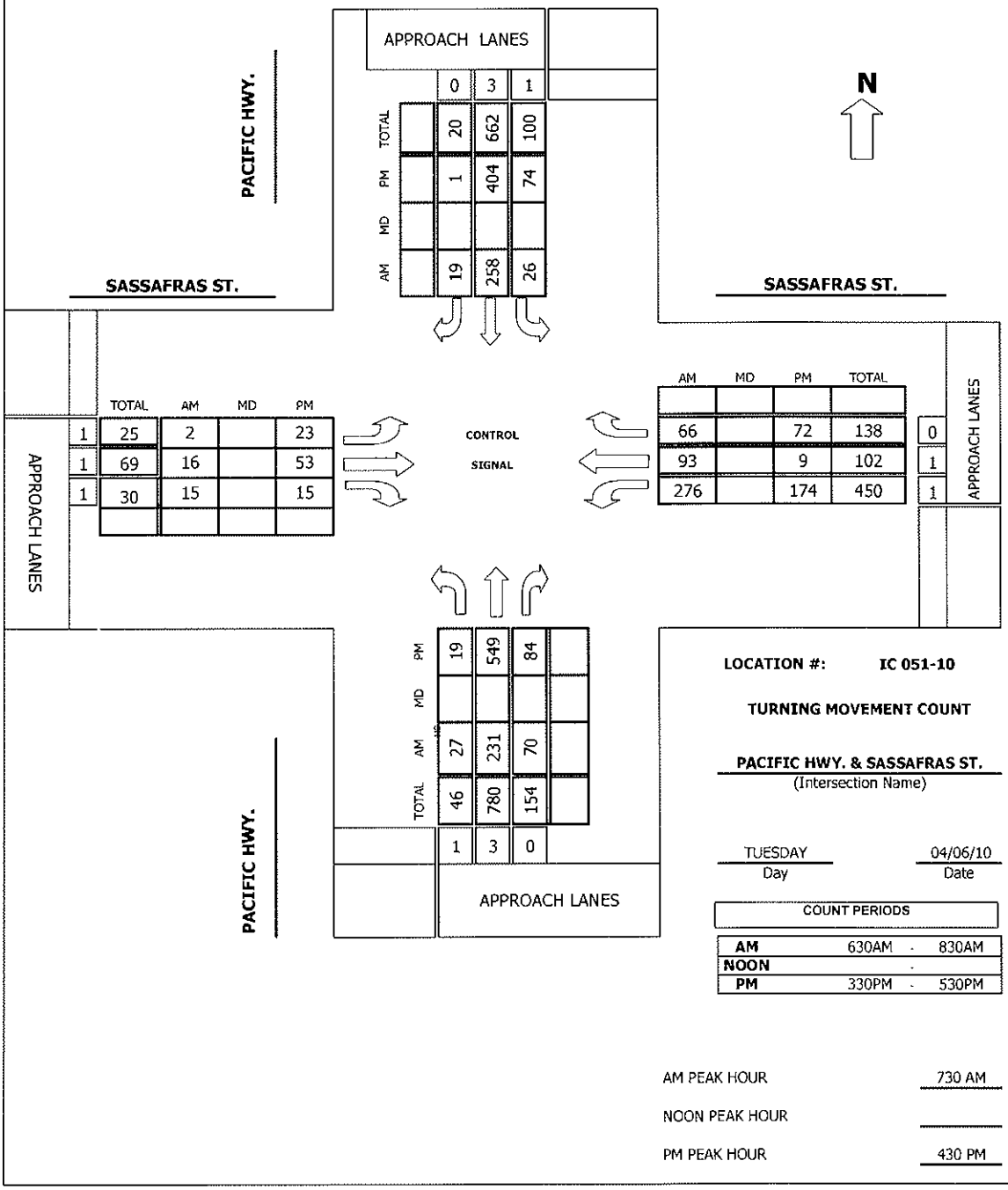
(34)

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: IC 051-10

TMC SUMMARY OF PACIFIC HWY. & SASSAFRAS ST.



LOCATION #: IC 051-10

TURNING MOVEMENT COUNT

PACIFIC HWY. & SASSAFRAS ST.
(Intersection Name)

TUESDAY (Day) 04/06/10 (Date)

COUNT PERIODS			
AM	630AM	-	830AM
NOON		-	
PM	330PM	-	530PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM	5	39	19	3	38	2	1	0	2	75	32	5	221
6:45 AM	6	47	9	4	63	1	1	1	1	104	15	7	259
7:00 AM	7	45	15	5	45	2	0	0	4	73	18	13	227
7:15 AM	8	55	16	4	67	3	0	0	1	50	21	8	233
7:30 AM	6	35	13	4	65	6	0	1	2	68	30	13	243
7:45 AM	7	72	12	7	69	4	0	3	2	77	20	19	292
8:00 AM	5	71	16	6	68	6	1	3	6	64	19	17	282
8:15 AM	9	53	29	9	56	3	1	9	5	67	24	17	282
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	53	417	129	42	471	27	4	17	23	578	179	99	2039
Approach %	8.85	69.62	21.54	7.78	87.22	5.00	9.09	38.64	52.27	67.52	20.91	11.57	
App/Depart	599	/	520	540	/	1072	44	/	188	856	/	259	

AM Peak Hr Begins at: 730 AM

PEAK													
Volumes	27	231	70	26	258	19	2	16	15	276	93	66	1099
Approach %	8.23	70.43	21.34	8.58	85.15	6.27	6.06	48.48	45.45	63.45	21.38	15.17	
PEAK HR. FACTOR:		0.891			0.947			0.550			0.938		0.941

CONTROL: SIGNAL
COMMENT 1:
COMMENT 2:

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	5	115	37	20	89	1	1	8	4	50	2	15	347
3:45 PM	6	127	26	16	90	1	2	2	3	42	1	19	335
4:00 PM	7	126	23	13	105	1	1	12	7	46	5	16	362
4:15 PM	5	98	23	18	105	1	2	11	4	59	4	17	347
4:30 PM	3	117	23	20	105	1	5	16	2	44	4	18	358
4:45 PM	6	130	19	17	99	0	3	7	3	42	1	17	344
5:00 PM	8	138	25	19	104	0	8	23	6	44	1	21	397
5:15 PM	2	164	17	18	96	0	7	7	4	44	3	16	378
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	42	1015	193	141	793	5	29	86	33	371	21	139	2868
Approach %	3.36	81.20	15.44	15.02	84.45	0.53	19.59	58.11	22.30	69.87	3.95	26.18	
App/Depart	1250	/	1183	939	/	1197	148	/	420	531	/	68	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	19	549	84	74	404	1	23	53	15	174	9	72	1477
Approach %	2.91	84.20	12.88	15.45	84.34	0.21	25.27	58.24	16.48	68.24	3.53	28.24	
PEAK HR. FACTOR:		0.891			0.950			0.615			0.966		0.930

CONTROL: SIGNAL
COMMENT 1: 0
COMMENT 2: 0

FIELD DATA SERVICES OF ARIZONA, INC.

520.316.6745

Pedestrian & Bicycle Study

Location: PACIFIC HWY. & SASSAFRAS ST.

Date: 04/06/10
Day: TUESDAY

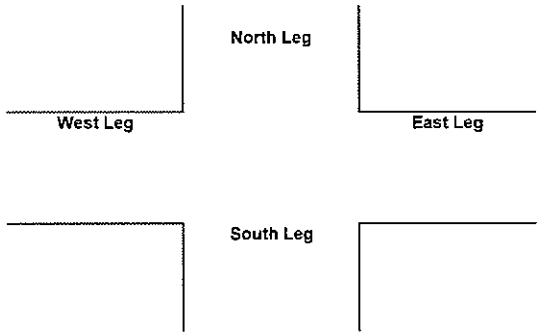
City: SAN DIEGO
Project #: IC 051-10

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	2	2	0
6:45 AM	0	1	0	0
7:00 AM	0	1	1	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	0
7:45 AM	0	1	0	0
8:00 AM	0	1	0	1
8:15 AM	0	1	0	0
TOTAL	0	8	3	1

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	0	1	2
6:45 AM	0	0	0	4
7:00 AM	0	0	0	2
7:15 AM	0	0	1	0
7:30 AM	0	0	1	0
7:45 AM	0	0	0	1
8:00 AM	0	0	0	2
8:15 AM	0	0	1	2
TOTAL	0	0	4	13

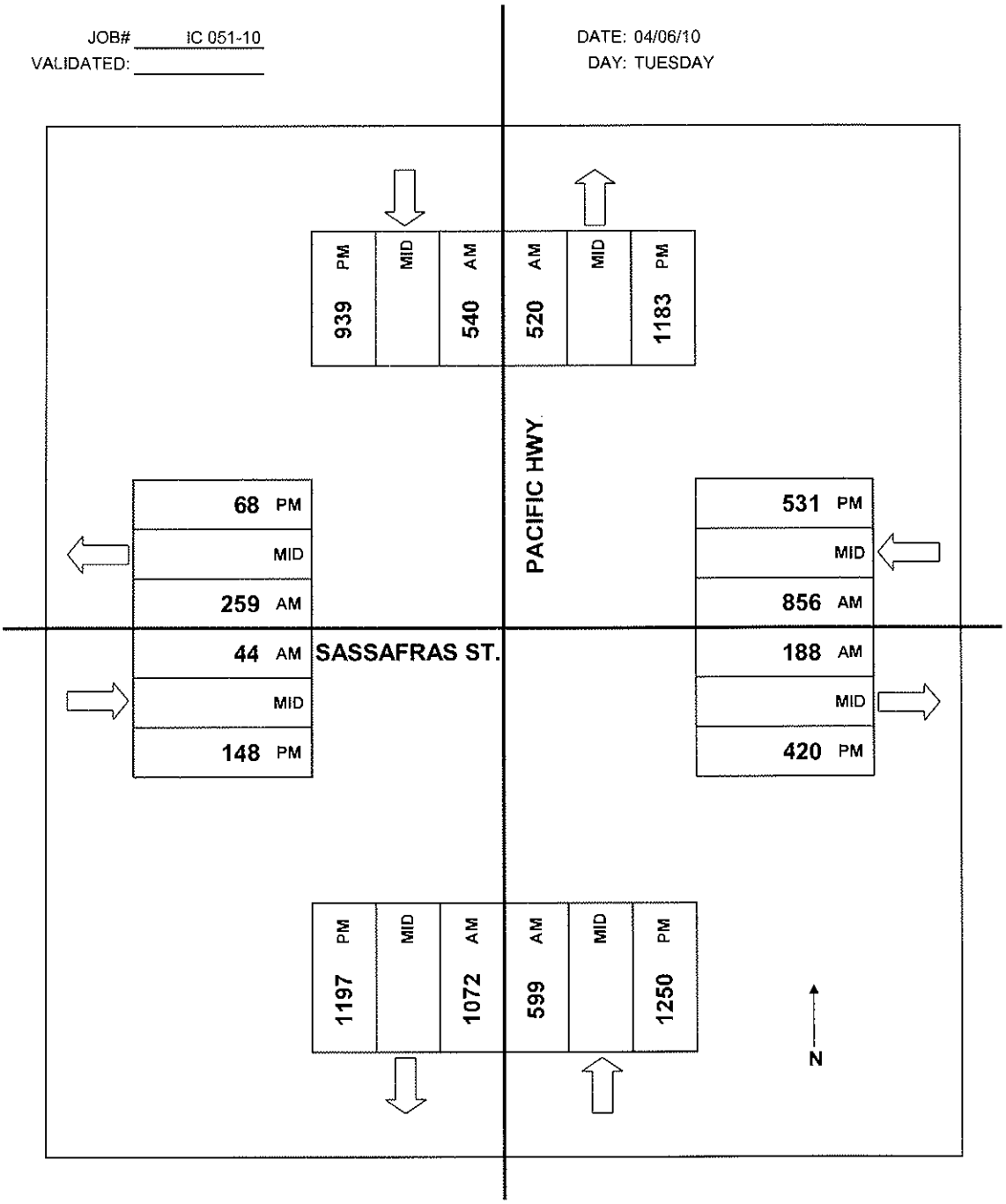
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	0	1
3:45 PM	0	0	0	0
4:00 PM	0	3	0	0
4:15 PM	0	1	0	2
4:30 PM	0	6	0	0
4:45 PM	0	1	0	2
5:00 PM	0	2	0	0
5:15 PM	0	0	0	0
TOTAL	0	13	0	5

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	2	0
3:45 PM	0	0	4	1
4:00 PM	0	0	2	2
4:15 PM	0	0	3	1
4:30 PM	0	0	1	2
4:45 PM	0	0	0	1
5:00 PM	0	0	2	1
5:15 PM	0	0	0	1
TOTAL	0	0	14	9



JOB# IC 051-10
VALIDATED: _____

DATE: 04/06/10
DAY: TUESDAY



(36)

2

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

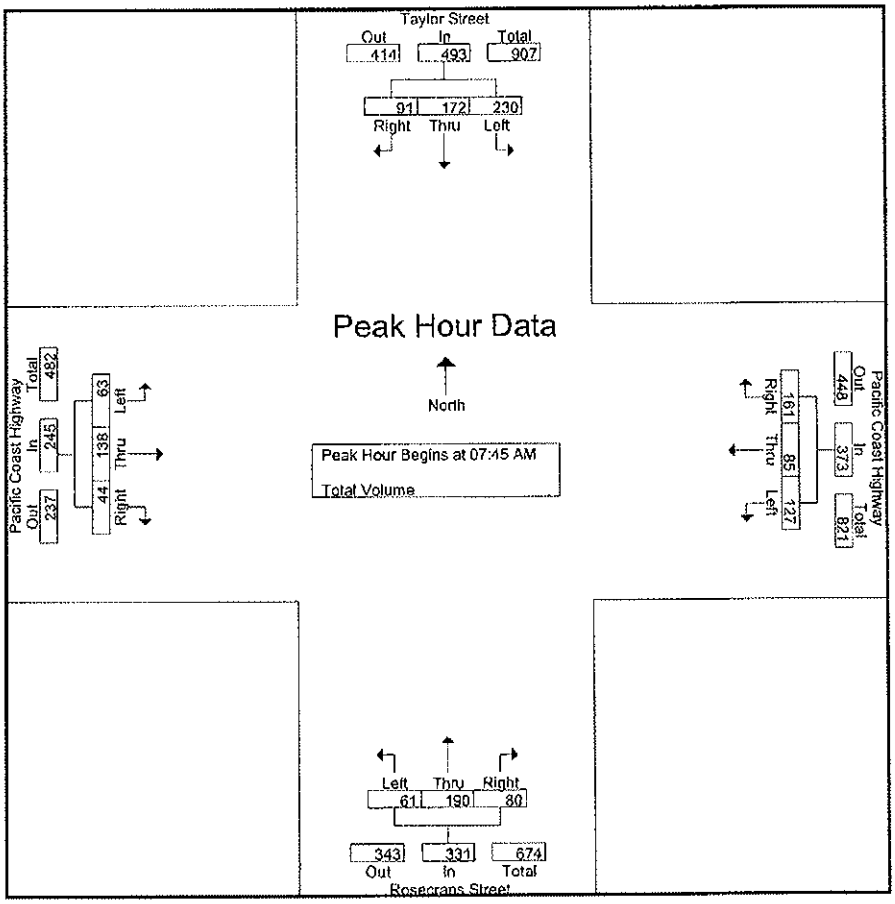
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
Total	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
07:00 AM	76	19	16	111	23	11	18	52	10	23	27	60	15	26	12	53	276
07:15 AM	92	21	11	124	43	18	21	82	13	29	21	63	12	21	6	39	308
07:30 AM	65	44	24	133	37	19	31	87	10	41	30	81	8	30	14	52	353
07:45 AM	66	53	20	139	37	20	41	98	11	51	18	80	22	50	15	87	404
Total	299	137	71	507	140	68	111	319	44	144	96	284	57	127	47	231	1341
08:00 AM	58	31	19	108	36	21	45	102	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	29	118	24	20	33	77	19	68	19	106	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Grand Total	533	268	162	963	250	146	261	657	101	304	186	591	114	236	82	432	2643
Apprch %	55.3	27.8	16.8		38.1	22.2	39.7		17.1	51.4	31.5		26.4	54.6	19		
Total %	20.2	10.1	6.1	36.4	9.5	5.5	9.9	24.9	3.8	11.5	7	22.4	4.3	8.9	3.1	16.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**66**	**53**	20	**139**	37	20	41	98	11	51	18	80	**22**	**50**	**15**	**87**	**404**
08:00 AM	58	31	19	108	36	21	**45**	**102**	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	**29**	118	24	20	33	77	**19**	**68**	19	**106**	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Total Volume	230	172	91	493	127	85	161	373	61	190	80	331	63	138	44	245	1442
% App. Total	46.7	34.9	18.5		34	22.8	43.2		18.4	57.4	24.2		25.7	56.3	18		
PHF	.871	.811	.784	.887	.858	.885	.894	.914	.803	.699	.870	.781	.716	.690	.733	.704	.892

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	76	19	16	111	37	20	41	98	10	41	**30**	81	**22**	**50**	**15**	**87**
+15 mins.	**92**	21	11	124	36	21	**45**	**102**	11	51	18	80	9	27	12	48
+30 mins.	65	44	**24**	133	24	20	33	77	13	31	23	67	13	31	7	51
+45 mins.	66	**53**	20	**139**	30	**24**	42	96	**19**	**68**	19	**106**	19	30	10	59
Total Volume	299	137	71	507	127	85	161	373	53	191	90	334	63	138	44	245
% App. Total	59	27	14		34	22.8	43.2		15.9	57.2	26.9		25.7	56.3	18	
PHF	.813	.646	.740	.912	.858	.885	.894	.914	.697	.702	.750	.788	.716	.690	.733	.704

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009

Groups Printed- Total Volume

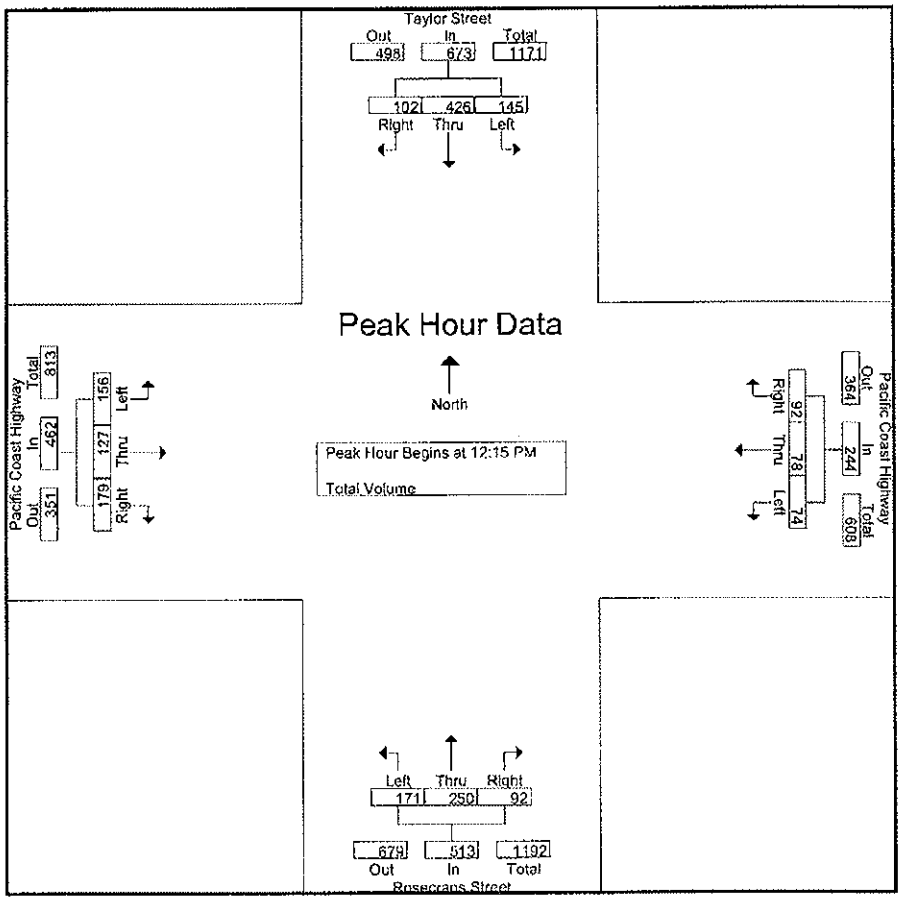
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	23	86	27	136	16	17	27	60	42	60	13	115	46	24	48	118	429
11:45 AM	21	94	29	144	16	23	13	52	27	77	21	125	45	28	54	127	448
Total	44	180	56	280	32	40	40	112	69	137	34	240	91	52	102	245	877
12:00 PM	30	70	19	119	13	28	32	73	33	62	12	107	41	32	41	114	413
12:15 PM	34	116	22	172	29	13	26	68	33	66	31	130	47	36	39	122	492
12:30 PM	34	110	33	177	14	20	18	52	45	58	25	128	38	26	54	118	475
12:45 PM	31	118	32	181	13	17	20	50	45	63	15	123	47	39	43	129	483
Total	129	414	106	649	69	78	96	243	156	249	83	488	173	133	177	483	1863
01:00 PM	46	82	15	143	18	28	28	74	48	63	21	132	24	26	43	93	442
01:15 PM	28	85	10	123	24	24	15	63	19	50	15	84	61	40	65	166	436
Grand Total	247	761	187	1195	143	170	179	492	292	499	153	944	349	251	387	987	3618
Apprch %	20.7	63.7	15.6		29.1	34.6	36.4		30.9	52.9	16.2		35.4	25.4	39.2		
Total %	6.8	21	5.2	33	4	4.7	4.9	13.6	8.1	13.8	4.2	26.1	9.6	6.9	10.7	27.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	34	116	22	172	**29**	13	26	68	33	**66**	**31**	130	**47**	36	39	122	**492**
12:30 PM	34	110	**33**	177	14	20	18	52	45	58	25	128	38	26	**54**	118	475
12:45 PM	31	**118**	32	**181**	13	17	20	50	45	63	15	123	47	**39**	43	**129**	483
01:00 PM	**46**	82	15	143	18	**28**	**28**	**74**	**48**	63	21	**132**	24	26	43	93	442
Total Volume	145	426	102	673	74	78	92	244	171	250	92	513	156	127	179	462	1892
% App. Total	21.5	63.3	15.2		30.3	32	37.7		33.3	48.7	17.9		33.8	27.5	38.7		
PHF	.788	.903	.773	.930	.638	.696	.821	.824	.891	.947	.742	.972	.830	.814	.829	.895	.961

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				12:15 PM				12:30 PM			
+0 mins.	34	116	22	172	16	17	27	60	33	**66**	31	130	38	26	54	118
+15 mins.	34	110	**33**	177	16	23	13	52	45	58	25	128	47	39	43	129
+30 mins.	31	**118**	32	**181**	13	**28**	**32**	**73**	45	63	15	123	24	26	43	93
+45 mins.	**46**	82	15	143	**29**	13	26	68	**48**	63	21	**132**	**61**	**40**	**65**	**166**
Total Volume	145	426	102	673	74	81	98	253	171	250	92	513	170	131	205	506
% App. Total	21.5	63.3	15.2		29.2	32	38.7		33.3	48.7	17.9		33.6	25.9	40.5	
PHF	.788	.903	.773	.930	.638	.723	.766	.866	.891	.947	.742	.972	.697	.819	.788	.762

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

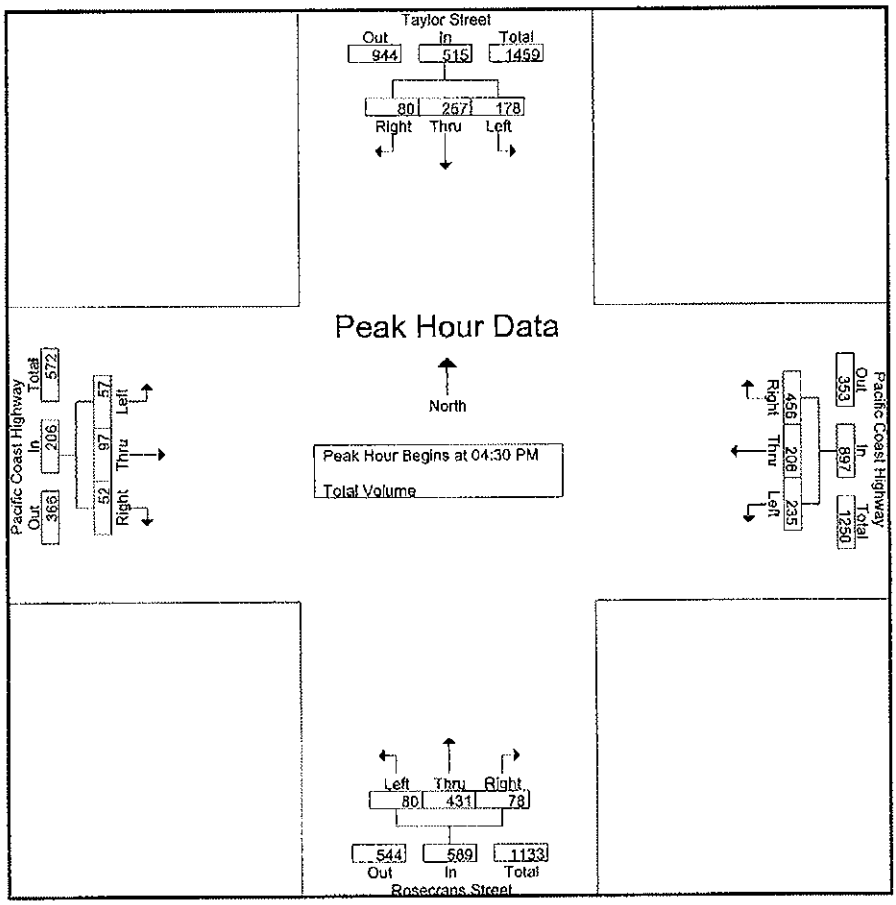
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	57	49	27	133	70	65	123	258	19	87	19	125	22	23	17	62	578
04:15 PM	32	54	20	106	83	46	103	232	22	64	32	118	11	27	12	50	506
04:30 PM	51	56	15	122	60	48	127	235	25	113	30	168	19	27	13	59	584
04:45 PM	40	57	16	113	62	38	107	207	18	90	10	118	14	13	7	34	472
Total	180	216	78	474	275	197	460	932	84	354	91	529	66	90	49	205	2140
05:00 PM	46	79	21	146	57	61	115	233	20	133	16	169	16	27	14	57	605
05:15 PM	41	65	28	134	56	59	107	222	17	95	22	134	8	30	18	56	546
05:30 PM	42	78	17	137	70	32	103	205	19	102	24	145	14	15	12	41	528
05:45 PM	42	80	20	142	42	36	92	170	18	90	22	130	12	24	15	51	493
Total	171	302	86	559	225	188	417	830	74	420	84	578	50	96	59	205	2172
Grand Total	351	518	164	1033	500	385	877	1762	158	774	175	1107	116	186	108	410	4312
Apprch %	34	50.1	15.9		28.4	21.9	49.8		14.3	69.9	15.8		28.3	45.4	26.3		
Total %	8.1	12	3.8	24	11.6	8.9	20.3	40.9	3.7	17.9	4.1	25.7	2.7	4.3	2.5	9.5	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**51**	56	15	122	60	48	**127**	**235**	**25**	113	**30**	168	**19**	27	13	**59**	584
04:45 PM	40	57	16	113	**62**	38	107	207	18	90	10	118	14	13	7	34	472
05:00 PM	46	**79**	21	**146**	57	**61**	115	233	20	**133**	16	**169**	16	27	14	57	**605**
05:15 PM	41	65	**28**	134	56	59	107	222	17	95	22	134	8	**30**	**18**	56	546
Total Volume	178	257	80	515	235	206	456	897	80	431	78	589	57	97	52	206	2207
% App. Total	34.6	49.9	15.5		26.2	23	50.8		13.6	73.2	13.2		27.7	47.1	25.2		
PHF	.873	.813	.714	.882	.948	.844	.898	.954	.800	.810	.650	.871	.750	.808	.722	.873	.912

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	**46**	79	21	**146**	70	**65**	123	**258**	**25**	113	**30**	168	**19**	27	13	**59**
+15 mins.	41	65	**28**	134	**83**	46	103	232	18	90	10	118	14	13	7	34
+30 mins.	42	78	17	137	60	48	**127**	235	20	**133**	16	**169**	16	27	14	57
+45 mins.	42	**80**	20	142	62	38	107	207	17	95	22	134	8	**30**	**18**	56
Total Volume	171	302	86	559	275	197	460	932	80	431	78	589	57	97	52	206
% App. Total	30.6	54	15.4		29.5	21.1	49.4		13.6	73.2	13.2		27.7	47.1	25.2	
PHF	.929	.944	.768	.957	.828	.758	.906	.903	.800	.810	.650	.871	.750	.808	.722	.873

(37)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	29	8	0	29	27	0	0	2	9	7	27	158
7:15 AM	27	35	2	0	32	33	1	0	0	7	11	31	179
7:30 AM	33	36	8	1	39	39	1	0	4	7	19	25	212
7:45 AM	37	43	9	1	31	38	1	0	6	9	35	45	255
8:00 AM	24	56	12	1	26	37	0	1	5	9	46	55	272
8:15 AM	27	37	7	0	21	69	1	0	3	7	51	42	265
8:30 AM	31	33	7	0	27	52	0	0	2	11	29	43	235
8:45 AM	24	43	5	5	28	61	1	0	5	11	28	41	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	223	312	58	8	233	356	5	1	27	70	226	309	1828
APPROACH %'s :	37.61%	52.61%	9.78%	1.34%	39.03%	59.63%	15.15%	3.03%	81.82%	11.57%	37.36%	51.07%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	91	46	3	1	42	31	0	0	1	15	16	34	280
4:15 PM	97	66	2	1	41	28	0	1	6	21	22	45	330
4:30 PM	96	70	4	0	52	39	0	1	6	17	26	38	349
4:45 PM	104	67	2	0	45	29	0	0	5	21	20	50	343
5:00 PM	107	54	1	0	53	46	0	0	9	24	26	50	370
5:15 PM	99	69	2	0	52	23	1	1	1	9	16	57	330
5:30 PM	76	52	3	0	47	36	1	0	4	16	25	53	313
5:45 PM	42	39	1	0	33	27	0	0	2	10	17	38	209
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	712	463	18	2	365	259	2	3	34	133	168	365	2524
APPROACH %'s :	59.68%	38.81%	1.51%	0.32%	58.31%	41.37%	5.13%	7.69%	87.18%	19.97%	25.23%	54.80%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

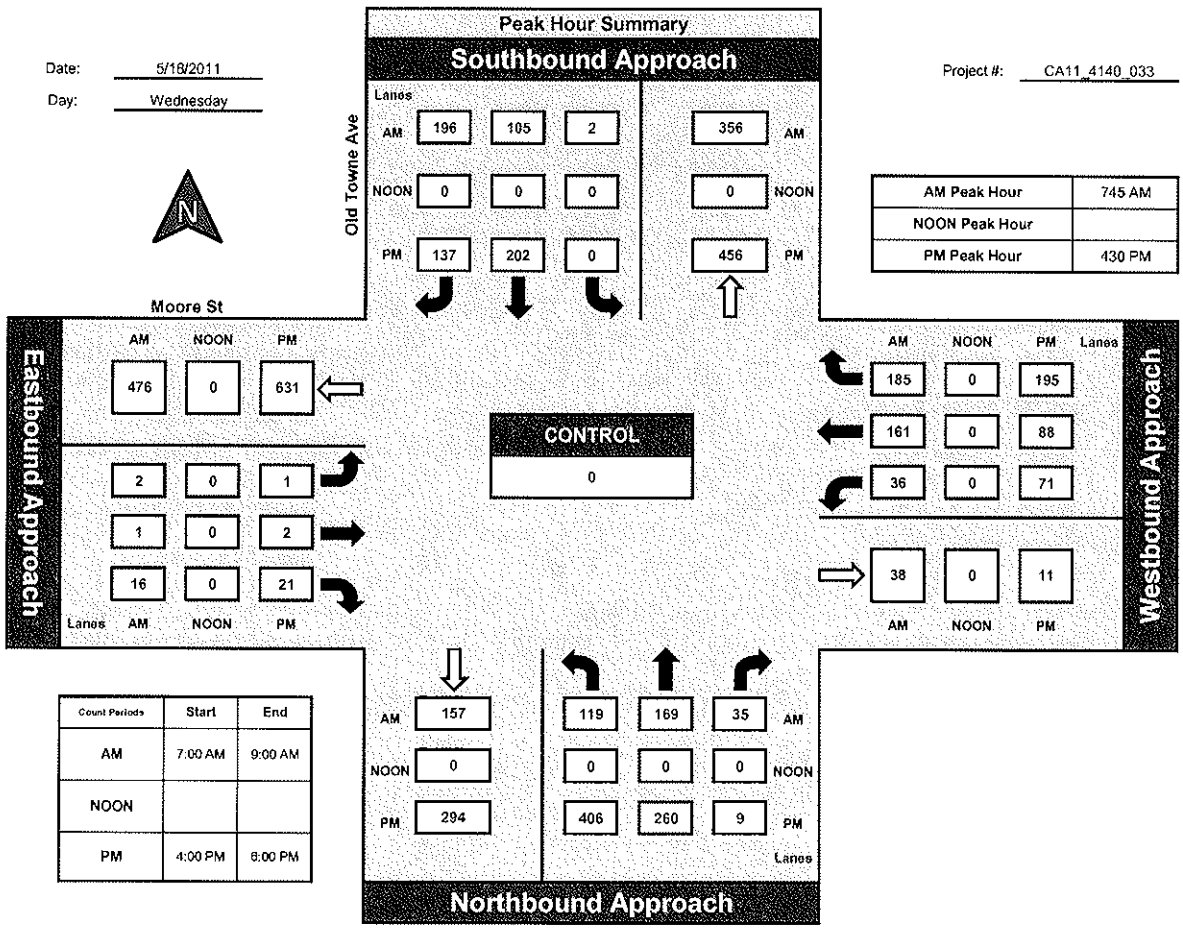
National Data & Surveying Services

Old Towne Ave and Moore St , City of San Diego

Date: 5/18/2011

Day: Wednesday

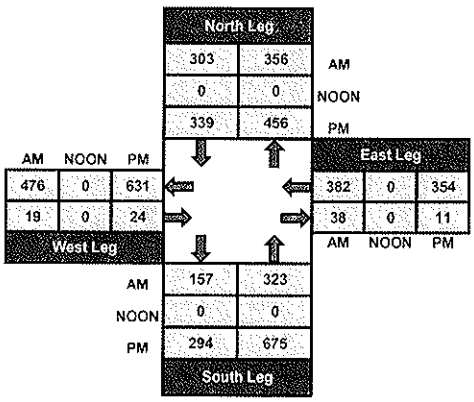
Project #: CA11_4140_033



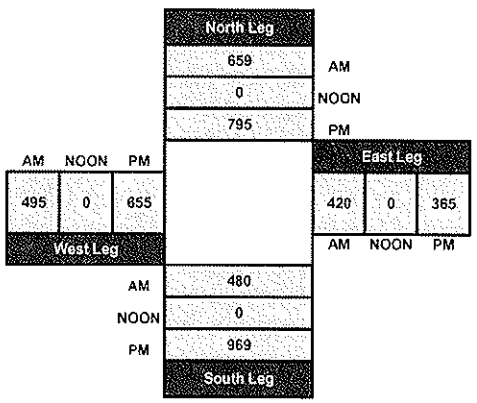
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(38)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

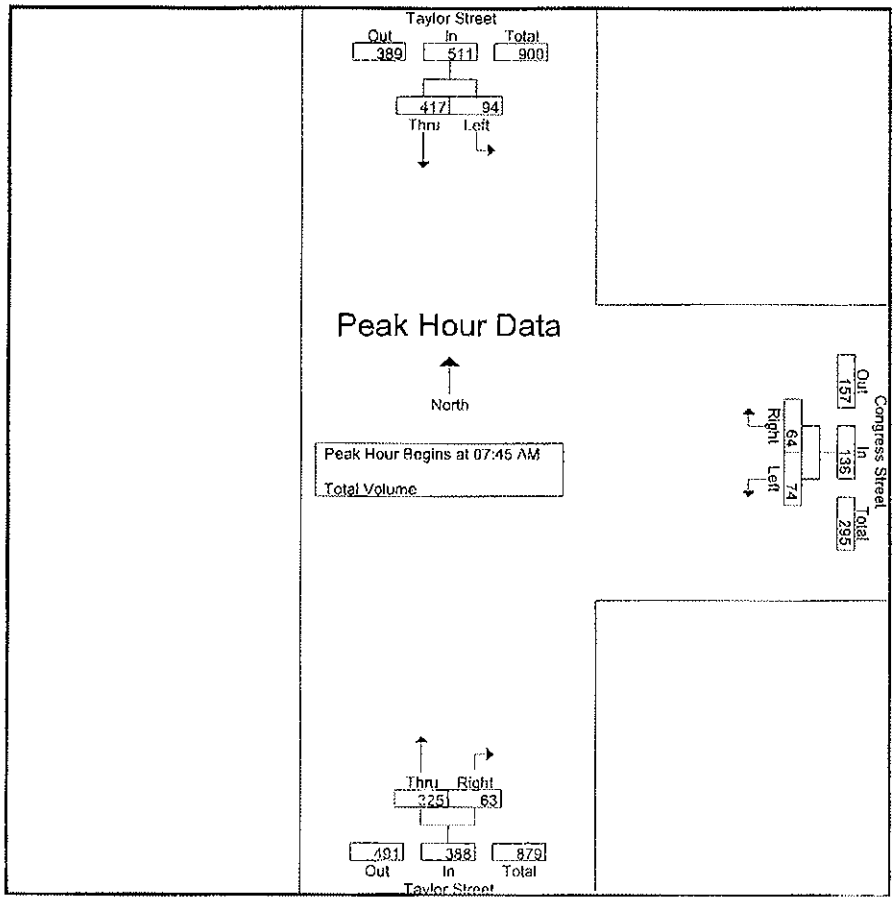
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:45 AM	10	92	102	13	4	17	42	11	53	172
Total	10	92	102	13	4	17	42	11	53	172
07:00 AM	14	108	122	7	11	18	58	6	64	204
07:15 AM	13	124	137	10	12	22	55	8	63	222
07:30 AM	21	121	142	9	17	26	63	8	71	239
07:45 AM	23	122	145	19	18	37	93	13	106	288
Total	71	475	546	45	58	103	269	35	304	953
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	19	32	80	18	98	252
08:30 AM	27	99	126	29	11	40	80	19	99	265
Grand Total	152	862	1014	113	108	221	543	96	639	1874
Apprch %	15	85		51.1	48.9		85	15		
Total %	8.1	46	54.1	6	5.8	11.8	29	5.1	34.1	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	23	**122**	**145**	19	18	37	**93**	13	**106**	**288**
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	**19**	32	80	18	98	252
08:30 AM	**27**	99	126	**29**	11	**40**	80	19	99	265
Total Volume	94	417	511	74	64	138	325	63	388	1037
% App. Total	18.4	81.6		53.6	46.4		83.8	16.2		
PHF	.870	.855	.881	.638	.842	.863	.874	.829	.915	.901

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:45 AM		
+0 mins.	14	108	122	19	18	37	93	13	106
+15 mins.	13	124	137	13	16	29	72	13	85
+30 mins.	21	121	142	13	19	32	80	18	98
+45 mins.	23	122	145	29	11	40	80	19	99
Total Volume	71	475	546	74	64	138	325	63	388
% App. Total	13	87		53.6	46.4		83.8	16.2	
PHF	.772	.958	.941	.638	.842	.863	.874	.82[illegible]	.915

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

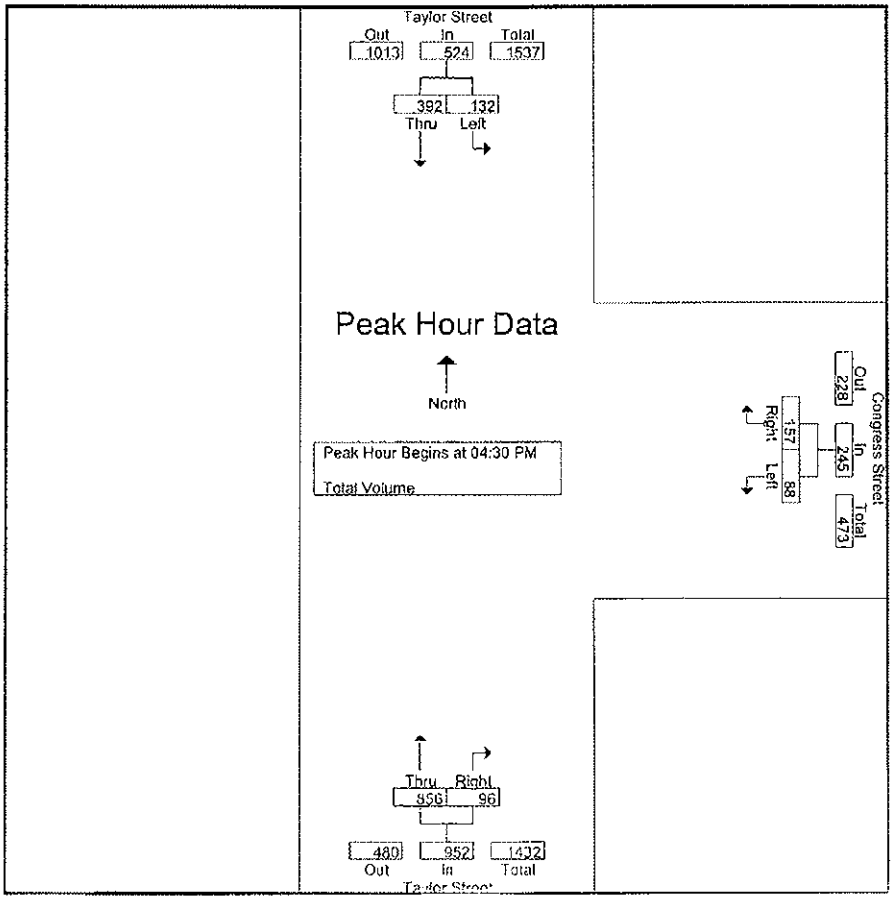
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	33	104	137	21	37	58	197	16	213	408
04:15 PM	29	85	114	12	25	37	182	12	194	345
04:30 PM	52	93	145	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
Total	135	368	503	71	133	204	795	72	867	1574
05:00 PM	26	111	137	24	36	60	240	20	260	457
05:15 PM	33	102	135	26	50	76	200	32	232	443
05:30 PM	28	101	129	24	33	57	194	26	220	406
05:45 PM	31	95	126	16	35	51	173	22	195	372
Total	118	409	527	90	154	244	807	100	907	1678
Grand Total	253	777	1030	161	287	448	1602	172	1774	3252
Apprch %	24.6	75.4		35.9	64.1		90.3	9.7		
Total %	7.8	23.9	31.7	5	8.8	13.8	49.3	5.3	54.6	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**52**	93	**145**	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
05:00 PM	26	111	137	24	36	60	**240**	20	**260**	**457**
05:15 PM	33	102	135	26	50	76	200	32	232	443
Total Volume	132	392	524	88	157	245	856	96	952	1721
% App. Total	25.2	74.8		35.9	64.1		89.9	10.1		
PHF	.635	.883	.903	.846	.785	.806	.892	.750	.915	.941

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	26	111	137	20	38	58	224	25	249
+15 mins.	33	102	135	24	36	60	192	24	216
+30 mins.	28	101	129	26	50	76	240	20	260
+45 mins.	31	95	126	24	33	57	200	32	232
Total Volume	118	409	527	94	157	251	856	96	952
% App. Total	22.4	77.6		37.5	62.5		89.9	10.1	
PHF	.894	.921	.962	.904	.785	.826	.893	.75	.915

(39)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

Day: WEDNESDAY

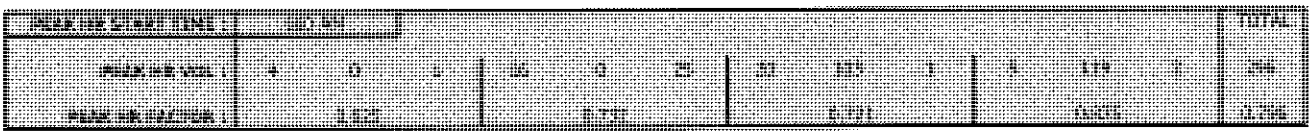
City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	2		2	2	12	1	0	12	1	32
7:15 AM	0	0	0	3		4	4	15	2	0	25	0	53
7:30 AM	2	0	1	4		4	2	25	0	0	21	0	59
7:45 AM	0	1	0	3		3	6	25	0	0	23	1	62
8:00 AM	1	0	0	3		3	2	24	0	2	23	1	59
8:15 AM	0	0	1	4		4	4	18	0	1	28	0	60
8:30 AM	1	0	0	3		11	5	28	0	1	35	0	84
8:45 AM	2	0	0	6		7	9	33	1	1	33	1	93

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	1	2	28	0	38	34	180	4	5	200	4	502
APPROACH %'s :	66.67%	11.11%	22.22%	42.42%	0.00%	57.58%	15.60%	82.57%	1.83%	2.39%	95.69%	1.91%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

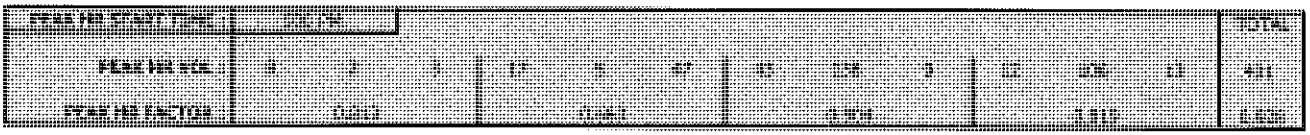
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	1	5	1	11	6	28	2	0	32	1	87
4:15 PM	0	2	1	7	0	5	6	28	2	0	34	4	89
4:30 PM	0	2	1	4	1	9	10	35	1	2	35	3	103
4:45 PM	1	0	2	3	0	6	10	26	0	1	27	4	80
5:00 PM	2	0	1	3	0	9	7	37	2	3	25	5	94
5:15 PM	2	0	0	2	0	11	10	32	2	4	31	5	99
5:30 PM	1	2	1	3	1	14	11	34	1	3	35	2	108
5:45 PM	3	0	1	9	4	13	15	33	4	2	15	1	100
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	6	8	36	7	78	75	253	14	15	234	25	760
APPROACH %'s :	39.13%	26.09%	34.78%	29.75%	5.79%	64.46%	21.93%	73.98%	4.09%	5.47%	85.40%	9.12%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

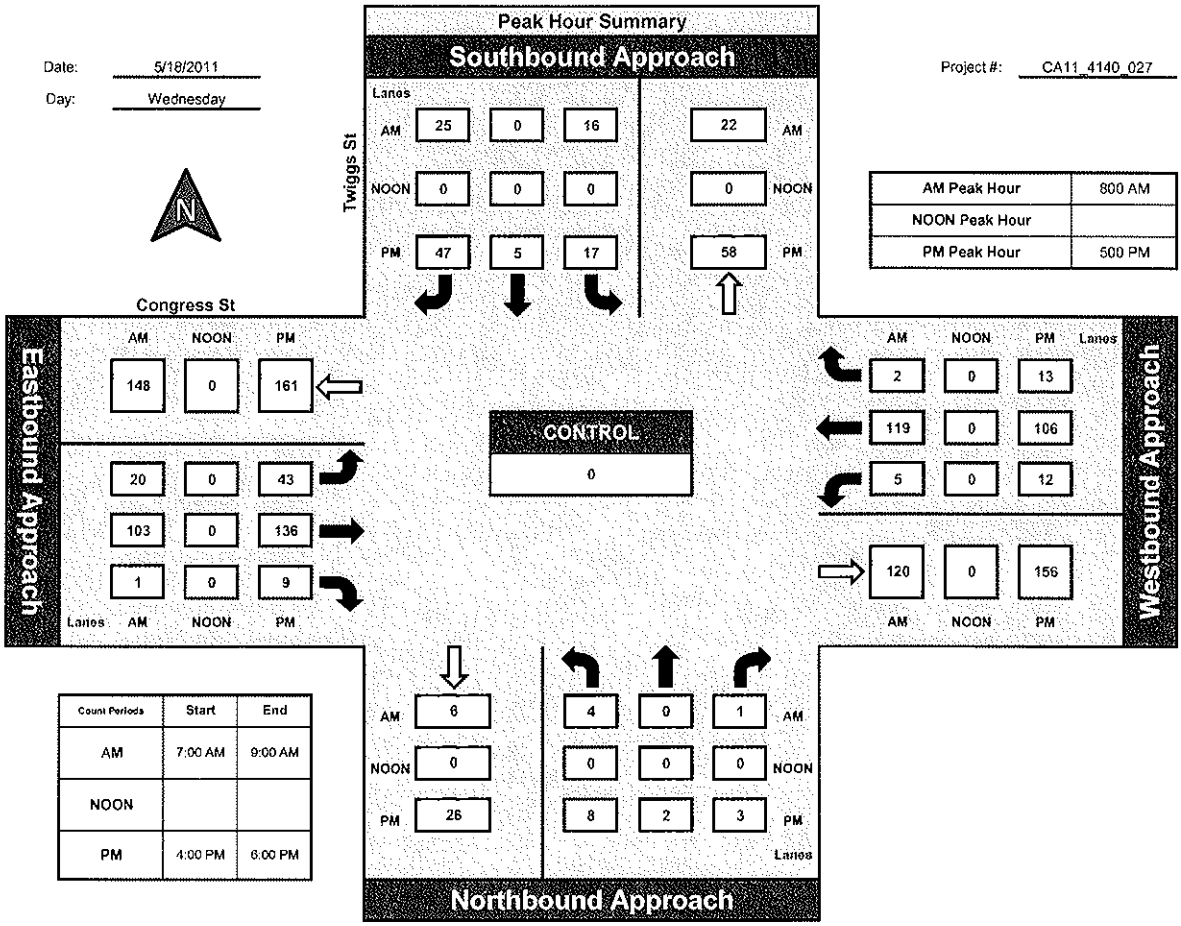
National Data & Surveying Services

Twiggs St and Congress St , City of San Diego

Date: 5/18/2011

Day: Wednesday

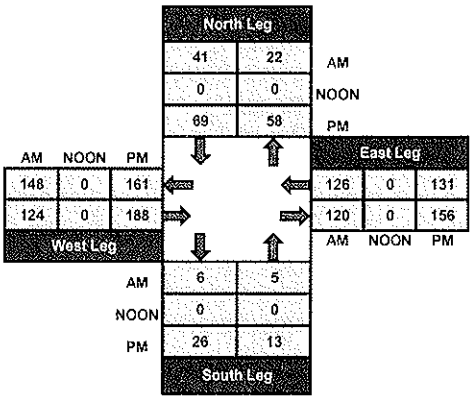
Project #: CA11_4140_027



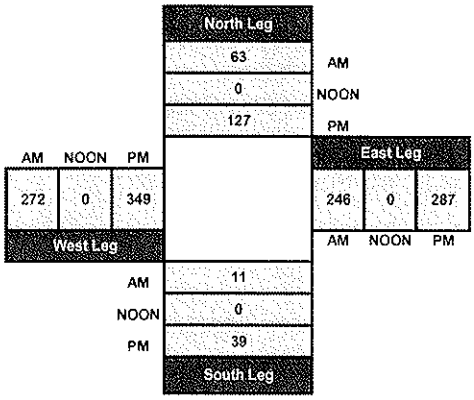
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(40)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	3	2	0	1	3	3	1	10	3	0	7	1	34
7:15 AM	7	1	0	3	3	1	0	12	6	1	17	0	51
7:30 AM	1	0	1	3	3	1	0	24	2	0	19	1	55
7:45 AM	2	2	1	2	3	0	2	27	1	0	19	0	59
8:00 AM	3	1	2	3	3	2	1	23	2	1	24	1	66
8:15 AM	0	0	0	2	3	1	1	19	1	0	27	4	58
8:30 AM	2	0	1	2	4	0	2	22	3	2	35	1	74
8:45 AM	3	1	0	3	4	2	1	27	12	2	30	2	87
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	7	5	19	26	10	8	164	30	6	178	10	484
APPROACH %'s :	63.64%	21.21%	15.15%	34.55%	47.27%	18.18%	3.96%	81.19%	14.85%	3.09%	91.75%	5.15%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

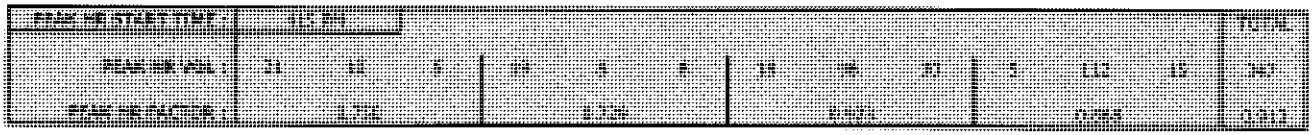
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	2	1	2	6	0	2	4	28	2	2	30	3	82
4:15 PM	5	2	1	7	2	3	5	26	6	1	33	4	95
4:30 PM	4	2	3	5	2	1	5	29	5	0	28	4	88
4:45 PM	6	5	1	5	0	1	2	20	7	3	26	5	81
5:00 PM	6	1	0	2	4	3	6	21	12	1	25	2	83
5:15 PM	4	1	2	4	3	7	2	24	7	2	30	1	87
5:30 PM	9	0	0	5	2	0	5	34	2	0	28	2	87
5:45 PM	6	3	3	9	1	2	3	27	10	0	16	6	86
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	42	15	12	43	14	19	32	209	51	9	216	27	689
APPROACH %'s :	60.87%	21.74%	17.39%	56.58%	18.42%	25.00%	10.96%	71.58%	17.47%	3.57%	85.71%	10.71%	



CONTROL :

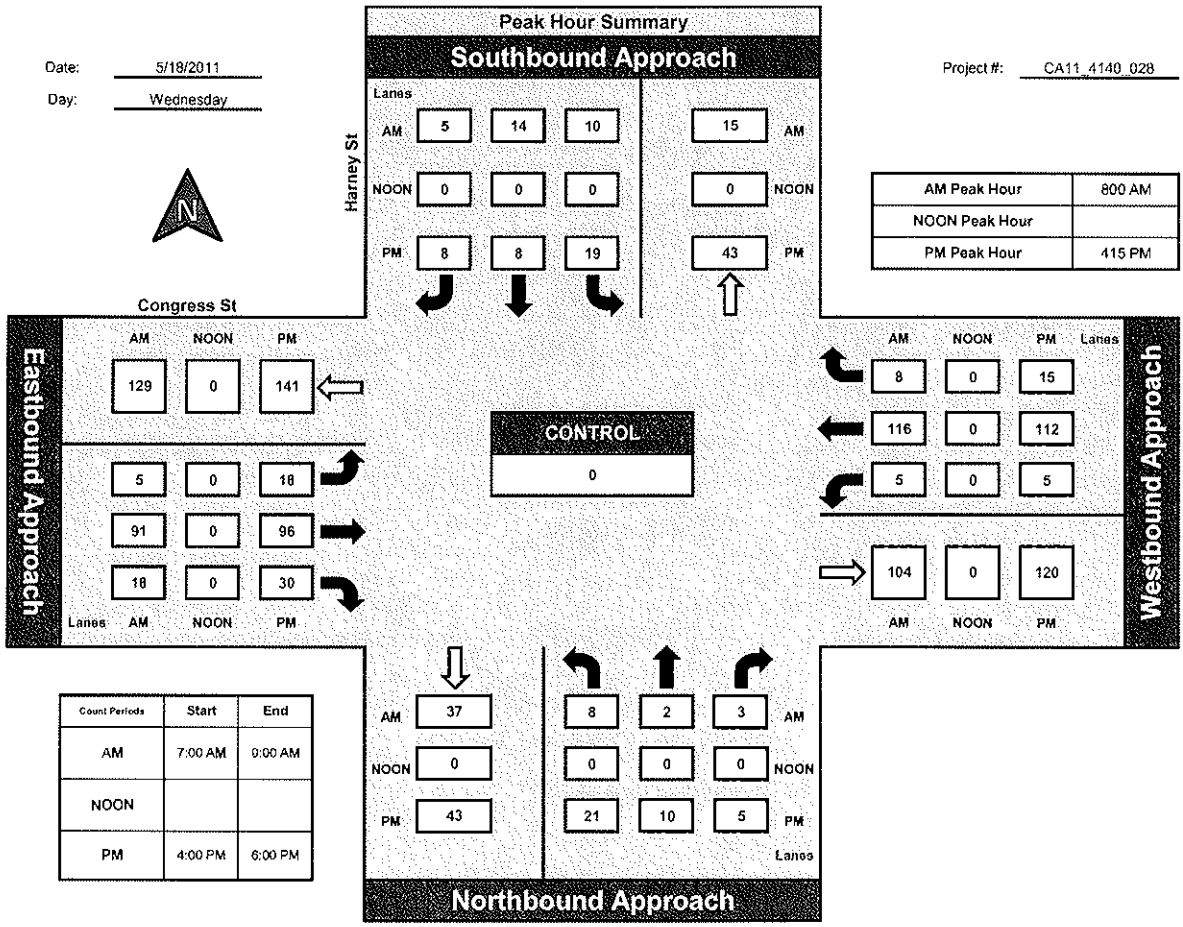
ITM Peak Hour Summary

Prepared by:

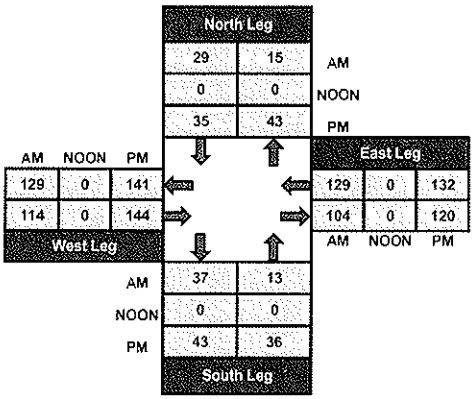
NDS

National Data & Surveying Services

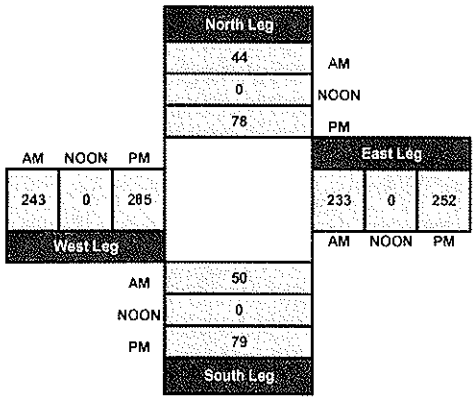
Harney St and Congress St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0			0			2	0			2
7:15 AM	1	0	1			0			2	1			5
7:30 AM	0	0	1			2			3	2			8
7:45 AM	0	0	1			4			1	1			7
8:00 AM	0	2	2			0			2	2			8
8:15 AM	2	3	3			2			3	6			19
8:30 AM	0	0	2			0			2	3			7
8:45 AM	0	3	2			5			1	4			15
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	8	12	0	0	13	0	0	16	19	0	0	71
APPROACH %'s :	13.04%	34.78%	52.17%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	
[illegible]	[illegible]												

CONTROL :

Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below **PM**

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	1	3			0			2	2			9
4:15 PM	2	2	1			3			4	1			13
4:30 PM	1	2	0			0			0	2			5
4:45 PM	1	1	0			2			5	0			9
5:00 PM	1	1	1			2			2	1			8
5:15 PM	0	1	1			3			1	3			9
5:30 PM	1	1	4			3			1	3			13
5:45 PM	2	2	0			2			3	2			11

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	11	10	0	0	15	0	0	18	14	0	0	77
APPROACH %'s :	30.00%	36.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

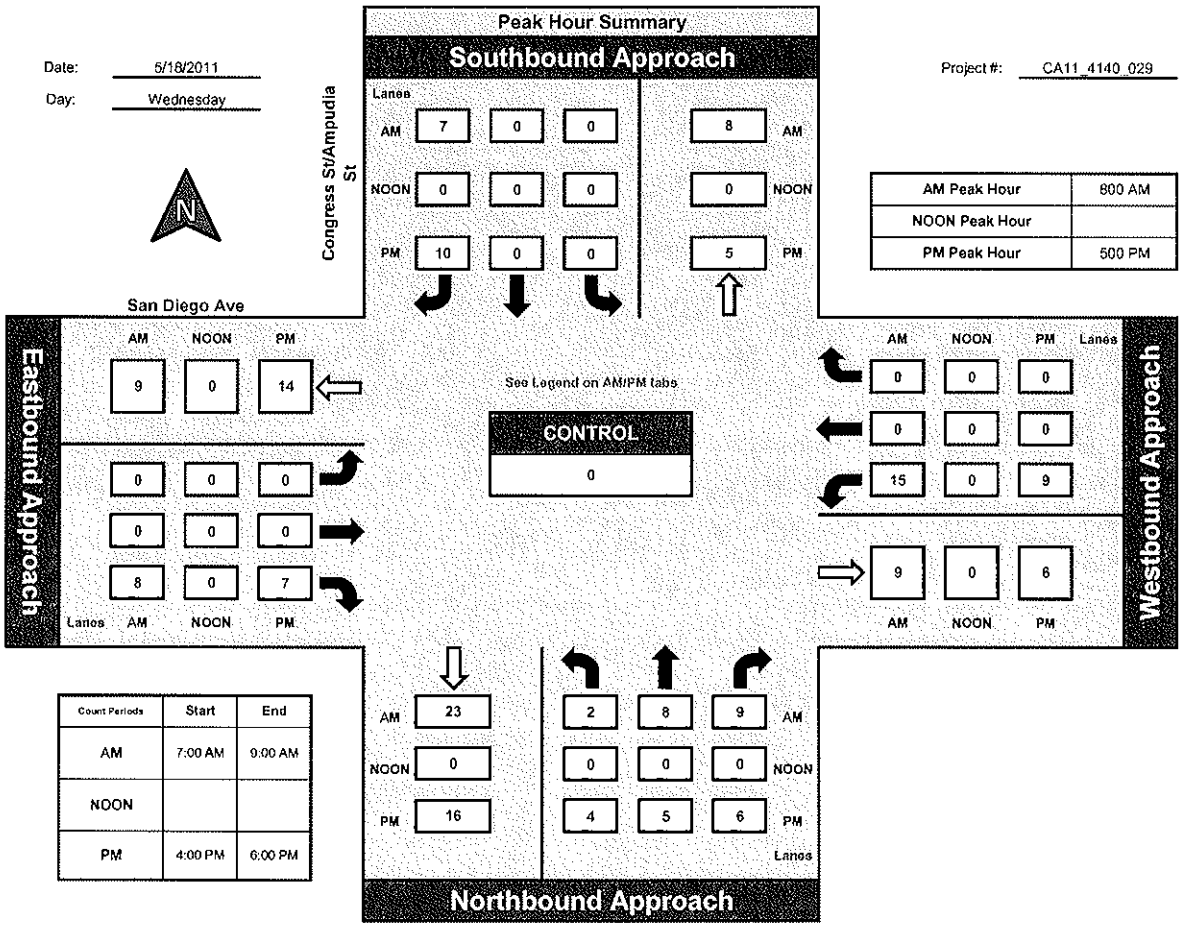
Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

ITM Peak Hour Summary

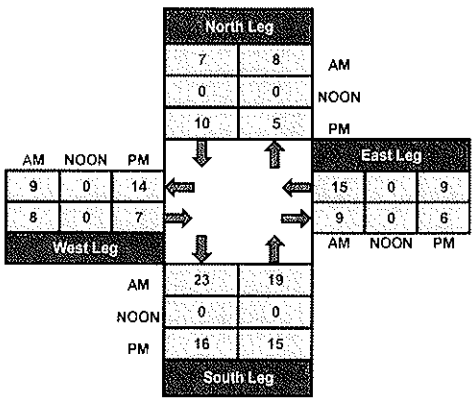
Prepared by:

National Data & Surveying Services

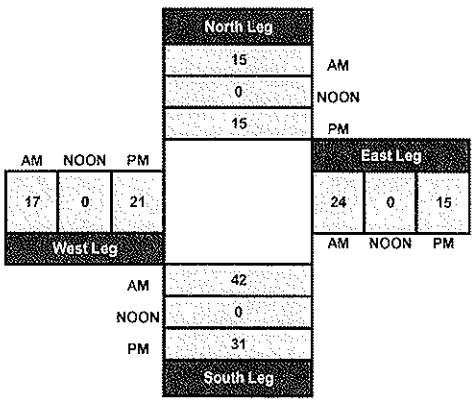
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		5	2	0			13	0	8	21	0	49
7:15 AM	0		6	0	0			8	3	17	22	1	57
7:30 AM	0		20	0	0			17	3	20	27	0	87
7:45 AM	0		18	0	1			16	0	30	33	2	100
8:00 AM	1		16	1	1			8	1	34	41	1	104
8:15 AM	1		14	1	0			14	0	27	63	0	120
8:30 AM	0		18	0	0			14	0	37	57	0	126
8:45 AM	0		19	0	0			13	0	30	61	0	123
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	116	4	2	0	0	103	7	203	325	4	766
APPROACH %'s :	1.69%	0.00%	98.31%	66.67%	33.33%	0.00%	0.00%	93.64%	6.36%	38.16%	61.09%	0.75%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029

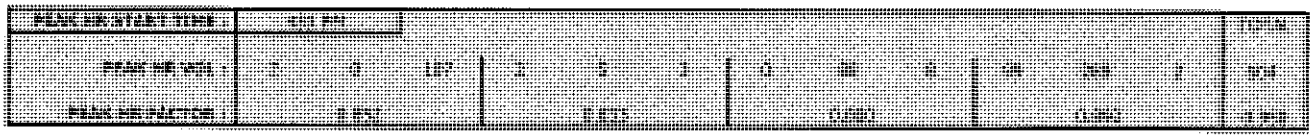
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		28	0	3	1		44	1	19	52	0	148
4:15 PM	1		24	0	1	0		22	1	20	49	1	119
4:30 PM	1		31	1	0	2		23	2	24	73	1	158
4:45 PM	0		24	0	2	0		19	2	22	69	0	138
5:00 PM	1		25	0	2	0		26	4	29	61	1	149
5:15 PM	0		27	1	1	1		20	0	24	85	0	159
5:30 PM	0		21	0	2	0		22	0	24	72	1	142
5:45 PM	0		31	0	0	0		25	2	16	76	0	150
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	211	2	11	4	0	201	12	178	537	4	1163
APPROACH %'s :	1.40%	0.00%	98.60%	11.76%	64.71%	23.53%	0.00%	94.37%	5.63%	24.76%	74.69%	0.56%	



CONTROL :

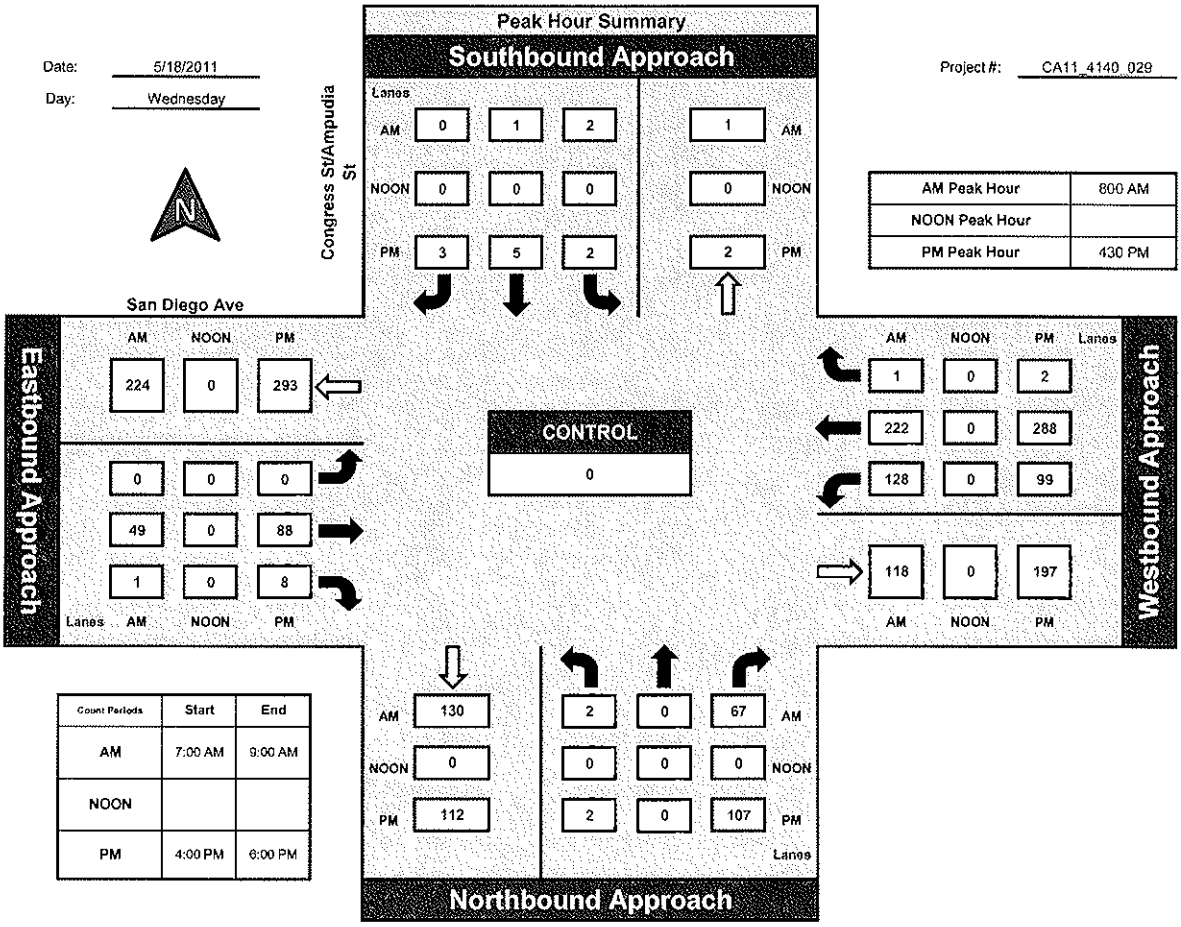
ITM Peak Hour Summary

Prepared by:

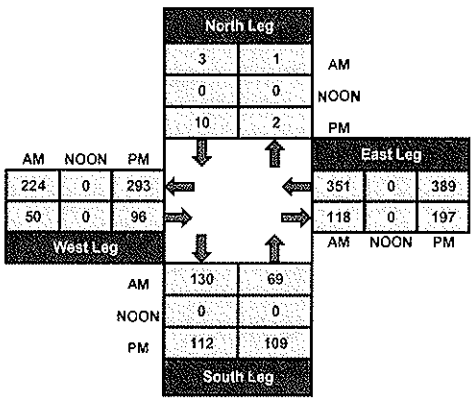
NDS

National Data & Surveying Services

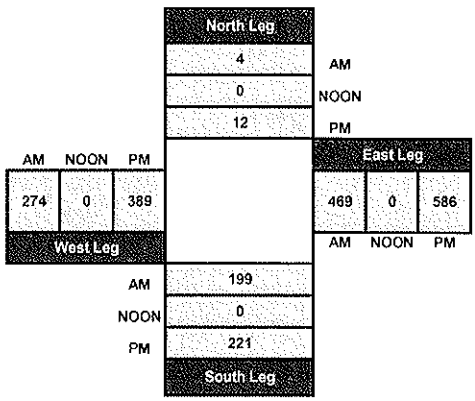
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(42)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		2	0	5	3					3		6	19
7:15 AM		3	2	4	6					2		8	25
7:30 AM		3	3	7	5					1		11	30
7:45 AM		3	3	10	4					3		19	42
8:00 AM		1	1	5	4					2		21	34
8:15 AM		4	0	3	8					2		35	52
8:30 AM		8	2	8	7					6		35	66
8:45 AM		6	1	9	10					8		37	71

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	30	12	51	47	0	0	0	0	27	0	172	339
APPROACH %'s :	0.00%	71.43%	28.57%	52.04%	47.96%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	13.57%	0.00%	86.43%	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		6	3	10	5					9		15	48
4:15 PM		9	5	12	7					8		16	57
4:30 PM		6	8	5	4					13		29	65
4:45 PM		7	6	10	2					9		21	55
5:00 PM		8	2	10	5					5		23	53
5:15 PM		9	4	14	4					8		31	70
5:30 PM		6	8	7	4					12		30	67
5:45 PM		7	6	10	2					9		20	54

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	58	42	78	33	0	0	0	0	73	0	185	469
APPROACH %'s :	0.00%	58.00%	42.00%	70.27%	29.73%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	28.29%	0.00%	71.71%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

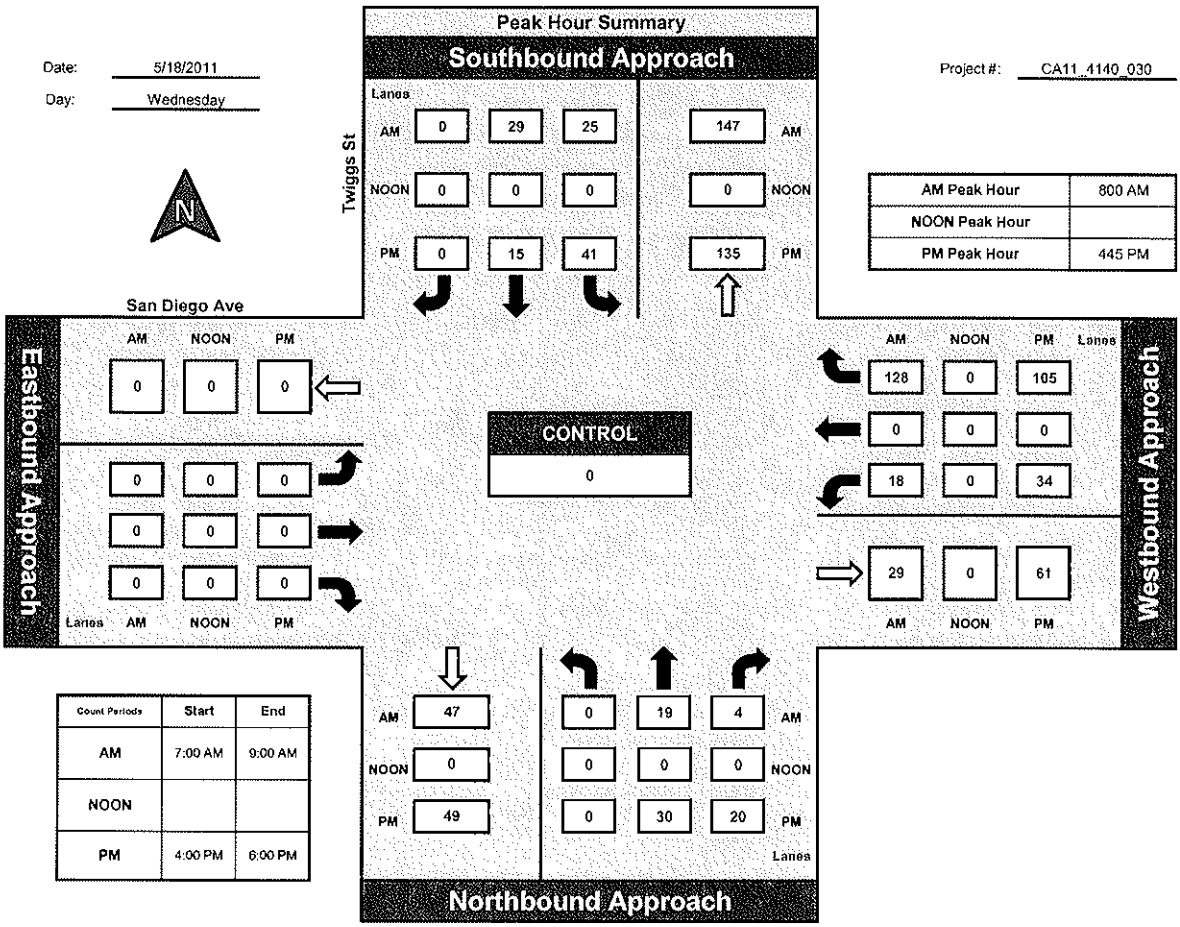
National Data & Surveying Services

Twiggs St and San Diego Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

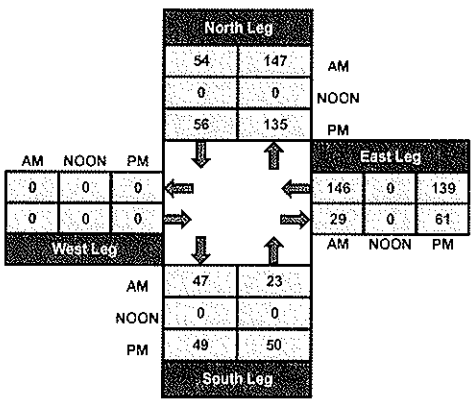
Project #: CA11_4140_030



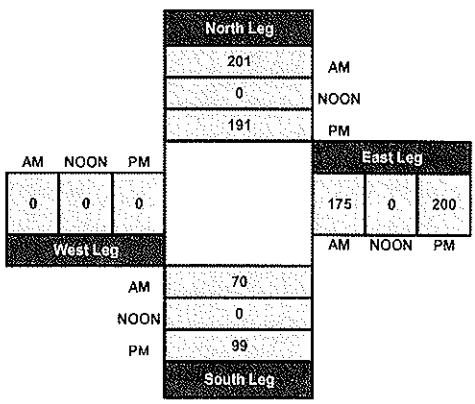
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(43)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	2	0	11	8	1	0	4	0	0	8	8	43
7:15 AM	1	0	0	8	5	1	0	6	1	1	6	9	38
7:30 AM	0	0	0	13	6	0	1	8	0	0	7	15	50
7:45 AM	1	3	0	15	6	2	1	7	1	0	26	13	75
8:00 AM	1	0	1	7	6	2	1	6	2	0	20	17	63
8:15 AM	1	3	0	14	5	2	0	1	0	2	31	26	85
8:30 AM	2	0	2	9	5	1	0	9	1	1	39	19	88
8:45 AM	1	0	0	7	2	7	0	8	1	0	35	21	82
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	8	3	84	43	16	3	49	6	4	172	128	524
APPROACH %'s :	42.11%	42.11%	15.79%	58.74%	30.07%	11.19%	5.17%	84.48%	10.34%	1.32%	56.58%	42.11%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	1	3	17	9	2	1	11	3	1	22	23	93
4:15 PM	0	4	1	15	6	1	0	15	3	3	29	22	99
4:30 PM	1	4	3	16	5	2	2	16	2	5	31	19	106
4:45 PM	0	4	2	14	1	1	1	14	0	5	29	27	98
5:00 PM	0	7	4	24	7	0	0	16	1	8	34	23	124
5:15 PM	3	3	5	21	7	1	0	19	5	6	39	25	134
5:30 PM	1	6	3	16	9	3	1	17	0	9	36	27	128
5:45 PM	1	2	1	29	5	2	2	15	2	7	28	21	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	31	22	152	49	12	7	123	16	44	248	187	897
APPROACH %'s :	10.17%	52.54%	37.29%	71.36%	23.00%	5.63%	4.79%	84.25%	10.96%	9.19%	51.77%	39.04%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

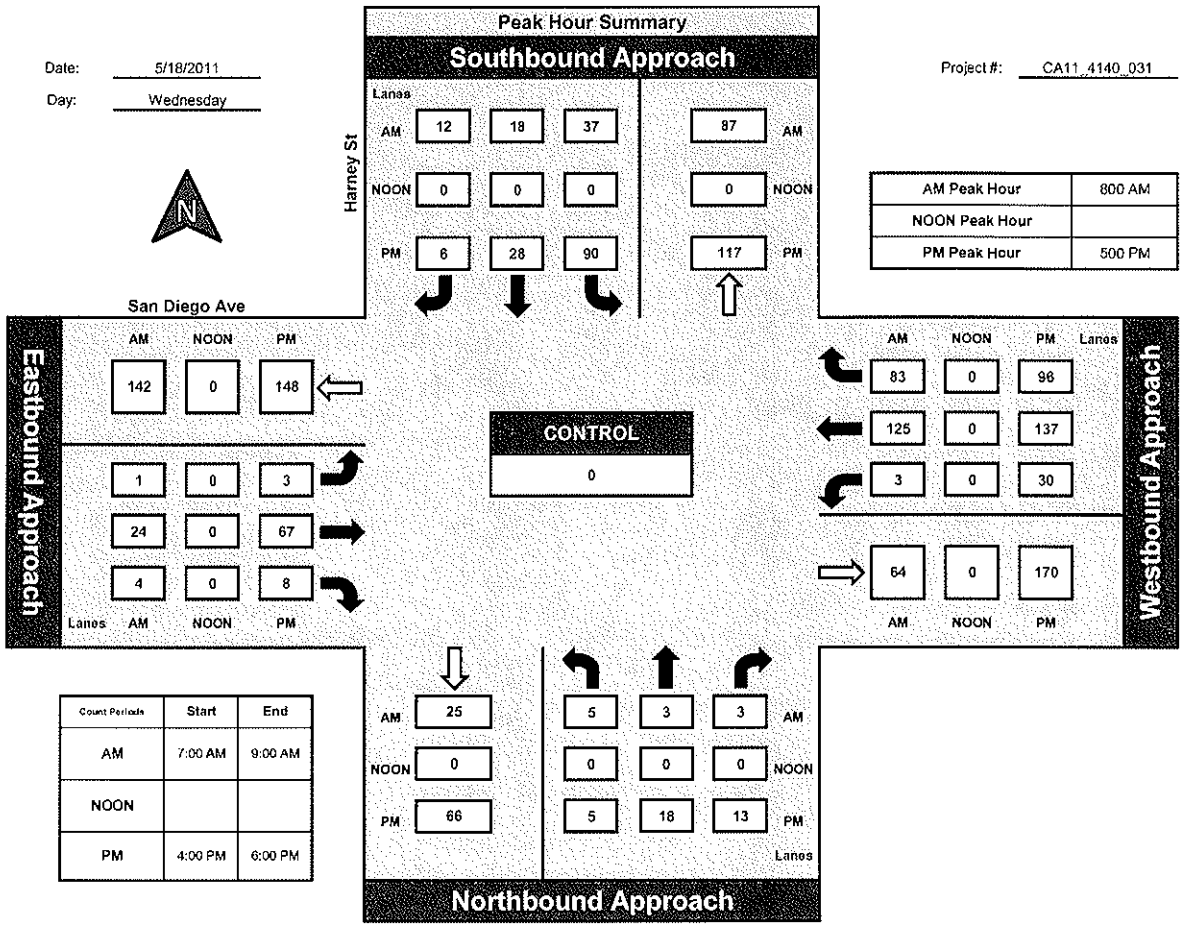
CONTROL :

ITM Peak Hour Summary

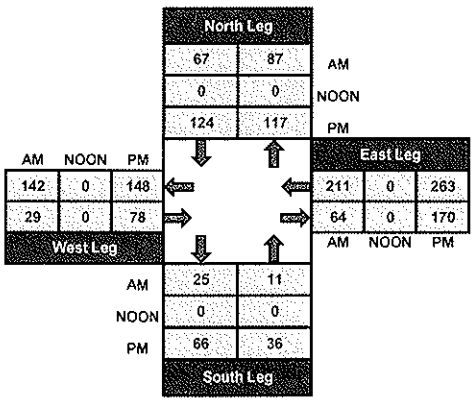
Prepared by:

National Data & Surveying Services

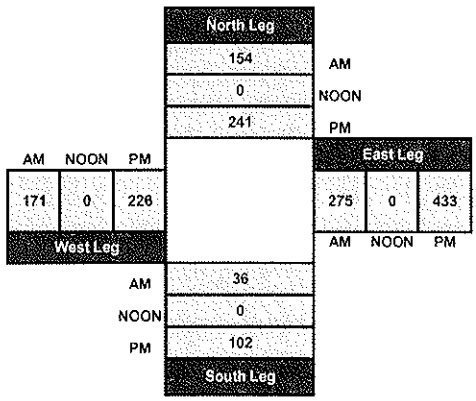
Harney St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(44)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	24	8	10	0	3	0	0	1	18	27	5	0	96
7:15 AM	31	7	11	0	8	2	0	6	14	30	9	0	118
7:30 AM	33	14	8	1	12	0	1	4	30	40	17	3	163
7:45 AM	51	4	10	1	4	1	4	5	24	38	12	0	154
8:00 AM	63	12	12	0	5	1	0	10	14	38	15	1	171
8:15 AM	53	8	7	0	5	1	2	7	22	55	42	1	203
8:30 AM	39	5	13	0	7	1	4	7	21	65	55	2	219
8:45 AM	43	2	13	0	5	1	3	16	16	63	47	2	211
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	337	60	84	2	49	7	14	56	159	356	202	9	1335
APPROACH %'s :	70.06%	12.47%	17.46%	3.45%	84.48%	12.07%	6.11%	24.45%	69.43%	62.79%	35.63%	1.59%	
[illegible]	[illegible]												TOTAL
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	46	3	15	1	18	1	2	7	63	32	28	1	217
4:15 PM	50	7	18	0	11	2	2	12	30	14	18	0	164
4:30 PM	55	7	22	1	10	3	0	15	40	24	38	4	219
4:45 PM	66	6	25	2	15	3	2	14	29	18	20	2	202
5:00 PM	62	11	18	0	12	2	0	11	44	28	30	3	221
5:15 PM	73	6	24	2	8	7	2	8	41	18	31	1	221
5:30 PM	64	2	30	3	16	5	2	13	27	21	32	0	215
5:45 PM	60	9	19	2	9	3	4	16	36	33	28	0	219
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	476	51	171	11	99	26	14	96	310	188	225	11	1678
APPROACH %'s :	68.19%	7.31%	24.50%	8.09%	72.79%	19.12%	3.33%	22.86%	73.81%	44.34%	53.07%	2.59%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

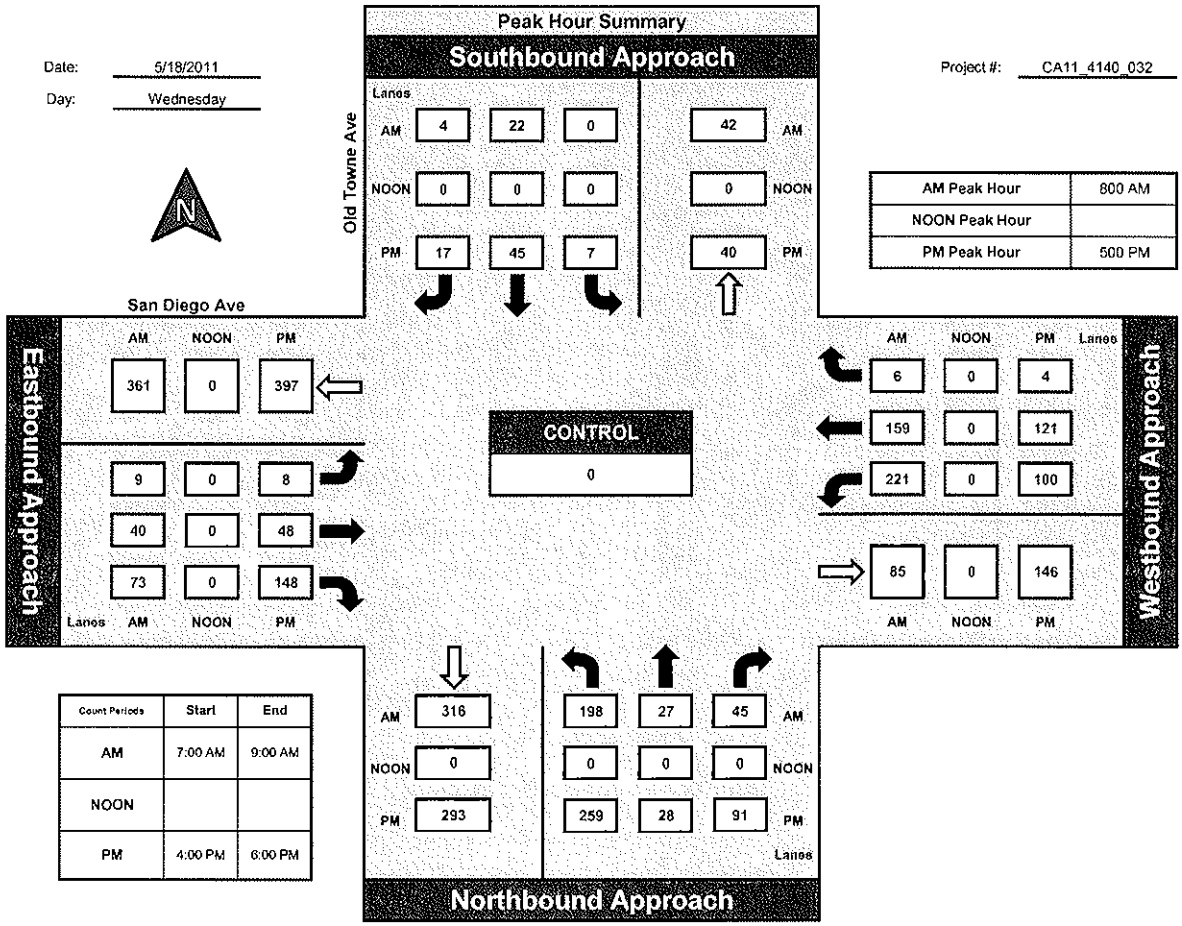
CONTROL :

ITM Peak Hour Summary

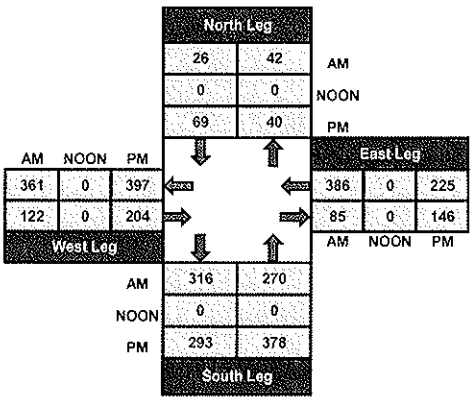
Prepared by:

National Data & Surveying Services

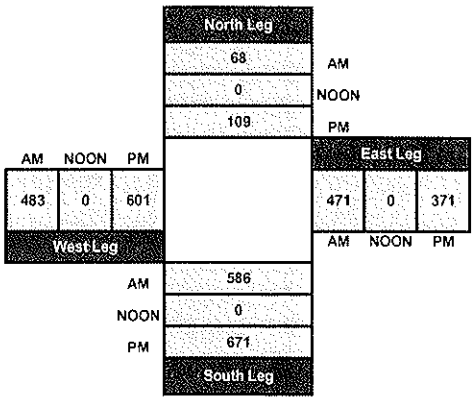
Old Towne Ave and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(45)

Intersection Turning Movement

Prepared by:

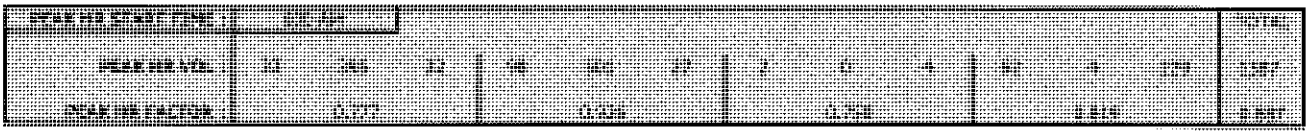
National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	5	44	6	16	108	3	1	1	2	10	2	14	212
7:15 AM	8	73	8	21	105	3	0	0	0	12	0	18	248
7:30 AM	12	81	6	18	131	3	0	0	1	14	0	38	304
7:45 AM	14	74	9	37	155	4	1	0	1	22	2	45	364
8:00 AM	15	63	11	25	134	9	0	0	2	16	2	38	315
8:15 AM	3	84	5	17	113	7	1	0	0	16	1	57	304
8:30 AM	9	128	11	23	125	4	0	0	2	11	1	63	377
8:45 AM	6	120	5	33	129	7	1	0	0	19	0	71	391
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	72	667	61	190	1000	40	4	1	8	120	8	344	2515
APPROACH %'s :	9.00%	83.38%	7.63%	15.45%	81.30%	3.25%	30.77%	7.69%	61.54%	25.42%	1.69%	72.88%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	206	24	32	66	3	5	0	3	23	0	31	394
4:15 PM	0	190	16	42	90	0	5	0	2	19	2	41	407
4:30 PM	4	211	27	49	98	2	5	0	1	20	0	38	455
4:45 PM	3	195	15	45	69	2	1	1	2	16	2	47	398
5:00 PM	5	214	22	42	84	1	3	1	1	15	0	43	431
5:15 PM	3	189	14	52	86	1	6	0	1	14	0	51	417
5:30 PM	1	175	24	39	81	2	3	0	3	17	1	31	377
5:45 PM	1	121	30	44	89	0	0	1	0	19	0	37	342
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	1501	172	345	663	11	28	3	13	143	5	319	3221
APPROACH %'s :	1.06%	88.76%	10.17%	33.86%	65.06%	1.08%	63.64%	6.82%	29.55%	30.62%	1.07%	68.31%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Taylor St and Juan St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_017

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	626	626	AM
NOON	0	0	NOON
PM	531	1003	PM

West Leg				East Leg			
AM	NOON	PM		AM	NOON	PM	
64	0	23		295	0	246	AM
6	0	22		130	0	268	NOON
							PM

	South Leg	
AM	567	460
NOON	0	0
PM	407	902

Total Volume Per Leg

	North Leg
AM	1252
NOON	0
PM	1534

West Leg			East Leg		
AM	NOON	PM			
70	0	45	425	0	514
			AM	NOON	PM

	South Leg
AM	1027
NOON	0
PM	1309

(46)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	1	1	0	0	0	0	14	5	0	19	0	47
7:15 AM	7	0	3	0	0	1	1	21	7	0	27	1	68
7:30 AM	8	0	1	0	0	0	0	20	9	1	34	1	74
7:45 AM	9	0	5	0	0	2	0	23	9	0	42	0	90
8:00 AM	6	1	0	1	1	0	0	29	18	0	24	0	80
8:15 AM	14	1	2	0	1	0	0	18	15	1	29	0	81
8:30 AM	11	1	2	1	0	1	0	20	7	0	26	0	69
8:45 AM	23	2	2	0	1	0	0	25	14	0	38	1	106
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	85	6	16	2	3	4	1	170	84	2	239	3	615
APPROACH %'s :	79.44%	5.61%	14.95%	22.22%	33.33%	44.44%	0.39%	66.67%	32.94%	0.82%	97.95%	1.23%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

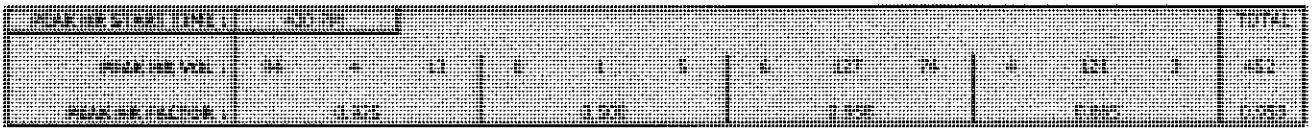
Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	23	0	3	0	0	0	1	36	15	2	23	0	103
4:15 PM	18	0	6	0	0	0	1	32	15	6	17	1	96
4:30 PM	23	3	4	0	1	2	1	37	13	1	26	1	112
4:45 PM	28	0	2	0	0	1	2	30	20	1	34	0	118
5:00 PM	22	1	3	0	0	1	0	31	23	0	26	2	109
5:15 PM	21	0	4	0	0	1	3	29	18	2	35	0	113
5:30 PM	20	1	2	1	1	1	0	33	15	1	32	0	107
5:45 PM	21	0	4	0	0	0	0	26	26	2	23	1	103

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	176	5	28	1	2	6	8	254	145	15	216	5	861
APPROACH %'s :	84.21%	2.39%	13.40%	11.11%	22.22%	66.67%	1.97%	62.41%	35.63%	6.36%	91.53%	2.12%	



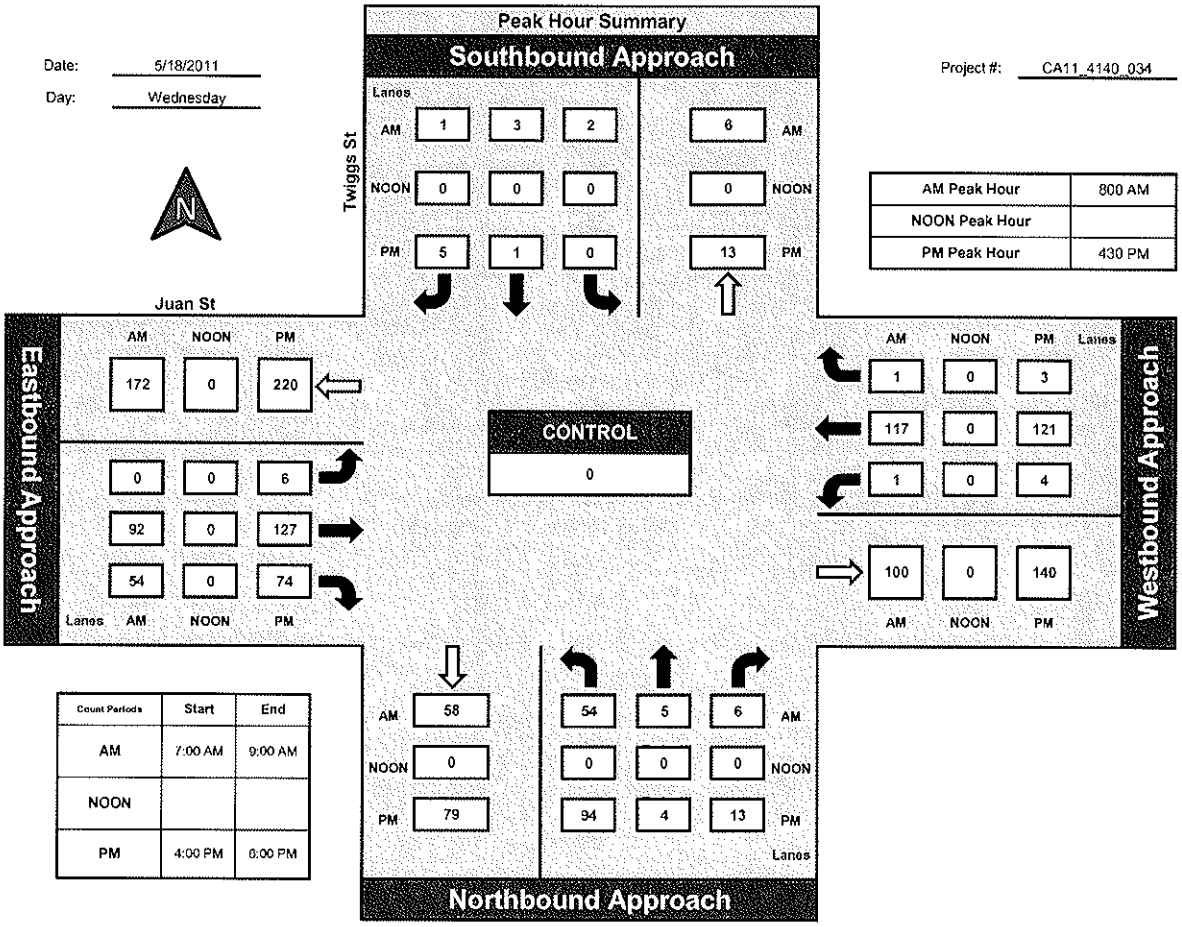
CONTROL :

ITM Peak Hour Summary

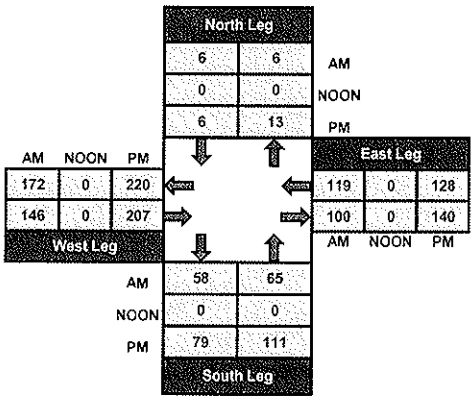
Prepared by:

National Data & Surveying Services

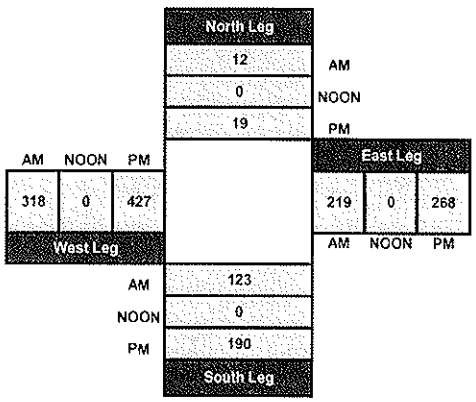
Twiggs St and Juan St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(47)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	6	1	6	0	1	1	1	10	0	9	15	0	50
7:15 AM	5	1	6	0	0	1	1	14	3	8	19	0	58
7:30 AM	8	1	6	0	0	3	1	9	6	15	38	0	87
7:45 AM	9	1	5	0	0	0	2	16	13	12	28	0	86
8:00 AM	4	1	9	0	0	1	4	15	11	6	24	0	75
8:15 AM	0	1	5	2	1	0	1	0	0	5	1	1	17
8:30 AM	13	0	4	0	0	1	0	17	8	8	23	0	74
8:45 AM	19	1	2	0	0	0	1	18	7	9	22	2	81

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	7	43	2	2	7	11	99	48	72	170	3	528
APPROACH %'s :	56.14%	6.14%	37.72%	18.18%	18.18%	63.64%	6.96%	62.66%	30.38%	29.39%	69.39%	1.22%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	11	0	3	0	0	0	0	26	10	10	23	0	83
4:15 PM	11	2	3	2	0	1	1	28	11	9	10	0	78
4:30 PM	11	1	11	0	0	2	1	30	9	4	16	1	86
4:45 PM	15	2	7	0	0	2	2	25	9	2	18	0	82
5:00 PM	14	0	13	0	0	2	1	22	13	3	16	2	86
5:15 PM	17	0	5	0	3	3	0	19	10	5	17	1	80
5:30 PM	24	2	8	0	1	0	3	18	12	4	11	0	83
5:45 PM	13	0	6	0	0	1	2	29	6	6	16	2	81
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	116	7	56	2	4	11	10	197	80	43	127	6	659
APPROACH %'s :	64.80%	3.91%	31.28%	11.76%	23.53%	64.71%	3.48%	68.64%	27.87%	24.43%	72.16%	3.41%	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harney St and Juan St , City of San Diego

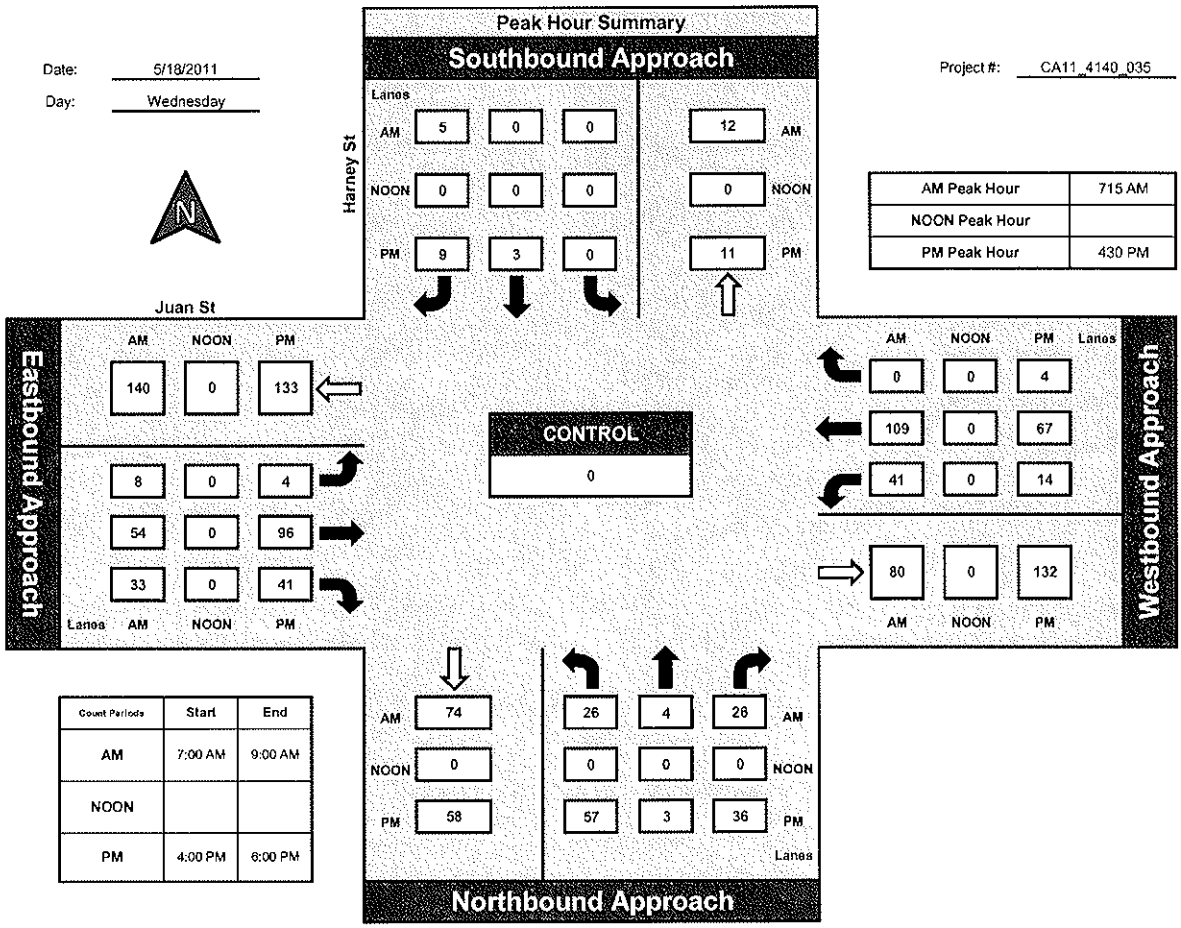
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

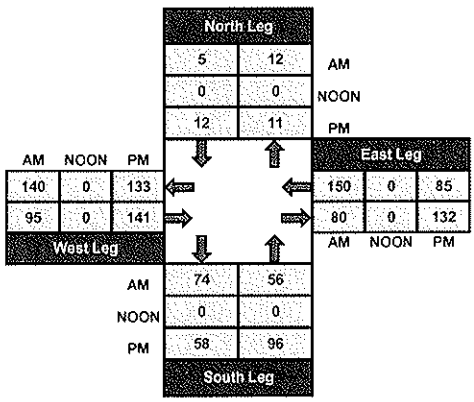
Project #: CA11_4140_035

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

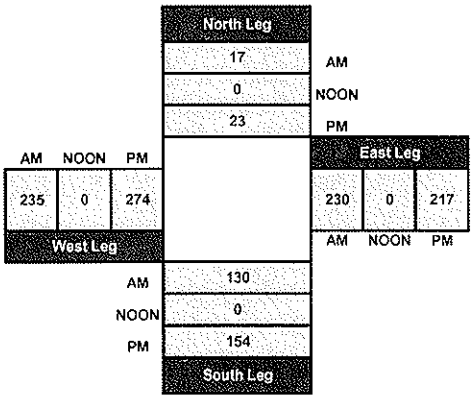


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(48)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	30	30	0	0	118	13	7	0	44			2	244
7:15 AM	49	34	0	0	100	18	9	0	46			0	256
7:30 AM	66	48	1	1	135	39	13	0	51			1	355
7:45 AM	73	38	1	0	152	64	18	0	74			2	422
8:00 AM	57	38	0	0	137	36	27	0	67			0	362
8:15 AM	77	56	0	0	119	50	17	0	36			0	355
8:30 AM	119	63	0	0	125	49	8	3	58			2	427
8:45 AM	111	76	0	0	141	57	7	2	53			2	449
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	582	383	2	1	1027	326	106	5	429	0	0	9	2870
APPROACH %'s :	60.19%	39.61%	0.21%	0.07%	75.85%	24.08%	19.63%	0.93%	79.44%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	364	233	1	1	533	199	65	3	274	0	0	5	1676
PEAK HR FACTOR :	0.788			0.250			0.778			0.000			0.945

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	104	167	2	0	57	37	16	0	36			3	422
4:15 PM	95	152	4	0	68	18	14	0	58			3	412
4:30 PM	120	164	1	2	70	32	20	4	56			4	473
4:45 PM	115	131	1	0	73	34	19	1	40			3	417
5:00 PM	120	165	4	1	68	23	23	2	48			3	457
5:15 PM	113	146	4	0	83	18	16	0	56			4	440
5:30 PM	103	114	1	0	74	16	18	0	57			1	384
5:45 PM	81	87	2	1	72	24	14	1	48			3	333
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	851	1126	19	4	565	202	140	8	399	0	0	24	3338
APPROACH %'s :	42.64%	56.41%	0.95%	0.52%	73.28%	26.20%	25.59%	1.46%	72.94%	0.00%	0.00%	100.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

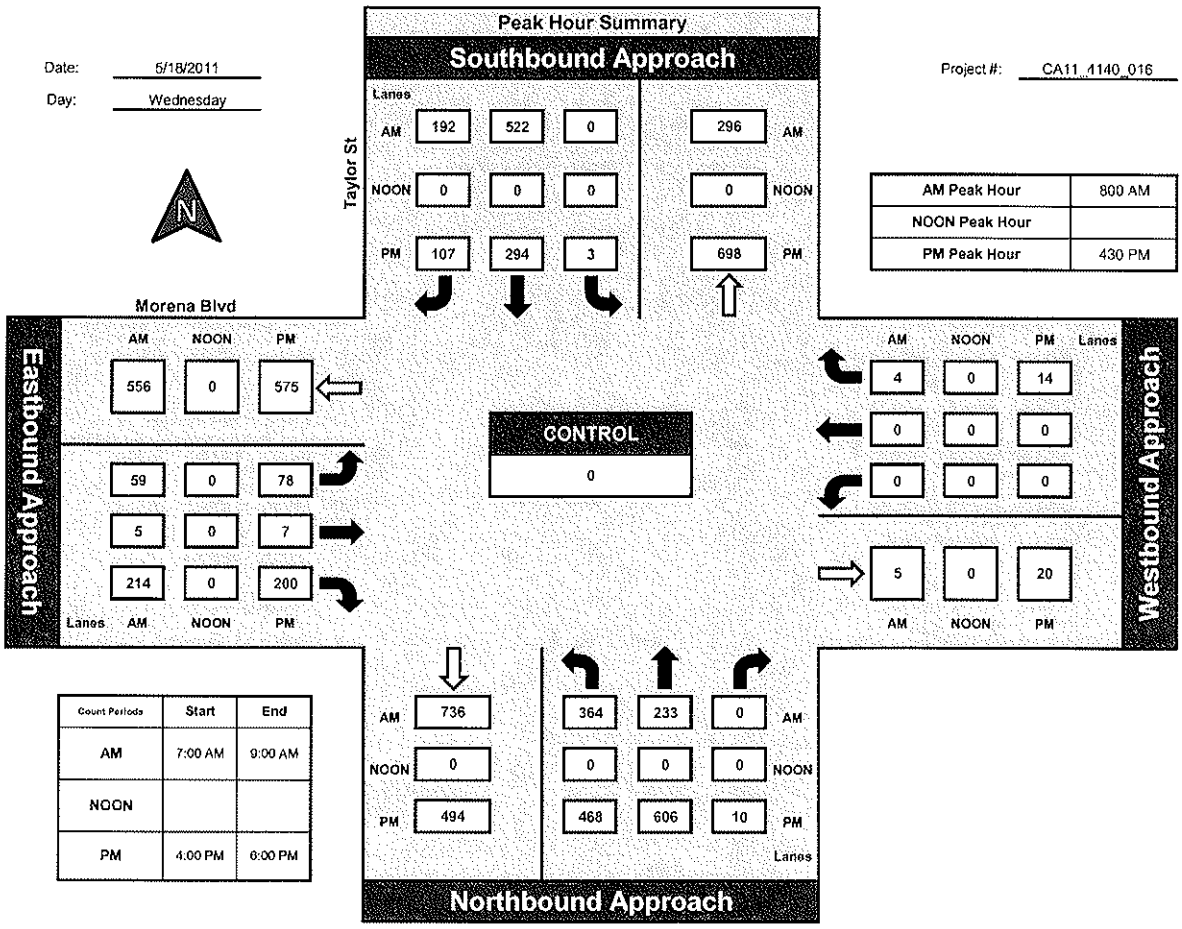
National Data & Surveying Services

Taylor St and Morena Blvd , City of San Diego

Date: 5/18/2011

Day: Wednesday

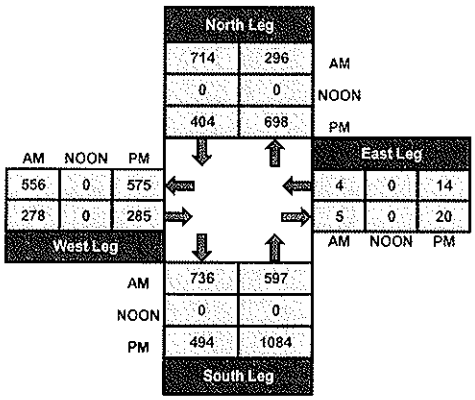
Project #: CA11_4140_016



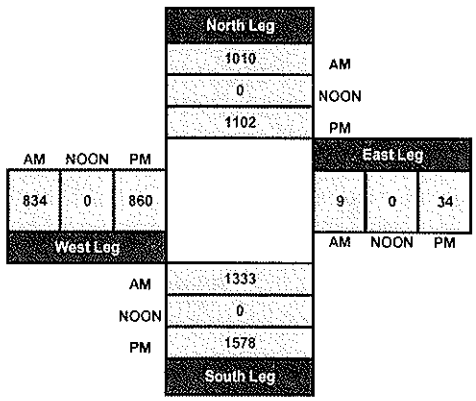
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

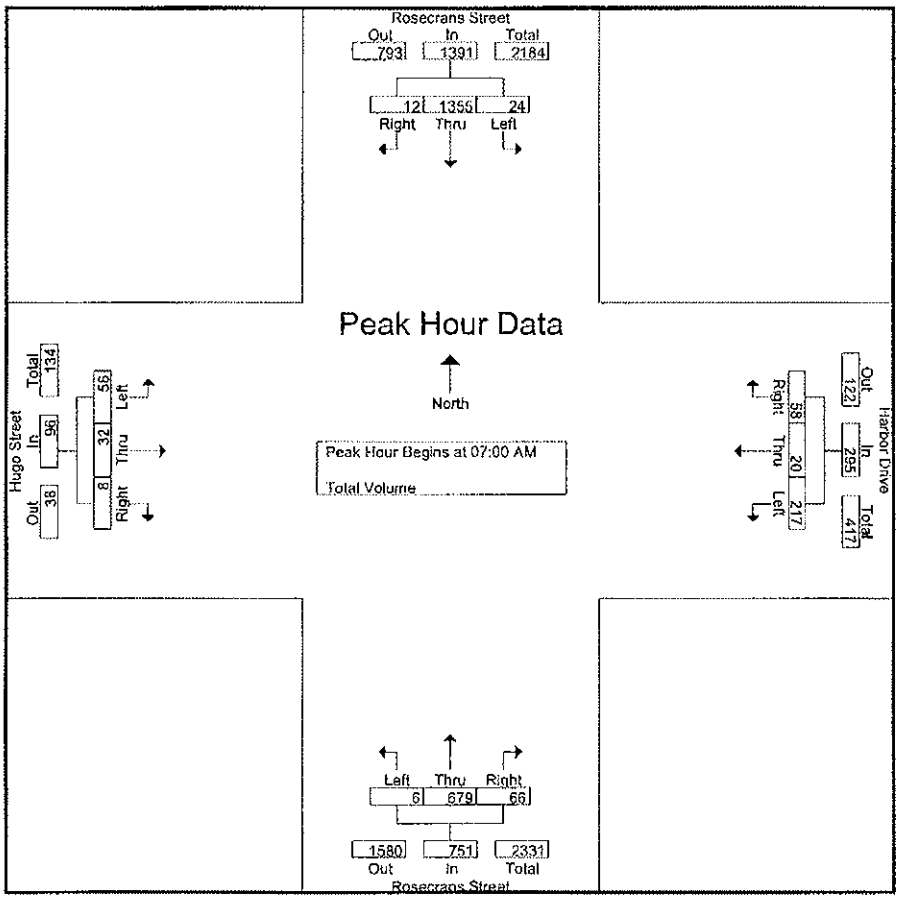
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	4	315	1	320	57	9	9	75	0	86	17	103	6	3	1	10	508
06:45 AM	3	387	5	395	43	7	9	59	0	101	9	110	10	5	3	18	582
Total	7	702	6	715	100	16	18	134	0	187	26	213	16	8	4	28	1090
07:00 AM	4	366	4	374	40	2	18	60	3	138	17	158	13	7	2	22	614
07:15 AM	4	340	1	345	74	12	15	101	1	181	21	203	14	11	2	27	676
07:30 AM	7	330	5	342	46	5	9	60	0	179	16	195	18	9	3	30	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
08:00 AM	5	277	1	283	40	16	11	67	0	183	18	201	15	14	1	30	581
08:15 AM	5	283	2	290	56	7	10	73	0	160	19	179	22	4	0	26	568
Grand Total	41	2617	21	2679	413	59	97	569	6	1209	129	1344	109	58	13	180	4772
Apprch %	1.5	97.7	0.8		72.6	10.4	17		0.4	90	9.6		60.6	32.2	7.2		
Total %	0.9	54.8	0.4	56.1	8.7	1.2	2	11.9	0.1	25.3	2.7	28.2	2.3	1.2	0.3	3.8	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	**366**	4	**374**	40	2	**18**	60	**3**	138	17	158	**13**	7	2	22	614
07:15 AM	4	340	1	345	74	**12**	15	**101**	1	**181**	**21**	**203**	14	**11**	2	27	**676**
07:30 AM	7	330	**5**	342	46	5	9	60	0	179	16	195	**18**	9	**3**	**30**	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total Volume	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
% App. Total	1.7	97.4	0.9		73.6	6.8	19.7		0.8	90.4	8.8		58.3	33.3	8.3		
PHF	.667	.926	.600	.930	.733	.417	.806	.730	.500	.938	.786	.925	.778	.727	.667	.800	.937

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	3	387	5	395	74	12	15	101	1	181	21	203	14	11	2	27
+15 mins.	4	366	4	374	46	5	9	60	0	179	16	195	18	9	3	30
+30 mins.	4	340	1	345	57	1	16	74	2	181	12	195	11	5	1	17
+45 mins.	7	330	5	342	40	16	11	67	0	183	18	201	15	14	1	30
Total Volume	18	1423	15	1456	217	34	51	302	3	724	67	794	58	39	7	104
% App. Total	1.2	97.7	1		71.9	11.3	16.9		0.4	91.2	8.4		55.8	37.5	6.7	
PHF	.643	.919	.750	.922	.733	.531	.797	.748	.375	.989	.798	.978	.806	.696	.583	.867

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

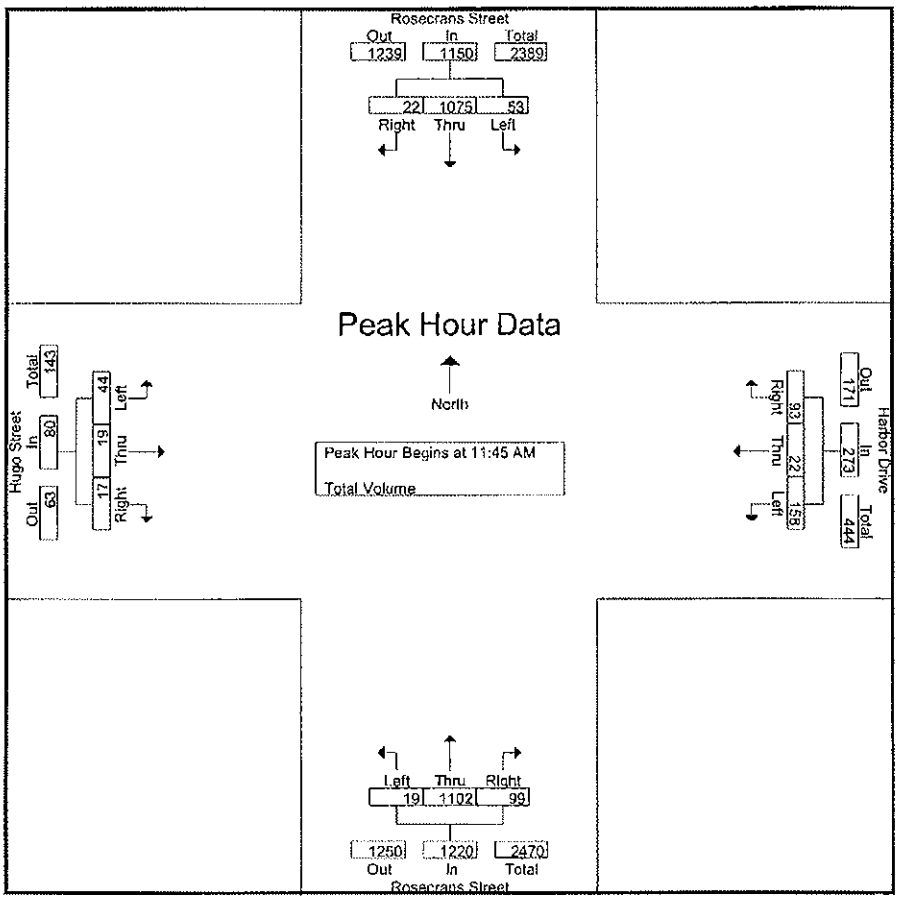
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	10	242	4	256	43	8	24	75	5	287	27	319	15	10	2	27	677
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
Total	21	521	10	552	71	12	43	126	10	597	54	661	29	14	7	50	1389
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
12:45 PM	12	280	8	300	37	7	27	71	4	264	24	292	13	9	6	28	691
Total	54	1076	24	1154	167	25	101	293	18	1056	96	1170	43	24	18	85	2702
01:00 PM	12	244	4	260	41	7	26	74	3	270	32	305	11	6	4	21	660
01:15 PM	10	214	5	229	36	5	19	60	2	280	29	311	13	6	0	19	619
Grand Total	97	2055	43	2195	315	49	189	553	33	2203	211	2447	96	50	29	175	5370
Apprch %	4.4	93.6	2		57	8.9	34.2		1.3	90	8.6		54.9	28.6	16.6		
Total %	1.8	38.3	0.8	40.9	5.9	0.9	3.5	10.3	0.6	41	3.9	45.6	1.8	0.9	0.5	3.3	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
Total Volume	53	1075	22	1150	158	22	93	273	19	1102	99	1220	44	19	17	80	2723
% App. Total	4.6	93.5	1.9		57.9	8.1	34.1		1.6	90.3	8.1		55	23.8	21.2		
PHF	.576	.873	.917	.893	.898	.786	.750	.875	.950	.889	.917	.892	.786	.679	.850	.870	.934

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				11:30 AM				12:15 PM			
+0 mins.	10	255	6	271	**44**	6	25	75	**5**	287	**27**	319	9	7	5	21
+15 mins.	**23**	233	5	261	44	**7**	18	69	5	**310**	27	**342**	11	4	4	19
+30 mins.	9	**308**	5	**322**	42	5	**31**	**78**	5	245	26	276	**13**	**9**	**6**	**28**
+45 mins.	12	280	**8**	300	37	7	27	71	5	262	25	292	11	6	4	21
Total Volume	54	1076	24	1154	167	25	101	293	20	1104	105	1229	44	26	19	89
% App. Total	4.7	93.2	2.1		57	8.5	34.5		1.6	89.8	8.5		49.4	29.2	21.3	
PHF	.587	.873	.750	.896	.949	.893	.815	.939	1.000	.890	.972	.898	.846	.722	.792	.795

Counts Unlimited Inc.
26286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

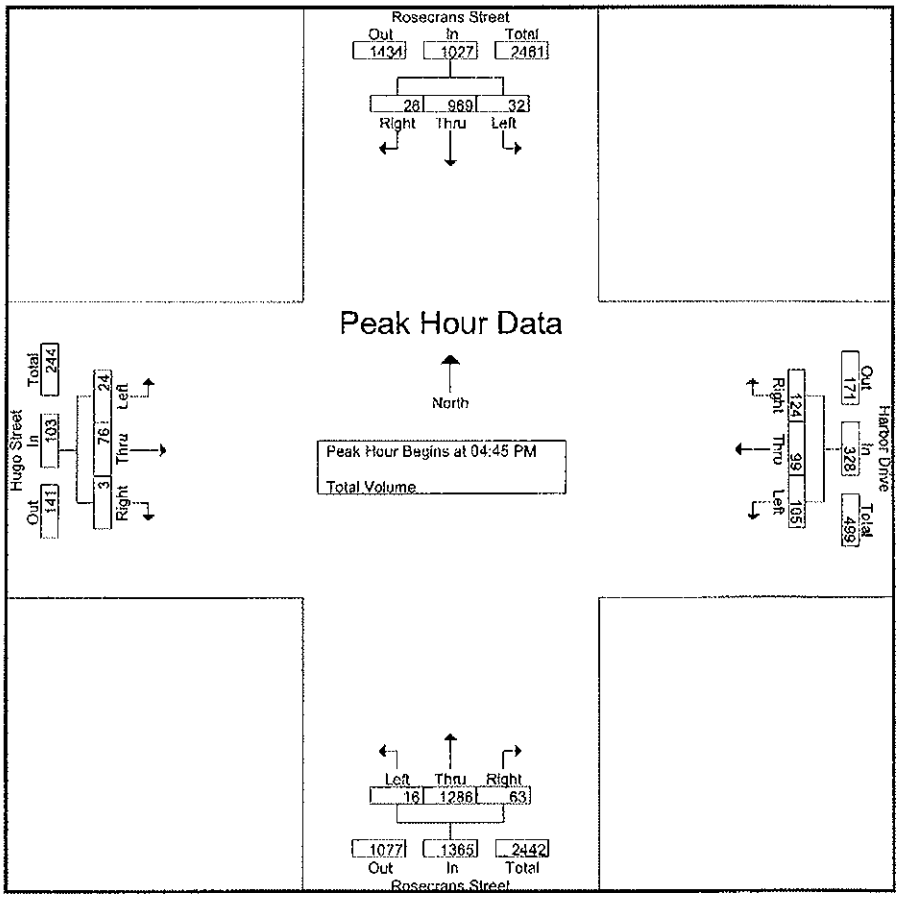
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	198	5	211	33	10	22	65	5	351	17	373	12	8	3	23	672
04:15 PM	3	200	11	214	37	12	27	76	8	319	9	336	13	9	2	24	650
04:30 PM	7	221	8	236	45	23	39	107	8	228	6	242	10	12	7	29	614
04:45 PM	9	241	4	254	28	21	37	86	7	251	12	270	9	13	0	22	632
Total	27	860	28	915	143	66	125	334	28	1149	44	1221	44	42	12	98	2568
05:00 PM	10	247	16	273	21	22	31	74	5	401	13	419	5	15	0	20	786
05:15 PM	5	251	5	261	29	27	29	85	2	322	28	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	29	27	83	2	312	10	324	2	27	2	31	677
05:45 PM	5	229	1	235	29	28	24	81	1	245	6	252	2	7	4	13	581
Total	28	957	23	1008	106	106	111	323	10	1280	57	1347	17	70	7	94	2772
Grand Total	55	1817	51	1923	249	172	236	657	38	2429	101	2568	61	112	19	192	5340
Apprch %	2.9	94.5	2.7		37.9	26.2	35.9		1.5	94.6	3.9		31.8	58.3	9.9		
Total %	1	34	1	36	4.7	3.2	4.4	12.3	0.7	45.5	1.9	48.1	1.1	2.1	0.4	3.6	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	9	241	4	254	28	21	**37**	**86**	**7**	251	12	270	9	13	0	22	632
05:00 PM	**10**	247	**16**	**273**	21	22	31	74	5	**401**	13	**419**	5	15	0	20	**786**
05:15 PM	5	**251**	5	261	**29**	27	29	85	2	322	**28**	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	**29**	27	83	2	312	10	324	2	**27**	2	**31**	677
Total Volume	32	969	26	1027	105	99	124	328	16	1286	63	1365	24	76	3	103	2823
% App. Total	3.1	94.4	2.5		32	30.2	37.8		1.2	94.2	4.6		23.3	73.8	2.9		
PHF	.800	.965	.406	.940	.905	.853	.838	.953	.571	.802	.563	.814	.667	.704	.375	.831	.898

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:45 PM				04:45 PM			
+0 mins.	9	241	4	254	**45**	23	**39**	**107**	7	251	12	270	9	13	0	22
+15 mins.	**10**	247	**16**	**273**	28	21	37	86	5	**401**	13	**419**	5	15	0	20
+30 mins.	5	**251**	5	261	21	22	31	74	2	322	28	352	8	21	1	30
+45 mins.	8	230	1	239	29	**27**	29	85	2	312	10	324	2	**27**	**2**	**31**
Total Volume	32	969	26	1027	123	93	136	352	16	1286	63	1365	24	76	3	103
% App. Total	3.1	94.4	2.5		34.9	26.4	38.6		1.2	94.2	4.6		23.3	73.8	2.9	
PHF	.800	.965	.406	.940	.683	.861	.872	.822	.571	.802	.563	.814	.667	.704	.375	.831

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

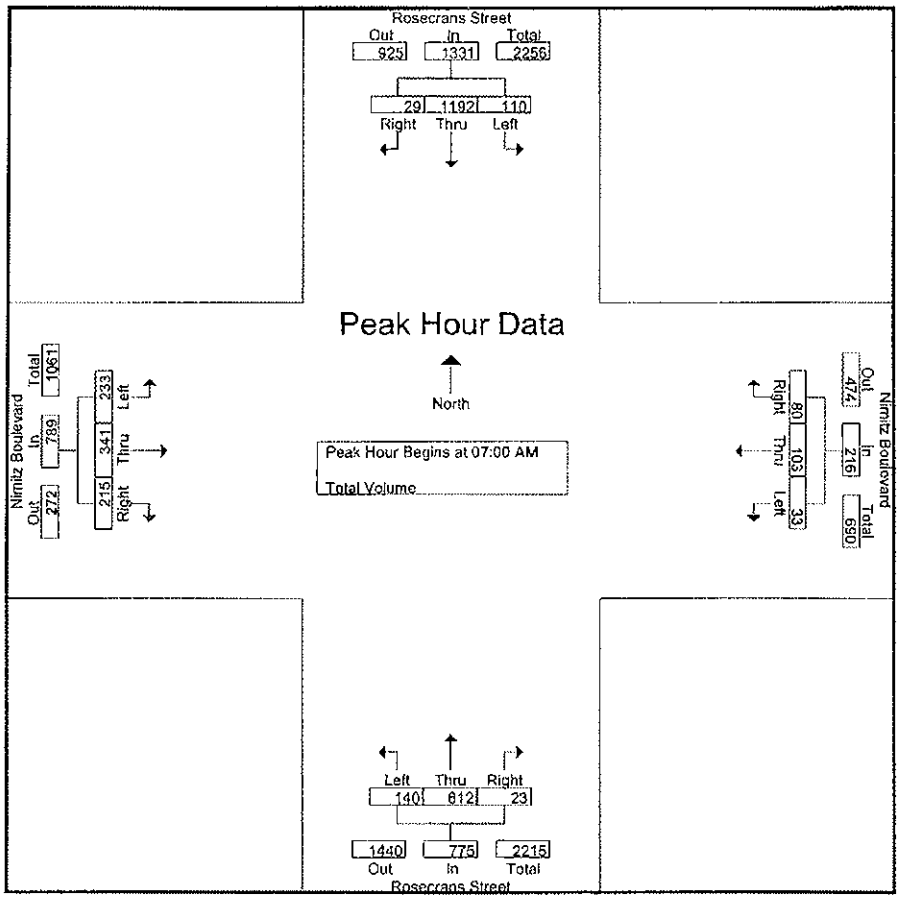
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	38	254	22	314	6	38	22	66	30	69	10	109	62	66	47	175	664
06:45 AM	28	322	19	369	5	33	24	62	45	89	3	137	62	71	60	193	761
Total	66	576	41	683	11	71	46	128	75	158	13	246	124	137	107	368	1425
07:00 AM	25	324	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	8	359	9	26	20	55	34	151	7	192	74	74	58	206	812
07:30 AM	28	272	8	308	13	29	23	65	37	158	6	201	49	103	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	39	166	8	213	66	100	49	215	782
Total	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
08:00 AM	34	230	8	272	4	27	12	43	38	161	8	207	85	54	43	182	704
08:15 AM	28	250	22	300	6	24	20	50	49	149	10	208	61	65	56	182	740
Grand Total	238	2248	100	2586	54	225	158	437	302	1080	54	1436	503	597	421	1521	5980
Apprch %	9.2	86.9	3.9		12.4	51.5	36.2		21	75.2	3.8		33.1	39.3	27.7		
Total %	4	37.6	1.7	43.2	0.9	3.8	2.6	7.3	5.1	18.1	0.9	24	8.4	10	7	25.4	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	25	**324**	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	**8**	**359**	9	26	20	55	34	151	7	192	**74**	74	**58**	206	**812**
07:30 AM	28	272	8	308	**13**	**29**	**23**	**65**	37	158	6	201	49	**103**	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	**39**	**166**	**8**	**213**	66	100	49	**215**	782
Total Volume	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
% App. Total	8.3	89.6	2.2		15.3	47.7	37		18.1	79	3		29.5	43.2	27.2		
PHF	.743	.920	.906	.927	.635	.888	.870	.831	.897	.922	.719	.910	.787	.828	.927	.917	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
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Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				07:30 AM				07:15 AM			
+0 mins.	**38**	254	**22**	314	6	**38**	22	**66**	37	158	6	201	74	74	**58**	206
+15 mins.	28	322	19	**369**	5	33	**24**	62	39	**166**	8	**213**	49	**103**	53	205
+30 mins.	25	**324**	6	355	7	23	21	51	38	161	8	207	66	100	49	**215**
+45 mins.	37	314	8	359	9	26	20	55	**49**	149	**10**	208	**85**	54	43	182
Total Volume	128	1214	55	1397	27	120	87	234	163	634	32	829	274	331	203	808
% App. Total	9.2	86.9	3.9		11.5	51.3	37.2		19.7	76.5	3.9		33.9	41	25.1	
PHF	.842	.937	.625	.946	.750	.789	.906	.886	.832	.955	.800	.973	.806	.803	.875	.940

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
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City of San Diego
N/S: Rosecrans Street
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File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

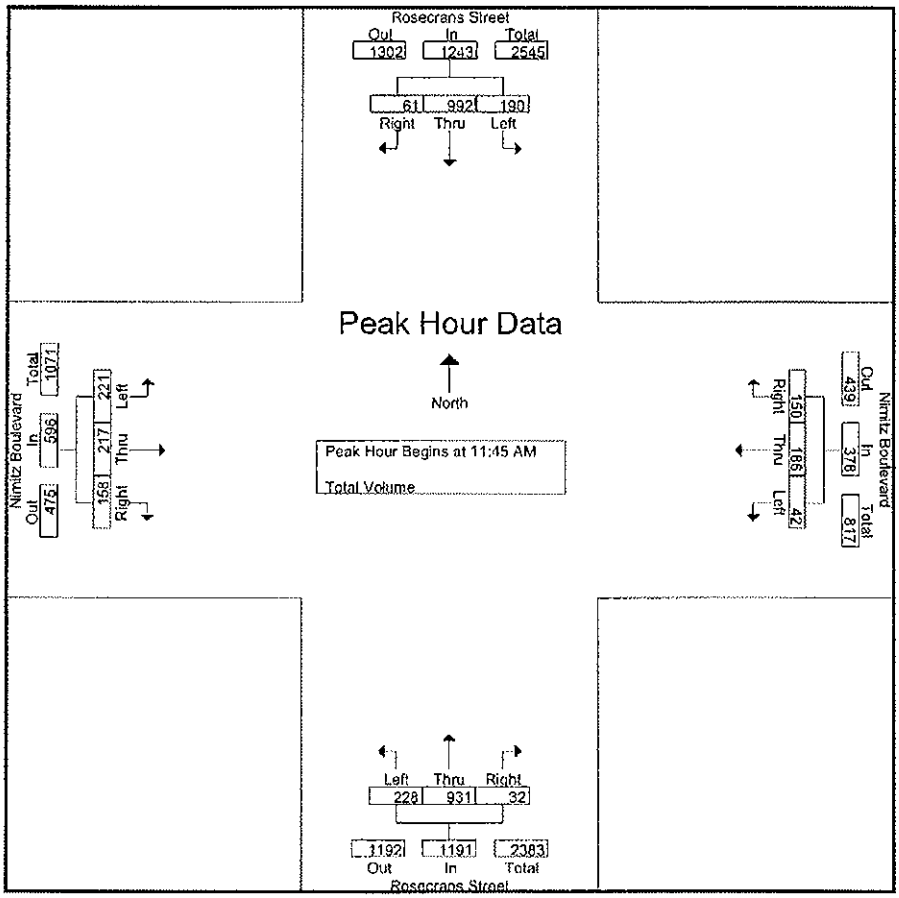
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	43	201	17	261	16	36	49	101	53	229	9	291	52	56	33	141	794
11:45 AM	43	272	15	330	13	51	43	107	62	266	11	339	64	45	37	146	922
Total	86	473	32	591	29	87	92	208	115	495	20	630	116	101	70	287	1716
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	63	46	163	766
12:15 PM	56	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	17	323	16	48	36	100	55	239	9	303	50	59	40	149	875
12:45 PM	42	249	22	313	11	41	35	87	62	258	10	330	37	45	62	144	874
Total	189	969	68	1226	40	176	142	358	228	923	31	1182	194	217	183	594	3360
01:00 PM	44	184	34	262	6	56	43	105	56	208	10	274	29	36	38	103	744
01:15 PM	35	195	25	255	6	59	36	101	69	230	11	310	36	45	34	115	781
Grand Total	354	1821	159	2334	81	378	313	772	468	1856	72	2396	375	399	325	1099	6601
Apprch %	15.2	78	6.8		10.5	49	40.5		19.5	77.5	3		34.1	36.3	29.6		
Total %	5.4	27.6	2.4	35.4	1.2	5.7	4.7	11.7	7.1	28.1	1.1	36.3	5.7	6	4.9	16.6	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	43	**272**	15	**330**	13	**51**	**43**	**107**	**62**	**266**	**11**	**339**	**64**	45	37	146	**922**
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	**63**	**46**	**163**	766
12:15 PM	**56**	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	**17**	323	**16**	48	36	100	55	239	9	303	50	59	40	149	875
Total Volume	190	992	61	1243	42	186	150	378	228	931	32	1191	221	217	158	596	3408
% App. Total	15.3	79.8	4.9		11.1	49.2	39.7		19.1	78.2	2.7		37.1	36.4	26.5		
PHF	.848	.912	.897	.942	.656	.912	.872	.883	.919	.875	.727	.878	.863	.861	.859	.914	.924

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:45 AM				12:30 PM				12:30 PM				11:45 AM			
+0 mins.	43	**272**	15	**330**	**16**	48	36	100	55	239	9	303	**64**	45	37	146
+15 mins.	45	214	13	272	11	41	35	87	62	**258**	10	**330**	54	**63**	**46**	**163**
+30 mins.	**56**	246	16	318	6	56	**43**	**105**	56	208	10	274	53	50	35	138
+45 mins.	46	260	**17**	323	6	59	36	101	69	230	**11**	310	50	59	40	149
Total Volume	190	992	61	1243	39	204	150	393	242	935	40	1217	221	217	158	596
% App. Total	15.3	79.8	4.9		9.9	51.9	38.2		19.9	76.8	3.3		37.1	36.4	26.5	
PHF	.848	.912	.897	.942	.609	.864	.872	.936	.877	.906	.909	.922	.863	.861	.859	.914

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25286 Jaclyn Avenue
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City of San Diego
N/S: Rosecrans Street
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File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
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Groups Printed- Total Volume

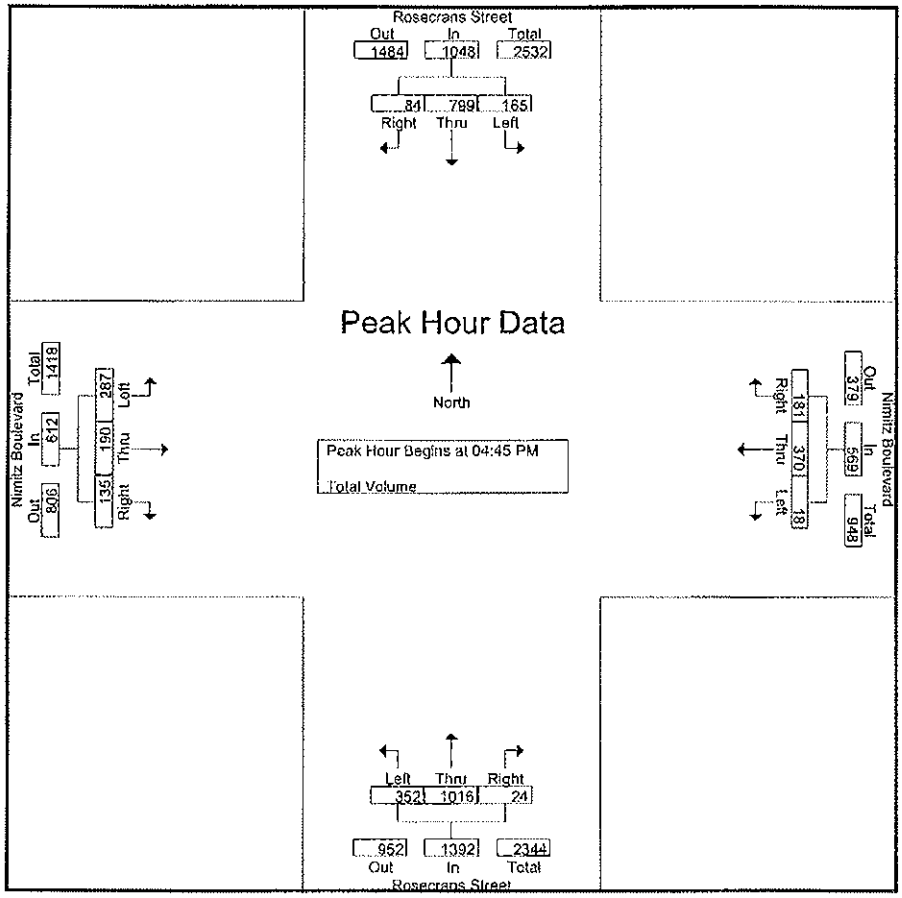
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	35	181	30	246	2	83	42	127	82	278	11	371	75	48	34	157	901
04:15 PM	45	199	25	269	3	92	42	137	67	259	7	333	61	67	37	165	904
04:30 PM	37	191	20	248	4	110	50	164	58	211	7	276	72	50	37	159	847
04:45 PM	47	216	22	285	6	92	56	154	79	205	6	290	81	51	37	169	898
Total	164	787	97	1048	15	377	190	582	286	953	31	1270	289	216	145	650	3550
05:00 PM	48	168	18	234	3	114	43	160	110	283	11	404	77	40	35	152	950
05:15 PM	38	208	23	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
05:45 PM	48	196	26	270	4	59	37	100	72	208	6	286	50	42	34	126	782
Total	166	779	88	1033	16	337	162	515	345	1019	24	1388	256	181	132	569	3505
Grand Total	330	1566	185	2081	31	714	352	1097	631	1972	55	2658	545	397	277	1219	7055
Apprch %	15.9	75.3	8.9		2.8	65.1	32.1		23.7	74.2	2.1		44.7	32.6	22.7		
Total %	4.7	22.2	2.6	29.5	0.4	10.1	5	15.5	8.9	28	0.8	37.7	7.7	5.6	3.9	17.3	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	47	**216**	22	**285**	**6**	92	**56**	154	79	205	6	290	**81**	**51**	37	**169**	898
05:00 PM	**48**	168	18	234	**3**	**114**	43	**160**	**110**	**283**	**11**	**404**	77	40	35	152	**950**
05:15 PM	38	208	**23**	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
Total Volume	165	799	84	1048	18	370	181	569	352	1016	24	1392	287	190	135	612	3621
% App. Total	15.7	76.2	8		3.2	65	31.8		25.3	73	1.7		46.9	31	22.1		
PHF	.859	.925	.913	.919	.750	.811	.808	.889	.800	.898	.545	.861	.886	.931	.912	.905	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
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City of San Diego
N/S: Rosecrans Street
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File Name : SDCRONIPM
Site Code : 9102139
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	35	181	**30**	246	3	92	42	137	79	205	6	290	75	48	34	157
+15 mins.	45	199	25	269	4	110	50	**164**	**110**	**283**	11	**404**	61	**67**	**37**	165
+30 mins.	37	191	20	248	**6**	92	**56**	154	96	269	6	371	72	50	37	159
+45 mins.	**47**	**216**	22	**285**	3	**114**	43	160	67	259	1	327	**81**	51	37	**169**
Total Volume	164	787	97	1048	16	408	191	615	352	1016	24	1392	289	216	145	650
% App. Total	15.6	75.1	9.3		2.6	66.3	31.1		25.3	73	1.7		44.5	33.2	22.3	
PHF	.872	.911	.808	.919	.667	.895	.853	.938	.800	.898	.545	.861	.892	.806	.980	.962

(51)

16

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

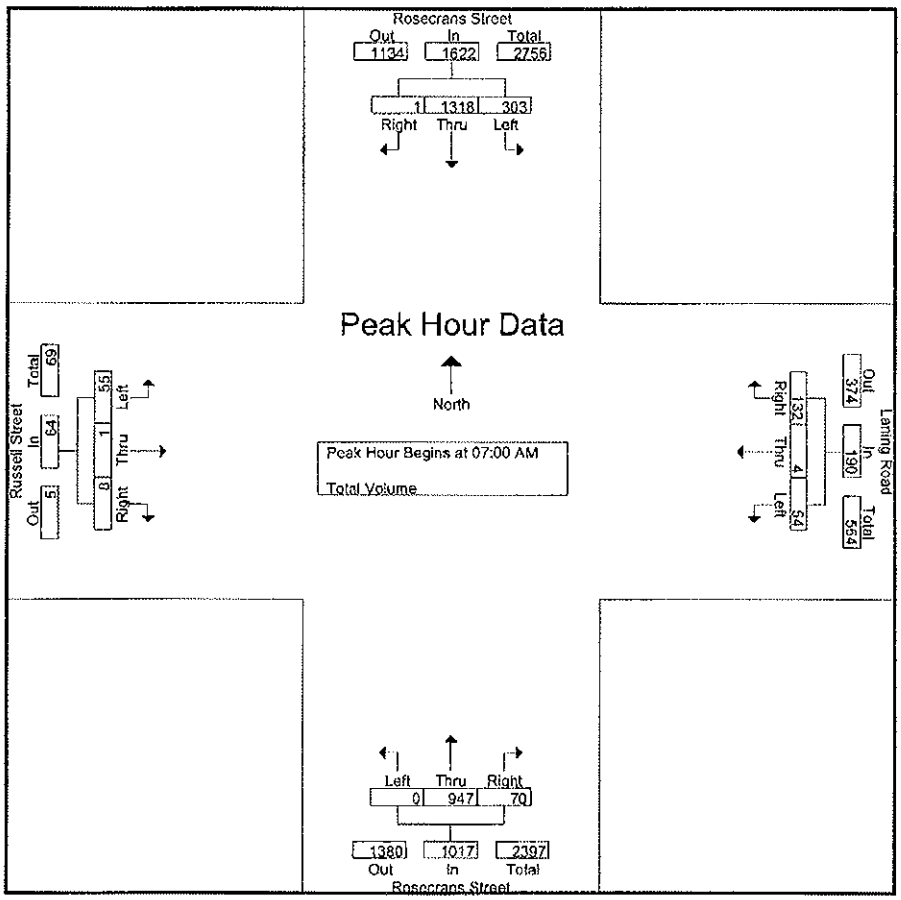
	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	46	248	0	294	15	0	34	49	0	127	1	128	14	2	0	16	487
06:45 AM	68	350	0	418	11	0	29	40	0	155	12	167	7	0	0	7	632
Total	114	598	0	712	26	0	63	89	0	282	13	295	21	2	0	23	1119
07:00 AM	58	411	1	470	13	1	42	56	0	227	10	237	16	0	7	23	786
07:15 AM	109	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	21	2	35	58	0	221	12	233	18	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	251	36	287	6	0	0	6	645
Total	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
08:00 AM	65	270	0	335	32	1	30	63	0	252	46	298	11	0	0	11	707
08:15 AM	53	371	0	424	32	0	32	64	0	243	20	263	10	2	0	12	763
Grand Total	535	2557	1	3093	144	5	257	406	0	1724	149	1873	97	5	8	110	5482
Apprch %	17.3	82.7	0		35.5	1.2	63.3		0	92	8		88.2	4.5	7.3		
Total %	9.8	46.6	0	56.4	2.6	0.1	4.7	7.4	0	31.4	2.7	34.2	1.8	0.1	0.1	2	

	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	58	**411**	**1**	**470**	13	1	**42**	56	**0**	227	10	237	16	0	**7**	**23**	**786**
07:15 AM	**109**	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	**21**	**2**	35	**58**	0	221	12	233	**18**	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	**251**	**36**	**287**	6	0	0	6	645
Total Volume	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
% App. Total	18.7	81.3	0.1		28.4	2.1	69.5		0	93.1	6.9		85.9	1.6	12.5		
PHF	.695	.802	.250	.863	.643	.500	.786	.819	.000	.943	.486	.886	.764	.250	.286	.696	.920

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:30 AM				07:30 AM				06:45 AM			
+0 mins.	68	350	0	418	21	2	35	58	0	221	12	233	7	0	0	7
+15 mins.	58	411	1	470	12	0	24	36	0	251	36	287	16	0	7	23
+30 mins.	109	356	0	465	32	1	30	63	0	252	46	298	15	1	0	16
+45 mins.	82	289	0	371	32	0	32	64	0	243	20	263	18	0	1	19
Total Volume	317	1406	1	1724	97	3	121	221	0	967	114	1081	56	1	8	65
% App. Total	18.4	81.6	0.1		43.9	1.4	54.8		0	89.5	10.5		86.2	1.5	12.3	
PHF	.727	.855	.250	.917	.758	.375	.864	.863	.000	.959	.620	.907	.778	.250	.286	.707

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Street
Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

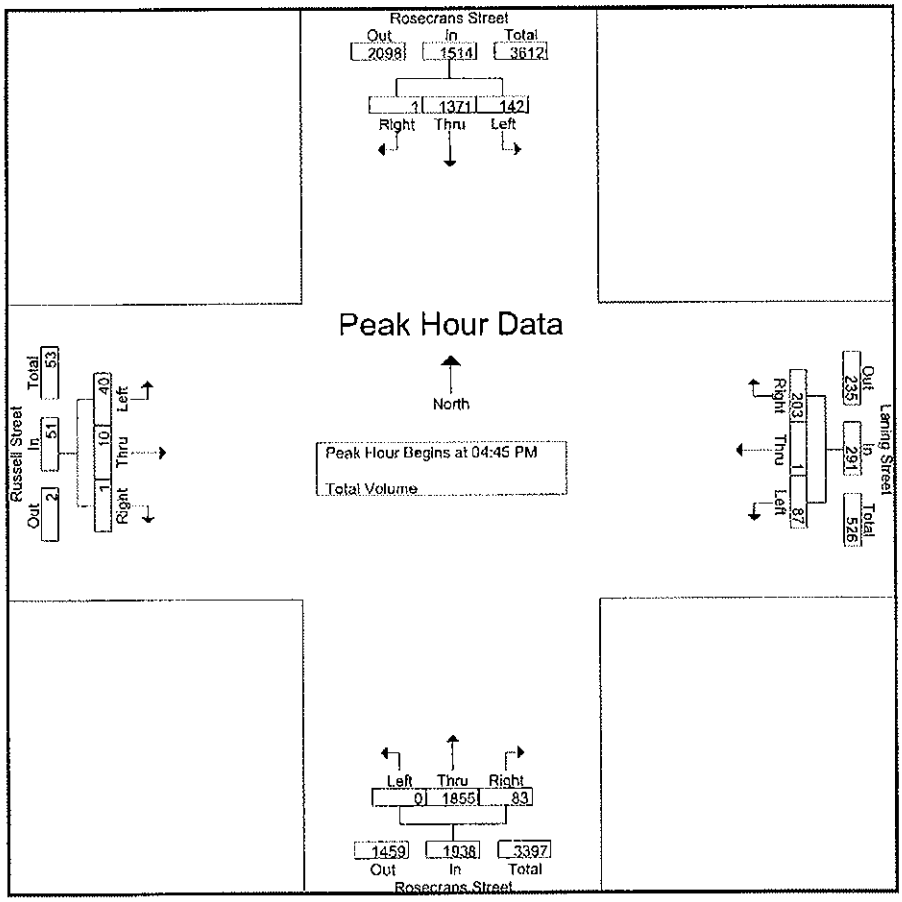
	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	280	0	308	21	4	56	81	1	374	26	401	11	0	0	11	801
04:15 PM	41	268	2	311	29	0	54	83	1	394	30	425	8	1	1	10	829
04:30 PM	38	266	1	305	22	0	63	85	0	404	14	418	8	1	1	10	818
04:45 PM	45	348	0	393	21	0	67	88	0	430	21	451	5	1	1	7	939
Total	152	1162	3	1317	93	4	240	337	2	1602	91	1695	32	3	3	38	3387
05:00 PM	39	310	1	350	15	0	71	86	0	528	22	550	8	1	0	9	995
05:15 PM	31	342	0	373	27	1	41	69	0	457	22	479	12	4	0	16	937
05:30 PM	27	371	0	398	24	0	24	48	0	440	18	458	15	4	0	19	923
05:45 PM	27	327	4	358	18	0	27	45	0	356	30	386	4	1	0	5	794
Total	124	1350	5	1479	84	1	163	248	0	1781	92	1873	39	10	0	49	3649
Grand Total	276	2512	8	2796	177	5	403	585	2	3383	183	3568	71	13	3	87	7036
Apprch %	9.9	89.8	0.3		30.3	0.9	68.9		0.1	94.8	5.1		81.6	14.9	3.4		
Total %	3.9	35.7	0.1	39.7	2.5	0.1	5.7	8.3	0	48.1	2.6	50.7	1	0.2	0	1.2	

	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**45**	348	0	393	21	0	67	**88**	0	430	21	451	5	1	**1**	7	939
05:00 PM	39	310	1	350	15	0	71	86	0	**528**	**22**	**550**	8	1	0	9	**995**
05:15 PM	31	342	0	373	**27**	1	41	69	0	457	22	479	12	**4**	0	16	937
05:30 PM	27	371	0	**398**	24	0	24	48	0	440	18	458	**15**	4	0	**19**	923
Total Volume	142	1371	1	1514	87	1	203	291	0	1855	83	1938	40	10	1	51	3794
% App. Total	9.4	90.6	0.1		29.9	0.3	69.8		0	95.7	4.3		78.4	19.6	2		
PHF	.789	.924	.250	.951	.806	.250	.715	.827	.000	.878	.943	.881	.667	.625	.250	.671	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	**45**	348	0	393	29	0	54	83	0	430	21	451	5	1	1	7
+15 mins.	39	310	1	350	22	0	63	85	0	**528**	**22**	**550**	8	1	0	9
+30 mins.	31	342	0	373	21	0	67	**88**	0	457	22	479	12	4	0	16
+45 mins.	27	**371**	0	**398**	15	0	**71**	86	0	440	18	458	15	4	0	19
Total Volume	142	1371	1	1514	87	0	255	342	0	1855	83	1938	40	10	1	51
% App. Total	9.4	90.6	0.1		25.4	0	74.6		0	95.7	4.3		78.4	19.6	2	
PHF	.789	.924	.250	.951	.750	.000	.898	.972	.000	.878	.943	.881	.667	.625	.250	.671

(S2)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					28	20				26	447		521
7:15 AM					20	12				38	434		504
7:30 AM					30	11				42	382		465
7:45 AM					45	19				62	433		559
8:00 AM					33	20				51	378		482
8:15 AM					46	22				48	373		489
8:30 AM					42	17				66	351		476
8:45 AM					57	15				47	346		465
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	301	136	0	0	0	380	3144	0	3961
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	68.88%	31.12%	#DIV/0!	#DIV/0!	#DIV/0!	10.78%	89.22%	0.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					80	11				36	222		349
4:15 PM					82	12				39	221		354
4:30 PM					74	20				51	219		364
4:45 PM					95	17				43	256		411
5:00 PM					101	20				52	211		384
5:15 PM					97	14				50	223		384
5:30 PM					100	16				52	227		395
5:45 PM					89	20				45	250		404

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	718	130	0	0	0	368	1829	0	3045
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	84.67%	15.33%	#DIV/0!	#DIV/0!	#DIV/0!	16.75%	83.25%	0.00%	



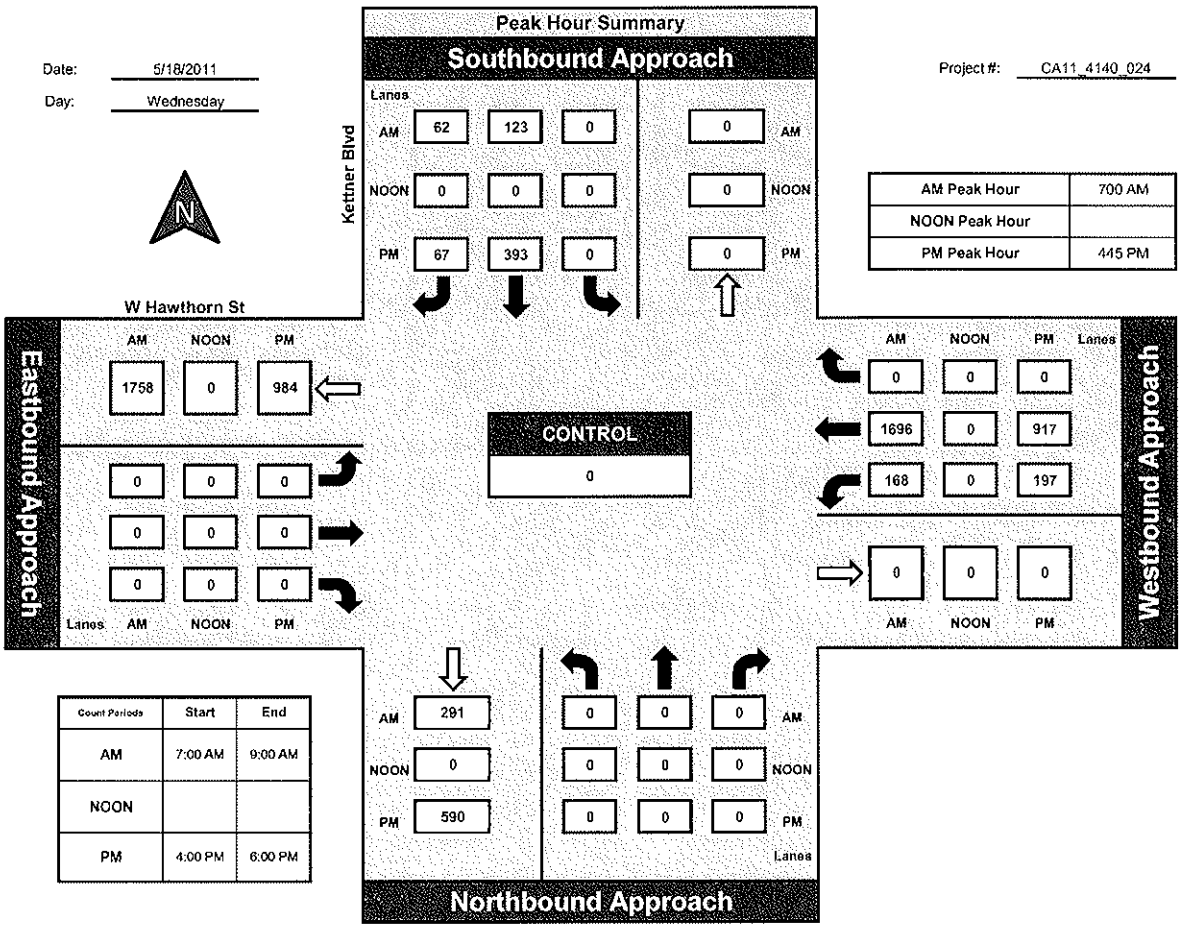
CONTROL :

ITM Peak Hour Summary

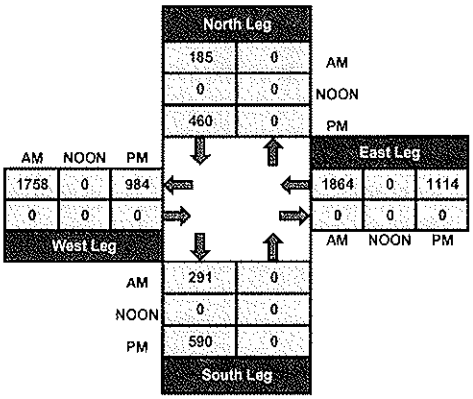
Prepared by:

National Data & Surveying Services

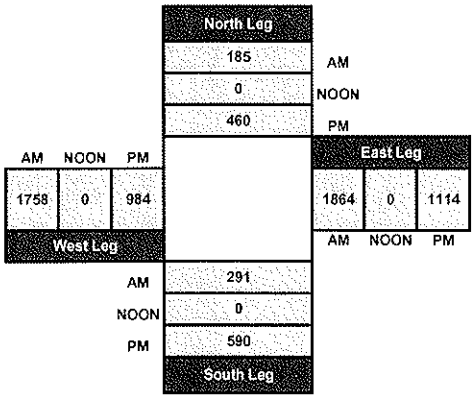
Kettner Blvd and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(53)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				20	31			201	5				257
7:15 AM				18	47			179	6				250
7:30 AM				24	47			200	5				276
7:45 AM				34	76			209	5				324
8:00 AM				24	61			199	5				289
8:15 AM				19	72			213	7				311
8:30 AM				31	77			220	8				336
8:45 AM				36	66			229	10				341
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	206	477	0	0	1650	51	0	0	0	2384
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	30.16%	69.84%	0.00%	0.00%	97.00%	3.00%	#DIV/0!	#DIV/0!	#DIV/0!	
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				54	63			362	4				483
4:15 PM				53	66			366	14				499
4:30 PM				53	74			428	4				559
4:45 PM				65	76			353	13				507
5:00 PM				70	79			385	7				541
5:15 PM				52	89			367	15				523
5:30 PM				69	85			326	14				494
5:45 PM				42	91			312	9				454
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	458	623	0	0	2899	80	0	0	0	4060
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	42.37%	57.63%	0.00%	0.00%	97.31%	2.69%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

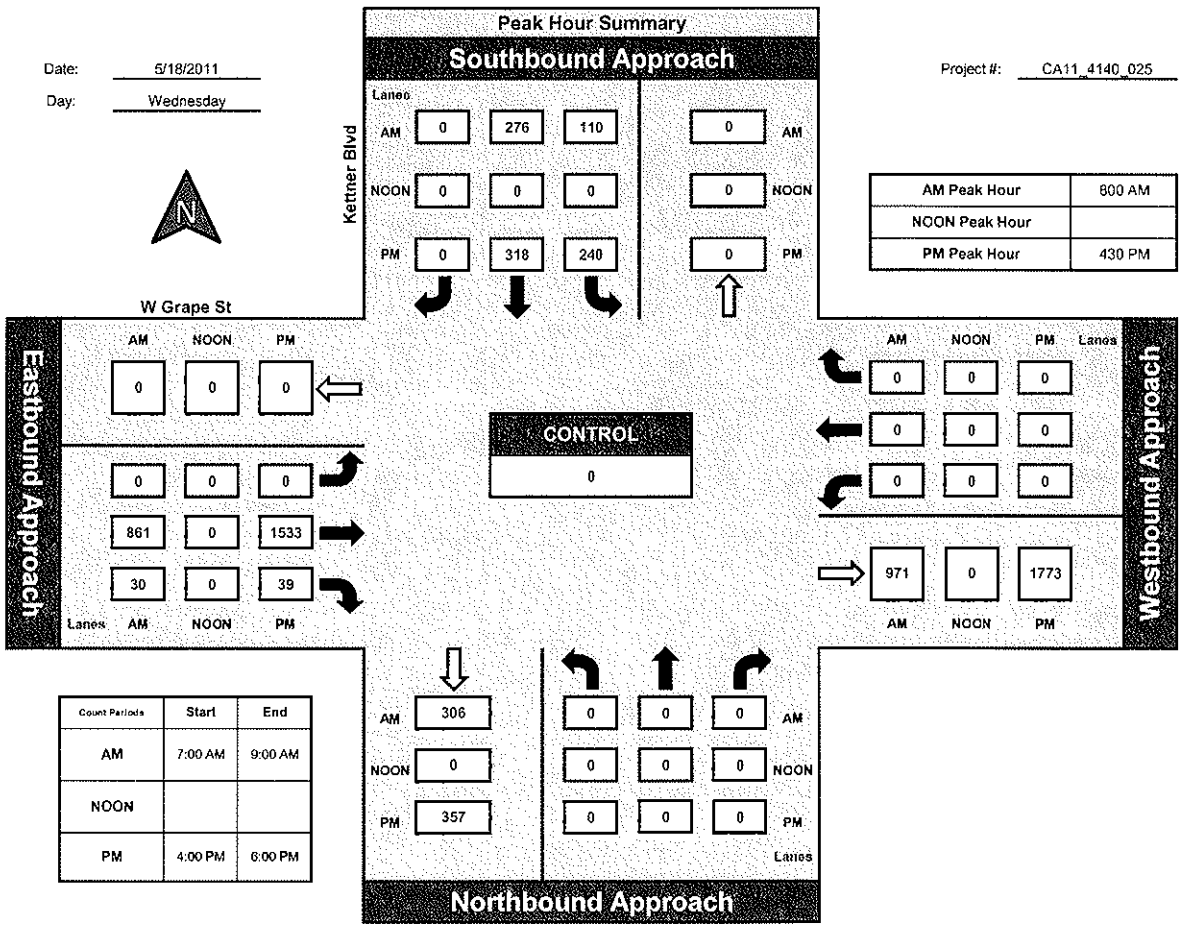
ITM Peak Hour Summary

Prepared by:

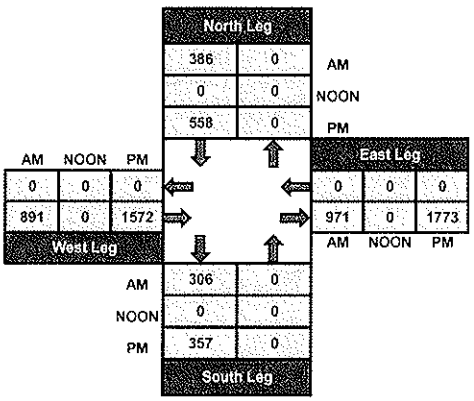
NDS

National Data & Surveying Services

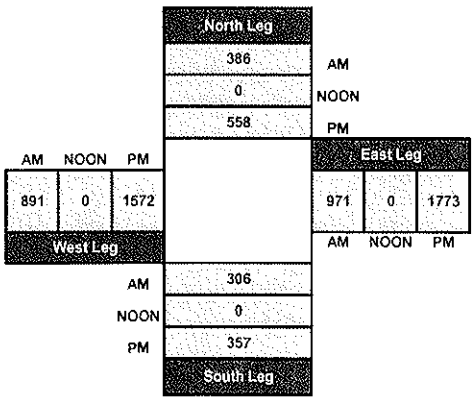
Kettner Blvd and W Grape St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(54)

Intersection Turning Movement

Prepared by:

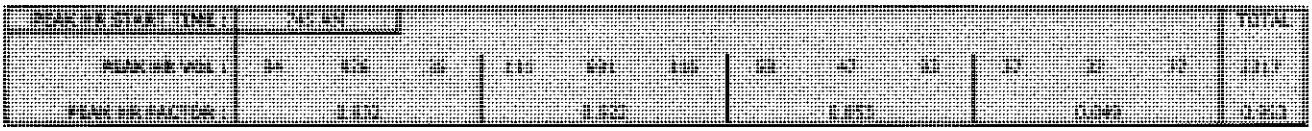
National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	189	8	29	120	16	7	8	15	4	5	8	424
7:15 AM	27	220	11	30	141	25	18	3	10	4	10	6	505
7:30 AM	21	228	15	34	167	29	12	9	15	8	5	20	563
7:45 AM	19	240	10	32	185	32	13	14	20	4	4	15	588
8:00 AM	32	209	12	28	160	31	11	11	22	11	10	19	556
8:15 AM	22	218	10	27	174	25	12	7	30	9	12	19	565
8:30 AM	21	259	3	24	172	28	22	15	21	13	6	24	608
8:45 AM	11	226	11	25	176	19	17	12	18	12	10	22	559
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	168	1789	80	229	1295	205	112	79	151	65	62	133	4368
APPRDACH %'s :	8.25%	87.83%	3.93%	13.24%	74.90%	11.86%	32.75%	23.10%	44.15%	25.00%	23.85%	51.15%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	19	291	21	28	313	3	13	13	32	19	5	21	778
4:15 PM	21	294	24	36	309	5	10	17	35	24	8	22	805
4:30 PM	28	261	36	38	327	1	10	11	38	17	8	19	794
4:45 PM	17	265	28	41	330	1	11	16	42	23	7	20	801
5:00 PM	19	267	25	26	313	2	17	25	51	34	11	43	833
5:15 PM	6	284	27	37	306	6	21	18	58	28	15	34	840
5:30 PM	17	245	36	37	301	9	11	11	39	31	14	26	777
5:45 PM	14	203	37	57	306	9	9	14	37	34	10	20	750
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	141	2110	234	300	2505	36	102	125	332	210	78	205	6378
APPROACH %'s :	5.67%	84.91%	9.42%	10.56%	88.17%	1.27%	18.25%	22.36%	59.39%	42.60%	15.82%	41.58%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]												

CONTROL :

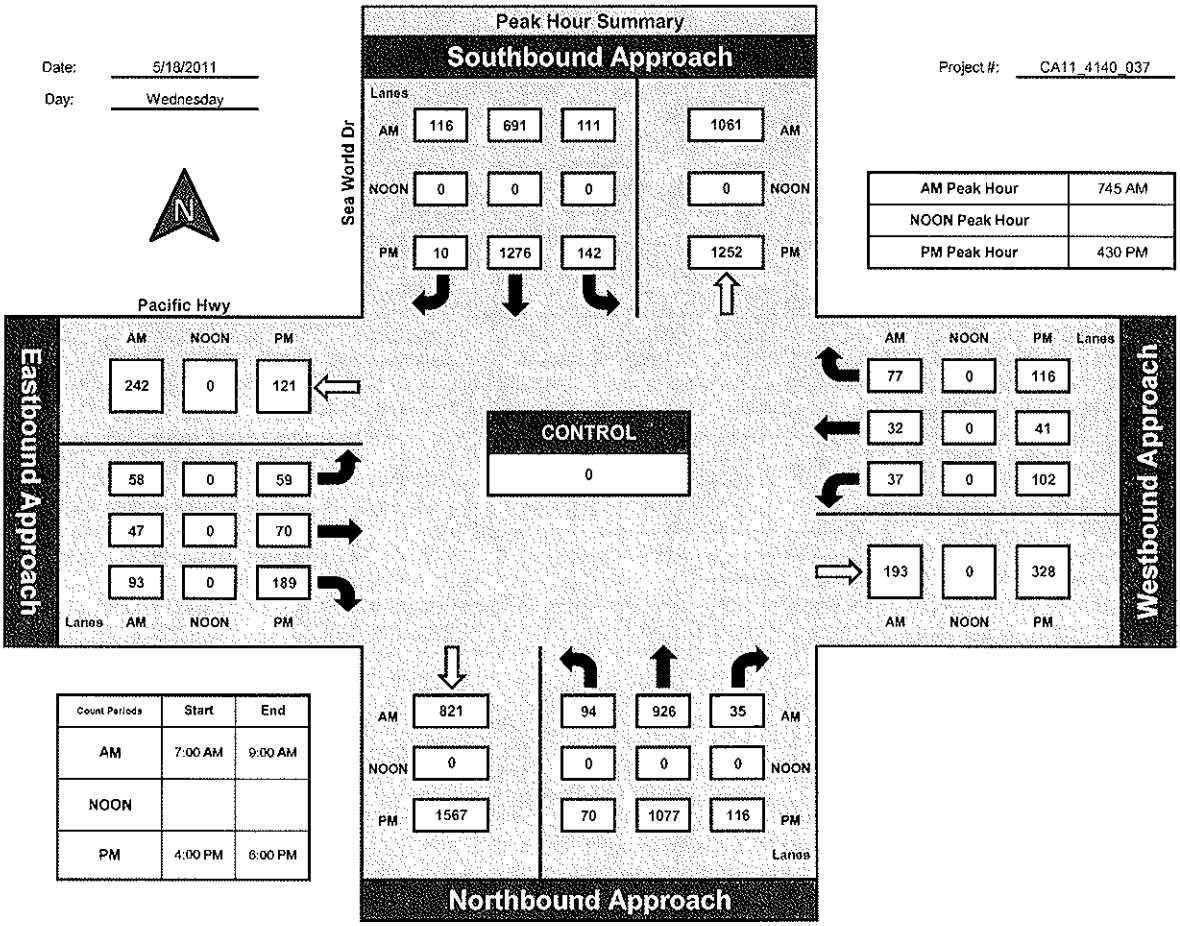
ITM Peak Hour Summary

Prepared by:

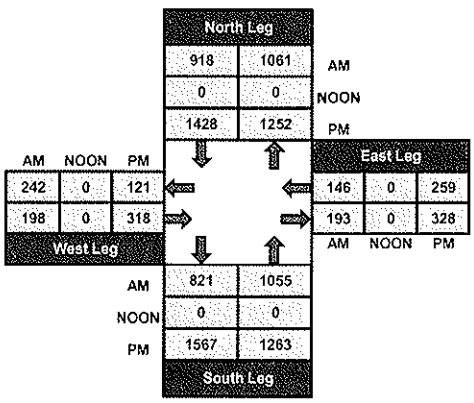
NDS

National Data & Surveying Services

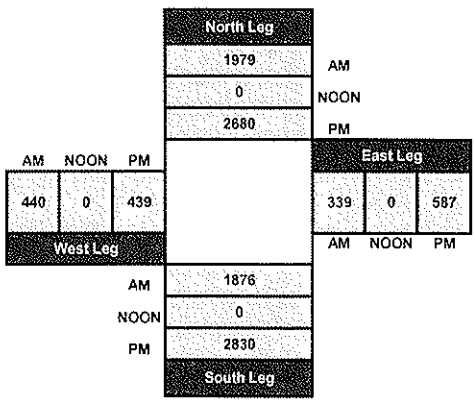
Sea World Dr and Pacific Hwy , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7												7
7:15 AM	12												12
7:30 AM	10												10
7:45 AM	15												15
8:00 AM	4												4
8:15 AM	7												7
8:30 AM	8												8
8:45 AM	13												13
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	76	0	0	0	0	0	0	0	0	0	0	0	76
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

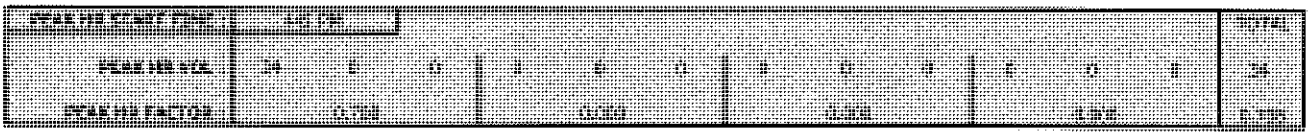
National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	9												9
4:15 PM	9												9
4:30 PM	7												7
4:45 PM	8												8
5:00 PM	7												7
5:15 PM	7												7
5:30 PM	12												12
5:45 PM	5												5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	0	0	0	0	0	0	0	0	0	0	0	64
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	



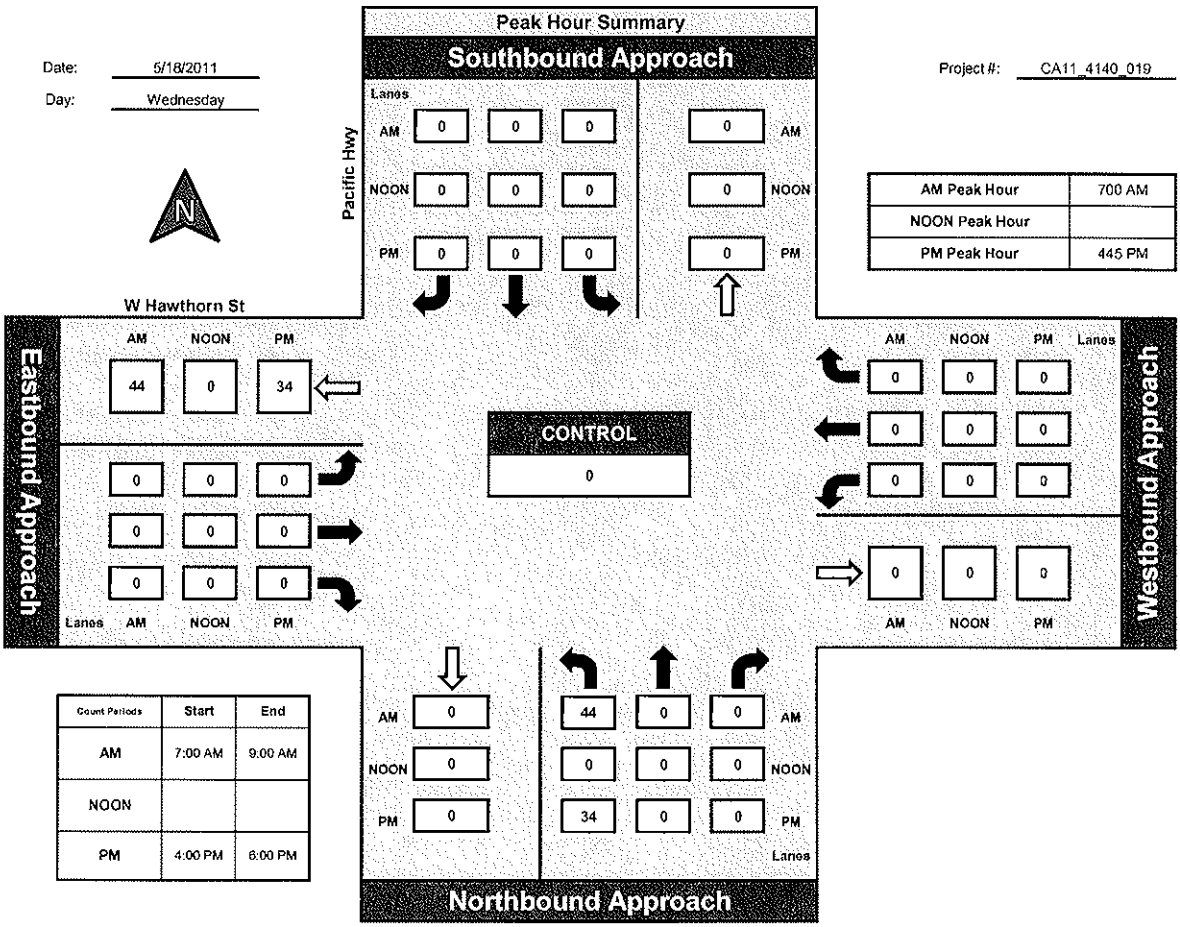
CONTROL :

ITM Peak Hour Summary

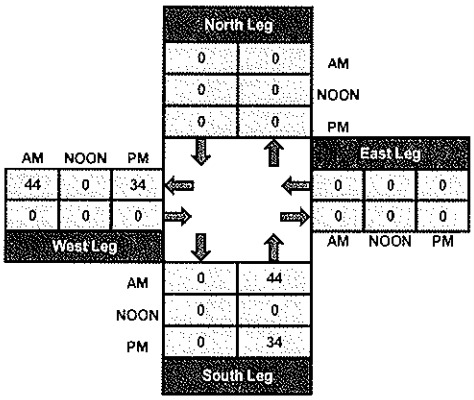
Prepared by:

National Data & Surveying Services

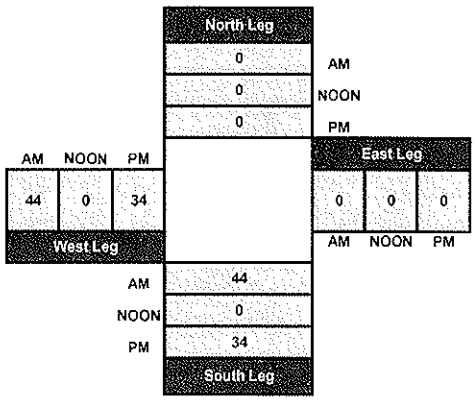
Pacific Hwy and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	36			24	7				86	360	12	545
7:15 AM	19	41			37	4				72	341	20	534
7:30 AM	13	45			35	5				90	284	18	490
7:45 AM	12	36			43	3				114	327	20	555
8:00 AM	12	41			35	7				83	294	15	487
8:15 AM	17	42			43	3				54	316	19	494
8:30 AM	13	47			52	9				70	269	16	476
8:45 AM	11	55			43	4				59	279	27	478
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	117	343	0	0	312	42	0	0	0	628	2470	147	4059
APPROACH %'s :	25.43%	74.57%	0.00%	0.00%	88.14%	11.86%	#DIV/0!	#DIV/0!	#DIV/0!	19.35%	76.12%	4.53%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	16	63			61	1				36	170	16	363
4:15 PM	23	70			61	5				34	173	22	388
4:30 PM	15	69			65	5				24	188	17	383
4:45 PM	21	70			54	5				30	222	17	419
5:00 PM	14	101			65	5				21	191	18	415
5:15 PM	13	108			51	3				26	190	20	411
5:30 PM	12	86			48	7				30	178	22	383
5:45 PM	13	80			53	3				33	216	22	420
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	127	647	0	0	458	34	0	0	0	234	1528	154	3182
APPROACH %'s :	16.41%	83.59%	0.00%	0.00%	93.09%	6.91%	#DIV/0!	#DIV/0!	#DIV/0!	12.21%	79.75%	8.04%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Hawthorn St , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_019

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Southbound Approach (Pacific Hwy)

Lanes				
AM	19	139	0	228 AM
NOON	0	0	0	0 NOON
PM	18	217	0	457 PM

Eastbound Approach (W Hawthorn St)

	AM	NOON	PM
	1395	0	845
	0	0	0
	0	0	0
	0	0	0
Lanes	AM	NOON	PM

CONTROL: 0

Westbound Approach

Lanes	AM	NOON	PM
	70	0	82
	1312	0	775
	362	0	110
	0	0	0
	AM	NOON	PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

AM	501	64	158	0 AM
NOON	0	0	0	0 NOON
PM	327	52	375	0 PM
				Lanes

Total Ins & Outs

	North Leg		
	158	228	AM
	0	0	NOON
	235	457	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
1395	0	845		1744	0	967
0	0	0		0	0	0

	South Leg	
AM	501	222
NOON	0	0
PM	327	427

Total Volume Per Leg

North Leg	
386	AM
0	NOON
692	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1395	0	845	1744	0	967

South Leg	
AM	723
NOON	0
PM	754

(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				0									
7:15 AM				4									4
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				0									
8:15 AM				1									1
8:30 AM				1									1
8:45 AM				5									5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	14	0	0	0	0	0	0	0	0	14
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				1									1
4:15 PM				3									3
4:30 PM				2									2
4:45 PM				0									
5:00 PM				3									3
5:15 PM				1									1
5:30 PM				4									4
5:45 PM				2									2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	16	0	0	0	0	0	0	0	0	16
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

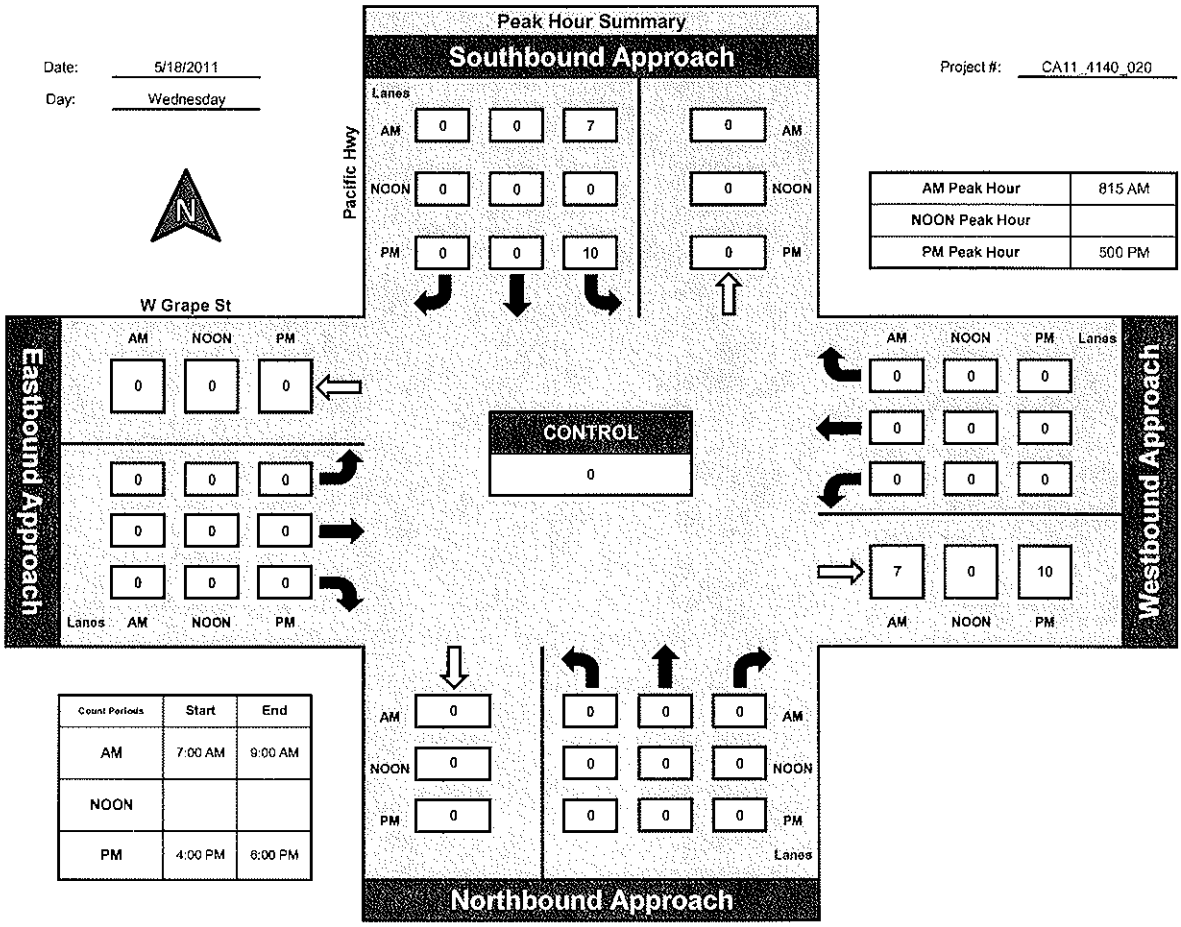
National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

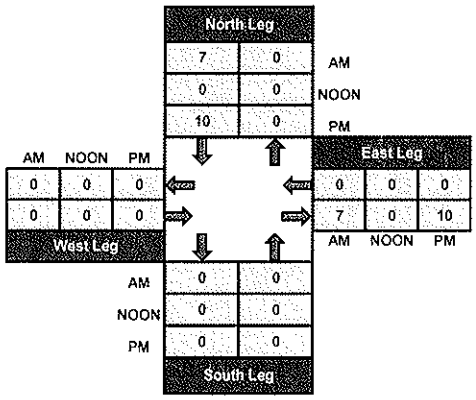
Project #: CA11_4140_020



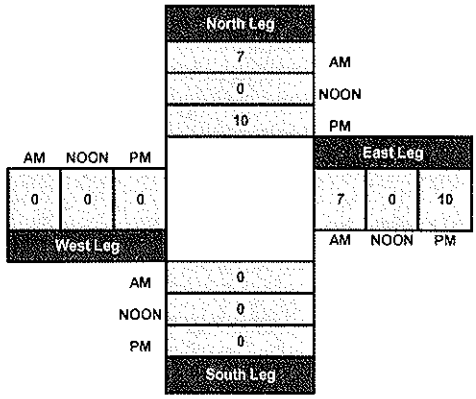
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

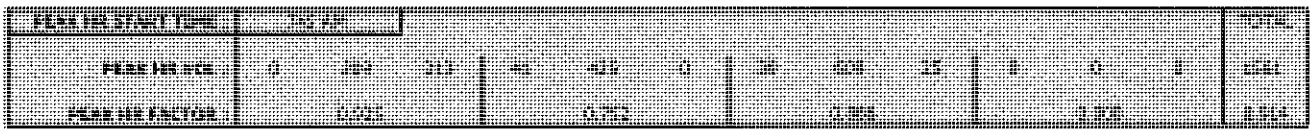
Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		51	41	6	79		15	166	7				365
7:15 AM		50	47	5	92		12	122	3				331
7:30 AM		56	51	11	112		8	137	5				380
7:45 AM		48	66	9	146		14	138	6				427
8:00 AM		55	42	8	107		8	148	8				376
8:15 AM		52	52	11	84		4	155	2				360
8:30 AM		54	53	13	88		13	168	9				398
8:45 AM		65	41	17	100		13	177	9				422

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	431	393	80	808	0	87	1211	49	0	0	0	3059
APPROACH %'s :	0.00%	52.31%	47.69%	9.01%	90.99%	0.00%	6.46%	89.90%	3.64%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		87	95	21	77		7	260	6				553
4:15 PM		95	87	29	76		5	243	9				544
4:30 PM		76	96	23	71		8	297	7				578
4:45 PM		86	79	23	69		6	257	6				526
5:00 PM		112	84	19	73		17	276	5				586
5:15 PM		113	73	17	63		12	311	6				595
5:30 PM		91	70	21	69		6	232	11				500
5:45 PM		85	57	19	69		10	242	10				492
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	745	641	172	567	0	71	2118	60	0	0	0	4374
APPROACH %'s :	0.00%	53.75%	46.25%	23.27%	76.73%	0.00%	3.16%	94.18%	2.67%	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_020

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach

Lanes					
AM	0	425	41	248	AM
NOON	0	0	0	0	NOON
PM	0	276	82	430	PM

Pacific Hwy

W Grape St

Eastbound Approach

Lanes	AM	NOON	PM
	0	0	0
	39	0	43
	609	0	1141
	25	0	24

Westbound Approach

Lanes	AM	NOON	PM
	0	0	0
	0	0	0
	0	0	0
	863	0	1555

CONTROL

0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	450	0	209	213	AM
NOON	0	0	0	0	NOON
PM	300	0	387	332	PM

Total Ins & Outs

	North Leg	
AM	466	248
NOON	0	0
PM	358	430

West Leg	AM	NOON	PM
AM	0	0	0
NOON	673	0	1208
PM			

East Leg	AM	NOON	PM
AM	0	0	0
NOON	863	0	1555
PM			

	South Leg	
AM	450	422
NOON	0	0
PM	300	719

Total Volume Per Leg

	North Leg
AM	714
NOON	0
PM	788

West Leg	AM	NOON	PM
AM	673	0	1208
NOON			
PM			

East Leg	AM	NOON	PM
AM	863	0	1555
NOON			
PM			

	South Leg
AM	872
NOON	0
PM	1019

(57)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		204	28	21	125					34		14	426
7:15 AM		234	55	33	116					38		19	495
7:30 AM		238	57	43	156					42		29	565
7:45 AM		240	74	56	145					40		25	580
8:00 AM		246	49	22	173					38		19	547
8:15 AM		211	59	29	183					59		28	569
8:30 AM		266	62	31	184					60		26	629
8:45 AM		214	67	26	171					51		25	554
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1853	451	261	1253	0	0	0	0	362	0	185	4365
APPROACH %'s :	0.00%	80.43%	19.57%	17.24%	82.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	66.18%	0.00%	33.82%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		296	82	64	304					74		36	856
4:15 PM		304	82	63	301					61		34	845
4:30 PM		295	82	67	319					72		31	866
4:45 PM		285	82	69	328					78		35	877
5:00 PM		275	122	80	316					72		25	890
5:15 PM		298	105	64	334					79		27	907
5:30 PM		256	78	63	302					74		34	807
5:45 PM		238	99	56	328					75		26	822
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2247	732	526	2532	0	0	0	0	585	0	248	6870
APPROACH %'s :	0.00%	75.43%	24.57%	17.20%	82.80%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	70.23%	0.00%	29.77%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and Friars Rd , City of San Diego

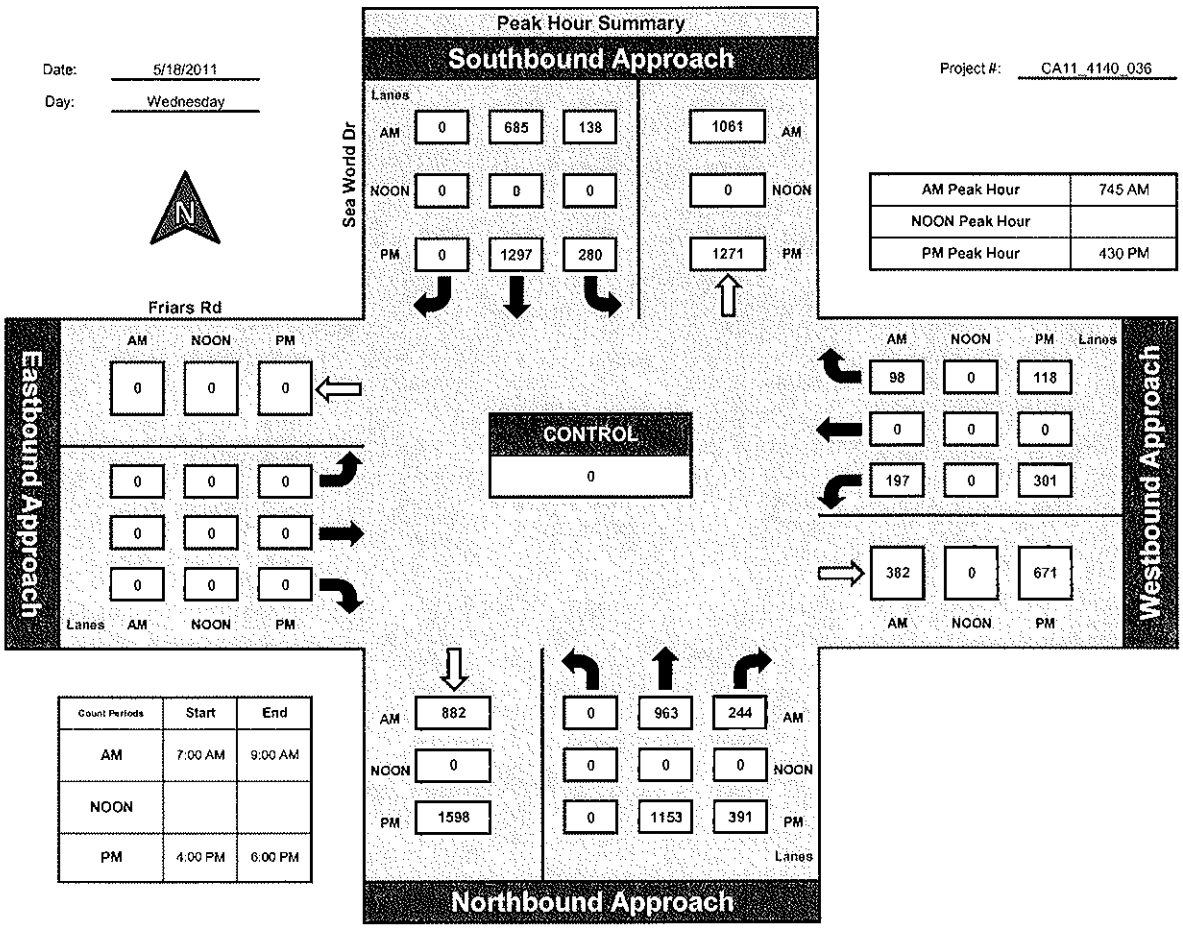
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

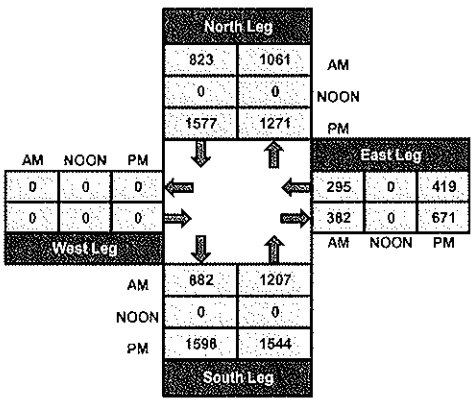
Project #: CA11_4140_036

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

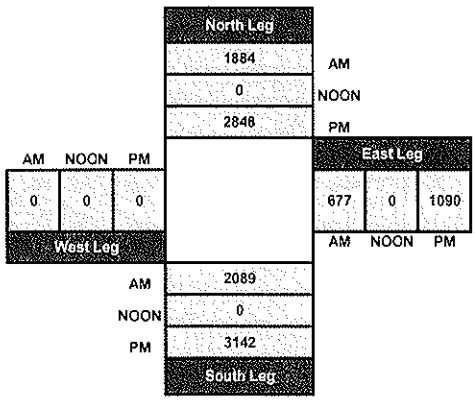


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(58)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		0	32	0	113		198	5	55	45		448
7:15 AM	0		0	48	0	153		226	19	57	50		553
7:30 AM	0		1	67	0	167		238	19	73	55		620
7:45 AM	0		0	75	1	183		258	13	78	57		665
8:00 AM	0		0	78	0	126		226	9	88	85		612
8:15 AM	0		0	68	1	178		235	18	79	57		636
8:30 AM	0		0	77	0	123		282	20	70	92		664
8:45 AM	1		0	68	0	162		249	19	61	67		627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	0	1	513	2	1205	0	1912	122	561	508	0	4825
APPROACH %'s :	50.00%	0.00%	50.00%	29.83%	0.12%	70.06%	0.00%	94.00%	6.00%	52.48%	47.52%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				65	1	257		270	51	76	76	1	797
4:15 PM				86	2	279		268	53	60	81	1	830
4:30 PM				85	0	272		239	47	90	83	1	817
4:45 PM				83	0	295		234	51	77	71	1	812
5:00 PM				76	1	279		275	63	65	69	0	828
5:15 PM				66	0	282		272	57	75	65	0	817
5:30 PM				74	0	282		239	53	53	68	0	769
5:45 PM				62	1	303		168	61	51	63	0	709
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	597	5	2249	0	1965	436	547	576	4	6379
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	20.94%	0.18%	78.88%	0.00%	81.84%	18.16%	48.54%	51.11%	0.35%	

[redacted]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 SB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_038

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach

Sea World Dr

Lanes					
AM	610	2	298	0	AM
NOON	0	0	0	0	NOON
PM	1125	3	330	3	PM

Eastbound Approach

I-5 SB Ramps

Lanes	AM	NOON	PM
	901	0	1429
	0	0	0
	1001	0	1016
	60	0	214

Westbound Approach

Lanes	AM	NOON	PM
	0	0	3
	291	0	304
	315	0	292
	1299	0	1346

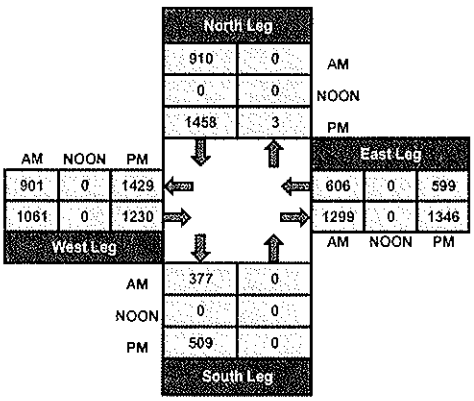
CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

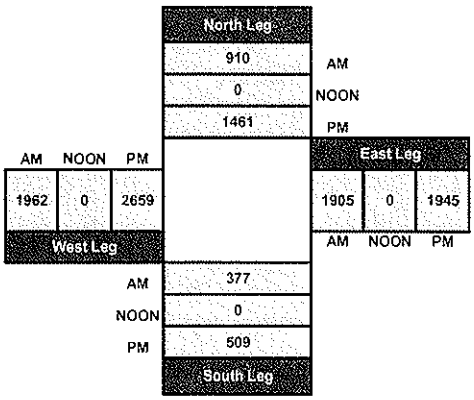
Northbound Approach

Lanes					
AM	377	0	0	0	AM
NOON	0	0	0	0	NOON
PM	509	0	0	0	PM

Total Ins & Outs



Total Volume Per Leg



(59)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

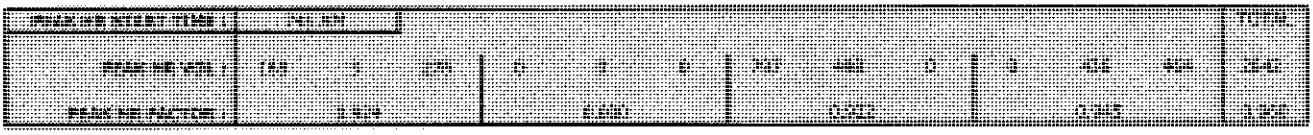
Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	21	0	45				174	50	0		72	77	439
7:15 AM	33	0	49				205	74	0		81	93	535
7:30 AM	31	0	65				193	108	0		92	117	606
7:45 AM	33	0	88				180	157	0		107	120	685
8:00 AM	44	0	67				186	113	0		122	116	648
8:15 AM	35	3	61				202	106	0		108	106	621
8:30 AM	56	0	60				229	122	0		99	122	688
8:45 AM	54	0	71				193	131	1		82	105	637

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	307	3	506	0	0	0	1562	861	1	0	763	856	4859
APPROACH %'s :	37.62%	0.37%	62.01%	#DIV/0!	#DIV/0!	#DIV/0!	64.44%	35.52%	0.04%	0.00%	47.13%	52.87%	



CONTROL :

Intersection Turning Movement

Prepared by:

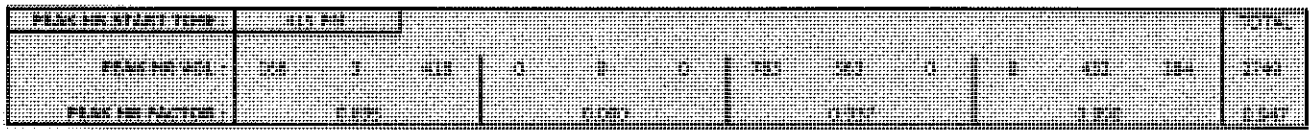
National Data & Surveying Services

Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	43	1	69				195	137			111	102	658
4:15 PM	44	0	120				208	149			100	105	726
4:30 PM	57	0	98				196	125			114	92	682
4:45 PM	31	0	96				183	126			110	96	642
5:00 PM	34	3	104				196	163			108	91	699
5:15 PM	36	0	109				210	127			99	90	671
5:30 PM	38	0	98				197	117			88	67	605
5:45 PM	37	1	69				144	79			70	61	461
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	320	5	763	0	0	0	1529	1023	0	0	800	704	5144
APPROACH %'s :	29.41%	0.46%	70.13%	#DIV/0!	#DIV/0!	#DIV/0!	59.91%	40.09%	0.00%	0.00%	53.19%	46.81%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 NB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_039

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach (Sea World Dr)

Lanes					
AM	0	0	0	1264	AM
NOON	0	0	0	0	NOON
PM	0	0	0	1170	PM

Eastbound Approach (I-5 NB Ramps)

Lanes	AM	NOON	PM
	604	0	598
	797	0	783
	498	0	563
	0	0	0

Westbound Approach

Lanes	AM	NOON	PM
	464	0	384
	436	0	432
	0	0	0
	774	0	981

CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	0	168	3	276	AM
NOON	0	0	0	0	NOON
PM	0	166	3	418	PM

Total Ins & Outs

North Leg		
0	1264	AM
0	0	NOON
0	1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
604	0	598	900	0	816
1295	0	1346	774	0	981

South Leg		
0	447	AM
0	0	NOON
0	587	PM

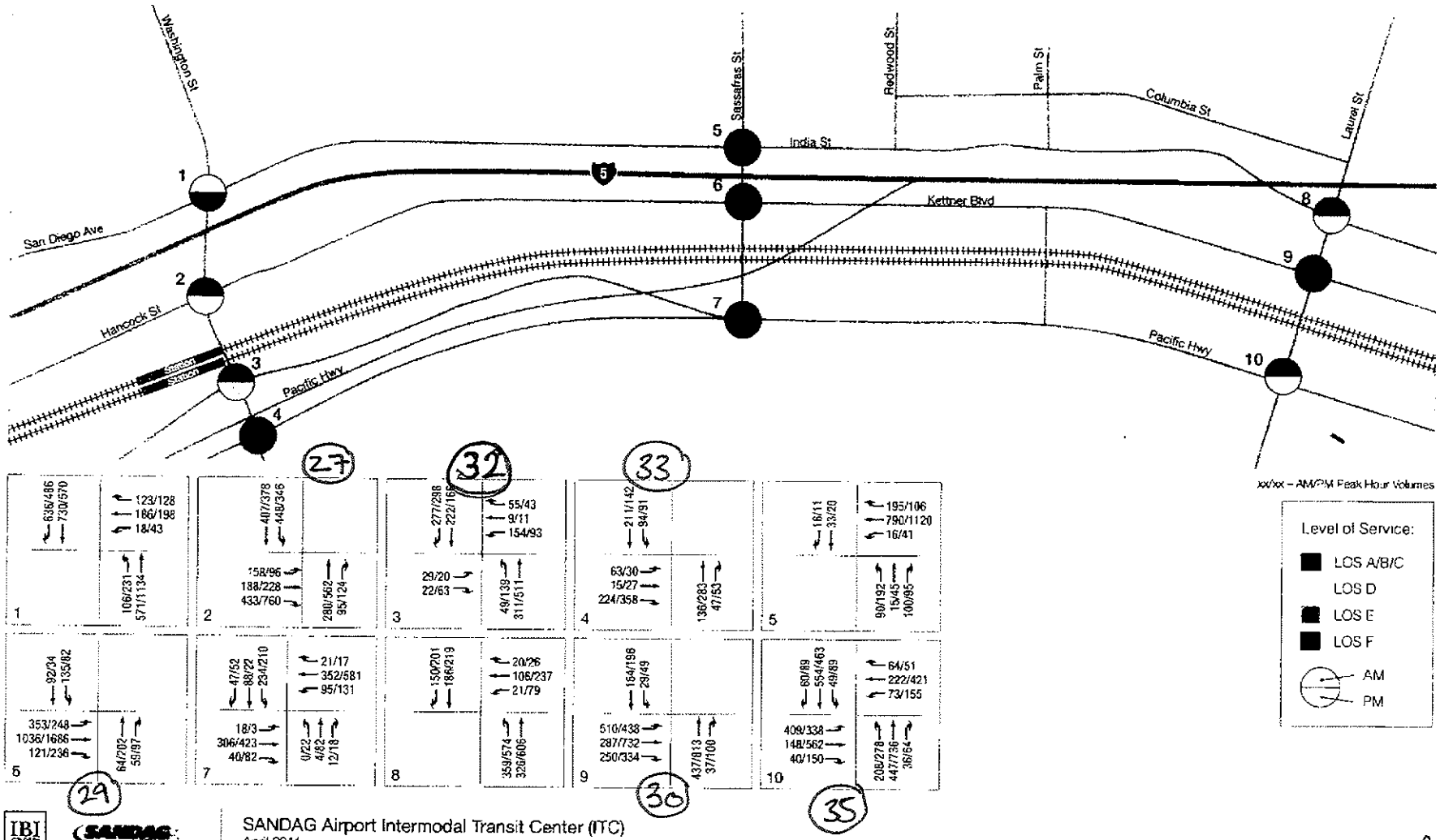
Total Volume Per Leg

North Leg	
1264	AM
0	NOON
1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1899	0	1944	1674	0	1797

South Leg	
447	AM
0	NOON
587	PM

Existing AM/PM Peak Hour Traffic Volumes and Level of Service



Cyclists and Pedestrian Counts

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

2

PROJECT#: 11-4140-001
N/S Street: W Mission Bay Dr
E/W Street: I-8 WB Off-Ramp
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	0	2	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0
7:45 AM	0	0	0	0	1	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	2	2	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	2	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4167-001
N/S Street: West Mission Bay Dr
E/W Street: Channel Way
DATE: 6/9/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0
TOTALS	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

4

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-003
N/S Street: Midway Dr
E/W Street: Sport Arena Blvd/W Point Loma Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	1	2	0	0	0
7:15 AM	4	3	0	1	0	1	1	0
7:30 AM	0	0	0	0	1	0	0	0
7:45 AM	0	0	1	1	2	0	0	1
8:00 AM	1	0	0	0	0	0	0	1
8:15 AM	2	2	3	0	0	1	1	0
8:30 AM	1	1	2	0	1	0	1	1
8:45 AM	0	1	0	0	1	0	0	0
TOTALS	**9**	**7**	**8**	**3**	**7**	**2**	**3**	**3**
	4	4	5	0	2	1	2	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	3
7:30 AM	0	0	0	1	3	0	0	2
7:45 AM	0	0	0	0	1	0	0	3
8:00 AM	0	0	2	2	0	0	0	5
8:15 AM	0	0	2	2	0	0	0	2
8:30 AM	0	0	1	2	0	0	0	6
8:45 AM	0	0	0	0	1	0	0	2
TOTALS	**0**	**1**	**5**	**7**	**5**	**0**	**0**	**23**
	0	0	5	6	1	0	0	15

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	3	0	0	0	0	2
4:15 PM	3	2	1	0	0	2	1	0
4:30 PM	0	2	2	0	0	0	1	0
4:45 PM	0	0	4	0	0	0	3	1
5:00 PM	1	2	2	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	1	2	0	0	0	0	1	1
5:45 PM	0	0	1	0	0	0	2	1
TOTALS	**5**	**9**	**13**	**0**	**0**	**2**	**9**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	3
4:15 PM	1	1	0	0	1	0	1	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	3	1	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	2	0	0	0	0	0
TOTALS	**1**	**5**	**5**	**1**	**1**	**0**	**2**	**4**

5

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-004
N/S Street: Kemper St
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	1
7:15 AM	0	0	1	0	0	1	1	2
7:30 AM	0	0	0	2	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	2	0	0	0	2
8:15 AM	0	0	0	1	0	2	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	0	1	1	5	5	3
TOTALS	**0**	**0**	**2**	**6**	**2**	**8**	**8**	**10**
	0	0	1	4	1	7	6	6

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	1	0	0	0	0
8:45 AM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**4**	**2**	**2**	**0**	**0**	**0**
	0	0	4	2	1	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	5	2	2	2	0	1	2
4:15 PM	0	5	5	5	1	1	1	1
4:30 PM	2	1	7	0	0	0	1	4
4:45 PM	0	4	2	4	3	6	0	1
5:00 PM	2	0	1	2	0	1	2	2
5:15 PM	3	2	2	3	0	2	2	0
5:30 PM	1	0	1	0	0	0	1	2
5:45 PM	0	0	2	2	0	0	1	1
TOTALS	**8**	**17**	**22**	**18**	**6**	**10**	**9**	**13**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**

6

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-005
N/S Street: East Dr
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	1	0	0	0	0
7:15 AM	0	0	1	0	0	0	2	1
7:30 AM	1	0	0	0	0	0	2	3
7:45 AM	0	0	1	0	0	0	0	1
8:00 AM	0	0	2	0	0	1	3	1
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	3	0
8:45 AM	0	0	1	0	0	0	2	1
TOTALS	**1**	**0**	**7**	**1**	**0**	**1**	**12**	**7**
	0	0	3	0	0	1	8	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**1**
	0	0	1	0	0	0	1	0

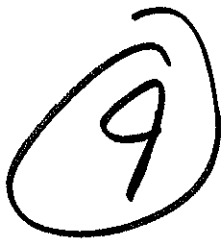
P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	9	3
4:15 PM	1	0	0	0	0	0	2	5
4:30 PM	1	0	0	0	0	0	5	3
4:45 PM	0	0	0	0	0	0	3	4
5:00 PM	1	0	0	0	0	0	7	2
5:15 PM	0	1	0	0	0	0	5	4
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	8	0	0	0	0	0	5	5
TOTALS	**11**	**1**	**0**	**0**	**0**	**1**	**38**	**28**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0
5:45 PM	0	0	1	1	0	0	0	0
TOTALS	**1**	**2**	**4**	**2**	**1**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-006
N/S Street: Midway Dr
E/W Street: Enterprise St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	3	0	0	0	0	0	0	0
TOTALS	**3**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
	3	0	0	0	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	1	1	0	0	0	0	0	0
8:15 AM	1	3	0	0	0	0	0	0
8:30 AM	0	4	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**12**	**0**	**0**	**0**	**0**	**0**	**0**
	2	8	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**3**	**1**	**0**	**0**

10

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-007
N/S Street: Midway Dr
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	2	0	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	0	0	0	0
8:30 AM	1	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**5**	**0**	**0**	**1**	**0**	**0**	**0**
	3	5	0	0	1	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	6	0	0	3	1	0	0
7:15 AM	4	2	0	0	2	2	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	2	3	0	0	0	2	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	3	5	0	0	1	3	0	0
8:30 AM	0	1	0	0	2	0	0	0
8:45 AM	1	2	0	0	1	1	0	0
TOTALS	**12**	**19**	**0**	**0**	**9**	**10**	**0**	**0**
	5	9	0	0	3	5	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	1	0	0	0	0	0	0
4:15 PM	1	2	0	0	1	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	1	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTALS	**7**	**4**	**0**	**0**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	1	0	0
4:15 PM	0	1	0	0	0	1	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	1	3	0	0	1	0	0	0
5:00 PM	2	1	0	0	1	0	0	0
5:15 PM	0	2	0	0	1	0	0	0
5:30 PM	0	1	0	0	1	1	0	0
5:45 PM	1	1	0	0	0	1	0	0
TOTALS	**5**	**10**	**0**	**0**	**4**	**4**	**0**	**0**

11

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-008
N/S Street: Hancock St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	2	0	0
7:15 AM	0	1	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	1	2
7:45 AM	2	2	1	1	0	2	1	2
8:00 AM	0	2	1	1	0	0	1	2
8:15 AM	2	2	2	5	0	1	0	3
8:30 AM	0	2	1	0	0	0	0	3
8:45 AM	0	1	1	3	0	3	2	0
TOTALS	**4**	**11**	**7**	**11**	**1**	**9**	**5**	**13**
	2	7	5	9	0	4	3	8

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0
8:00 AM	0	1	2	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**
	0	1	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	1	1	3	1	0	1
4:15 PM	1	1	1	3	1	2	2	4
4:30 PM	1	4	0	2	1	0	2	2
4:45 PM	3	1	2	1	2	2	2	3
5:00 PM	5	2	0	1	0	1	1	1
5:15 PM	0	2	0	4	1	4	0	5
5:30 PM	1	1	0	2	2	2	2	3
5:45 PM	0	4	1	3	0	1	1	1
TOTALS	**11**	**18**	**5**	**17**	**10**	**13**	**10**	**20**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**3**	**1**	**0**	**0**	**0**	**0**

12

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-009
N/S Street: Kemper St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	2	2	3	0	0	0
7:15 AM	1	0	0	0	1	2	0	0
7:30 AM	0	0	0	1	0	1	0	0
7:45 AM	3	0	1	1	3	2	0	1
8:00 AM	0	0	0	0	1	2	1	0
8:15 AM	2	0	2	1	4	2	0	1
8:30 AM	1	0	2	2	2	0	0	0
8:45 AM	1	1	2	1	2	1	0	1
TOTALS	**8**	**2**	**9**	**8**	**16**	**10**	**1**	**3**
	4	1	6	4	9	S	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	1	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0
7:30 AM	0	2	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	1	0	0
8:15 AM	0	0	2	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	3	0	1	1	0	0
TOTALS	**1**	**5**	**9**	**0**	**2**	**3**	**1**	**1**
	0	0	8	0	1	2	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	4	3	1	0	0	0	0
4:45 PM	1	2	2	2	3	0	1	0
5:00 PM	3	1	1	2	5	1	0	1
5:15 PM	2	0	3	0	0	0	1	0
5:30 PM	2	1	1	2	2	0	0	0
5:45 PM	1	0	0	1	0	0	0	0
TOTALS	**10**	**8**	**11**	**8**	**10**	**2**	**2**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	1	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**3**	**6**	**1**	**0**	**0**	**0**	**0**

13

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-010
N/S Street: Sport Arena Driveway
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	1	1	1	0	0	0
7:45 AM	1	0	0	0	1	0	0	0
8:00 AM	0	0	0	1	0	0	0	0
8:15 AM	1	0	0	2	3	0	0	0
8:30 AM	2	0	0	2	1	0	0	0
8:45 AM	1	0	2	2	1	2	0	0
TOTALS	**5**	**0**	**4**	**8**	**9**	**2**	**0**	**0**
	4	0	2	7	5	2	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	1	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**1**	**4**	**3**	**3**	**0**	**0**	**0**	**0**
	0	3	3	2	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	1	1	0	0	0
4:15 PM	3	1	1	0	0	1	0	0
4:30 PM	4	0	1	1	1	1	0	0
4:45 PM	4	1	0	0	0	2	0	0
5:00 PM	2	5	0	1	0	1	0	0
5:15 PM	1	2	3	1	0	1	0	0
5:30 PM	1	0	2	2	0	0	0	0
5:45 PM	1	0	2	1	1	0	0	0
TOTALS	**17**	**9**	**10**	**7**	**3**	**6**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	2	0	0	0	0	0
4:45 PM	0	0	3	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	3	0	0	0	0	0
5:45 PM	1	1	0	0	0	0	0	0
TOTALS	**1**	**3**	**10**	**0**	**0**	**0**	**0**	**0**

14

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-011
N/S Street: East Dr
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	3	3	0	1	1	2	0	0
7:15 AM	3	2	0	2	0	1	0	0
7:30 AM	2	1	2	0	0	1	0	0
7:45 AM	1	0	2	2	0	0	0	0
8:00 AM	0	2	1	0	1	1	0	0
8:15 AM	4	2	0	1	1	4	0	0
8:30 AM	5	3	3	4	1	4	0	0
8:45 AM	4	1	3	3	4	5	0	0
TOTALS	**22**	**14**	**11**	**13**	**8**	**18**	**0**	**0**
	13	8	7	8	7	14	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	1	0	0	0	0	0
7:15 AM	0	0	1	2	1	1	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	2	2	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	1	1	0	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**3**	**10**	**5**	**2**	**1**	**1**	**0**	**0**
	3	4	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	2	0	0	0	0	0	0
4:15 PM	3	1	3	1	0	0	0	0
4:30 PM	2	2	4	6	1	0	0	0
4:45 PM	1	2	3	2	0	0	0	0
5:00 PM	3	3	1	4	1	0	0	0
5:15 PM	2	5	0	3	0	2	0	0
5:30 PM	4	6	1	2	0	0	0	0
5:45 PM	3	2	0	5	0	0	0	0
TOTALS	**24**	**23**	**12**	**23**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	2	0	0	1	0	0	0	0
4:45 PM	3	1	0	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0
TOTALS	**7**	**1**	**1**	**6**	**0**	**0**	**0**	**0**

17

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-012
N/S Street: Pacific Hwy
E/W Street: Sports Arena Blvd
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	2	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**5**
	0	0	0	0	0	0	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	7
7:15 AM	0	0	0	0	0	0	0	8
7:30 AM	0	0	0	0	0	0	1	3
7:45 AM	0	0	0	0	0	0	1	8
8:00 AM	0	0	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	1	5
8:30 AM	0	0	0	0	0	0	1	9
8:45 AM	0	0	0	0	0	0	0	5
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**51**
	0	0	0	0	0	0	3	28

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**

18

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-013
N/S Street: Kurtz St
E/W Street: Hancock St
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**
	0	0	3	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
	0	0	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

19

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-014
N/S Street: Camino Del Rio W
E/W Street: Kurtz St
DATE: 5/19/2011
CITY: San Diego

DAY: Thursday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	2	0	0	0	0
7:15 AM	0	0	2	2	1	0	0	0	0	0
7:30 AM	0	0	2	3	2	1	1	0	1	1
7:45 AM	0	0	0	3	0	0	1	0	0	1
8:00 AM	0	0	1	3	0	0	0	0	0	0
8:15 AM	0	0	2	3	1	1	0	1	1	0
8:30 AM	0	0	0	1	1	1	1	0	1	0
8:45 AM	0	0	2	1	4	2	0	1	1	1
TOTALS	**0**	**0**	**9**	**21**	**9**	**7**	**3**	**2**	**4**	**3**
	0	0	5	8	6	4	1	2	3	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	2	1	0	0	0	0
8:15 AM	0	0	2	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	1	2	0	0	0	1
TOTALS	**0**	**0**	**8**	**3**	**1**	**0**	**0**	**2**
	0	0	6	3	0	0	0	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	1	5	0	1	0	0	0	0
4:15 PM	0	0	4	6	0	2	0	0	0	0
4:30 PM	0	0	2	2	2	0	1	5	0	0
4:45 PM	0	0	1	3	2	2	0	0	1	1
5:00 PM	0	0	3	3	7	3	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	7	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0
4:45 PM	0	0	2	2	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	2	1	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-015
N/S Street: Pacific Hwy
E/W Street: Kurtz St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
	0	0	0	0	0	0	0	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	8
7:15 AM	0	0	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	11
8:15 AM	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**51**
	0	0	0	0	0	0	1	27

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

22

PROJECT#: 11-4167-002
N/S Street: Hancock St
E/W Street: Channel Way
DATE: 6/9/2011
DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	1	0
TOTALS	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

25

PROJECT#: 11-4140-021
N/S Street: Hancock St
E/W Street: Old Towne Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
	2	1	0	0	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	2	0	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-022
N/S Street: Hancock St
E/W Street: Witherby St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	0	0	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	0	0	1	0	1	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	1	1	0	0
TOTALS	**0**	**0**	**6**	**1**	**2**	**2**	**0**	**1**
	0	0	6	0	1	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**
	0	0	0	1	0	2	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	2	0
4:30 PM	0	0	1	1	0	0	2	1
4:45 PM	0	0	0	1	0	0	2	0
5:00 PM	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	2	1	1	0	1	4
TOTALS	**0**	**0**	**4**	**3**	**2**	**0**	**9**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	2	0	2	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	2	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

28

PROJECT#: 11-4140-023
N/S Street: Kettner Blvd
E/W Street: Vine St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
	0	0	0	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
	0	0	0	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**

31

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-018
N/S Street: Pacific Hwy
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**
	0	0	0	0	0	0	2	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
	0	0	0	0	0	0	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-016
N/S Street: Taylor St
E/W Street: Morena Blvd
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	1	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	1	0	0
8:30 AM	0	0	0	0	3	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**4**	**2**	**1**	**0**
	0	0	1	0	3	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	1	5
7:30 AM	0	0	1	1	2	0	1	0
7:45 AM	0	0	2	1	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	1	1	0	1	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**5**	**3**	**3**	**0**	**5**	**11**
	0	0	1	1	1	0	1	4

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	1	0	0	1	0
4:45 PM	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	2	0	0	0
5:15 PM	0	0	0	1	1	0	2	2
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**1**	**2**	**4**	**2**	**5**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	1	2	0	1	1
4:30 PM	0	0	1	0	2	0	1	1
4:45 PM	0	0	1	0	2	0	1	0
5:00 PM	0	0	1	1	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	2	3	0	0	1
5:45 PM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**3**	**5**	**12**	**0**	**4**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

37

PROJECT#: 11-4140-033
N/S Street: Old Towne Ave
E/W Street: Moore St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	2	0	0	0	0	2	0	0
8:00 AM	2	1	0	0	0	0	0	0
8:15 AM	2	1	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**6**	**5**	**0**	**0**	**1**	**3**	**0**	**0**
	6	2	0	0	0	3	0	0

0 1.3541667

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
	0	0	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	2	0	0	0
4:15 PM	1	1	0	0	1	1	0	0
4:30 PM	0	1	0	0	2	0	0	0
4:45 PM	0	1	0	0	1	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	1	0	1	0	0	1	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**4**	**5**	**2**	**0**	**6**	**2**	**1**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-027
N/S Street: Twiggs St
E/W Street: Congress St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	2	7	0	0	0	0
7:15 AM	0	1	2	1	0	1	0	0
7:30 AM	1	1	3	1	0	0	0	0
7:45 AM	1	0	2	0	0	0	0	0
8:00 AM	0	0	5	0	0	0	0	0
8:15 AM	0	2	1	1	0	0	0	0
8:30 AM	2	1	9	3	0	0	0	0
8:45 AM	1	2	10	1	0	0	0	0
TOTALS	**6**	**8**	**34**	**14**	**0**	**1**	**0**	**0**
	3	5	25	5	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	2	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0
8:30 AM	0	3	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**3**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	3	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	8	9	7	0	0	1	8
4:15 PM	0	4	15	7	0	2	0	7
4:30 PM	1	2	6	9	5	5	0	2
4:45 PM	4	10	4	9	0	4	0	2
5:00 PM	5	3	16	5	1	1	2	0
5:15 PM	8	9	13	8	2	5	6	4
5:30 PM	7	5	12	4	4	0	2	8
5:45 PM	3	3	10	9	3	6	0	5
TOTALS	**34**	**44**	**85**	**58**	**15**	**23**	**11**	**36**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	2	1	0	0	0	0	0
4:45 PM	0	2	4	0	0	4	0	0
5:00 PM	1	2	0	0	0	0	0	0
5:15 PM	1	1	1	0	0	2	0	0
5:30 PM	1	0	1	0	0	0	0	0
5:45 PM	0	5	0	0	0	0	0	0
TOTALS	**4**	**14**	**8**	**0**	**0**	**6**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

40

PROJECT#: 11-4140-028
N/S Street: Harney St
E/W Street: Congress St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	0	0	0
7:15 AM	0	1	2	2	0	0	1	0
7:30 AM	1	0	2	2	1	1	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	4	0	0	0	0	0
8:15 AM	0	2	2	1	2	0	0	1
8:30 AM	2	1	5	2	0	0	0	0
8:45 AM	3	0	3	1	0	0	1	0
TOTALS	**6**	**4**	**20**	**13**	**3**	**1**	**2**	**1**
	5	3	14	4	2	0	1	1 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0
7:45 AM	0	3	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	2	0	0	0	0	0
8:30 AM	1	3	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	2	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	4	0	2	0	0	6	1
4:15 PM	0	0	6	4	4	3	2	1
4:30 PM	0	2	2	1	0	0	4	2
4:45 PM	2	4	5	3	1	3	4	0
5:00 PM	0	4	3	4	0	0	4	0
5:15 PM	0	0	6	2	0	0	3	2
5:30 PM	3	5	3	5	1	1	2	1
5:45 PM	2	1	3	2	0	0	3	0
TOTALS	**8**	**20**	**28**	**23**	**6**	**7**	**28**	**7**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	0	2	1	0	0	0	0	0
4:45 PM	0	1	3	0	0	0	0	0
5:00 PM	0	2	1	0	0	0	0	0
5:15 PM	0	1	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	3	0	0	0	0	0	0
TOTALS	**0**	**11**	**8**	**0**	**0**	**0**	**0**	**0**

41

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-029
N/S Street: Congress St/Ampudia St
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	2	0	0	1	0	1	0	0	0
7:45 AM	0	0	1	0	2	0	0	1	0	0
8:00 AM	2	0	0	0	3	2	0	0	0	0
8:15 AM	2	1	0	0	1	2	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0
TOTALS	**4**	**3**	**1**	**0**	**8**	**4**	**1**	**3**	**1**	**0**
	4	1	0	0	5	4	0	1	1	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	1	0
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	3	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**2**	**0**	**0**	**2**	**0**
	0	0	3	0	0	0	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	1	2	0	2
4:15 PM	0	0	0	0	3	0	1	4	0	3
4:30 PM	0	1	0	0	4	1	3	5	1	4
4:45 PM	0	0	0	0	3	2	2	3	2	2
5:00 PM	2	4	0	0	3	1	1	0	4	0
5:15 PM	1	0	0	0	2	2	2	0	2	0
5:30 PM	2	1	1	0	3	0	2	3	2	3
5:45 PM	0	2	0	0	0	1	1	2	0	1
TOTALS	**5**	**8**	**1**	**0**	**19**	**7**	**13**	**19**	**11**	**15**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	1	0
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	1	0	1	0	1	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0
TOTALS	**0**	**0**	**7**	**1**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

42

PROJECT#: 11-4140-030
N/S Street: Twiggs St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	3	0	1	0	0	0
7:15 AM	3	6	5	3	1	1	0	0
7:30 AM	4	8	9	5	0	4	0	0
7:45 AM	10	15	13	13	2	0	0	0
8:00 AM	12	22	12	8	5	9	0	0
8:15 AM	15	10	11	7	6	6	0	0
8:30 AM	18	11	9	15	3	11	0	0
8:45 AM	25	21	15	11	8	14	0	0
TOTALS	**88**	**94**	**77**	**62**	**26**	**45**	**0**	**0**
	70	64	47	41	22	40	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	22	26	25	8	5	8	0	0
4:15 PM	12	12	25	29	5	11	0	0
4:30 PM	33	16	22	8	4	11	0	0
4:45 PM	15	26	37	19	11	21	0	0
5:00 PM	25	29	21	16	3	10	0	0
5:15 PM	15	12	29	27	3	11	0	0
5:30 PM	34	13	17	10	4	10	0	0
5:45 PM	19	23	41	29	8	19	0	0
TOTALS	**175**	**157**	**217**	**146**	**43**	**101**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-031
N/S Street: Harney St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

43

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	5	1	2	3	0	1	0
7:15 AM	7	12	9	2	2	2	1	2
7:30 AM	14	8	12	10	10	13	11	6
7:45 AM	14	21	15	17	7	9	10	10
8:00 AM	13	29	14	11	12	10	8	7
8:15 AM	21	18	14	10	10	7	12	4
8:30 AM	18	15	12	19	2	11	2	9
8:45 AM	31	25	13	11	14	16	12	11
TOTALS	**118**	**133**	**90**	**82**	**60**	**68**	**57**	**49**
	83	87	53	51	38	44	34	31

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0
8:30 AM	2	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**4**	**0**	**2**	**2**	**0**	**0**	**0**	**0**
	3	0	2	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	52	28	36	28	17	9	0	9
4:15 PM	48	32	24	17	7	3	5	12
4:30 PM	48	28	24	16	7	10	14	5
4:45 PM	40	25	30	23	13	5	7	2
5:00 PM	30	26	37	25	5	7	15	4
5:15 PM	31	26	26	16	14	6	6	23
5:30 PM	36	39	17	35	7	12	1	16
5:45 PM	46	58	16	33	11	9	7	12
TOTALS	**331**	**262**	**210**	**193**	**81**	**61**	**55**	**83**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	3	1	0	1	0	0	0	0
4:30 PM	3	3	0	3	1	0	0	0
4:45 PM	0	1	2	0	0	0	0	0
5:00 PM	3	0	2	0	2	0	0	0
5:15 PM	0	1	0	2	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0
5:45 PM	0	3	1	0	0	1	0	0
TOTALS	**9**	**10**	**6**	**6**	**3**	**1**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

44

PROJECT#: 11-4140-032
N/S Street: Old Towne Ave
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	2	1	0	0	0	1	0
8:00 AM	0	4	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	1	0	0	1	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**4**	**7**	**4**	**1**	**0**	**0**	**4**	**2**
	0	4	2	1	0	0	3	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**
	0	1	2	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	1	0	0
4:15 PM	0	2	3	2	2	0	0	1
4:30 PM	2	2	2	3	0	1	2	0
4:45 PM	1	0	2	1	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	1	2	1	0	0	0	0	0
5:30 PM	1	4	1	1	0	2	2	3
5:45 PM	2	0	1	1	0	1	0	0
TOTALS	**10**	**10**	**10**	**9**	**2**	**5**	**4**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0
TOTALS	**1**	**10**	**2**	**0**	**0**	**0**	**0**	**1**

45

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-017
N/S Street: Taylor St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	1	1	2	0
7:30 AM	1	0	0	0	1	1	0	0
7:45 AM	1	1	0	0	3	1	0	0
8:00 AM	0	1	0	0	1	2	0	0
8:15 AM	1	0	0	0	2	1	0	0
8:30 AM	0	0	0	0	5	2	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**14**	**8**	**2**	**0**
	1	1	0	0	8	5	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	1
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	1
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**0**	**3**	**0**	**1**	**0**	**2**	**5**
	0	0	2	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	1	2	1	0	0
4:15 PM	1	1	0	1	1	4	0	0
4:30 PM	0	0	0	0	0	3	1	0
4:45 PM	0	0	1	4	2	0	0	1
5:00 PM	0	0	0	1	1	2	2	0
5:15 PM	0	2	0	0	0	4	9	0
5:30 PM	0	0	0	1	0	3	0	0
5:45 PM	1	0	0	2	1	0	4	0
TOTALS	**2**	**4**	**1**	**10**	**7**	**17**	**16**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	1	0
4:30 PM	2	0	0	0	0	0	1	2
4:45 PM	0	0	1	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**2**	**0**	**1**	**0**	**4**	**6**

46

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-034
N/S Street: Twiggs St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	4	2	0	0	2	0	0
7:30 AM	0	1	0	1	0	0	0	0
7:45 AM	1	0	1	1	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0
8:45 AM	0	5	2	2	1	1	0	0
TOTALS	**1**	**12**	**5**	**6**	**1**	**3**	**0**	**0**
	0	7	2	3	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1
7:45 AM	2	0	0	0	1	0	0	0
8:00 AM	1	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**6**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
	3	0	0	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	0
4:45 PM	0	0	2	6	0	18	2	0
5:00 PM	0	0	1	0	1	11	0	0
5:15 PM	0	0	2	0	2	4	0	0
5:30 PM	0	0	1	0	0	0	1	1
5:45 PM	0	0	6	0	6	1	8	0
TOTALS	**0**	**0**	**14**	**6**	**9**	**37**	**11**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

47

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-035
N/S Street: Harney St
E/W Street: Juan St
DATE: 5/18/2011
DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	7	0	0	0	0	1	3
7:15 AM	0	1	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	4
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0
TOTALS	**3**	**8**	**2**	**1**	**0**	**2**	**1**	**7**
	1	1	1	1	0	2	0	4

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**
	0	2	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	3	0	2	2	2
4:15 PM	0	0	2	1	2	0	2	1
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	1	2	0	0	1	0	5	0
5:00 PM	2	4	2	1	3	4	3	0
5:15 PM	3	1	2	4	0	2	2	2
5:30 PM	0	0	0	2	0	1	0	0
5:45 PM	0	2	1	0	2	0	3	4
TOTALS	**7**	**10**	**7**	**11**	**8**	**9**	**19**	**9**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0
TOTALS	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**1**

Table 3.1
Rosecrans Corridor 2-Hour AM Peak Period Pedestrian Counts

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Taylor Street / Congress Street	61	82 (Taylor St.)	29 (Congress St.)	15 (Taylor St.)	187
Rosecrans Street-Taylor Street / Pacific Highway	34 (PCH)	129 (Taylor St.)	21 (PCH)	61 (Rosecrans St.)	245
Rosecrans Street / Jefferson Street	69 (Jefferson St.)	1 (Rosecrans St.)	0 (Jefferson St.)	0 (Rosecrans St.)	70
Rosecrans Street / Moore Street	37 (Moore St.)	4 (Rosecrans St.)	0 (Moore St.)	4 (Rosecrans St.)	45
Rosecrans Street / Hancock Street	30 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	30
Rosecrans Street / Kurtz Street	47 (Kurtz St.)	4 (Rosecrans St.)	21 (Kurtz St.)	2 (Rosecrans St.)	74
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	9 (Sports Arena Blvd.)	9 (Rosecrans St.)	45 (Sports Arena Blvd.)	18 (Rosecrans St.)	100
Rosecrans Street / Midway Drive	18 (Midway Dr.)	14 (Rosecrans St.)	27 (Midway Dr.)	25 (Rosecrans St.)	84
Rosecrans Street / N. Evergreen Street	8 (Evergreen St.)	6 (Rosecrans St.)	5 (Evergreen St.)	0 (Rosecrans St.)	19
Rosecrans Street / Lytton Street	8 (Lytton St.)	0 (Rosecrans St.)	0 (Lytton St.)	3 (Rosecrans St.)	11
Rosecrans Street / Roosevelt Road	0	15 (Rosecrans St.)	11 (Roosevelt Rd.)	2 (Rosecrans St.)	28
Rosecrans Street / Curtis Street	9 (Curtis St.)	0 (Rosecrans St.)	0	0 (Rosecrans St.)	9
Rosecrans Street / Womble Road		82 (Rosecrans St.)	12 (Womble Rd.)	0 (Rosecrans St.)	94
Rosecrans Street / Xenophon Street	17 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	17
Rosecrans Street / Farragut Road-Voltaire Street	4 (Voltaire St.)	5 (Rosecrans St.)	17 (Farragut Rd.)	12 (Rosecrans St.)	38
Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	1 (Laning Rd.)	1 (Rosecrans St.)	2
Rosecrans Street / Oliphant Street	8 (Oliphant St.)	0 (Rosecrans St.)	8	0 (Rosecrans St.)	16
Rosecrans Street / Macualay Street	18 (Macualay St.)	1 (Rosecrans St.)	5 (DW)	3 (Rosecrans St.)	27
Rosecrans Street / Nimitz Boulevard	23 (Nimitz Blvd.)	14 (Rosecrans St.)	24 (Nimitz Blvd.)	19 (Rosecrans St.)	80
Rosecrans Street / Jarvis Street	23 (Jarvis St.)	8 (Rosecrans St.)	9 (Jarvis St.)	11 (Rosecrans St.)	51
Rosecrans Street / N. Harbor Drive-Hugo Street	14 (Hugo St.)	13 (Rosecrans St.)	16 (Harbor Dr.)	13 (Rosecrans St.)	56
Rosecrans Street / Garrison Street	11 (Garrison St.)	0 (Rosecrans St.)	0 (Garrison St.)	0 (Rosecrans St.)	11
Rosecrans Street / Carleton Street	25 (Carleton St.)	16 (Rosecrans St.)	11 (Carleton St.)	13 (Rosecrans St.)	65
Rosecrans Street / Shelter Island Drive-Byron Street	10 (Byron St.)	11 (Rosecrans St.)	14 (Shelter Island Dr.)	13 (Rosecrans St.)	48

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	15 (Canon St.)	23 (Rosecrans St.)	24 (Canon St.)	10 (Rosecrans St.)	72
Rosecrans Street / Talbot Street	10 (Talbot St.)	14 (Rosecrans St.)	5 (Talbot St.)	13 (Rosecrans St.)	42
Camino del Rio W. / Moore Street	1 (Moore St.)	0 (Camino del Rio)	0 (Moore St.)	3 (Camino del Rio)	4
#23 Camino del Rio W. / Hancock Street	0 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	0
#19 Camino del Rio W. / Kurtz Street	0 (Kurtz St.)	0 (Rosecrans St.)	0 (Kurtz St.)	0 (Rosecrans St.)	0
TOTAL	509	451	305	241	1,525

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 4 pedestrians along the northwest leg of the intersection (Camino del Rio) and 15 pedestrians along the south leg (Rosecrans St.).

Table 3.2
Rosecrans Corridor 2-Hour PM Peak Period Pedestrian Counts

	Intersection	West Leg	North Leg	East Leg	South Leg	Total
#38	Taylor Street / Congress Street	46	26 (Taylor St.)	81 (Congress St.)	53 (Taylor St.)	206
#36	Rosecrans Street-Taylor Street / Pacific Highway	23 (PCH)	170 (Taylor St.)	15 (PCH)	27 (Rosecrans St.)	235
	Rosecrans Street / Jefferson Street	86 (Jefferson St.)	0 (Rosecrans St.)	0 (Jefferson St.)	2 (Rosecrans St.)	88
	Rosecrans Street / Moore Street	57 (Moore St.)	7 (Rosecrans St.)	2 (Moore St.)	0 (Rosecrans St.)	66
#24	Rosecrans Street / Hancock Street	66 (Hancock St.)	0 (Rosecrans St.)	145 (Hancock St.)	0 (Rosecrans St.)	211
#20	Rosecrans Street / Kurtz Street	51 (Kurtz St.)	17 (Rosecrans St.)	43 (Kurtz St.)	3 (Rosecrans St.)	114
#15	Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	31 (Sports Arena Blvd.)	10 (Rosecrans St.)	29 (Sports Arena Blvd.)	63 (Rosecrans St.)	156
#7	Rosecrans Street / Midway Drive	48 (Midway Dr.)	40 (Rosecrans St.)	65 (Midway Dr.)	42 (Rosecrans St.)	195
	Rosecrans Street / N. Evergreen Street	11 (Evergreen St.)	11 (Rosecrans St.)	8 (Evergreen St.)	1 (Rosecrans St.)	31
#1	Rosecrans Street / Lytton Street	6 (Lytton St.)	6 (Rosecrans St.)	1 (Lytton St.)	0 (Rosecrans St.)	13
	Rosecrans Street / Roosevelt Road	0	7 (Rosecrans St.)	4 (Roosevelt Rd.)	0 (Rosecrans St.)	11
	Rosecrans Street / Curtis Street	5 (Curtis St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	5
	Rosecrans Street / Womble Road		32 (Rosecrans St.)	7 (Womble Rd.)	0 (Rosecrans St.)	39
	Rosecrans Street / Xenophon Street	6 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	6
	Rosecrans Street / Farragut Road-Voltaire Street	1 (Voltaire St.)	5 (Rosecrans St.)	13 (Farragut Rd.)	20 (Rosecrans St.)	39
#51	Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	3 (Laning Rd.)	0 (Rosecrans St.)	3
	Rosecrans Street / Oliphant Street	34 (Oliphant St.)	0 (Rosecrans St.)	47	0 (Rosecrans St.)	81
	Rosecrans Street / Macualay Street	8 (Macualay St.)	0 (Rosecrans St.)	12 (DW)	1 (Rosecrans St.)	21
#50	Rosecrans Street / Nimitz Boulevard	26 (Nimitz Blvd.)	25 (Rosecrans St.)	26 (Nimitz Blvd.)	41 (Rosecrans St.)	118
	Rosecrans Street / Jarvis Street	19 (Jarvis St.)	2 (Rosecrans St.)	20 (Jarvis St.)	5 (Rosecrans St.)	46
#49	Rosecrans Street / N. Harbor Drive-Hugo Street	4 (Hugo St.)	5 (Rosecrans St.)	3 (Harbor Dr.)	6 (Rosecrans St.)	18
	Rosecrans Street / Garrison Street	34 (Garrison St.)	0 (Rosecrans St.)	47 (Garrison St.)	0 (Rosecrans St.)	81
	Rosecrans Street / Carleton Street	15 (Carleton St.)	22 (Rosecrans St.)	10 (Carleton St.)	11 (Rosecrans St.)	58
	Rosecrans Street / Shelter Island Drive-Byron Street	9 (Byron St.)	8 (Rosecrans St.)	15 (Shelter Island Dr.)	19 (Rosecrans St.)	51

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	11 (Canon St.)	25 (Rosecrans St.)	28 (Canon St.)	11 (Rosecrans St.)	75
Rosecrans Street / Talbot Street	9 (Talbot St.)	20 (Rosecrans St.)	13 (Talbot St.)	19 (Rosecrans St.)	61
Camino del Rio W. / Moore Street	0 (Moore St.)	0 (Camino del Rio)	1 (Moore St.)	0 (Camino del Rio)	1
#23 Camino del Rio W. / Hancock Street	15 (Hancock St.)	20 (Rosecrans St.)	2 (Hancock St.)	1 (Rosecrans St.)	38
#19 Camino del Rio W. / Kurtz Street	15 (Kurtz St.)	20 (Rosecrans St.)	2 (Kurtz St.)	1 (Rosecrans St.)	38
TOTAL	636	478	642	326	2,105

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 9 pedestrians along the northwest leg of the intersection (Camino del Rio) and 14 pedestrians along the south leg (Rosecrans St.).

Table 5.1
Rosecrans Corridor 2-Hour AM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	3/9	0/0 (Taylor St.)	7/0 (Congress St.)	0/0 (Taylor St.)	19
Rosecrans Street - Taylor Street / Pacific Coast Highway	3/10 (PCH)	5/0 (Taylor St.)	7/0 (PCH)	0/5 (Rosecrans St.)	30
Rosecrans Street / Jefferson Street	2/13 (Jefferson St.)	0/0 (Rosecrans St.)	0/0 (Jefferson St.)	0/0 (Rosecrans St.)	15
Rosecrans Street / Moore Street	4/12 (Moore St.)	0/0 (Rosecrans St.)	10/2 (Moore St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Hancock Street	4/12 (Hancock St.)	0/0 (Rosecrans St.)	10/2 (Hancock St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Kurtz Street	1/8 (Kurtz St.)	2/0 (Rosecrans St.)	14/0 (Kurtz St.)	0/1 (Rosecrans St.)	26
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	0/0 (Sports Arena Blvd.)	0/1 (Rosecrans St.)	7/3 (Sports Arena Blvd.)	0/6 (Rosecrans St.)	20
Rosecrans Street / Midway Drive	0/7 (Midway Dr.)	3/1 (Rosecrans St.)	6/3 (Midway Dr.)	2/3 (Rosecrans St.)	25
Rosecrans Street / N. Evergreen Street	0/6 (Evergreen St.)	1/2 (Rosecrans St.)	6/2 (Evergreen St.)	0/0 (Rosecrans St.)	17
Rosecrans Street / Lytton Street	0/5 (Lytton St.)	2/1 (Rosecrans St.)	1/0 (Lytton St.)	0/0 (Rosecrans St.)	9
Rosecrans Street / Roosevelt Road	1/6	0/1 (Rosecrans St.)	7/1 (Roosevelt Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Curtis Street	1/6 (Curtis St.)	3/0 (Rosecrans St.)	0/0	1/3 (Rosecrans St.)	14
Rosecrans Street / Womble Road		2/4 (Rosecrans St.)	9/1 (Womble Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Xenophon Street	0/2 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	2
Rosecrans Street / Farragut Road-Voltaire Street	0/5 (Voltaire St.)	0/0 (Rosecrans St.)	3/0 (Farragut Rd.)	0/0 (Rosecrans St.)	8
Rosecrans Street / Russell Street-Laning Road	0/4 (Russell St.)	5/0 (Rosecrans St.)	17/0 (Laning Rd.)	0/12 (Rosecrans St.)	38
Rosecrans Street / Oliphant Street	0/4 (Oliphant St.)	0/0 (Rosecrans St.)	8/0	0/0 (Rosecrans St.)	12
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	7/1 (DW)	0/0 (Rosecrans St.)	13
Rosecrans Street / Nimitz Boulevard	1/4 (Nimitz Blvd.)	12/0 (Rosecrans St.)	8/1 (Nimitz Blvd.)	0/6 (Rosecrans St.)	32
Rosecrans Street / Jarvis Street	0/13 (Jarvis St.)	0/0 (Rosecrans St.)	5/0 (Jarvis St.)	1/0 (Rosecrans St.)	19
Rosecrans Street / N. Harbor Drive-Hugo Street	0/3 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/1 (Rosecrans St.)	7
Rosecrans Street / Garrison Street	0/4 (Garrison St.)	0/0	8/0 (Garrison St.)	0/0 (Rosecrans St.)	12
Rosecrans Street / Carleton Street	1/3 (Carleton St.)	1/0 (Rosecrans St.)	3/0 (Carleton St.)	1/0 (Rosecrans St.)	9

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/4 *(Byron St.)*	2/1 *(Rosecrans St.)*	2/0 *(Shelter Island Dr.)*	0/0 *(Rosecrans St.)*	9
Rosecrans Street / Canon Street	0/5 *(Canon St.)*	10/0 *(Rosecrans St.)*	2/0 *(Canon St.)*	0/12 *(Rosecrans St.)*	29
Rosecrans Street / Talbot Street	0/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	2/0 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6
Camino del Rio W. / Moore Street	0/6 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	3/0 *(Camino del Rio)*	9
#23 Camino del Rio W. / Hancock Street	0/1 *(Hancock St.)*	2/0 *(Rosecrans St.)*	1/0 *(Hancock St.)*	0/0 *(Rosecrans St.)*	4
#19 Camino del Rio W. / Kurtz Street	0/1 *(Kurtz St.)*	2/0 *(Rosecrans St.)*	1/0 *(Kurtz St.)*	0/0 *(Rosecrans St.)*	4
TOTAL	183	63	170	57	476

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 1 bicyclist southwest bound along the northwest leg of the intersection (Camino del Rio) and 0 west bound and 2 east bound along the south leg (Rosecrans St.).

Table 5.2
Rosecrans Corridor 2-Hour PM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	9/12	4/0 (Taylor St.)	18/2 (Congress St.)	1/1 (Taylor St.)	47
Rosecrans Street-Taylor Street / Pacific Coast Highway	9/12 (PCH)	21/2 (Taylor St.)	15/3 (PCH)	1/9 (Rosecrans St.)	72
Rosecrans Street / Jefferson Street	7/28 (Jefferson St.)	0/0 (Rosecrans St.)	4/1 (Jefferson St.)	0/0 (Rosecrans St.)	40
Rosecrans Street / Moore Street	4/20 (Moore St.)	0/0 (Rosecrans St.)	20/2 (Moore St.)	0/0 (Rosecrans St.)	46
Rosecrans Street / Hancock Street	1/1 (Hancock St.)	0/0 (Rosecrans St.)	20/5 (Hancock St.)	0/0 (Rosecrans St.)	27
Rosecrans Street / Kurtz Street	2/3 (Kurtz St.)	29/1 (Rosecrans St.)	3/0 (Kurtz St.)	3/15 (Rosecrans St.)	56
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	2/3 (Sports Arena Blvd.)	2/2 (Rosecrans St.)	6/4 (Sports Arena Blvd.)	6/13 (Rosecrans St.)	43
Rosecrans Street / Midway Drive	3/7 (Midway Dr.)	5/4 (Rosecrans St.)	8/3 (Midway Dr.)	0/7 (Rosecrans St.)	37
Rosecrans Street / N. Evergreen Street	2/5 (Evergreen St.)	0/2 (Rosecrans St.)	3/1 (Evergreen St.)	0/1 (Rosecrans St.)	14
Rosecrans Street / Lytton Street	0/3 (Lytton St.)	1/0 (Rosecrans St.)	2/0 (Lytton St.)	1/3 (Rosecrans St.)	10
Rosecrans Street / Roosevelt Road	2/1	0/2 (Rosecrans St.)	7/2 (Roosevelt Rd.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Curtis Street	0/1 (Curtis St.)	0/0 (Rosecrans St.)	0/0	0/0 (Rosecrans St.)	1
Rosecrans Street / Womble Road		2/2 (Rosecrans St.)	6/1 (Womble Rd.)	0/0 (Rosecrans St.)	11
Rosecrans Street / Xenophon Street	0/6 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	6
Rosecrans Street / Farragut Road-Voltaire Street	0/9 (Voltaire St.)	0/0 (Rosecrans St.)	10/0 (Farragut Rd.)	0/0 (Rosecrans St.)	19
Rosecrans Street / Russell Street-Laning Road	0/1 (Russell St.)	5/0 (Rosecrans St.)	11/0 (Laning Rd.)	0/20 (Rosecrans St.)	37
Rosecrans Street / Oliphant Street	0/3 (Oliphant St.)	0/0 (Rosecrans St.)	11/0	0/0 (Rosecrans St.)	14
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	6/2 (DW)	0/1 (Rosecrans St.)	14
Rosecrans Street / Nimitz Boulevard	0/2 (Nimitz Blvd.)	12/1 (Rosecrans St.)	6/2 (Nimitz Blvd.)	0/8 (Rosecrans St.)	31
Rosecrans Street / Jarvis Street	0/0 (Jarvis St.)	9/0 (Rosecrans St.)	0/0 (Jarvis St.)	0/1 (Rosecrans St.)	10
Rosecrans Street / N. Harbor Drive-Hugo Street	0/2 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/4 (Rosecrans St.)	9
Rosecrans Street / Garrison Street	0/3 (Garrison St.)	0/0 (Rosecrans St.)	11/0 (Garrison St.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Carleton Street	1/1 (Carleton St.)	1/0 (Rosecrans St.)	5/4 (Carleton St.)	1/0 (Rosecrans St.)	13

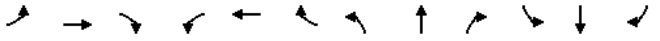
Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/2 *(Byron St.)*	5/0 *(Rosecrans St.)*	4/1 *(Shelter Island Dr.)*	1/0 *(Rosecrans St.)*	13
Rosecrans Street / Canon Street	1/5 *(Canon St.)*	12/0 *(Rosecrans St.)*	8/1 *(Canon St.)*	0/6 *(Rosecrans St.)*	33
Rosecrans Street / Talbot Street	1/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6/1 *(Talbot St.)*	0/0 *(Rosecrans St.)*	12
Camino del Rio W. / Moore Street	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0
Camino del Rio W. / Hancock Street	0/12 *(Hancock St.)*	8/0 *(Rosecrans St.)*	0/0 *(Hancock St.)*	0/2 *(Rosecrans St.)*	22
Camino del Rio W. / Kurtz Street	0/12 *(Kurtz St.)*	8/0 *(Rosecrans St.)*	0/0 *(Kurtz St.)*	0/2 *(Rosecrans St.)*	22
TOTAL	207	140	228	107	687

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:
*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 2 bicyclists southwest bound along the northwest leg of the intersection (Camino del Rio) and 2 bicyclists west bound and 1 bicyclist east bound along the south leg (Rosecrans St.).

Appendix E
Peak Hour Intersection Worksheets – Existing Conditions

Existing AM
1: Rosecrans St. & Lytton St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Volume (vph)	3	1019	308	142	1311	161	349	285	15	546	254	77
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	1084	328	151	1395	171	371	303	16	581	270	82
RTOR Reduction (vph)	0	0	227	0	0	68	0	0	12	0	8	0
Lane Group Flow (vph)	3	1084	101	151	1395	103	371	303	4	581	344	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	0.8	38.9	38.9	7.6	45.6	45.6	17.6	28.6	28.6	37.4	46.6	
Effective Green, g (s)	1.2	40.2	40.2	8.0	47.0	47.0	18.0	29.4	29.4	36.4	47.8	
Actuated g/C Ratio	0.01	0.31	0.31	0.06	0.36	0.36	0.14	0.23	0.23	0.28	0.37	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	16	1572	483	211	1279	542	475	421	353	496	659	
v/s Ratio Prot	0.00	0.21		c0.04	c0.39		c0.11	c0.16		c0.33	0.19	
v/s Ratio Perm			0.06			0.07			0.00			
v/c Ratio	0.19	0.69	0.21	0.72	1.09	0.19	0.78	0.72	0.01	1.17	0.52	
Uniform Delay, d1	63.9	39.4	33.2	59.9	41.5	28.4	54.1	46.5	39.0	46.8	32.2	
Progression Factor	1.00	1.00	1.00	1.39	0.60	0.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	2.5	1.0	5.9	49.6	0.5	7.5	6.1	0.0	96.9	0.3	
Delay (s)	66.0	41.9	34.2	89.4	74.3	15.1	61.6	52.6	39.0	143.7	32.5	
Level of Service	E	D	C	F	E	B	E	D	D	F	C	
Approach Delay (s)		40.2			69.7			57.2			101.7	
Approach LOS		D			E			E			F	

Intersection Summary				
HCM Average Control Delay	65.4	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/5/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	452	1054	306	0	0	428
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	1158	333	0	0	465
RTOR Reduction (vph)	0	540	0	0	0	0
Lane Group Flow (vph)	497	618	333	0	0	465
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	10.7	10.7	13.9			13.9
Effective Green, g (s)	10.7	10.7	13.9			13.9
Actuated g/C Ratio	0.28	0.28	0.36			0.36
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	952	773	1274			671
v/s Ratio Prot	0.14		0.09			c0.25
v/s Ratio Perm		c0.22				
v/c Ratio	0.52	0.80	0.26			0.69
Uniform Delay, d1	11.8	13.0	8.7			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.2	5.4	0.0			2.5
Delay (s)	12.0	18.4	8.8			13.0
Level of Service	B	B	A			B
Approach Delay (s)	16.5		8.8			13.0
Approach LOS	B		A			B

Intersection Summary				
HCM Average Control Delay	14.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	57.0%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
3: Channel Way & W Mission Bay Dr 4/5/2012

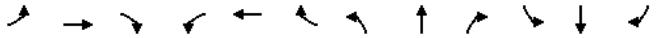


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	34	921	41	0	897
Peak Hour Factor	0.65	0.65	0.92	0.92	0.91	0.91
Hourly flow rate (vph)	0	52	1001	45	0	986
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked						
vC, conflicting volume	1352	359			1046	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1352	359			1046	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	141	636			661	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	52	400	400	245	329	329	329
Volume Left	0	0	0	0	0	0	0
Volume Right	52	0	0	45	0	0	0
cSH	636	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.24	0.24	0.14	0.19	0.19	0.19
Queue Length 95th (ft)	7	0	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	11.2	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	29.7%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
4: Sports Arena & W Mission Bay Dr 4/5/2012

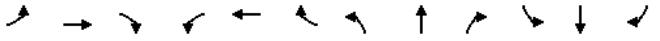


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Volume (vph)	412	277	244	16	125	223	149	327	19	298	428	171
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.79	0.79	0.79	0.94	0.94	0.94
Adj. Flow (vph)	438	295	260	19	147	262	189	414	24	317	455	182
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	357	376	122	19	147	262	189	414	24	249	523	182
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Split		pm+ov	Split		Free	Split		Free	Split		Free
Protected Phases	2	2	3	1	1		3	3		4	4	
Permitted Phases			2			Free			Free			Free
Actuated Green, G (s)	32.2	32.2	54.0	19.4	19.4	119.4	21.8	21.8	119.4	26.3	26.3	119.4
Effective Green, g (s)	33.1	33.1	55.8	20.4	20.4	119.4	22.7	22.7	119.4	27.2	27.2	119.4
Actuated g/C Ratio	0.28	0.28	0.47	0.17	0.17	1.00	0.19	0.19	1.00	0.23	0.23	1.00
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0		3.1	3.1		5.5	5.5	
Lane Grp Cap (vph)	466	485	785	302	605	1563	337	673	1562	367	767	1561
v/s Ratio Prot	0.21	c0.21	0.03	0.01	c0.04		0.11	c0.12		0.15	c0.16	
v/s Ratio Perm			0.05			0.17			0.02			0.12
v/c Ratio	0.77	0.78	0.15	0.06	0.24	0.17	0.56	0.62	0.02	0.68	0.68	0.12
Uniform Delay, d1	39.6	39.7	18.3	41.5	42.8	0.0	43.8	44.3	0.0	42.1	42.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	6.9	0.1	0.4	0.9	0.2	2.2	1.7	0.0	7.0	3.5	0.2
Delay (s)	46.3	46.7	18.4	41.9	43.7	0.2	46.0	46.0	0.0	49.1	45.7	0.2
Level of Service	D	D	B	D	D	A	D	D	A	D	D	A
Approach Delay (s)		39.1			17.0			44.3			37.9	
Approach LOS		D			B			D			D	

Intersection Summary					
HCM Average Control Delay	36.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.61				
Actuated Cycle Length (s)	119.4	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	69.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Existing AM
5: Kemper St & Midway Dr 4/5/2012

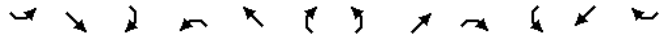


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Volume (vph)	97	95	91	25	89	53	64	309	35	62	390	70
Peak-hour factor, PHF	0.80	0.80	0.80	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Adj. Flow (vph)	121	119	114	27	98	58	73	351	40	67	419	75
RTOR Reduction (vph)	0	0	88	0	0	49	0	5	0	0	0	44
Lane Group Flow (vph)	121	119	26	27	98	9	73	386	0	67	419	31
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	12.9	12.9	17.6	11.9	11.9	11.9	4.7	33.1		4.7	33.1	33.1
Effective Green, g (s)	13.8	13.8	18.9	12.8	12.8	12.8	5.1	34.0		5.1	34.0	34.0
Actuated g/C Ratio	0.17	0.17	0.23	0.16	0.16	0.16	0.06	0.42		0.06	0.42	0.42
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	284	299	437	277	292	244	214	1448		110	1473	659
v/s Ratio Prot	c0.07	0.07	0.00	0.02	c0.05		0.02	0.11		c0.04	c0.12	
v/s Ratio Perm			0.01			0.01						0.02
v/c Ratio	0.43	0.40	0.06	0.10	0.34	0.04	0.34	0.27		0.61	0.28	0.05
Uniform Delay, d1	30.4	30.2	24.5	29.5	30.7	29.2	36.7	15.7		37.3	15.8	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.9	0.0	0.2	0.7	0.1	0.3	0.2		6.4	0.2	0.1
Delay (s)	31.4	31.1	24.5	29.7	31.3	29.3	37.0	15.8		43.7	16.0	14.3
Level of Service	C	C	C	C	C	C	D	B		D	B	B
Approach Delay (s)		29.1			30.4			19.2			19.1	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	22.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
6: Midway Dr & East Dr 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.98			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	3528		1770	3487			1750			1691	
Flt Permitted	0.33	1.00		0.42	1.00			0.76			0.83	
Satd. Flow (perm)	612	3528		791	3487			1382			1430	
Volume (vph)	16	537	10	25	629	68	19	3	5	16	2	15
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.61	0.61	0.61	0.75	0.75	0.75
Adj. Flow (vph)	18	590	11	29	740	80	31	5	8	21	3	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	7	0	0	18	0
Lane Group Flow (vph)	18	600	0	29	813	0	0	37	0	0	26	0
Confl. Peds. (#/hr)			3						1			10
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.4	41.6		42.4	41.6			4.1			4.1	
Effective Green, g (s)	43.7	42.5		43.7	42.5			5.0			5.0	
Actuated g/C Ratio	0.72	0.70		0.72	0.70			0.08			0.08	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	463	2470		589	2441			114			118	
v/s Ratio Prot	0.00	0.17		c0.00	c0.23							
v/s Ratio Perm	0.03			0.03				c0.03			0.02	
v/c Ratio	0.04	0.24		0.05	0.33			0.32			0.22	
Uniform Delay, d1	2.4	3.3		2.4	3.6			26.3			26.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.6			0.3	
Delay (s)	2.4	3.3		2.4	3.6			26.8			26.4	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		3.3			3.6			26.8			26.4	
Approach LOS		A			A			C			C	

Intersection Summary				
HCM Average Control Delay	4.8	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.33			
Actuated Cycle Length (s)	60.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	35.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
7: Rosecrans St. & Midway Dr 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Volume (vph)	156	1299	67	204	1658	246	207	255	152	64	297	169
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	1367	71	215	1745	259	218	268	160	67	313	178
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	125	0	0	144
Lane Group Flow (vph)	164	1433	0	215	1990	0	218	268	35	67	313	34
Confl. Peds. (#/hr)	14		25	25		14	27		14	18		27
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	13.9	50.4		25.8	62.4		11.0	27.6	27.6	7.4	24.0	24.0
Effective Green, g (s)	14.3	51.5		26.2	63.4		11.4	28.5	28.5	7.8	24.9	24.9
Actuated g/C Ratio	0.11	0.40		0.20	0.49		0.09	0.22	0.22	0.06	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	195	1995		692	2421		301	776	337	106	678	290
v/s Ratio Prot	c0.09	0.28		0.06	c0.40		c0.06	0.08		c0.04	c0.09	
v/s Ratio Perm									0.02			0.02
v/c Ratio	0.84	0.72		0.31	0.82		0.72	0.35	0.10	0.63	0.46	0.12
Uniform Delay, d1	56.7	33.1		44.2	28.5		57.8	42.9	40.5	59.7	46.6	43.5
Progression Factor	0.81	0.69		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	1.1		0.1	2.5		7.1	0.1	0.0	8.7	0.2	0.1
Delay (s)	60.2	24.1		44.3	30.9		64.9	43.0	40.6	68.4	46.8	43.5
Level of Service	E	C		D	C		E	D	D	E	D	D
Approach Delay (s)		27.8			32.2			49.8			48.3	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM Average Control Delay	34.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	84.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

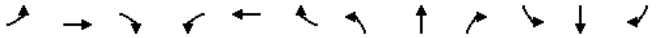
Existing AM
9: Enterprise St & Midway Dr 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	82	502	25	0	492
Peak Hour Factor	0.85	0.85	0.89	0.89	0.85	0.85
Hourly flow rate (vph)	0	96	564	28	0	579
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	870	301			594	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	870	301			594	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			100	
cM capacity (veh/h)	291	692			976	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	96	376	216	289	289
Volume Left	0	0	0	0	0
Volume Right	96	0	28	0	0
cSH	692	1700	1700	1700	1700
Volume to Capacity	0.14	0.22	0.13	0.17	0.17
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	11.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
10: Barnett Ave & Midway Dr 4/5/2012

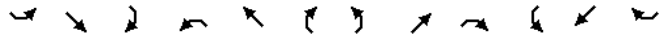


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	784	0	0	1211	527	0	0	0	397	0	95
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.81	0.92	0.81
Adj. Flow (vph)	0	852	0	0	1302	567	0	0	0	490	0	117
RTOR Reduction (vph)	0	0	0	0	0	267	0	0	0	0	0	90
Lane Group Flow (vph)	0	852	0	0	1302	300	0	0	0	490	0	27
Confl. Peds. (#/hr)						8				8		
Turn Type						custom				Prot		custom
Protected Phases		2			2	8				1		
Permitted Phases												1
Actuated Green, G (s)		26.8			26.8	22.3				12.9		12.9
Effective Green, g (s)		26.8			26.8	21.8				12.9		12.9
Actuated g/C Ratio		0.48			0.48	0.39				0.23		0.23
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	3.0				2.5		2.5
Lane Grp Cap (vph)		1688			1688	1081				788		363
v/s Ratio Prot		0.24			c0.37	0.11				c0.14		
v/s Ratio Perm												0.02
v/c Ratio		0.50			0.77	0.28				0.62		0.07
Uniform Delay, d1		10.1			12.2	11.8				19.5		17.0
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		0.2			2.2	0.1				1.3		0.1
Delay (s)		10.4			14.4	11.9				20.8		17.0
Level of Service		B			B	B				C		B
Approach Delay (s)		10.4			13.6			0.0			20.1	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	14.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	52.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
11: Sports Arena & Hancock 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9					4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91					1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes	1.00	1.00		0.78	1.00					1.00		1.00
Frt	1.00	1.00		1.00	0.98					1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)	1770	3532		1384	4970					1770		1583
Flt Permitted	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (perm)	1770	3532		1384	4970					1770		1583
Volume (vph)	104	484	6	1	331	52	0	0	0	18	0	33
Peak-hour factor, PHF	0.96	0.96	0.96	0.80	0.80	0.80	0.92	0.92	0.92	0.63	0.63	0.63
Adj. Flow (vph)	108	504	6	1	414	65	0	0	0	29	0	52
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	0	44
Lane Group Flow (vph)	108	510	0	1	462	0	0	0	0	29	0	8
Confl. Peds. (#/hr)	9		14	14		9			4	4		11
Turn Type	Prot			Prot					Free	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases									Free			
Actuated Green, G (s)	7.1	42.6		0.6	36.1					9.4		9.4
Effective Green, g (s)	7.1	42.6		0.6	36.1					9.4		10.3
Actuated g/C Ratio	0.11	0.64		0.01	0.54					0.14		0.15
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	188	2252		12	2686					249		244
v/s Ratio Prot	c0.06	c0.14		0.00	0.09					c0.02		0.01
v/s Ratio Perm												
v/c Ratio	0.57	0.23		0.08	0.17					0.12		0.03
Uniform Delay, d1	28.4	5.1		32.8	7.8					25.1		24.0
Progression Factor	1.00	1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2	2.6	0.1		1.1	0.1					0.1		0.0
Delay (s)	31.0	5.2		33.9	7.8					25.1		24.0
Level of Service	C	A		C	A					C		C
Approach Delay (s)		9.7			7.9			0.0			24.4	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	10.0	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.24			
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	9.3	
Intersection Capacity Utilization	33.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
12: Kemper Street & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Volume (vph)	62	40	90	46	23	100	68	481	76	117	327	80
Peak-hour factor, PHF	0.80	0.80	0.80	0.78	0.78	0.78	0.94	0.94	0.94	0.83	0.83	0.83
Adj. Flow (vph)	78	50	112	59	29	128	72	512	81	141	394	96
RTOR Reduction (vph)	0	94	0	0	0	117	0	13	0	0	38	0
Lane Group Flow (vph)	78	68	0	59	29	11	72	580	0	141	452	0
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	9.9	9.9		5.0	5.0	5.0	2.8	24.1		8.8	30.1	
Effective Green, g (s)	10.8	10.8		5.9	5.9	5.9	3.2	25.0		9.2	31.0	
Actuated g/C Ratio	0.16	0.16		0.09	0.09	0.09	0.05	0.37		0.14	0.46	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	286	270		156	164	140	164	1296		243	2287	
v/s Ratio Prot	c0.04	0.04		c0.03	0.02		0.02	c0.17		c0.08	0.09	
v/s Ratio Perm						0.01						
v/c Ratio	0.27	0.25		0.38	0.18	0.08	0.44	0.45		0.58	0.20	
Uniform Delay, d1	24.6	24.5		28.8	28.3	28.0	31.0	15.8		27.0	10.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.5		0.6	0.2	0.1	0.7	0.3		2.3	0.0	
Delay (s)	25.1	25.0		29.3	28.4	28.1	31.7	16.1		29.3	10.6	
Level of Service	C	C		C	C	C	C	B		C	B	
Approach Delay (s)		25.0			28.5			17.8			14.8	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	19.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
13: Sports Arena & 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99			0.97		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	3433	3464		1759	5042			1747		1770	1602	
Flt Permitted	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (perm)	3433	3464		1759	5042			1747		1770	1602	
Volume (vph)	72	482	63	20	458	25	26	5	8	25	3	40
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.71	0.71	0.71
Adj. Flow (vph)	77	513	67	24	539	29	35	7	11	35	4	56
RTOR Reduction (vph)	0	5	0	0	3	0	0	10	0	0	54	0
Lane Group Flow (vph)	77	575	0	24	565	0	0	43	0	35	6	0
Confl. Peds. (#/hr)	4		9	9		4			7	7		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Effective Green, g (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Actuated g/C Ratio	0.03	0.58		0.01	0.56			0.09		0.04	0.04	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	118	2021		20	2825			161		69	62	
v/s Ratio Prot	c0.02	c0.17		0.01	0.11			c0.02		c0.02	0.00	
v/s Ratio Perm												
v/c Ratio	0.65	0.28		1.20	0.20			0.27		0.51	0.10	
Uniform Delay, d1	33.2	7.2		34.4	7.6			29.4		32.8	32.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	9.5	0.0		270.0	0.0			0.3		2.1	0.3	
Delay (s)	42.6	7.3		304.4	7.6			29.7		34.9	32.5	
Level of Service	D	A		F	A			C		C	C	
Approach Delay (s)		11.4			19.6			29.7			33.4	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	17.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
14: Sports Arena & East Dr 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (prot)	1770	5037		1770	5024			1770	1542			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (perm)	1770	5037		1770	5024			1770	1542			1611
Volume (vph)	30	524	26	41	544	36	13	0	34	0	0	2
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.78	0.78	0.78	0.50	0.50	0.50
Adj. Flow (vph)	33	576	29	44	579	38	17	0	44	0	0	4
RTOR Reduction (vph)	0	4	0	0	5	0	0	0	39	0	0	0
Lane Group Flow (vph)	33	601	0	44	612	0	0	17	5	0	0	4
Confl. Peds. (#/hr)	21		15	15		21			21	21		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Effective Green, g (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Actuated g/C Ratio	0.02	0.65		0.02	0.65			0.11	0.11			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	27	3288		27	3280			199	174			1611
v/s Ratio Prot	0.02	0.12		c0.02	c0.12							
v/s Ratio Perm								0.01	0.00			0.00
v/c Ratio	1.22	0.18		1.63	0.19			0.09	0.03			0.00
Uniform Delay, d1	31.9	4.4		31.9	4.4			25.8	25.6			0.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	247.9	0.0		404.3	0.0			0.1	0.0			0.0
Delay (s)	279.8	4.5		436.2	4.5			25.8	25.6			0.0
Level of Service	F	A		F	A			C	C			A
Approach Delay (s)		18.7			33.2			25.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary				
HCM Average Control Delay	26.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.20			
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
15: Rosecrans St. & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (prot)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (perm)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Volume (vph)	171	1325	179	0	1887	296	155	154	10	242	215	101
Peak-hour factor, PHF	0.86	0.95	0.90	1.00	0.95	0.90	0.82	0.80	0.62	0.76	0.81	0.92
Adj. Flow (vph)	199	1395	199	0	1986	329	189	192	16	318	265	110
RTOR Reduction (vph)	0	13	0	0	0	0	0	4	0	0	0	87
Lane Group Flow (vph)	199	1581	0	0	1986	329	128	265	0	195	388	23
Confl. Peds. (#/hr)				45			18		9	9		45
Confl. Bikes (#/hr)									1			10
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	11.1	71.0			54.7	125.0	10.1	10.1		26.0	26.0	26.0
Effective Green, g (s)	12.5	73.1			56.6	125.0	10.1	10.1		26.0	26.0	26.0
Actuated g/C Ratio	0.10	0.58			0.45	1.00	0.08	0.08		0.21	0.21	0.21
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	343	2918			2302	1583	130	268		335	656	300
v/s Ratio Prot	0.06	c0.32			c0.39		0.08	c0.08		0.12	c0.12	0.02
v/s Ratio Perm						0.21						
v/c Ratio	0.58	0.54			0.86	0.21	0.98	0.99		0.58	0.59	0.08
Uniform Delay, d1	53.7	15.8			30.7	0.0	57.4	57.4		44.6	44.7	39.8
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.7			4.6	0.3	73.7	52.1		3.1	1.7	0.2
Delay (s)	55.4	16.5			35.3	0.3	131.1	109.5		47.7	46.4	40.0
Level of Service	E	B			D	A	F	F		D	D	D
Approach Delay (s)		20.8			30.3			116.4			45.8	
Approach LOS		C			C			F			D	

Intersection Summary				
HCM Average Control Delay	35.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	88.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	678	568	24
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	737	598	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	979	312	623			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	979	312	623			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	247	684	954			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	368	368	399	225
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	25
cSH	684	1700	1700	1700	1700
Volume to Capacity	0.06	0.22	0.22	0.23	0.13
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Existing AM
19: Kurtz & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1681	1752	1583		5085		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1681	1752	1583		5085		1770	6408	
Volume (vph)	0	0	0	112	78	45	0	1577	0	83	2142	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	122	85	47	0	1660	0	86	2208	0
RTOR Reduction (vph)	0	0	0	0	0	6	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	101	106	41	0	1660	0	86	2208	0
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				22.3	22.3	22.3		84.2		9.0	97.9	
Effective Green, g (s)				23.2	23.2	23.2		85.4		9.4	98.8	
Actuated g/C Ratio				0.18	0.18	0.18		0.66		0.07	0.76	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				300	313	283		3340		128	4870	
v/s Ratio Prot								c0.33		c0.05	0.34	
v/s Ratio Perm				0.06	0.06	0.03						
v/c Ratio				0.34	0.34	0.15		0.50		0.67	0.45	
Uniform Delay, d1				46.7	46.7	45.0		11.4		58.8	5.7	
Progression Factor				1.00	1.00	1.00		1.00		1.10	0.16	
Incremental Delay, d2				0.2	0.2	0.1		0.5		3.9	0.1	
Delay (s)				46.9	46.9	45.1		11.9		68.8	1.0	
Level of Service				D	D	D		B		E	A	
Approach Delay (s)		0.0			46.6			11.9			3.5	
Approach LOS		A			D			B			A	

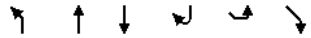
Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
20: Rosecrans St & Kurtz 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3364		1744	3539		1770		1548	1770	1863	
Flt Permitted		1.00		0.44	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3364		804	3539		1770		1548	1770	1863	
Volume (vph)	0	349	84	87	294	0	103	0	142	41	125	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.97	0.97	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	367	88	90	303	0	112	0	154	44	133	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	65	0	0	0
Lane Group Flow (vph)	0	446	0	90	303	0	112	0	89	44	133	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		74.3		85.7	85.7		13.1		74.3	17.0	17.0	
Effective Green, g (s)		75.2		86.6	86.6		13.5		75.2	17.9	17.9	
Actuated g/C Ratio		0.58		0.67	0.67		0.10		0.58	0.14	0.14	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1946		589	2358		184		895	244	257	
v/s Ratio Prot		c0.13		c0.01	0.09		c0.06			0.02	c0.07	
v/s Ratio Perm				0.09					0.06			
v/c Ratio		0.23		0.15	0.13		0.61		0.10	0.18	0.52	
Uniform Delay, d1		13.3		7.9	7.9		55.7		12.3	49.6	52.0	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.82	0.81	
Incremental Delay, d2		0.3		0.0	0.1		5.6		0.2	0.3	1.6	
Delay (s)		13.6		8.0	8.0		61.3		12.5	41.1	44.0	
Level of Service		B		A	A		E		B	D	D	
Approach Delay (s)		13.6			8.0			33.0			43.2	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
21: Pacific Highway & Kurtz St 4/5/2012

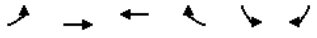


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	294	391	444	7	0	247
Peak Hour Factor	0.91	0.91	0.94	0.94	0.92	0.92
Hourly flow rate (vph)	323	430	472	7	0	268
Pedestrians		2				
Lane Width (ft)		12.0				
Walking Speed (ft/s)		4.0				
Percent Blockage		0				
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	480				1265	163
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	480				1265	163
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	65				100	68
cM capacity (veh/h)	918				104	851

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	323	143	143	143	189	189	102	268
Volume Left	323	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	7	268
cSH	918	1700	1700	1700	1700	1700	1700	851
Volume to Capacity	0.35	0.08	0.08	0.08	0.11	0.11	0.06	0.32
Queue Length 95th (ft)	40	0	0	0	0	0	0	34
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Lane LOS	B							B
Approach Delay (s)	4.7				0.0			11.2
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
22: Hancock & Channel Way 4/5/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	31	125	67	26	4	14
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	38	154	84	32	5	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1157				
pX, platoon unblocked						
vC, conflicting volume	116				331	100
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	116				331	100
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	98
cM capacity (veh/h)	1472				647	956

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	38	154	116	24
Volume Left	38	0	0	5
Volume Right	0	0	32	19
cSH	1472	1700	1700	864
Volume to Capacity	0.03	0.09	0.07	0.03
Queue Length 95th (ft)	2	0	0	2
Control Delay (s)	7.5	0.0	0.0	9.3
Lane LOS	A			A
Approach Delay (s)	1.5		0.0	9.3
Approach LOS				A

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
23: Hancock St & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frt		0.98					1.00	1.00			1.00	0.85
Flt Protected		1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3475					1770	5078			5085	1583
Flt Permitted		1.00					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3475					1770	5078			5085	1583
Volume (vph)	10	184	23	0	0	0	75	1594	15	0	2215	286
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	194	24	0	0	0	82	1752	16	0	2434	314
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	224	0	0	0	0	82	1768	0	0	2434	241
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		30.1					19.8	90.1			65.9	65.9
Effective Green, g (s)		31.0					20.2	91.0			66.8	66.8
Actuated g/C Ratio		0.24					0.16	0.70			0.51	0.51
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		829					275	3555			2613	813
v/s Ratio Prot		c0.06					0.05	c0.35			c0.48	
v/s Ratio Perm												0.15
v/c Ratio		0.27					0.30	0.50			0.93	0.30
Uniform Delay, d1		40.3					48.6	9.0			29.5	18.1
Progression Factor		0.90					0.89	0.52			1.00	1.00
Incremental Delay, d2		0.1					0.2	0.5			7.5	0.9
Delay (s)		36.4					43.3	5.1			37.0	19.1
Level of Service		D					D	A			D	B
Approach Delay (s)		36.4			0.0			6.8			34.9	
Approach LOS		D			A			A			C	

Intersection Summary				
HCM Average Control Delay	24.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
25: Old Town St & Hancock St 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	157	0	0	113	250	489
Peak Hour Factor	0.88	0.88	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	178	0	0	131	275	537

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	178	131	275	537
Volume Left (vph)	178	0	275	0
Volume Right (vph)	0	131	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.0	4.8	5.7	5.2
Degree Utilization, x	0.30	0.18	0.44	0.78
Capacity (veh/h)	566	707	615	674
Control Delay (s)	11.5	8.9	12.0	23.3
Approach Delay (s)	11.5	8.9	19.4	
Approach LOS	B	A	C	

Intersection Summary			
Delay	16.9		
HCM Level of Service	C		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
26: Witherby St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	93	2	35	0	1	1	7	19	3	9	166	471
Peak Hour Factor	0.84	0.84	0.84	0.76	0.76	0.76	0.91	0.91	0.91	0.91	0.72	0.72
Hourly flow rate (vph)	111	2	42	0	1	1	8	21	3	10	231	654

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	155	3	32	240	654
Volume Left (vph)	111	0	8	10	0
Volume Right (vph)	42	1	3	0	654
Hadj (s)	0.02	-0.27	0.02	0.05	-0.67
Departure Headway (s)	5.6	5.6	5.3	5.1	4.3
Degree Utilization, x	0.24	0.00	0.05	0.34	0.79
Capacity (veh/h)	609	592	646	697	816
Control Delay (s)	10.4	8.6	8.5	9.4	20.2
Approach Delay (s)	10.4	8.6	8.5	17.3	
Approach LOS	B	A	A	C	

Intersection Summary				
Delay		16.0		
HCM Level of Service		C		
Intersection Capacity Utilization		45.8%	ICU Level of Service	A
Analysis Period (min)		15		

Existing AM
27: Washington St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	1583
Volume (vph)	0	256	95	448	396	0	0	0	0	158	188	233
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	278	103	487	430	0	0	0	0	172	204	253
RTOR Reduction (vph)	0	0	54	0	0	0	0	0	0	0	0	207
Lane Group Flow (vph)	0	278	49	487	430	0	0	0	0	121	255	46
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		41.8	41.8	18.4	64.6					15.6	15.6	15.6
Effective Green, g (s)		42.7	42.7	18.8	65.5					16.5	16.5	16.5
Actuated g/C Ratio		0.47	0.47	0.21	0.73					0.18	0.18	0.18
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1679	751	717	2576					295	615	290
v/s Ratio Prot		0.08		c0.14	c0.12							
v/s Ratio Perm			0.03							0.08	0.08	0.03
v/c Ratio		0.17	0.07	0.68	0.17					0.41	0.41	0.16
Uniform Delay, d1		13.5	12.8	32.8	3.8					32.5	32.5	30.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	2.0	0.1					0.3	0.2	0.1
Delay (s)		13.7	13.0	34.8	3.9					32.8	32.6	31.0
Level of Service		B	B	C	A					C	C	C
Approach Delay (s)		13.5			20.4			0.0			32.0	
Approach LOS		B			C			A			C	

Intersection Summary						
HCM Average Control Delay		22.8	HCM Level of Service		C	
HCM Volume to Capacity ratio		0.35				
Actuated Cycle Length (s)		90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization		37.6%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

Existing AM
28: Vine St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	10	28	0	0	0	0	0	0	1404	14
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	20	40	0	0	0	0	0	0	1478	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1485	1485	500	513	1493	0	1493			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1485	1485	500	513	1493	0	1493			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	91	100	100	100			100		
cM capacity (veh/h)	86	124	516	427	122	1084	446			1622		

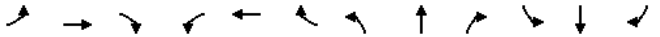
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	20	40	591	591	310
Volume Left	0	40	0	0	0
Volume Right	20	0	0	0	15
cSH	516	427	1700	1700	1700
Volume to Capacity	0.04	0.09	0.35	0.35	0.18
Queue Length 95th (ft)	3	8	0	0	0
Control Delay (s)	12.3	14.3	0.0	0.0	0.0
Lane LOS	B	B			
Approach Delay (s)	12.3	14.3	0.0		
Approach LOS	B	B			

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
29: Sassafras St & Kettner Bl 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3468					1770	4951	
Flt Permitted		1.00	1.00		0.81					0.95	1.00	
Satd. Flow (perm)		1863	1583		2850					1770	4951	
Volume (vph)	0	64	59	135	192	0	0	0	0	353	1036	221
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	70	64	147	209	0	0	0	0	384	1126	240
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	60	0
Lane Group Flow (vph)	0	70	40	0	356	0	0	0	0	384	1306	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		19.0	19.0		19.0					23.0	23.0	
Effective Green, g (s)		21.7	21.7		21.7					25.3	25.3	
Actuated g/C Ratio		0.39	0.39		0.39					0.46	0.46	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		735	625		1124					814	2277	
v/s Ratio Prot		0.04									c0.26	
v/s Ratio Perm			0.03		c0.12					0.22		
v/c Ratio		0.10	0.06		0.32					0.47	0.57	
Uniform Delay, d1		10.5	10.3		11.5					10.2	10.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.3	0.2		0.7					2.0	1.1	
Delay (s)		10.7	10.5		12.3					12.2	11.9	
Level of Service		B	B		B					B	B	
Approach Delay (s)		10.6			12.3			0.0			12.0	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM Average Control Delay	12.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	47.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3510		1770	3539						4657	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3510		1770	3539						4657	1362
Volume (vph)	0	637	37	29	178	0	0	0	0	510	287	250
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	692	40	32	193	0	0	0	0	554	312	272
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	728	0	32	193	0	0	0	0	0	866	90
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		37.3		3.0	43.0						25.0	25.0
Effective Green, g (s)		35.5		3.4	42.9						24.1	26.4
Actuated g/C Ratio		0.44		0.04	0.54						0.30	0.33
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1558		75	1898						1403	449
v/s Ratio Prot		c0.21		c0.02	0.05							
v/s Ratio Perm											0.19	0.07
v/c Ratio		0.47		0.43	0.10						1.09dl	0.20
Uniform Delay, d1		15.6		37.3	9.1						24.0	19.2
Progression Factor		1.00		1.33	0.85						1.00	1.00
Incremental Delay, d2		1.0		1.4	0.1						0.6	0.1
Delay (s)		16.6		50.9	7.9						24.6	19.3
Level of Service		B		D	A						C	B
Approach Delay (s)		16.6			14.0			0.0			23.3	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	20.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.5%	ICU Level of Service	C	
Analysis Period (min)	15			

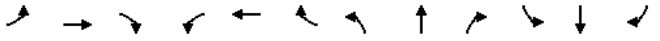
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Existing AM

32: Washington St & Pacific Highway NB Frontage Road

4/5/2012



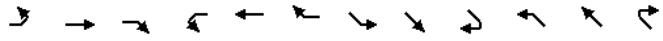
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.94			0.94	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97			0.97	
Satd. Flow (prot)	1770	3539			3539	1583	1610	3106			1702	
Flt Permitted	0.95	1.00			1.00	1.00	0.72	0.78			0.49	
Satd. Flow (perm)	1770	3539			3539	1583	1218	2502			856	
Volume (vph)	49	267	0	0	352	277	154	9	55	29	0	22
Peak-hour factor, PHF	0.95	0.92	0.95	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.83	0.83
Adj. Flow (vph)	52	290	0	0	383	301	164	10	60	32	0	27
RTOR Reduction (vph)	0	0	0	0	0	150	0	48	0	0	25	0
Lane Group Flow (vph)	52	290	0	0	383	151	82	104	0	0	34	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	2.3	48.7			41.5	41.5	14.0	14.0			6.3	
Effective Green, g (s)	2.8	48.7			41.9	41.9	16.4	16.4			6.3	
Actuated g/C Ratio	0.03	0.58			0.50	0.50	0.20	0.20			0.08	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	59	2067			1778	795	240	492			65	
v/s Ratio Prot	c0.03	0.08			c0.11							
v/s Ratio Perm						0.10	c0.07	0.04			c0.04	
v/c Ratio	0.88	0.14			0.22	0.19	0.34	0.21			0.52	
Uniform Delay, d1	40.1	7.9			11.6	11.4	28.9	28.1			37.1	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	76.9	0.0			0.3	0.5	0.3	0.1			3.5	
Delay (s)	117.0	7.9			11.9	11.9	29.2	28.2			40.6	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		24.5			11.9			28.5			40.6	
Approach LOS		C			B			C			D	

Intersection Summary				
HCM Average Control Delay	19.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	83.4	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

33: Washington St & Pacific Highway SB

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.97		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3411		1756	1863		1681	1701	1583			
Flt Permitted		1.00		0.60	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3411		1100	1863		1681	1701	1583			
Volume (vph)	0	186	47	131	397	0	130	15	224	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	202	51	142	432	0	141	16	243	0	0	0
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	69	0	0	0
Lane Group Flow (vph)	0	224	0	142	432	0	76	81	174	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		9.2		22.6	22.6		16.5	16.5	25.7			
Effective Green, g (s)		9.2		22.9	22.9		18.7	18.7	27.9			
Actuated g/C Ratio		0.15		0.36	0.36		0.30	0.30	0.44			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		500		401	679		501	507	804			
v/s Ratio Prot		c0.07			c0.23				c0.06			
v/s Ratio Perm				0.13			0.05	0.05	0.05			
v/c Ratio		0.45		0.35	0.64		0.15	0.16	0.22			
Uniform Delay, d1		24.5		14.6	16.5		16.2	16.3	10.7			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.2		2.4	4.5		0.1	0.1	0.0			
Delay (s)		24.7		17.0	21.0		16.3	16.3	10.8			
Level of Service		C		B	C		B	B	B			
Approach Delay (s)		24.7			20.0			12.9			0.0	
Approach LOS		C			C			B			A	

Intersection Summary				
HCM Average Control Delay	18.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	62.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	41.4%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
34: Sassafras St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.94		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1715		1766	1746		1770	4908		1770	5025	
Flt Permitted	0.65	1.00		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1207	1715		1368	1746		1770	4908		1770	5025	
Volume (vph)	2	16	15	276	93	66	27	231	70	26	258	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	17	16	300	101	72	29	251	76	28	280	21
RTOR Reduction (vph)	0	11	0	0	45	0	0	43	0	0	10	0
Lane Group Flow (vph)	2	22	0	300	128	0	29	284	0	28	291	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	17.2	17.2		16.5	16.5		1.6	22.0		1.3	21.5	
Effective Green, g (s)	17.2	17.2		16.9	16.9		1.6	23.4		1.8	23.6	
Actuated g/C Ratio	0.32	0.32		0.31	0.31		0.03	0.43		0.03	0.43	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	382	542		425	542		52	2111		59	2180	
v/s Ratio Prot		0.01			0.07		c0.02	0.06		0.02	c0.06	
v/s Ratio Perm	0.00			c0.22								
v/c Ratio	0.01	0.04		0.71	0.24		0.56	0.13		0.47	0.13	
Uniform Delay, d1	12.7	12.9		16.6	13.9		26.1	9.4		25.8	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		5.3	0.2		7.2	0.1		5.9	0.1	
Delay (s)	12.7	12.9		21.8	14.2		33.2	9.5		31.7	9.4	
Level of Service	B	B		C	B		C	A		C	A	
Approach Delay (s)		12.9			19.0			11.4			11.3	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM Average Control Delay	14.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	54.4	Sum of lost time (s)	8.3	
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
35: W Laurel St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Volume (vph)	208	401	36	49	319	60	73	222	64	209	148	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	226	436	39	53	347	65	79	241	70	227	161	43
RTOR Reduction (vph)	0	9	0	0	20	0	0	48	0	0	0	38
Lane Group Flow (vph)	226	466	0	53	392	0	79	263	0	227	161	5
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	8.7	20.9		6.6	18.2		6.2	23.7		8.7	26.1	8.7
Effective Green, g (s)	9.1	22.1		7.0	20.0		6.6	24.6		9.1	27.1	9.1
Actuated g/C Ratio	0.12	0.28		0.09	0.25		0.08	0.31		0.12	0.34	0.12
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	204	980		157	875		148	1529		204	1749	178
v/s Ratio Prot	c0.13	c0.13		0.03	0.11		0.04	c0.05		c0.13	0.03	
v/s Ratio Perm												0.00
v/c Ratio	1.11	0.48		0.34	0.45		0.53	0.17		1.11	0.09	0.03
Uniform Delay, d1	34.9	23.5		33.7	24.8		34.6	19.7		34.9	17.5	30.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	94.9	0.5		5.7	0.3		1.8	0.2		96.5	0.1	0.0
Delay (s)	129.7	24.0		39.5	25.1		36.5	19.9		131.4	17.6	30.9
Level of Service	F	C		D	C		D	B		F	B	C
Approach Delay (s)		58.1			26.7			23.3			78.9	
Approach LOS		E			C			C			E	

Intersection Summary				
HCM Average Control Delay	48.4	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.9%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
36: Rosecrans St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Volume (vph)	81	204	90	230	270	91	127	85	161	63	138	44
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	89	224	99	253	297	100	137	91	173	68	150	48
RTOR Reduction (vph)	0	0	47	0	0	54	0	0	132	0	0	38
Lane Group Flow (vph)	89	224	52	253	297	46	137	91	41	68	150	10
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	4.1	35.5	39.7	4.2	35.6	35.6	4.2	16.0	20.2	4.4	16.2	16.2
Effective Green, g (s)	4.5	36.4	41.0	4.6	36.5	36.5	4.6	15.4	18.5	4.8	15.7	15.7
Actuated g/C Ratio	0.06	0.46	0.52	0.06	0.46	0.46	0.06	0.20	0.24	0.06	0.20	0.20
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	101	1637	905	201	864	734	103	693	483	108	706	316
v/s Ratio Prot	0.05	0.06	0.00	c0.07	c0.16		c0.08	0.03	0.00	0.04	c0.04	
v/s Ratio Perm			0.03			0.03			0.02			0.01
v/c Ratio	0.88	0.14	0.06	1.26	0.34	0.06	1.33	0.13	0.08	0.63	0.21	0.03
Uniform Delay, d1	36.8	12.1	9.3	37.1	13.5	11.7	37.1	26.1	23.5	36.1	26.3	25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	52.4	0.2	0.0	150.2	1.1	0.2	200.7	0.1	0.0	8.0	0.3	0.1
Delay (s)	89.2	12.3	9.3	187.2	14.5	11.8	237.7	26.3	23.5	44.1	26.6	25.4
Level of Service	F	B	A	F	B	B	F	C	C	D	C	C
Approach Delay (s)		28.2			81.3			97.3			30.9	
Approach LOS		C			F			F			C	

Intersection Summary				
HCM Average Control Delay	64.6	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	46.1%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
37: Old Town St & Moore St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.91			0.93			0.88	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1807			1699			1703			1638	
Flt Permitted		0.80			1.00			0.97			0.97	
Satd. Flow (perm)		1465			1698			1663			1594	
Volume (vph)	109	219	35	2	105	196	36	161	185	2	1	16
Peak-hour factor, PHF	0.88	0.88	0.88	0.84	0.84	0.84	0.87	0.87	0.87	0.68	0.68	0.68
Adj. Flow (vph)	124	249	40	2	125	233	41	185	213	3	1	24
RTOR Reduction (vph)	0	5	0	0	53	0	0	51	0	0	17	0
Lane Group Flow (vph)	0	408	0	0	307	0	0	388	0	0	11	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		38.3			38.3			17.9			17.9	
Effective Green, g (s)		39.2			39.2			18.8			18.8	
Actuated g/C Ratio		0.59			0.59			0.28			0.28	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		870			1009			474			454	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.18			c0.23			0.01	
v/c Ratio		0.47			0.30			0.82			0.02	
Uniform Delay, d1		7.5			6.6			22.0			17.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.8			10.0			0.0	
Delay (s)		7.7			7.4			32.0			17.0	
Level of Service		A			A			C			B	
Approach Delay (s)		7.7			7.4			32.0			17.0	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	75.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
38: Taylor St & Congress St 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4974		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4974		1770	3539	1770	1583
Volume (vph)	376	52	124	517	74	84
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.86	0.86
Adj. Flow (vph)	409	57	141	588	86	98
RTOR Reduction (vph)	21	0	0	0	0	77
Lane Group Flow (vph)	445	0	141	588	86	21
Confl. Peds. (#/hr)		7	7		30	15
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.8		5.9	40.1	12.5	12.5
Effective Green, g (s)	31.7		6.3	40.1	13.4	13.4
Actuated g/C Ratio	0.51		0.10	0.64	0.21	0.21
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2527		179	2274	380	340
v/s Ratio Prot	0.09		c0.08	c0.17	c0.05	0.01
v/s Ratio Perm						
v/c Ratio	0.18		0.79	0.26	0.23	0.06
Uniform Delay, d1	8.3		27.4	4.8	20.2	19.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2		18.7	0.3	0.1	0.0
Delay (s)	8.4		46.1	5.1	20.3	19.5
Level of Service	A		D	A	C	B
Approach Delay (s)	8.4			13.0	19.9	
Approach LOS	A			B	B	

Intersection Summary				
HCM Average Control Delay	12.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

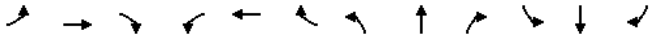
Existing AM
39: Twiggs St & Congress St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	0	1	22	0	25	5	122	7	20	91	1
Peak Hour Factor	0.63	0.63	0.63	0.73	0.73	0.73	0.88	0.88	0.88	0.72	0.72	0.72
Hourly flow rate (vph)	6	0	2	30	0	34	6	139	8	28	126	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	8	64	152	156
Volume Left (vph)	6	30	6	28
Volume Right (vph)	2	34	8	1
Hadj (s)	0.07	-0.19	0.01	0.06
Departure Headway (s)	4.7	4.4	4.2	4.3
Degree Utilization, x	0.01	0.08	0.18	0.19
Capacity (veh/h)	697	755	823	819
Control Delay (s)	7.8	7.8	8.2	8.3
Approach Delay (s)	7.8	7.8	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
HCM Level of Service	A			
Intersection Capacity Utilization	24.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
40: Harney St & Congress St 4/5/2012

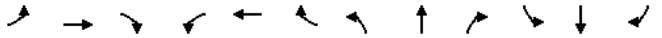


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	2	3	10	14	5	5	116	8	5	91	18
Peak Hour Factor	0.54	0.54	0.54	0.81	0.81	0.81	0.85	0.85	0.85	0.71	0.71	0.71
Hourly flow rate (vph)	24	4	6	12	17	6	6	136	9	7	128	25

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	33	36	152	161
Volume Left (vph)	24	12	6	7
Volume Right (vph)	6	6	9	25
Hadj (s)	0.08	0.00	0.00	-0.05
Departure Headway (s)	4.7	4.6	4.2	4.2
Degree Utilization, x	0.04	0.05	0.18	0.19
Capacity (veh/h)	704	717	824	842
Control Delay (s)	7.9	7.9	8.2	8.1
Approach Delay (s)	7.9	7.9	8.2	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.1		
HCM Level of Service		A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
41: Ampudia St & Congress St 4/5/2012

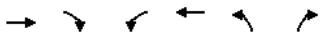


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	10	9	90	8	8	15	128	223	0	67	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	2	11	10	145	13	13	16	138	240	0	75	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								376				
pX, platoon unblocked												
vC, conflicting volume	273	497	78	271	258	152	80			386		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273	497	78	271	258	152	80			386		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	78	98	99	99			100		
cM capacity (veh/h)	646	465	981	648	633	884	1516			1163		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	23	171	154	240	78
Volume Left	2	145	16	0	0
Volume Right	10	13	0	240	2
cSH	622	660	1516	1700	1163
Volume to Capacity	0.04	0.26	0.01	0.14	0.00
Queue Length 95th (ft)	3	26	1	0	0
Control Delay (s)	11.0	12.3	0.9	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.0	12.3	0.3		0.0
Approach LOS	B	B			

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization	33.6%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
42: Twiggs St & San Diego Ave 4/5/2012

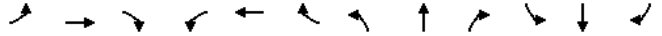


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	18	9	29	29	18	124
Peak Hour Factor	0.58	0.58	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	31	16	41	41	22	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	47	82	175
Volume Left (vph)	0	41	22
Volume Right (vph)	16	0	153
Hadj (s)	-0.17	0.13	-0.46
Departure Headway (s)	4.2	4.4	3.7
Degree Utilization, x	0.05	0.10	0.18
Capacity (veh/h)	821	779	931
Control Delay (s)	7.4	7.9	7.5
Approach Delay (s)	7.4	7.9	7.5
Approach LOS	A	A	A

Intersection Summary			
Delay		7.6	
HCM Level of Service		A	
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
43: Harney St & San Diego Ave 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	5	7	3	37	18	12	3	125	83	3	27	8
Peak Hour Factor	0.69	0.69	0.69	0.80	0.80	0.80	0.89	0.89	0.89	0.73	0.73	0.73
Hourly flow rate (vph)	7	10	4	46	22	15	3	140	93	4	37	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	22	84	237	52
Volume Left (vph)	7	46	3	4
Volume Right (vph)	4	15	93	11
Hadj (s)	-0.02	0.04	-0.20	-0.08
Departure Headway (s)	4.6	4.6	4.0	4.3
Degree Utilization, x	0.03	0.11	0.26	0.06
Capacity (veh/h)	718	731	871	792
Control Delay (s)	7.7	8.1	8.4	7.6
Approach Delay (s)	7.7	8.1	8.4	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
44: San Diego Ave & Old Town St 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.91			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1764	1850		1763	1668			1763			1819	
Flt Permitted	0.68	1.00		0.63	1.00			0.79			1.00	
Satd. Flow (perm)	1265	1850		1164	1668			1438			1819	
Volume (vph)	218	159	6	9	40	63	254	87	65	0	22	4
Peak-hour factor, PHF	0.79	0.79	0.79	0.87	0.87	0.87	0.78	0.78	0.78	0.81	0.81	0.81
Adj. Flow (vph)	276	201	8	10	46	72	326	112	83	0	27	5
RTOR Reduction (vph)	0	2	0	0	41	0	0	14	0	0	3	0
Lane Group Flow (vph)	276	207	0	10	78	0	0	507	0	0	29	0
Confl. Peds. (#/hr)	3		4	4		3	5					5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Effective Green, g (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Actuated g/C Ratio	0.44	0.44		0.44	0.44			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	4.4	4.4		2.1	2.1			2.0			2.0	
Lane Grp Cap (vph)	553	809		509	730			577			730	
v/s Ratio Prot		0.11			0.05						0.02	
v/s Ratio Perm	c0.22			0.01				c0.35				
v/c Ratio	0.50	0.26		0.02	0.11			0.88			0.04	
Uniform Delay, d1	10.0	8.8		7.9	8.2			13.7			9.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	3.2	0.8		0.1	0.3			13.8			0.0	
Delay (s)	13.2	9.6		8.0	8.5			27.6			9.0	
Level of Service	B	A		A	A			C			A	
Approach Delay (s)		11.7			8.5			27.6			9.0	
Approach LOS		B			A			C			A	

Intersection Summary				
HCM Average Control Delay	18.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	54.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

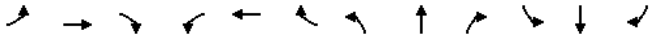
Existing AM
45: Taylor St & 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.90			0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1769	3499		1770	3467			1623			1632	
Flt Permitted	0.39	1.00		0.38	1.00			0.92			0.94	
Satd. Flow (perm)	728	3499		716	3467			1511			1535	
Volume (vph)	33	395	32	98	563	75	62	4	229	2	0	16
Peak-hour factor, PHF	0.78	0.77	0.77	0.93	0.93	0.93	0.82	0.82	0.82	0.75	0.75	0.75
Adj. Flow (vph)	42	513	42	105	605	81	76	5	279	3	0	21
RTOR Reduction (vph)	0	6	0	0	11	0	0	222	0	0	17	0
Lane Group Flow (vph)	42	549	0	105	675	0	0	138	0	0	7	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	29.7	27.9		35.2	30.7			10.9			10.9	
Effective Green, g (s)	31.1	28.9		36.5	31.6			11.8			11.8	
Actuated g/C Ratio	0.54	0.50		0.63	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	433	1756		543	1902			310			314	
v/s Ratio Prot	0.00	0.16		c0.02	c0.19							
v/s Ratio Perm	0.05			0.11				c0.09			0.00	
v/c Ratio	0.10	0.31		0.19	0.35			0.45			0.02	
Uniform Delay, d1	6.2	8.5		4.3	7.3			20.0			18.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.5		0.1	0.5			0.4			0.0	
Delay (s)	6.3	8.9		4.4	7.8			20.4			18.3	
Level of Service	A	A		A	A			C			B	
Approach Delay (s)		8.8			7.3			20.4			18.3	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	10.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
46: Twiggs St & Juan St 4/5/2012

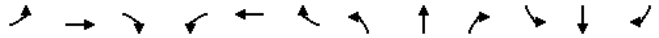


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	54	5	6	2	3	1	5	130	5	30	92	54
Peak Hour Factor	0.60	0.60	0.60	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77
Hourly flow rate (vph)	90	8	10	3	4	1	7	171	7	39	119	70

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	8	184	229
Volume Left (vph)	90	3	7	39
Volume Right (vph)	10	1	7	70
Hadj (s)	0.14	0.00	0.02	-0.12
Departure Headway (s)	5.0	5.0	4.5	4.3
Degree Utilization, x	0.15	0.01	0.23	0.27
Capacity (veh/h)	665	645	774	803
Control Delay (s)	8.9	8.0	8.8	8.9
Approach Delay (s)	8.9	8.0	8.8	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.8		
HCM Level of Service		A		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
47: Harney St & Juan St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	26	9	26	0	0	5	41	109	0	13	54	33
Peak Hour Factor	0.93	0.93	0.93	0.42	0.42	0.42	0.71	0.71	0.71	0.77	0.77	0.77
Hourly flow rate (vph)	28	10	28	0	0	12	58	154	0	17	70	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	12	211	130
Volume Left (vph)	28	0	58	17
Volume Right (vph)	28	12	0	43
Hadj (s)	-0.14	-0.57	0.09	-0.14
Departure Headway (s)	4.5	4.2	4.3	4.2
Degree Utilization, x	0.08	0.01	0.25	0.15
Capacity (veh/h)	730	780	814	829
Control Delay (s)	7.9	7.2	8.8	7.9
Approach Delay (s)	7.9	7.2	8.8	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.3		
HCM Level of Service		A		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
48: Taylor St & Morena Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95			0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00			1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Frt	1.00	1.00			0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3528			3397				1590	1681	1698	1583
Flt Permitted	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3528			3397				1590	1681	1698	1583
Volume (vph)	368	253	5	0	522	192	0	0	4	59	5	214
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.50	0.50	0.50	0.74	0.74	0.74
Adj. Flow (vph)	460	316	6	0	580	213	0	0	8	80	7	289
RTOR Reduction (vph)	0	1	0	0	42	0	0	0	0	0	0	190
Lane Group Flow (vph)	460	321	0	0	751	0	0	0	8	42	45	99
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	7.7	35.5			23.4				57.6	11.9	11.9	11.9
Effective Green, g (s)	8.1	36.4			24.3				57.6	13.2	13.2	13.2
Actuated g/C Ratio	0.14	0.63			0.42				1.00	0.23	0.23	0.23
Clearance Time (s)	4.4	4.9			4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3			3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	483	2230			1433				1590	385	389	363
v/s Ratio Prot	c0.13	0.09			c0.22					0.02	0.03	
v/s Ratio Perm									0.01			c0.06
v/c Ratio	0.95	0.14			0.52				0.01	0.11	0.12	0.27
Uniform Delay, d1	24.6	4.3			12.4				0.0	17.6	17.6	18.2
Progression Factor	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	28.9	0.1			1.4				0.0	0.2	0.2	0.7
Delay (s)	53.4	4.4			13.7				0.0	17.8	17.8	18.9
Level of Service	D	A			B				A	B	B	B
Approach Delay (s)		33.3			13.7			0.0			18.7	
Approach LOS		C			B			A			B	

Intersection Summary				
HCM Average Control Delay	22.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
49: Rosecrans St. & Hugo St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.99		1.00	1.00		1.00	0.89			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1678	3382		1671	3434		1633	1515			1675	
Flt Permitted	0.95	1.00		0.95	1.00		0.68	1.00			0.80	
Satd. Flow (perm)	1678	3382		1671	3434		1175	1515			1381	
Volume (vph)	6	679	66	24	1355	12	217	20	58	56	32	8
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	6	730	71	26	1457	13	233	22	62	60	34	9
RTOR Reduction (vph)	0	6	0	0	0	0	0	47	0	0	3	0
Lane Group Flow (vph)	6	795	0	26	1470	0	233	37	0	0	100	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.2	69.8		4.3	72.9		27.7	27.7			27.7	
Effective Green, g (s)	1.6	70.7		4.7	73.8		28.6	28.6			28.6	
Actuated g/C Ratio	0.01	0.61		0.04	0.64		0.25	0.25			0.25	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	23	2061		68	2185		290	374			340	
v/s Ratio Prot	0.00	0.24		c0.02	c0.43			0.02				
v/s Ratio Perm							c0.20				0.07	
v/c Ratio	0.26	0.39		0.38	0.67		0.80	0.10			0.29	
Uniform Delay, d1	56.6	11.6		54.2	13.4		41.1	33.8			35.5	
Progression Factor	1.00	1.00		1.38	0.37		1.00	1.00			1.00	
Incremental Delay, d2	2.2	0.5		0.7	0.9		14.0	0.0			0.2	
Delay (s)	58.8	12.1		75.7	5.9		55.1	33.8			35.7	
Level of Service	E	B		E	A		E	C			D	
Approach Delay (s)		12.5			7.1			49.4			35.7	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	14.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
50: Rosecrans St. & Lowell St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Volume (vph)	140	612	23	110	1192	29	33	103	80	233	341	215
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	644	24	116	1255	31	35	108	84	245	359	226
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	56	0	87	0
Lane Group Flow (vph)	147	666	0	116	1285	0	35	108	28	245	498	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	11.2	44.5		11.6	44.4		3.7	21.4	33.0	19.8	37.6	
Effective Green, g (s)	11.6	45.4		12.0	45.8		4.1	22.4	34.4	20.2	38.5	
Actuated g/C Ratio	0.10	0.39		0.10	0.39		0.04	0.19	0.30	0.17	0.33	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	177	1375		183	1391		63	683	458	308	1087	
v/s Ratio Prot	c0.08	0.19		0.07	c0.36		c0.02	0.03	0.01	c0.14	c0.15	
v/s Ratio Perm									0.01			
v/c Ratio	0.83	0.48		0.63	0.92		0.56	0.16	0.06	0.80	0.46	
Uniform Delay, d1	51.2	26.5		49.9	33.4		55.1	39.0	29.2	45.9	30.5	
Progression Factor	0.87	1.52		1.23	0.82		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.8	1.2		4.5	10.4		5.9	0.1	0.0	12.4	0.2	
Delay (s)	69.6	41.3		66.1	37.7		61.0	39.1	29.2	58.3	30.8	
Level of Service	E	D		E	D		E	D	C	E	C	
Approach Delay (s)		46.4			40.0			38.8			38.9	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	41.2	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	79.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
51: Rosecrans St. & Laning Rd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected		1.00		0.95	1.00			0.96	1.00		0.96	
Satd. Flow (prot)		5021		1770	3539			1778	1552		1747	
Flt Permitted		1.00		0.95	1.00			0.74	1.00		0.73	
Satd. Flow (perm)		5021		1770	3539			1377	1552		1329	
Volume (vph)	0	947	70	303	1318	1	54	4	132	55	1	8
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	76	329	1433	1	59	4	143	60	1	9
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	118	0	5	0
Lane Group Flow (vph)	0	1100	0	329	1434	0	0	63	25	0	65	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		57.5		24.8	86.7			19.1	19.1		19.1	
Effective Green, g (s)		58.8		25.2	88.0			20.0	20.0		20.0	
Actuated g/C Ratio		0.51		0.22	0.76			0.17	0.17		0.17	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		2545		385	2685			237	268		229	
v/s Ratio Prot		0.22		c0.19	c0.41							
v/s Ratio Perm								0.05	0.02		c0.05	
v/c Ratio		0.43		0.85	0.53			0.27	0.09		0.28	
Uniform Delay, d1		18.1		43.6	5.7			41.6	40.4		41.8	
Progression Factor		0.40		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		16.1	0.8			0.2	0.1		0.2	
Delay (s)		7.7		59.7	6.4			41.9	40.4		42.0	
Level of Service		A		E	A			D	D		D	
Approach Delay (s)		7.7			16.4			40.9			42.0	
Approach LOS		A			B			D			D	

Intersection Summary				
HCM Average Control Delay	15.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	60.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
52: Hawthorne St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.97	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5058						4892	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5058						4892	
Volume (vph)	0	0	0	168	1696	0	0	0	0	0	218	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	179	1804	0	0	0	0	0	303	86
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	0	0	0	1974	0	0	0	0	0	380	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3546						1027	
v/s Ratio Prot											c0.08	
v/s Ratio Perm					0.39							
v/c Ratio					0.56						0.37	
Uniform Delay, d1					6.6						30.4	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.6						0.1	
Delay (s)					7.2						30.5	
Level of Service					A						C	
Approach Delay (s)		0.0			7.2			0.0			30.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	11.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

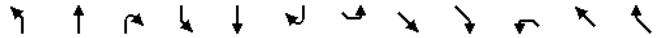
Existing AM
53: Grape St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5055									4985	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5055									4985	
Volume (vph)	0	833	30	0	0	0	0	0	0	110	276	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	896	32	0	0	0	0	0	0	124	310	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	926	0	0	0	0	0	0	0	0	364	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		62.0									19.0	
Effective Green, g (s)		62.0									20.0	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3482									1108	
v/s Ratio Prot		c0.18										
v/s Ratio Perm											0.07	
v/c Ratio		0.27									0.33	
Uniform Delay, d1		5.3									29.4	
Progression Factor		0.54									0.57	
Incremental Delay, d2		0.2									0.2	
Delay (s)		3.1									16.8	
Level of Service		A									B	
Approach Delay (s)		3.1			0.0			0.0			16.8	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	7.4	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.28			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
54: Seaworld Dr & E Mission Bay Dr 4/5/2012

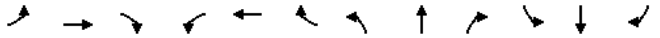


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Volume (vph)	100	926	35	111	691	116	59	70	189	37	32	77
Peak-hour factor, PHF	0.93	0.93	0.93	0.85	0.85	0.85	0.92	0.92	0.92	0.85	0.85	0.85
Adj. Flow (vph)	108	996	38	131	813	136	64	76	205	44	38	91
RTOR Reduction (vph)	0	0	37	0	0	130	0	0	170	0	0	77
Lane Group Flow (vph)	108	996	1	131	813	6	64	76	35	44	38	14
Confl. Peds. (#/hr)	2								2			
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	4.0	29.9	2.3	6.9	32.9	3.2	3.2	10.6	10.6	2.3	8.8	8.8
Effective Green, g (s)	4.0	31.4	2.3	6.9	34.3	3.2	3.2	11.5	11.5	2.3	10.6	10.6
Actuated g/C Ratio	0.06	0.46	0.03	0.10	0.50	0.05	0.05	0.17	0.17	0.03	0.16	0.16
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	202	1632	53	179	1782	74	161	315	264	60	290	246
v/s Ratio Prot	0.03	c0.28		c0.07	c0.23		0.02	c0.04		c0.02	0.02	
v/s Ratio Perm			0.00			0.00			0.02			0.01
v/c Ratio	0.53	0.61	0.02	0.73	0.46	0.09	0.40	0.24	0.13	0.73	0.13	0.06
Uniform Delay, d1	31.1	13.8	31.8	29.7	10.9	31.1	31.5	24.5	24.1	32.6	24.8	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	1.7	0.1	12.4	0.8	0.2	0.6	0.4	0.2	32.5	0.1	0.0
Delay (s)	32.5	15.5	31.9	42.1	11.7	31.2	32.1	24.9	24.3	65.1	24.9	24.5
Level of Service	C	B	C	D	B	C	C	C	C	E	C	C
Approach Delay (s)		17.6			17.9			25.9			34.9	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	19.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
55: Hawthorne St & Pacific Highway 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	5.0
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes				0.94	1.00		1.00	1.00			1.00	1.00
Frt				1.00	0.99		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1665	3509		1770	5085			5085	1545
Flt Permitted				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)				1665	3509		1770	5085			5085	1545
Volume (vph)	0	0	0	362	1326	70	64	158	0	0	139	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	381	1396	74	69	170	0	0	162	22
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	0	0	381	1466	0	69	170	0	0	162	3
Confl. Peds. (#/hr)				68		10	8					8
Turn Type				Perm			Prot					Perm
Protected Phases					6		3	8			4	
Permitted Phases				6								4
Actuated Green, G (s)				35.1	35.1		29.3	45.1			11.4	11.4
Effective Green, g (s)				35.6	34.2		29.3	45.1			11.3	11.3
Actuated g/C Ratio				0.40	0.38		0.33	0.50			0.13	0.13
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	4.9
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	3.3
Lane Grp Cap (vph)				659	1333		576	2548			638	194
v/s Ratio Prot					c0.42		c0.04	0.03			c0.03	
v/s Ratio Perm				0.23								0.00
v/c Ratio				0.58	1.10		0.12	0.07			0.25	0.01
Uniform Delay, d1				21.3	27.9		21.3	11.6			35.5	34.5
Progression Factor				0.77	0.82		0.78	0.85			1.00	1.00
Incremental Delay, d2				3.1	55.1		0.4	0.0			0.2	0.0
Delay (s)				19.6	78.1		17.0	9.9			35.8	34.5
Level of Service				B	E		B	A			D	C
Approach Delay (s)		0.0			66.0			12.0			35.6	
Approach LOS		A			E			B			D	

Intersection Summary				
HCM Average Control Delay	57.9	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
56: Grape St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.92		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5069	1549					4632		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5069	1549					4632		1770	5085	
Volume (vph)	39	609	25	0	0	0	0	209	213	41	460	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.93	0.93	0.93	0.75	0.75	0.75
Adj. Flow (vph)	44	684	28	0	0	0	0	225	229	55	613	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	160	0	0	0	0
Lane Group Flow (vph)	0	728	12	0	0	0	0	294	0	55	613	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		37.8	37.8					27.0		11.0	42.4	
Effective Green, g (s)		38.7	38.7					27.0		11.4	42.4	
Actuated g/C Ratio		0.43	0.43					0.30		0.13	0.47	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2180	666					1390		224	2396	
v/s Ratio Prot								0.06		0.03	c0.12	
v/s Ratio Perm		0.14	0.01									
v/c Ratio		0.33	0.02					0.21		0.25	0.26	
Uniform Delay, d1		17.1	14.7					23.5		35.4	14.3	
Progression Factor		1.00	1.00					1.00		0.89	0.81	
Incremental Delay, d2		0.4	0.0					0.3		2.5	0.2	
Delay (s)		17.5	14.8					23.9		34.2	11.9	
Level of Service		B	B					C		C	B	
Approach Delay (s)		17.4			0.0			23.9			13.7	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	17.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.9	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
57: Seaworld Dr & Friars Rd 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.97	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3360	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3360	1421
Volume (vph)	963	244	138	779	197	98
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.85	0.50
Adj. Flow (vph)	1047	265	144	811	232	196
RTOR Reduction (vph)	0	28	0	0	36	109
Lane Group Flow (vph)	1047	237	144	811	255	28
Confl. Peds. (#/hr)						2
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.5	43.9	5.1	42.8	11.4	11.4
Effective Green, g (s)	34.7	48.3	5.0	44.2	13.6	13.6
Actuated g/C Ratio	0.53	0.73	0.08	0.67	0.21	0.21
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1866	1258	261	2377	694	294
v/s Ratio Prot	c0.30	0.04	c0.04	0.23	c0.08	
v/s Ratio Perm		0.11				0.02
v/c Ratio	0.56	0.19	0.55	0.34	0.37	0.10
Uniform Delay, d1	10.4	2.7	29.3	4.6	22.4	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	1.4	0.4	0.1	0.1
Delay (s)	11.7	2.7	30.8	5.0	22.5	21.2
Level of Service	B	A	C	A	C	C
Approach Delay (s)	9.9			8.9	22.1	
Approach LOS	A			A	C	

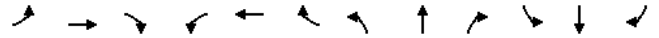
Intersection Summary				
HCM Average Control Delay	11.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM

58: I-5 SB On/I-5 SB Off & Seaworld Dr

12/07/2017



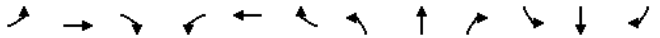
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Future Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1139	68	358	331	0	0	0	0	341	0	712
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1139	29	358	331	0	0	0	0	341	0	713
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		23.6	23.6	7.7	35.5					12.8		57.9
Effective Green, g (s)		24.6	24.6	7.9	36.5					13.4		57.9
Actuated g/C Ratio		0.42	0.42	0.14	0.63					0.23		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1503	663	468	2230					409		1583
v/s Ratio Prot		c0.32		c0.10	0.09					c0.19		
v/s Ratio Perm			0.02									0.45
v/c Ratio		0.76	0.04	0.76	0.15					0.83		0.45
Uniform Delay, d1		14.1	9.8	24.1	4.4					21.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.6	0.1	6.6	0.1					13.0		0.9
Delay (s)		17.7	9.9	30.7	4.5					34.2		0.9
Level of Service		B	A	C	A					C		A
Approach Delay (s)		17.3			18.1			0.0			11.7	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

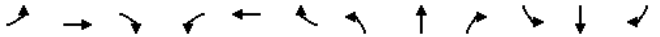
59: Seaworld Dr & I-5 NB On

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.92			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3266			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3266			1770	1583			
Volume (vph)	797	505	0	0	438	464	168	0	276	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88
Adj. Flow (vph)	866	549	0	0	461	488	183	0	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	162	0	0	0	268	0	0	0
Lane Group Flow (vph)	866	549	0	0	787	0	0	183	32	0	0	0
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	15.5	37.8			18.1			5.0	5.0			
Effective Green, g (s)	15.7	38.3			18.6			5.6	5.6			
Actuated g/C Ratio	0.30	0.72			0.35			0.11	0.11			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1019	2562			1148			187	168			
v/s Ratio Prot	c0.25	0.16			c0.24			c0.10				
v/s Ratio Perm									0.02			
v/c Ratio	0.85	0.21			0.69			0.98	0.19			
Uniform Delay, d1	17.5	2.4			14.7			23.6	21.6			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	6.5	0.2			3.3			58.7	0.2			
Delay (s)	24.0	2.6			18.0			82.3	21.8			
Level of Service	C	A			B			F	C			
Approach Delay (s)		15.7			18.0			44.7			0.0	
Approach LOS		B			B			D			A	

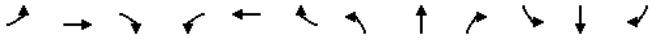
Intersection Summary				
HCM Average Control Delay	21.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	3433	1863			3302			3510	1583			
Flt Permitted	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	3433	1863			3302			3510	1583			
Volume (vph)	359	788	0	0	186	150	21	106	20	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	390	857	0	0	202	163	23	115	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	73	0	0	0	20	0	0	0
Lane Group Flow (vph)	390	857	0	0	292	0	0	138	2	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	15.7	64.1			44.0			6.1	6.1			
Effective Green, g (s)	15.7	64.1			44.0			6.1	6.1			
Actuated g/C Ratio	0.20	0.80			0.55			0.08	0.08			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	674	1493			1816			268	121			
v/s Ratio Prot	0.11	c0.46			0.09							
v/s Ratio Perm								0.04	0.00			
v/c Ratio	0.58	0.57			0.16			0.51	0.01			
Uniform Delay, d1	29.2	2.9			8.9			35.5	34.2			
Progression Factor	1.04	1.61			1.00			1.00	1.00			
Incremental Delay, d2	1.1	1.4			0.2			0.7	0.0			
Delay (s)	31.5	6.2			9.1			36.2	34.2			
Level of Service	C	A			A			D	C			
Approach Delay (s)		14.1			9.1			35.9			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Exisitng PM
1: Rosecrans St. & Lytton St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Volume (vph)	15	1495	429	102	1142	346	414	329	144	279	238	11
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	16	1557	447	106	1190	360	431	343	150	291	248	11
RTOR Reduction (vph)	0	0	173	0	0	123	0	0	93	0	1	0
Lane Group Flow (vph)	16	1557	274	106	1190	237	431	343	57	291	258	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.4	71.6	71.6	8.2	76.3	76.3	23.7	33.3	33.3	29.4	37.2	
Effective Green, g (s)	3.8	72.9	72.9	8.6	77.7	77.7	24.1	34.1	34.1	28.4	38.4	
Actuated g/C Ratio	0.02	0.46	0.46	0.05	0.49	0.49	0.15	0.21	0.21	0.18	0.24	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	42	2317	711	185	1719	730	517	397	331	314	444	
v/s Ratio Prot	0.01	0.31		c0.03	c0.34		0.13	c0.18		c0.16	0.14	
v/s Ratio Perm			0.18			0.16			0.04			
v/c Ratio	0.38	0.67	0.39	0.57	0.69	0.32	0.83	0.86	0.17	0.93	0.58	
Uniform Delay, d1	76.9	34.2	28.8	73.9	31.9	25.1	66.0	60.7	51.4	64.8	53.7	
Progression Factor	1.00	1.00	1.00	0.94	0.77	1.09	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	1.6	1.6	1.7	1.5	0.7	10.6	17.9	0.3	31.7	1.3	
Delay (s)	79.0	35.7	30.3	70.9	26.1	28.1	76.6	78.6	51.7	96.4	55.0	
Level of Service	E	D	C	E	C	C	E	E	D	F	D	
Approach Delay (s)		34.9			29.4			73.3			76.9	
Approach LOS		C			C			E			E	

Intersection Summary				
HCM Average Control Delay	44.5	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/9/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	689	1585	603	0	0	573
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	757	1742	655	0	0	623
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	757	1674	655	0	0	623
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	65.0	65.0	40.5			40.5
Effective Green, g (s)	65.0	65.0	40.5			40.5
Actuated g/C Ratio	0.54	0.54	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1867	1516	1199			631
v/s Ratio Prot	0.22		0.19			c0.33
v/s Ratio Perm		c0.60				
v/c Ratio	0.41	1.10	0.55			0.99
Uniform Delay, d1	15.9	27.2	32.0			39.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	57.1	0.3			32.2
Delay (s)	16.0	84.4	32.3			71.5
Level of Service	B	F	C			E
Approach Delay (s)	63.6		32.3			71.5
Approach LOS	E		C			E

Intersection Summary				
HCM Average Control Delay	59.5	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.06			
Actuated Cycle Length (s)	119.5	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	83.8%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
3: Channel Way & W Mission Bay Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	136	1380	25	0	1200
Peak Hour Factor	0.65	0.87	0.98	0.98	0.90	0.90
Hourly flow rate (vph)	0	156	1408	26	0	1333
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.98	0.98			0.98	
vC, conflicting volume	1865	485			1434	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1847	444			1408	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	72			100	
cM capacity (veh/h)	65	551			473	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	156	563	563	307	444	444	444
Volume Left	0	0	0	0	0	0	0
Volume Right	156	0	0	26	0	0	0
cSH	551	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.33	0.33	0.18	0.26	0.26	0.26
Queue Length 95th (ft)	29	0	0	0	0	0	0
Control Delay (s)	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	14.1	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Exisitng PM
4: Midway Dr & W Point Loma Blvd 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Volume (vph)	359	445	30	312	594	294	350	206	287	39	503	610
Peak-hour factor, PHF	0.88	0.88	0.88	0.90	0.90	0.90	0.99	0.99	0.99	0.84	0.84	0.84
Adj. Flow (vph)	408	506	34	347	660	327	354	208	290	46	599	726
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	159	0	0	0
Lane Group Flow (vph)	408	506	34	324	683	327	274	288	131	46	599	726
Confl. Peds. (#/hr)	6					6	6		3	3		6
Turn Type	Split		Free	Split		Free	Split		pm+ov	Split		Free
Protected Phases	3	3		4	4		2	2	3	1	1	
Permitted Phases			Free			Free			2			Free
Actuated Green, G (s)	39.9	39.9	150.0	34.0	34.0	150.0	25.9	25.9	65.8	30.5	30.5	150.0
Effective Green, g (s)	40.8	40.8	150.0	34.9	34.9	150.0	26.8	26.8	67.6	31.5	31.5	150.0
Actuated g/C Ratio	0.27	0.27	1.00	0.23	0.23	1.00	0.18	0.18	0.45	0.21	0.21	1.00
Clearance Time (s)	4.9	4.9		4.9	4.9		4.9	4.9	4.9	5.0	5.0	
Vehicle Extension (s)	3.1	3.1		5.5	5.5		0.2	0.2	3.1	8.0	8.0	
Lane Grp Cap (vph)	481	963	1583	375	787	1562	300	312	751	372	743	1562
v/s Ratio Prot	c0.23	0.14		0.20	c0.20		0.16	c0.17	0.05	0.03	c0.17	
v/s Ratio Perm			0.02			0.21			0.04			0.46
v/c Ratio	0.85	0.53	0.02	0.86	0.87	0.21	0.91	0.92	0.17	0.12	0.81	0.46
Uniform Delay, d1	51.7	46.4	0.0	55.3	55.3	0.0	60.5	60.6	24.6	48.1	56.3	0.0
Progression Factor	0.90	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.6	1.9	0.0	20.0	11.0	0.3	30.0	31.2	0.0	0.6	8.3	1.0
Delay (s)	61.9	41.5	0.0	75.3	66.4	0.3	90.4	91.8	24.6	48.7	64.6	1.0
Level of Service	E	D	A	E	E	A	F	F	C	D	E	A
Approach Delay (s)		48.8			52.4			68.5			30.4	
Approach LOS		D			D			E			C	

Intersection Summary				
HCM Average Control Delay	48.0	HCM Level of Service		D
HCM Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		16.0
Intersection Capacity Utilization	84.6%	ICU Level of Service		E
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
5: Kemper St & Midway Dr 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Volume (vph)	186	122	157	53	141	74	225	621	59	122	500	140
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	209	137	176	57	152	80	247	682	65	136	556	156
RTOR Reduction (vph)	0	0	126	0	0	70	0	3	0	0	0	81
Lane Group Flow (vph)	168	178	50	57	152	10	247	744	0	136	556	75
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	41.7	18.4	18.4	18.4	17.8	65.8		22.8	70.8	70.8
Effective Green, g (s)	24.8	24.8	43.0	19.3	19.3	19.3	18.2	66.7		23.2	71.7	71.7
Actuated g/C Ratio	0.17	0.17	0.29	0.13	0.13	0.13	0.12	0.44		0.15	0.48	0.48
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	278	289	488	228	240	199	417	1549		274	1692	729
v/s Ratio Prot	0.10	c0.10	0.01	0.03	c0.08		c0.07	c0.21		c0.08	0.16	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.60	0.62	0.10	0.25	0.63	0.05	0.59	0.48		0.50	0.33	0.10
Uniform Delay, d1	58.1	58.2	39.3	58.8	62.0	57.3	62.4	29.4		58.1	24.2	21.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.81		1.13	0.56	0.79
Incremental Delay, d2	3.7	3.9	0.0	0.6	5.4	0.1	1.3	0.9		0.4	0.4	0.2
Delay (s)	61.7	62.0	39.4	59.4	67.4	57.4	59.4	24.6		65.8	13.9	17.2
Level of Service	E	E	D	E	E	E	E	C		E	B	B
Approach Delay (s)		54.3			63.0			33.2			22.8	
Approach LOS		D			E			C			C	

Intersection Summary				
HCM Average Control Delay	37.3	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	70.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
6: Midway Dr & East Dr 4/9/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	1.00		1.00	0.98			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	3530		1770	3452			1682			1676	
Flt Permitted	0.14	1.00		0.23	1.00			0.86			0.82	
Satd. Flow (perm)	269	3530		431	3452			1479			1406	
Volume (vph)	46	943	16	27	1008	164	24	6	34	69	4	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.79	0.79	0.79	0.74	0.74	0.74
Adj. Flow (vph)	51	1036	18	29	1096	178	30	8	43	93	5	70
RTOR Reduction (vph)	0	1	0	0	10	0	0	35	0	0	46	0
Lane Group Flow (vph)	51	1053	0	29	1264	0	0	46	0	0	122	0
Confl. Peds. (#/hr)	3					3	33					33
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.0	45.9		46.2	44.0			12.7			12.7	
Effective Green, g (s)	51.3	46.8		47.5	44.9			13.6			13.6	
Actuated g/C Ratio	0.68	0.62		0.63	0.60			0.18			0.18	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	274	2203		319	2067			268			255	
v/s Ratio Prot	c0.01	0.30		0.00	c0.37							
v/s Ratio Perm	0.12			0.05				0.03			c0.09	
v/c Ratio	0.19	0.48		0.09	0.61			0.17			0.48	
Uniform Delay, d1	5.8	7.6		5.4	9.5			25.9			27.5	
Progression Factor	1.14	1.63		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.7		0.0	1.4			0.1			0.5	
Delay (s)	6.6	13.1		5.5	10.9			26.0			28.0	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		12.8			10.8			26.0			28.0	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	13.2	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
7: Rosecrans St. & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.92	1.00	1.00	0.93
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Volume (vph)	290	1688	63	425	1298	332	312	490	244	130	577	328
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	293	1705	64	429	1311	335	315	495	246	131	583	331
RTOR Reduction (vph)	0	2	0	0	27	0	0	0	195	0	0	202
Lane Group Flow (vph)	293	1767	0	429	1619	0	315	495	51	131	583	129
Confl. Peds. (#/hr)	48		65	65		48	40		42	42		40
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	29.1	68.0		26.5	65.5		17.0	32.3	32.3	14.4	29.7	29.7
Effective Green, g (s)	29.5	69.1		26.9	66.5		17.4	33.2	33.2	14.8	30.6	30.6
Actuated g/C Ratio	0.18	0.43		0.17	0.42		0.11	0.21	0.21	0.09	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	326	2174		577	2005		373	734	304	164	677	281
v/s Ratio Prot	c0.17	c0.35		0.12	c0.34		c0.09	0.14		0.07	c0.16	
v/s Ratio Perm									0.03			0.09
v/c Ratio	0.90	0.81		0.74	0.81		0.84	0.67	0.17	0.80	0.86	0.46
Uniform Delay, d1	63.8	39.8		63.3	41.1		70.0	58.4	52.1	71.1	62.6	57.4
Progression Factor	1.06	0.44		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.8	2.7		4.5	2.6		15.3	1.9	0.1	21.8	10.6	0.4
Delay (s)	88.3	20.2		67.8	43.7		85.3	60.4	52.2	92.9	73.2	57.8
Level of Service	F	C		E	D		F	E	D	F	E	E
Approach Delay (s)		29.8			48.7			65.9			70.8	
Approach LOS		C			D			E			E	

Intersection Summary				
HCM Average Control Delay	49.1	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
9: Enterprise St & Midway Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	228	763	6	0	863
Peak Hour Factor	0.80	0.80	0.87	0.87	0.93	0.93
Hourly flow rate (vph)	0	285	877	7	0	928
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	1346	447			886	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1346	447			886	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	49			100	
cM capacity (veh/h)	142	557			759	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	285	585	299	464	464
Volume Left	0	0	0	0	0
Volume Right	285	0	7	0	0
cSH	557	1700	1700	1700	1700
Volume to Capacity	0.51	0.34	0.18	0.27	0.27
Queue Length 95th (ft)	72	0	0	0	0
Control Delay (s)	18.1	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	18.1	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	42.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
10: Barnett Ave & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	1232	0	0	891	769	0	0	0	739	0	124
Peak-hour factor, PHF	0.86	0.86	0.86	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1433	0	0	938	809	0	0	0	803	0	135
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	0	97
Lane Group Flow (vph)	0	1433	0	0	938	408	0	0	0	803	0	38
Confl. Peds. (#/hr)						6				3		
Turn Type						custom				Prot		custom
Protected Phases		2			2	2				1		
Permitted Phases						8						1
Actuated Green, G (s)		43.0			43.0	43.0				24.0		24.0
Effective Green, g (s)		43.0			43.0	42.5				24.0		24.0
Actuated g/C Ratio		0.51			0.51	0.50				0.29		0.29
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	2.9				2.5		2.5
Lane Grp Cap (vph)		1807			1807	1407				979		451
v/s Ratio Prot		c0.40			0.27	0.15				c0.23		
v/s Ratio Perm												0.02
v/c Ratio		0.79			0.52	0.29				0.82		0.09
Uniform Delay, d1		16.9			13.7	12.1				28.1		22.1
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		2.5			0.2	0.1				5.5		0.1
Delay (s)		19.4			14.0	12.2				33.6		22.1
Level of Service		B			B	B				C		C
Approach Delay (s)		19.4			13.1			0.0			31.9	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	19.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	84.2	Sum of lost time (s)	17.2	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
11: Sport Arena Blvd & Hancock 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9				4.0	4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91				1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99				0.86	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (prot)	1770	3529		1770	5041				1611	1770		1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (perm)	1770	3529		1770	5041				1611	1770		1583
Volume (vph)	86	905	14	20	996	51	0	0	10	56	0	185
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	90	943	15	24	1172	60	0	0	11	62	0	206
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	11	0	0	166
Lane Group Flow (vph)	90	957	0	24	1229	0	0	0	0	62	0	40
Confl. Peds. (#/hr)	18		10	10		18				11		16
Turn Type	Prot			Prot					NA	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases												
Actuated Green, G (s)	8.5	67.0		4.1	62.6				0.0	19.7		19.7
Effective Green, g (s)	8.5	67.0		4.1	62.6				0.0	19.7		20.6
Actuated g/C Ratio	0.08	0.64		0.04	0.60				0.00	0.19		0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	143	2252		69	3005				0	332		311
v/s Ratio Prot	c0.05	c0.27		0.01	0.24					c0.04		0.03
v/s Ratio Perm												
v/c Ratio	0.63	0.43		0.35	0.41				0.00	0.19		0.13
Uniform Delay, d1	46.7	9.4		49.1	11.3				52.5	35.9		34.8
Progression Factor	1.00	1.00		1.50	0.58				1.00	1.00		1.00
Incremental Delay, d2	6.1	0.6		1.0	0.4				0.0	0.1		0.1
Delay (s)	52.8	10.0		74.5	6.9				52.5	36.0		34.9
Level of Service	D	B		E	A				D	D		C
Approach Delay (s)		13.7			8.2			52.5			35.1	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	13.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.40			
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	53.8%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
12: Kemper Street & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Volume (vph)	27	14	40	102	21	102	136	806	19	56	938	108
Peak-hour factor, PHF	0.92	0.92	0.92	0.78	0.78	0.78	0.95	0.95	0.95	0.91	0.91	0.91
Adj. Flow (vph)	29	15	43	131	27	131	143	848	20	62	1031	119
RTOR Reduction (vph)	0	37	0	0	0	115	0	1	0	0	9	0
Lane Group Flow (vph)	29	21	0	131	27	16	143	867	0	62	1141	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	14.8	14.8		11.9	11.9	11.9	8.7	50.1		9.1	50.5	
Effective Green, g (s)	15.7	15.7		12.8	12.8	12.8	9.1	51.0		9.5	51.4	
Actuated g/C Ratio	0.15	0.15		0.12	0.12	0.12	0.09	0.49		0.09	0.49	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	265	244		216	227	189	298	1712		160	2443	
v/s Ratio Prot	c0.02	0.01		c0.07	0.01		0.04	c0.25		0.04	c0.23	
v/s Ratio Perm						0.01						
v/c Ratio	0.11	0.09		0.61	0.12	0.08	0.48	0.51		0.39	0.47	
Uniform Delay, d1	38.6	38.5		43.7	41.1	40.9	45.7	18.4		45.0	17.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.74	0.99		0.59	0.35	
Incremental Delay, d2	0.2	0.2		3.3	0.1	0.1	0.4	1.0		0.5	0.6	
Delay (s)	38.8	38.6		47.0	41.2	41.0	34.2	19.2		27.0	6.9	
Level of Service	D	D		D	D	D	C	B		C	A	
Approach Delay (s)		38.7			43.7			21.3			7.9	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
13: Sport Arena Blvd & 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.94		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	3433	3492		1770	5034			1694		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (perm)	3433	3492		1770	5034			1694		1770	1610	
Volume (vph)	101	786	61	34	931	53	50	11	54	129	13	121
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.79	0.79	0.79	0.93	0.93	0.93
Adj. Flow (vph)	107	836	65	36	990	56	63	14	68	139	14	130
RTOR Reduction (vph)	0	4	0	0	4	0	0	38	0	0	115	0
Lane Group Flow (vph)	107	897	0	36	1042	0	0	107	0	139	29	0
Confl. Peds. (#/hr)	18		7	7		18			6	6		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Effective Green, g (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Actuated g/C Ratio	0.09	0.48		0.08	0.48			0.14		0.12	0.12	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	314	1686		148	2392			231		204	186	
v/s Ratio Prot	c0.03	c0.26		0.02	0.21			c0.06		c0.08	0.02	
v/s Ratio Perm												
v/c Ratio	0.34	0.53		0.24	0.44			0.46		0.68	0.16	
Uniform Delay, d1	44.7	18.9		45.0	18.2			41.8		44.6	41.8	
Progression Factor	1.10	1.07		1.23	0.77			1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.1		0.3	0.6			0.5		7.3	0.1	
Delay (s)	49.6	21.4		55.6	14.6			42.3		51.9	42.0	
Level of Service	D	C		E	B			D		D	D	
Approach Delay (s)		24.4			15.9			42.3			46.8	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
14: Sport Arena Blvd & East Dr 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00	0.99			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.98		1.00	1.00			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (prot)	1770	4954		1770	5074			1788	1563			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (perm)	1770	4954		1770	5074			1788	1563			1611
Volume (vph)	22	837	110	123	989	11	24	5	56	0	0	5
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.78	0.78	0.78	0.30	0.30	0.30
Adj. Flow (vph)	23	890	117	135	1087	12	31	6	72	0	0	17
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	23	999	0	135	1098	0	0	37	6	0	0	17
Confl. Peds. (#/hr)	19		19	19		19			1	1		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Effective Green, g (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Actuated g/C Ratio	0.03	0.66		0.11	0.75			0.09	0.09			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	49	3274		202	3793			160	140			1611
v/s Ratio Prot	0.01	c0.20		c0.08	0.22							
v/s Ratio Perm								0.02	0.00			0.01
v/c Ratio	0.47	0.31		0.67	0.29			0.23	0.05			0.01
Uniform Delay, d1	50.3	7.6		44.6	4.3			44.4	43.7			0.0
Progression Factor	0.81	1.40		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	2.3	0.2		6.3	0.2			0.3	0.0			0.0
Delay (s)	42.9	10.8		50.9	4.5			44.7	43.8			0.0
Level of Service	D	B		D	A			D	D			A
Approach Delay (s)		11.5			9.5			44.1			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
15: Rosecrans St. & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	0.99			1.00	0.98	1.00	0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Volume (vph)	274	1612	442	0	1621	587	251	262	26	372	338	183
Peak-hour factor, PHF	0.86	0.95	0.90	0.25	0.95	0.89	0.85	0.82	0.81	0.93	0.94	0.93
Adj. Flow (vph)	319	1697	491	0	1706	660	295	320	32	400	360	197
RTOR Reduction (vph)	0	33	0	0	0	0	0	3	0	0	0	159
Lane Group Flow (vph)	319	2155	0	0	1706	660	210	434	0	254	506	38
Confl. Peds. (#/hr)	29		31	31		29	63		31	10		63
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	15.6	79.9			59.1	150.0	23.0	23.0		29.2	29.2	29.2
Effective Green, g (s)	17.0	82.0			61.0	150.0	23.0	23.0		29.2	29.2	29.2
Actuated g/C Ratio	0.11	0.55			0.41	1.00	0.15	0.15		0.19	0.19	0.19
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	389	2652			2068	1551	247	506		313	615	281
v/s Ratio Prot	0.09	c0.44			0.34		0.13	c0.13		0.16	c0.16	0.03
v/s Ratio Perm						0.43						
v/c Ratio	0.82	0.81			0.82	0.43	0.85	0.86		0.81	0.82	0.14
Uniform Delay, d1	65.0	27.7			39.7	0.0	61.8	61.9		57.8	57.9	50.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.4	2.8			3.9	0.9	23.3	13.4		15.5	9.2	0.3
Delay (s)	77.4	30.6			43.6	0.9	85.1	75.3		73.3	67.1	50.3
Level of Service	E	C			D	A	F	E		E	E	D
Approach Delay (s)		36.5			31.7			78.5			65.3	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.8
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	852	844	19
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	926	888	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1361	454	908			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1361	454	908			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	100			
cM capacity (veh/h)	139	553	745			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	463	463	592	316
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	20
cSH	553	1700	1700	1700	1700
Volume to Capacity	0.07	0.27	0.27	0.35	0.19
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.0	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM
19: Kurtz & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frpb, ped/bikes				1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes				0.98	1.00	1.00		1.00		1.00	1.00	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1654	1738	1559		5080		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1654	1738	1559		5080		1770	6408	
Volume (vph)	0	0	0	295	177	75	0	1996	14	85	2133	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	311	186	79	0	2101	15	88	2199	0
RTOR Reduction (vph)	0	0	0	0	0	10	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	240	257	69	0	2116	0	88	2199	0
Confl. Peds. (#/hr)				14		3				13		
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				30.4	30.4	30.4		104.1		11.0	119.8	
Effective Green, g (s)				31.3	31.3	31.3		105.3		11.4	120.7	
Actuated g/C Ratio				0.20	0.20	0.20		0.66		0.07	0.75	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				324	340	305		3343		126	4834	
v/s Ratio Prot								c0.42		c0.05	0.34	
v/s Ratio Perm				0.15	0.15	0.04						
v/c Ratio				0.74	0.76	0.22		0.63		0.70	0.45	
Uniform Delay, d1				60.5	60.7	54.1		16.0		72.6	7.3	
Progression Factor				1.00	1.00	1.00		1.00		0.89	1.20	
Incremental Delay, d2				7.7	8.2	0.1		0.9		8.7	0.2	
Delay (s)				68.3	69.0	54.3		16.9		73.3	9.0	
Level of Service				E	E	D		B		E	A	
Approach Delay (s)		0.0			66.7			16.9			11.5	
Approach LOS		A			E			B			B	

Intersection Summary				
HCM Average Control Delay	20.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	68.5%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

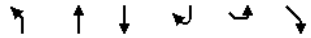
Exisitng PM
20: Rosecrans St & Kurtz 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.94		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3227		1770	3539		1770		1549	1770	1863	
Flt Permitted		1.00		0.23	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3227		435	3539		1770		1549	1770	1863	
Volume (vph)	0	672	199	80	464	0	167	0	124	67	209	0
Peak-hour factor, PHF	1.00	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Adj. Flow (vph)	0	693	205	82	478	0	172	0	128	73	227	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	56	0	0	0
Lane Group Flow (vph)	0	888	0	82	478	0	172	0	72	73	227	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		89.4		101.3	101.3		19.8		89.4	24.7	24.7	
Effective Green, g (s)		90.3		102.2	102.2		20.2		90.3	25.6	25.6	
Actuated g/C Ratio		0.56		0.64	0.64		0.13		0.56	0.16	0.16	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1821		344	2261		223		874	283	298	
v/s Ratio Prot		c0.28		0.01	c0.14		c0.10			0.04	c0.12	
v/s Ratio Perm				0.14					0.05			
v/c Ratio		0.49		0.24	0.21		0.77		0.08	0.26	0.76	
Uniform Delay, d1		20.9		13.2	12.1		67.7		15.9	58.9	64.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.95	0.99	
Incremental Delay, d2		0.9		0.1	0.2		15.1		0.2	0.4	9.1	
Delay (s)		21.9		13.3	12.3		82.8		16.1	56.1	72.6	
Level of Service		C		B	B		F		B	E	E	
Approach Delay (s)		21.9			12.4			54.3			68.6	
Approach LOS		C			B			D			E	

Intersection Summary				
HCM Average Control Delay	30.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	66.6%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
21: Pacific Highway & Kurtz St 4/9/2012

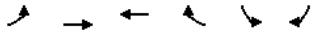


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	214	656	444	7	0	423
Peak Hour Factor	0.92	0.92	0.87	0.87	0.99	0.99
Hourly flow rate (vph)	233	713	510	8	0	427
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	520				1219	176
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	520				1219	176
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	74				100	49
cM capacity (veh/h)	905				128	835

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	233	238	238	238	204	204	110	427
Volume Left	233	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	427
cSH	905	1700	1700	1700	1700	1700	1700	835
Volume to Capacity	0.26	0.14	0.14	0.14	0.12	0.12	0.06	0.51
Queue Length 95th (ft)	26	0	0	0	0	0	0	74
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Lane LOS	B							B
Approach Delay (s)	2.5				0.0			13.7
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
22: Hancock & Channel Way 4/9/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	51	72	159	59	10	70
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	63	89	199	74	13	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1226				
pX, platoon unblocked						
vC, conflicting volume	272				450	236
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				450	236
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	88
cM capacity (veh/h)	1291				539	803

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	63	89	272	107
Volume Left	63	0	0	13
Volume Right	0	0	74	93
cSH	1291	1700	1700	757
Volume to Capacity	0.05	0.05	0.16	0.14
Queue Length 95th (ft)	4	0	0	12
Control Delay (s)	7.9	0.0	0.0	10.5
Lane LOS	A			B
Approach Delay (s)	3.3		0.0	10.5
Approach LOS				B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
23: Hancock St & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frpb, ped/bikes		0.98					1.00	1.00			1.00	0.96
Flpb, ped/bikes		1.00					1.00	1.00			1.00	1.00
Frt		0.92					1.00	1.00			1.00	0.85
Flt Protected		0.99					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3165					1770	5073			5085	1516
Flt Permitted		0.99					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3165					1770	5073			5085	1516
Volume (vph)	40	81	146	0	0	0	87	2175	29	0	2178	83
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	88	159	0	0	0	95	2364	32	0	2367	90
RTOR Reduction (vph)	0	6	0	0	0	0	0	1	0	0	0	21
Lane Group Flow (vph)	0	284	0	0	0	0	95	2395	0	0	2367	69
Confl. Peds. (#/hr)	1		20				15		2			15
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		32.1					13.6	118.1			100.1	100.1
Effective Green, g (s)		33.0					14.0	119.0			101.0	101.0
Actuated g/C Ratio		0.21					0.09	0.74			0.63	0.63
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		653					155	3773			3210	957
v/s Ratio Prot		c0.09					0.05	c0.47			c0.47	
v/s Ratio Perm												0.05
v/c Ratio		0.43					0.61	0.63			0.74	0.07
Uniform Delay, d1		55.4					70.4	10.0			20.4	11.4
Progression Factor		0.81					1.08	1.20			1.00	1.00
Incremental Delay, d2		0.2					4.0	0.7			1.6	0.1
Delay (s)		44.9					79.8	12.6			21.9	11.5
Level of Service		D					E	B			C	B
Approach Delay (s)		44.9			0.0			15.2			21.5	
Approach LOS		D			A			B			C	

Intersection Summary				
HCM Average Control Delay	19.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	79.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

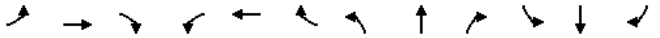
Exisitng PM
25: Old Town St & Hancock St 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	242	0	0	304	294	258
Peak Hour Factor	0.85	0.85	0.93	0.93	0.84	0.84
Hourly flow rate (vph)	285	0	0	327	350	307

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	285	327	350	307
Volume Left (vph)	285	0	350	0
Volume Right (vph)	0	327	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.3	5.3	6.5	5.9
Degree Utilization, x	0.50	0.48	0.63	0.51
Capacity (veh/h)	530	658	547	593
Control Delay (s)	15.5	13.0	18.5	13.7
Approach Delay (s)	15.5	13.0	16.3	
Approach LOS	C	B	C	

Intersection Summary				
Delay	15.2			
HCM Level of Service	C			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
26: Witherby St & Hancock St 4/9/2012

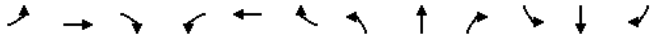


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	87	154	172	10	75	0	422	217	50	15	270	215
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.91	0.91	0.91	0.72	0.72	0.72
Hourly flow rate (vph)	104	183	205	12	94	0	464	238	55	21	375	299

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	492	106	757	396	299
Volume Left (vph)	104	13	464	21	0
Volume Right (vph)	205	0	55	0	299
Hadj (s)	-0.17	0.06	0.11	0.06	-0.67
Departure Headway (s)	7.4	9.5	7.8	8.2	7.5
Degree Utilization, x	1.02	0.28	1.64	0.90	0.62
Capacity (veh/h)	492	371	465	427	469
Control Delay (s)	72.3	16.1	319.6	50.2	20.9
Approach Delay (s)	72.3	16.1	319.6	37.6	
Approach LOS	F	C	F	E	

Intersection Summary				
Delay	149.0			
HCM Level of Service	F			
Intersection Capacity Utilization	93.1%	ICU Level of Service	F	
Analysis Period (min)	15			

Exisitng PM
27: Washington St & Hancock St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Volume (vph)	0	547	124	346	378	0	0	0	0	96	228	760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	595	135	376	411	0	0	0	0	104	248	826
RTOR Reduction (vph)	0	0	99	0	0	0	0	0	0	0	0	253
Lane Group Flow (vph)	0	595	36	376	411	0	0	0	0	104	248	573
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		20.5	20.5	12.7	37.6					32.6	32.6	32.6
Effective Green, g (s)		21.4	21.4	13.1	38.5					33.5	33.5	33.5
Actuated g/C Ratio		0.27	0.27	0.16	0.48					0.42	0.42	0.42
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		947	423	562	1703					674	1420	663
v/s Ratio Prot		c0.17		c0.11	0.12						0.07	
v/s Ratio Perm			0.02							0.06		c0.36
v/c Ratio		0.63	0.09	0.67	0.24					0.15	0.17	0.86
Uniform Delay, d1		25.8	22.0	31.4	12.2					14.4	14.6	21.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2	0.4	2.3	0.3					0.0	0.0	11.0
Delay (s)		29.0	22.4	33.8	12.5					14.5	14.6	32.2
Level of Service		C	C	C	B					B	B	C
Approach Delay (s)		27.7			22.7			0.0			26.9	
Approach LOS		C			C			A			C	

Intersection Summary						
HCM Average Control Delay	25.9	HCM Level of Service		C		
HCM Volume to Capacity ratio	0.75					
Actuated Cycle Length (s)	80.0	Sum of lost time (s)		12.0		
Intersection Capacity Utilization	64.2%	ICU Level of Service		C		
Analysis Period (min)	15					
c Critical Lane Group						

Exisitng PM
28: Vine St & Hancock St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	18	51	0	0	0	0	0	0	2034	4
Peak Hour Factor	0.56	0.56	0.56	0.75	0.75	0.75	0.95	0.95	0.95	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	32	68	0	0	0	0	0	0	2211	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	2213	2213	739	769	2215	0	2215			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2213	2213	739	769	2215	0	2215			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	91	74	100	100	100			100		
cM capacity (veh/h)	24	43	360	265	43	1084	233			1622		

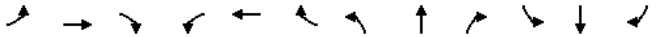
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	32	68	884	884	447
Volume Left	0	68	0	0	0
Volume Right	32	0	0	0	4
cSH	360	265	1700	1700	1700
Volume to Capacity	0.09	0.26	0.52	0.52	0.26
Queue Length 95th (ft)	7	25	0	0	0
Control Delay (s)	16.0	23.2	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	16.0	23.2	0.0		
Approach LOS	C	C			

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Exisitng PM
29: Sassafras St & Kettner Bl 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.96	
Flt Protected		1.00	1.00		0.97					0.95	1.00	
Satd. Flow (prot)		1863	1583		3418					1770	4887	
Flt Permitted		1.00	1.00		0.72					0.95	1.00	
Satd. Flow (perm)		1863	1583		2557					1770	4887	
Volume (vph)	0	202	97	82	34	0	0	0	0	248	686	241
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	220	105	89	37	0	0	0	0	270	746	262
RTOR Reduction (vph)	0	0	52	0	0	0	0	0	0	0	115	0
Lane Group Flow (vph)	0	220	53	0	126	0	0	0	0	270	893	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		22.0	22.0		22.0					20.0	20.0	
Effective Green, g (s)		24.7	24.7		24.7					22.3	22.3	
Actuated g/C Ratio		0.45	0.45		0.45					0.41	0.41	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		837	711		1148					718	1981	
v/s Ratio Prot		c0.12									c0.18	
v/s Ratio Perm			0.03		0.05					0.15		
v/c Ratio		0.26	0.07		0.11					0.38	0.45	
Uniform Delay, d1		9.5	8.6		8.8					11.5	11.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.8	0.2		0.2					1.5	0.7	
Delay (s)		10.2	8.8		9.0					13.0	12.6	
Level of Service		B	A		A					B	B	
Approach Delay (s)		9.8			9.0			0.0			12.7	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	11.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3481		1770	3539						4718	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3481		1770	3539						4718	1362
Volume (vph)	0	813	100	49	196	0	0	0	0	438	732	334
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	884	109	53	213	0	0	0	0	476	796	363
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	0	241
Lane Group Flow (vph)	0	985	0	53	213	0	0	0	0	0	1272	122
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		49.6		6.2	58.5						33.5	33.5
Effective Green, g (s)		47.8		6.6	58.4						32.6	34.9
Actuated g/C Ratio		0.46		0.06	0.56						0.31	0.34
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1600		112	1987						1479	457
v/s Ratio Prot		c0.28		c0.03	0.06							
v/s Ratio Perm											0.27	0.09
v/c Ratio		0.62		0.47	0.11						0.90dl	0.27
Uniform Delay, d1		21.2		47.0	10.6						33.6	25.2
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		1.8		1.1	0.1						5.2	0.1
Delay (s)		23.0		48.2	10.7						38.7	25.3
Level of Service		C		D	B						D	C
Approach Delay (s)		23.0			18.2			0.0			35.8	
Approach LOS		C			B			A			D	

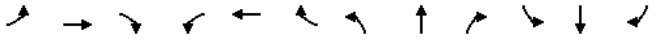
Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM

32: Washington St & Pacific Highway NB Frontage Road 4/9/2012

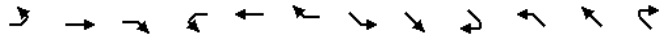


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.88			0.90	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99			0.99	
Satd. Flow (prot)	1770	3539			3539	1583	1610	2969			1653	
Flt Permitted	0.95	1.00			1.00	1.00	0.70	0.90			0.31	
Satd. Flow (perm)	1770	3539			3539	1583	1184	2690			514	
Volume (vph)	139	511	0	0	766	372	93	11	140	20	0	63
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	151	555	0	0	833	404	101	12	152	22	0	68
RTOR Reduction (vph)	0	0	0	0	0	228	0	121	0	0	61	0
Lane Group Flow (vph)	151	555	0	0	833	176	71	73	0	0	29	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	4.0	42.9			34.0	34.0	13.5	13.5			8.1	
Effective Green, g (s)	4.5	42.9			34.4	34.4	15.9	15.9			8.1	
Actuated g/C Ratio	0.06	0.54			0.44	0.44	0.20	0.20			0.10	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	101	1924			1543	690	239	542			53	
v/s Ratio Prot	c0.09	0.16			c0.24							
v/s Ratio Perm						0.11	c0.06	0.03			c0.06	
v/c Ratio	1.50	0.29			0.54	0.26	0.30	0.13			0.55	
Uniform Delay, d1	37.2	9.7			16.4	14.1	26.8	25.9			33.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	267.6	0.0			1.4	0.9	0.3	0.0			6.0	
Delay (s)	304.8	9.8			17.8	15.0	27.0	25.9			39.7	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		72.9			16.9			26.2			39.7	
Approach LOS		E			B			C			D	

Intersection Summary				
HCM Average Control Delay	36.0	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	52.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM

33: Washington St & Pacific Highway SB 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.98		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3457		1757	1863		1681	1699	1583			
Flt Permitted		1.00		0.49	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3457		904	1863		1681	1699	1583			
Volume (vph)	0	367	53	270	652	0	283	27	358	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	399	58	293	709	0	308	29	389	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	0	444	0	293	709	0	164	173	348	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		12.7		32.2	32.2		18.3	18.3	31.0			
Effective Green, g (s)		12.7		32.5	32.5		20.5	20.5	33.2			
Actuated g/C Ratio		0.16		0.42	0.42		0.26	0.26	0.43			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		565		378	779		444	448	758			
v/s Ratio Prot		c0.13			c0.38				c0.12			
v/s Ratio Perm				0.32			0.10	0.10	0.10			
v/c Ratio		0.79		0.78	0.91		0.37	0.39	0.46			
Uniform Delay, d1		31.2		19.5	21.2		23.3	23.4	15.9			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		6.6		14.4	16.6		0.2	0.2	0.2			
Delay (s)		37.8		33.8	37.8		23.5	23.6	16.0			
Level of Service		D		C	D		C	C	B			
Approach Delay (s)		37.8			36.7			19.5			0.0	
Approach LOS		D			D			B			A	

Intersection Summary				
HCM Average Control Delay	31.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
34: Sassafras St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.89		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1833		1763	1665		1767	4984		1770	5083	
Flt Permitted	0.69	1.00		0.64	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1278	1833		1182	1665		1767	4984		1770	5083	
Volume (vph)	23	139	15	174	29	72	19	549	84	76	404	1
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	151	16	189	32	78	21	597	91	83	439	1
RTOR Reduction (vph)	0	7	0	0	58	0	0	23	0	0	0	0
Lane Group Flow (vph)	25	160	0	189	52	0	21	665	0	83	440	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	15.3	15.3		14.6	14.6		0.8	24.8		4.1	27.4	
Effective Green, g (s)	15.3	15.3		15.0	15.0		0.8	26.2		1.9	29.5	
Actuated g/C Ratio	0.27	0.27		0.26	0.26		0.01	0.45		0.03	0.51	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	339	487		308	434		25	2267		58	2603	
v/s Ratio Prot		0.09			0.03		0.01	c0.13		c0.05	c0.09	
v/s Ratio Perm	0.02			c0.16								
v/c Ratio	0.07	0.33		0.61	0.12		0.84	0.29		1.43	0.17	
Uniform Delay, d1	15.8	17.0		18.7	16.3		28.3	9.9		27.9	7.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1		3.6	0.1		106.1	0.3		268.4	0.1	
Delay (s)	15.9	17.2		22.4	16.4		134.4	10.2		296.3	7.6	
Level of Service	B	B		C	B		F	B		F	A	
Approach Delay (s)		17.0			20.2			13.9			53.4	
Approach LOS		B			C			B			D	

Intersection Summary				
HCM Average Control Delay	27.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	18.5	
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
35: W Laurel St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Volume (vph)	278	524	64	89	352	89	155	421	51	338	562	150
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	302	570	70	97	383	97	168	458	55	367	611	163
RTOR Reduction (vph)	0	9	0	0	22	0	0	13	0	0	0	134
Lane Group Flow (vph)	302	631	0	97	458	0	168	500	0	367	611	29
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	17.7	27.0		12.3	21.0		13.2	20.9		21.2	28.8	17.7
Effective Green, g (s)	18.1	28.2		12.7	22.8		13.6	21.8		21.6	29.8	18.1
Actuated g/C Ratio	0.18	0.28		0.13	0.23		0.14	0.22		0.22	0.30	0.18
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	319	979		224	778		240	1086		381	1511	280
v/s Ratio Prot	c0.17	c0.18		0.05	0.13		0.09	c0.10		c0.21	0.12	
v/s Ratio Perm												0.02
v/c Ratio	0.95	0.64		0.43	0.59		0.70	0.46		0.96	0.40	0.11
Uniform Delay, d1	40.6	31.6		40.5	34.6		41.4	34.1		39.0	28.2	34.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	35.8	1.6		6.0	1.0		7.0	1.4		36.1	0.8	0.1
Delay (s)	76.5	33.3		46.5	35.6		48.4	35.5		75.1	29.0	34.4
Level of Service	E	C		D	D		D	D		E	C	C
Approach Delay (s)		47.1			37.4			38.7			44.6	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	42.9	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	90.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
36: Rosecrans St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.84	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Volume (vph)	100	685	78	143	257	80	235	206	456	57	97	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	753	86	157	282	88	258	226	501	63	107	57
RTOR Reduction (vph)	0	0	39	0	0	54	0	0	88	0	0	47
Lane Group Flow (vph)	110	753	47	157	282	34	258	226	413	63	107	10
Confl. Peds. (#/hr)	170		27	27		170	23		15	15		23
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	7.2	34.4	46.4	5.8	33.0	33.0	12.0	21.9	27.7	5.8	15.7	15.7
Effective Green, g (s)	7.6	35.3	47.7	6.2	33.9	33.9	12.4	21.3	26.0	6.2	15.2	15.2
Actuated g/C Ratio	0.09	0.41	0.55	0.07	0.39	0.39	0.14	0.25	0.30	0.07	0.18	0.18
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	156	1444	923	246	730	520	254	871	565	127	622	270
v/s Ratio Prot	c0.06	c0.21	0.01	0.05	0.15		c0.15	0.06	c0.04	0.04	0.03	
v/s Ratio Perm			0.02			0.03			0.23			0.01
v/c Ratio	0.71	0.52	0.05	0.64	0.39	0.07	1.02	0.26	0.73	0.50	0.17	0.04
Uniform Delay, d1	38.4	19.2	9.0	39.1	18.8	16.4	37.0	26.2	27.1	38.6	30.3	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	1.3	0.0	4.0	1.5	0.2	60.6	0.3	4.2	1.1	0.2	0.1
Delay (s)	49.6	20.6	9.0	43.0	20.4	16.7	97.6	26.5	31.3	39.8	30.5	29.7
Level of Service	D	C	A	D	C	B	F	C	C	D	C	C
Approach Delay (s)		22.9			26.5			47.6			32.9	
Approach LOS		C			C			D			C	

Intersection Summary				
HCM Average Control Delay	33.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	86.5	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	77.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
37: Old Town St & Moore St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.94			0.95			0.88	
Flt Protected		0.97			1.00			0.99			1.00	
Satd. Flow (prot)		1796			1726			1725			1605	
Flt Permitted		0.62			0.99			0.90			0.99	
Satd. Flow (perm)		1147			1714			1570			1596	
Volume (vph)	406	183	9	5	150	137	71	88	95	1	2	21
Peak-hour factor, PHF	0.98	0.98	0.98	0.86	0.86	0.86	0.89	0.89	0.89	0.67	0.67	0.67
Adj. Flow (vph)	414	187	9	6	174	159	80	99	107	1	3	31
RTOR Reduction (vph)	0	1	0	0	21	0	0	29	0	0	24	0
Lane Group Flow (vph)	0	609	0	0	318	0	0	257	0	0	11	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		49.4			49.4			15.4			15.4	
Effective Green, g (s)		50.3			50.3			16.3			16.3	
Actuated g/C Ratio		0.67			0.67			0.22			0.22	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		773			1156			343			349	
v/s Ratio Prot												
v/s Ratio Perm		c0.53			0.19			c0.16			0.01	
v/c Ratio		0.79			0.27			0.75			0.03	
Uniform Delay, d1		8.4			4.9			27.2			22.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.9			0.6			7.6			0.0	
Delay (s)		13.4			5.4			34.9			22.9	
Level of Service		B			A			C			C	
Approach Delay (s)		13.4			5.4			34.9			22.9	
Approach LOS		B			A			C			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	74.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
38: Taylor St & Congress St 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4770		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4770		1770	3539	1770	1583
Volume (vph)	902	296	132	392	88	157
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.90	0.90
Adj. Flow (vph)	1013	333	148	440	98	174
RTOR Reduction (vph)	67	0	0	0	0	136
Lane Group Flow (vph)	1279	0	148	440	98	38
Confl. Peds. (#/hr)		53	53		46	81
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	33.8		6.3	44.5	14.0	14.0
Effective Green, g (s)	35.7		6.7	44.5	14.9	14.9
Actuated g/C Ratio	0.52		0.10	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2493		174	2306	386	345
v/s Ratio Prot	c0.27		c0.08	0.12	c0.06	0.02
v/s Ratio Perm						
v/c Ratio	0.51		0.85	0.19	0.25	0.11
Uniform Delay, d1	10.6		30.3	4.7	22.1	21.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		29.8	0.2	0.1	0.1
Delay (s)	11.4		60.1	4.9	22.2	21.4
Level of Service	B		E	A	C	C
Approach Delay (s)	11.4			18.8	21.7	
Approach LOS	B			B	C	

Intersection Summary				
HCM Average Control Delay	14.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	55.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

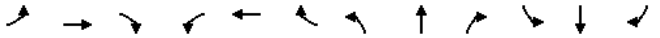
Exisitng PM
39: Twiggs St & Congress St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	2	3	17	5	47	12	106	13	43	136	9
Peak Hour Factor	0.80	0.80	0.80	0.66	0.66	0.66	0.82	0.82	0.82	0.90	0.90	0.90
Hourly flow rate (vph)	10	2	4	26	8	71	15	129	16	48	151	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	105	160	209
Volume Left (vph)	10	26	15	48
Volume Right (vph)	4	71	16	10
Hadj (s)	0.02	-0.33	-0.01	0.05
Departure Headway (s)	4.9	4.4	4.4	4.4
Degree Utilization, x	0.02	0.13	0.20	0.26
Capacity (veh/h)	666	744	783	782
Control Delay (s)	8.0	8.1	8.5	8.9
Approach Delay (s)	8.0	8.1	8.5	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
HCM Level of Service	A			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
40: Harney St & Congress St 4/9/2012

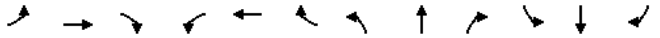


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	10	5	19	29	8	5	102	15	20	96	40
Peak Hour Factor	0.75	0.75	0.75	0.73	0.73	0.73	0.87	0.87	0.87	0.92	0.92	0.92
Hourly flow rate (vph)	28	13	7	26	40	11	6	117	17	22	104	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	48	77	140	170
Volume Left (vph)	28	26	6	22
Volume Right (vph)	7	11	17	43
Hadj (s)	0.07	0.02	-0.03	-0.09
Departure Headway (s)	4.8	4.7	4.4	4.3
Degree Utilization, x	0.06	0.10	0.17	0.20
Capacity (veh/h)	695	712	791	805
Control Delay (s)	8.1	8.2	8.2	8.3
Approach Delay (s)	8.1	8.2	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.3	
HCM Level of Service			A	
Intersection Capacity Utilization			30.3%	ICU Level of Service
Analysis Period (min)			15	A

Exisitng PM
41: Ampudia St & Congress St 4/9/2012

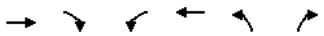


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	5	6	51	18	11	9	99	290	0	107	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	7	5	7	82	29	18	10	106	312	0	120	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								320				
pX, platoon unblocked												
vC, conflicting volume	286	570	123	265	259	120	124			427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	286	570	123	265	259	120	124			427		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	88	95	98	99			100		
cM capacity (veh/h)	619	425	926	662	635	920	1460			1124		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	19	129	116	312	122
Volume Left	7	82	10	0	0
Volume Right	7	18	0	312	2
cSH	608	682	1460	1700	1124
Volume to Capacity	0.03	0.19	0.01	0.18	0.00
Queue Length 95th (ft)	2	17	1	0	0
Control Delay (s)	11.1	11.5	0.7	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.1	11.5	0.2		0.0
Approach LOS	B	B			

Intersection Summary					
Average Delay			2.5		
Intersection Capacity Utilization			38.5%	ICU Level of Service	
Analysis Period (min)			15		A

Exisitng PM
42: Twiggs St & San Diego Ave 4/9/2012

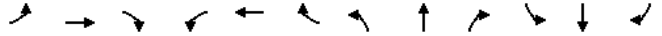


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	30	28	41	35	34	85
Peak Hour Factor	0.89	0.89	0.78	0.78	0.83	0.83
Hourly flow rate (vph)	34	31	53	45	41	102

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	65	97	143
Volume Left (vph)	0	53	41
Volume Right (vph)	31	0	102
Hadj (s)	-0.26	0.14	-0.34
Departure Headway (s)	4.0	4.4	3.9
Degree Utilization, x	0.07	0.12	0.16
Capacity (veh/h)	851	787	877
Control Delay (s)	7.4	8.0	7.6
Approach Delay (s)	7.4	8.0	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay		7.7	
HCM Level of Service		A	
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
43: Harney St & San Diego Ave 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	18	13	40	18	6	30	99	46	3	58	8
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.91	0.91	0.91	0.81	0.81	0.81
Hourly flow rate (vph)	17	22	16	47	21	7	33	109	51	4	72	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	74	192	85
Volume Left (vph)	17	47	33	4
Volume Right (vph)	16	7	51	10
Hadj (s)	-0.08	0.10	-0.09	-0.03
Departure Headway (s)	4.5	4.7	4.2	4.4
Degree Utilization, x	0.07	0.10	0.23	0.10
Capacity (veh/h)	732	713	822	777
Control Delay (s)	7.9	8.2	8.4	7.9
Approach Delay (s)	7.9	8.2	8.4	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
44: Old Town St & San Diego Ave 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.97		1.00	1.00		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1728			1785		1765	1852		1763	1623	
Flt Permitted		0.77			0.95		0.62	1.00		0.66	1.00	
Satd. Flow (perm)		1377			1713		1149	1852		1219	1623	
Volume (vph)	160	28	91	7	45	17	100	121	4	8	48	147
Peak-hour factor, PHF	0.78	0.78	0.78	0.81	0.81	0.81	0.79	0.79	0.79	0.87	0.87	0.87
Adj. Flow (vph)	205	36	117	9	56	21	127	153	5	9	55	169
RTOR Reduction (vph)	0	41	0	0	14	0	0	2	0	0	83	0
Lane Group Flow (vph)	0	317	0	0	72	0	127	156	0	9	141	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Effective Green, g (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.31			0.31		0.51	0.51		0.51	0.51	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		431			536		582	939		618	822	
v/s Ratio Prot								0.08			0.09	
v/s Ratio Perm		c0.23			0.04		c0.11			0.01		
v/c Ratio		0.73			0.13		0.22	0.17		0.01	0.17	
Uniform Delay, d1		13.6			10.9		6.1	5.9		5.4	5.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.5			0.0		0.9	0.4		0.0	0.5	
Delay (s)		19.1			11.0		6.9	6.3		5.5	6.4	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		19.1			11.0			6.6			6.3	
Approach LOS		B			B			A			A	

Intersection Summary				
HCM Average Control Delay	11.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	44.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	55.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

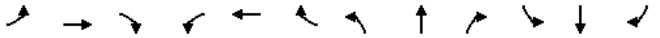
Exisitng PM
45: Taylor St & 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.90			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1764	3473		1769	3530			1640			1742	
Flt Permitted	0.46	1.00		0.14	1.00			0.90			0.73	
Satd. Flow (perm)	856	3473		264	3530			1500			1315	
Volume (vph)	52	909	98	188	454	6	65	2	179	15	2	5
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.95	0.95	0.95	0.79	0.79	0.79
Adj. Flow (vph)	56	977	105	211	510	7	68	2	188	19	3	6
RTOR Reduction (vph)	0	10	0	0	1	0	0	148	0	0	5	0
Lane Group Flow (vph)	56	1072	0	211	516	0	0	110	0	0	23	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.1	25.8		37.3	30.6			10.5			10.5	
Effective Green, g (s)	29.5	26.8		38.2	31.5			11.4			11.4	
Actuated g/C Ratio	0.51	0.47		0.66	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	481	1616		368	1930			297			260	
v/s Ratio Prot	0.01	c0.31		c0.07	0.15							
v/s Ratio Perm	0.05			0.31				c0.07			0.02	
v/c Ratio	0.12	0.66		0.57	0.27			0.37			0.09	
Uniform Delay, d1	7.1	11.9		6.8	6.9			20.0			18.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	2.2		1.3	0.3			0.3			0.1	
Delay (s)	7.1	14.1		8.1	7.3			20.3			18.9	
Level of Service	A	B		A	A			C			B	
Approach Delay (s)		13.7			7.5			20.3			18.9	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	12.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
46: Twiggs St & Juan St 4/9/2012

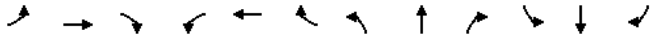


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	98	4	13	0	1	5	4	91	3	6	127	71
Peak Hour Factor	0.93	0.93	0.93	0.50	0.50	0.50	0.87	0.87	0.87	0.96	0.96	0.96
Hourly flow rate (vph)	105	4	14	0	2	10	5	105	3	6	132	74

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	124	12	113	213
Volume Left (vph)	105	0	5	6
Volume Right (vph)	14	10	3	74
Hadj (s)	0.14	-0.47	0.02	-0.17
Departure Headway (s)	4.8	4.3	4.5	4.2
Degree Utilization, x	0.16	0.01	0.14	0.25
Capacity (veh/h)	701	753	765	819
Control Delay (s)	8.7	7.4	8.2	8.6
Approach Delay (s)	8.7	7.4	8.2	8.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.5		
HCM Level of Service		A		
Intersection Capacity Utilization		33.9%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
47: Harney St & Juan St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	22	3	42	0	3	9	21	67	4	4	96	40
Peak Hour Factor	0.90	0.90	0.90	0.50	0.50	0.50	0.92	0.92	0.92	0.88	0.88	0.80
Hourly flow rate (vph)	24	3	47	0	6	18	23	73	4	5	109	50

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	74	24	100	164
Volume Left (vph)	24	0	23	5
Volume Right (vph)	47	18	4	50
Hadj (s)	-0.28	-0.42	0.05	-0.14
Departure Headway (s)	4.2	4.1	4.3	4.1
Degree Utilization, x	0.09	0.03	0.12	0.19
Capacity (veh/h)	790	799	798	858
Control Delay (s)	7.6	7.3	7.9	8.0
Approach Delay (s)	7.6	7.3	7.9	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.9		
HCM Level of Service		A		
Intersection Capacity Utilization		33.2%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
48: Taylor St & Morena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3510		1770	3426				1611	1681	1699	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3510		1770	3426				1611	1681	1699	1561
Volume (vph)	468	606	29	3	448	107	0	0	14	78	7	200
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	498	645	31	3	477	114	0	0	16	88	8	225
RTOR Reduction (vph)	0	3	0	0	21	0	0	0	0	0	0	181
Lane Group Flow (vph)	498	673	0	3	570	0	0	0	16	47	49	44
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	12.0	38.5		0.6	27.1				65.3	11.6	11.6	11.6
Effective Green, g (s)	12.4	39.4		1.0	28.0				65.3	12.9	12.9	12.9
Actuated g/C Ratio	0.19	0.60		0.02	0.43				1.00	0.20	0.20	0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	652	2118		27	1469				1611	332	336	308
v/s Ratio Prot	c0.15	0.19		0.00	c0.17					0.03	c0.03	
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.76	0.32		0.11	0.39				0.01	0.14	0.15	0.14
Uniform Delay, d1	25.1	6.4		31.7	12.8				0.0	21.6	21.6	21.6
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	0.4		0.7	0.8				0.0	0.3	0.3	0.4
Delay (s)	29.8	6.8		32.4	13.6				0.0	22.0	22.0	22.0
Level of Service	C	A		C	B				A	C	C	C
Approach Delay (s)		16.5			13.6			0.0			22.0	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
49: Rosecrans St. & Hugo St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.92			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3420		1671	3423		1644	1575			1736	
Flt Permitted	0.95	1.00		0.95	1.00		0.55	1.00			0.51	
Satd. Flow (perm)	1678	3420		1671	3423		949	1575			900	
Volume (vph)	16	1386	63	32	969	26	105	99	124	24	76	3
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	1540	70	36	1077	29	117	110	138	27	84	3
RTOR Reduction (vph)	0	1	0	0	1	0	0	34	0	0	1	0
Lane Group Flow (vph)	18	1609	0	36	1105	0	117	214	0	0	113	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	105.3		6.8	109.0		23.7	23.7			23.7	
Effective Green, g (s)	3.5	106.2		7.2	109.9		24.6	24.6			24.6	
Actuated g/C Ratio	0.02	0.71		0.05	0.73		0.16	0.16			0.16	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	39	2421		80	2508		156	258			148	
v/s Ratio Prot	0.01	c0.47		c0.02	c0.32			c0.14				
v/s Ratio Perm							0.12				0.13	
v/c Ratio	0.46	0.66		0.45	0.44		0.75	0.83			0.76	
Uniform Delay, d1	72.3	12.1		69.5	7.9		59.8	60.7			59.9	
Progression Factor	1.00	1.00		0.91	0.44		1.00	1.00			1.00	
Incremental Delay, d2	3.1	1.5		1.0	0.4		16.3	18.4			18.8	
Delay (s)	75.4	13.5		64.3	3.8		76.1	79.0			78.7	
Level of Service	E	B		E	A		E	E			E	
Approach Delay (s)		14.2			5.8			78.1			78.7	
Approach LOS		B			A			E			E	

Intersection Summary				
HCM Average Control Delay	20.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	72.2%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
50: Rosecrans St. & Lowell St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Volume (vph)	352	1316	24	165	799	184	18	370	181	287	190	135
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	371	1385	25	174	841	194	19	389	191	302	200	142
RTOR Reduction (vph)	0	1	0	0	13	0	0	0	31	0	85	0
Lane Group Flow (vph)	371	1409	0	174	1022	0	19	389	160	302	257	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	33.0	60.9		16.7	44.1		3.6	24.8	41.5	28.9	50.2	
Effective Green, g (s)	33.4	61.8		17.1	45.5		4.0	25.8	42.9	29.3	51.1	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.03	0.17	0.29	0.20	0.34	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	394	1453		202	1030		47	609	437	346	1084	
v/s Ratio Prot	c0.21	c0.40		0.10	0.30		0.01	c0.11	0.04	c0.17	0.08	
v/s Ratio Perm									0.06			
v/c Ratio	0.94	0.97		0.86	0.99		0.40	0.64	0.37	0.87	0.24	
Uniform Delay, d1	57.3	43.2		65.3	52.1		71.8	57.8	42.7	58.5	35.5	
Progression Factor	1.19	0.83		1.16	0.91		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.0	15.0		26.6	25.0		2.1	2.5	0.2	20.2	0.1	
Delay (s)	94.0	50.7		102.4	72.3		73.9	60.2	42.9	78.8	35.6	
Level of Service	F	D		F	E		E	E	D	E	D	
Approach Delay (s)		59.7			76.7			55.1			55.8	
Approach LOS		E			E			E			E	

Intersection Summary				
HCM Average Control Delay	63.3	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.3%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
51: Rosecrans St. & Laning Rd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (prot)		5045		1770	3539			1775	1552		1787	
Flt Permitted		1.00		0.95	1.00			0.71	1.00		0.70	
Satd. Flow (perm)		5045		1770	3539			1329	1552		1302	
Volume (vph)	0	1855	83	142	1217	1	87	1	203	40	10	1
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1953	87	149	1281	1	92	1	214	42	11	1
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	184	0	1	0
Lane Group Flow (vph)	0	2038	0	149	1282	0	0	93	30	0	53	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		98.8		16.5	119.7			20.1	20.1		20.1	
Effective Green, g (s)		100.1		16.9	121.0			21.0	21.0		21.0	
Actuated g/C Ratio		0.67		0.11	0.81			0.14	0.14		0.14	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		3367		199	2855			186	217		182	
v/s Ratio Prot		c0.40		c0.08	0.36							
v/s Ratio Perm								c0.07	0.02		0.04	
v/c Ratio		0.61		0.75	0.45			0.50	0.14		0.29	
Uniform Delay, d1		13.9		64.5	4.4			59.6	56.6		57.8	
Progression Factor		0.35		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		12.6	0.5			0.8	0.1		0.3	
Delay (s)		5.4		77.1	4.9			60.4	56.7		58.2	
Level of Service		A		E	A			E	E		E	
Approach Delay (s)		5.4			12.4			57.8			58.2	
Approach LOS		A			B			E			E	

Intersection Summary				
HCM Average Control Delay	12.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
52: Hawthorne St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.98	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5031						4958	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5031						4958	
Volume (vph)	0	0	0	197	900	0	0	0	0	0	393	67
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	210	957	0	0	0	0	0	546	93
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	0	0	0	1141	0	0	0	0	0	607	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3527						1041	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.23							
v/c Ratio					0.32						0.58	
Uniform Delay, d1					5.2						32.0	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.2						0.5	
Delay (s)					5.4						32.5	
Level of Service					A						C	
Approach Delay (s)		0.0			5.4			0.0			32.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	15.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

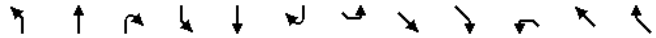
Exisitng PM
53: Grape St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		1.00									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5063									4943	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5063									4943	
Volume (vph)	0	1526	39	0	0	0	0	0	0	240	350	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	1641	42	0	0	0	0	0	0	270	393	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	1681	0	0	0	0	0	0	0	0	655	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		61.8									19.2	
Effective Green, g (s)		61.8									20.2	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3477									1109	
v/s Ratio Prot		c0.33										
v/s Ratio Perm											0.13	
v/c Ratio		0.48									0.59	
Uniform Delay, d1		6.6									31.2	
Progression Factor		0.40									0.72	
Incremental Delay, d2		0.4									0.8	
Delay (s)		3.0									23.3	
Level of Service		A									C	
Approach Delay (s)		3.0			0.0			0.0			23.3	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	8.7	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
54: Seaworld Dr & E Mission Bay Dr 4/9/2012

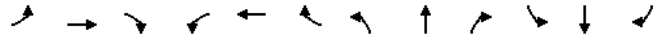


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Volume (vph)	78	1077	116	142	1276	13	59	70	189	102	41	116
Peak-hour factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96	0.82	0.82	0.82	0.74	0.74	0.74
Adj. Flow (vph)	80	1110	120	148	1329	14	72	85	230	138	55	157
RTOR Reduction (vph)	0	0	89	0	0	9	0	0	115	0	0	116
Lane Group Flow (vph)	80	1110	31	148	1329	5	72	85	115	138	55	41
Confl. Peds. (#/hr)	1					1			1	1		
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	3.1	31.6	8.0	8.1	36.7	3.9	3.9	11.8	11.8	8.0	15.0	15.0
Effective Green, g (s)	3.1	33.1	8.0	8.1	38.1	3.9	3.9	12.7	12.7	8.0	16.8	16.8
Actuated g/C Ratio	0.04	0.42	0.10	0.10	0.49	0.05	0.05	0.16	0.16	0.10	0.22	0.22
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	137	1504	163	184	1731	78	172	304	255	182	402	341
v/s Ratio Prot	0.02	0.31		c0.08	c0.38		0.02	0.05		c0.08	0.03	
v/s Ratio Perm			0.02			0.00			c0.07			0.03
v/c Ratio	0.58	0.74	0.19	0.80	0.77	0.07	0.42	0.28	0.45	0.76	0.14	0.12
Uniform Delay, d1	36.8	18.8	32.0	34.1	16.3	35.3	35.9	28.6	29.5	34.0	24.7	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	3.3	0.2	20.8	3.3	0.1	0.6	0.5	1.3	14.8	0.1	0.1
Delay (s)	40.8	22.0	32.2	54.9	19.6	35.4	36.5	29.1	30.7	48.8	24.7	24.7
Level of Service	D	C	C	D	B	D	D	C	C	D	C	C
Approach Delay (s)		24.1			23.3			31.4			34.2	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM Average Control Delay	25.6	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	77.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
55: Hawthorne St & Pacific Highway 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				0.97	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			0.99	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1716	3482		1770	5085			5029	
Flt Permitted				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)				1716	3482		1770	5085			5029	
Volume (vph)	0	0	0	110	775	82	52	375	0	0	258	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.88	0.88	0.88	0.84	0.84	0.84
Adj. Flow (vph)	0	0	0	124	871	92	59	426	0	0	307	21
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	124	954	0	59	426	0	0	318	0
Confl. Peds. (#/hr)				35		10	7					7
Turn Type				Perm			Prot					
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)				40.5	40.5		23.3	39.7			12.0	
Effective Green, g (s)				41.0	39.6		23.3	39.7			11.9	
Actuated g/C Ratio				0.46	0.44		0.26	0.44			0.13	
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	
Lane Grp Cap (vph)				782	1532		458	2243			665	
v/s Ratio Prot					c0.27		0.03	c0.08			c0.06	
v/s Ratio Perm				0.07								
v/c Ratio				0.16	0.62		0.13	0.19			0.48	
Uniform Delay, d1				14.4	19.4		25.6	15.3			36.2	
Progression Factor				1.07	1.09		0.47	0.53			1.00	
Incremental Delay, d2				0.4	1.8		0.5	0.2			0.6	
Delay (s)				15.8	23.1		12.4	8.2			36.8	
Level of Service				B	C		B	A			D	
Approach Delay (s)		0.0			22.3			8.7			36.8	
Approach LOS		A			C			A			D	

Intersection Summary				
HCM Average Control Delay	21.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.44			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.8	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
56: Grape St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5075	1532					4668		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5075	1532					4668		1770	5085	
Volume (vph)	43	1141	24	0	0	0	0	384	332	92	276	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.92	0.92	0.92	0.95	0.95
Adj. Flow (vph)	47	1240	26	0	0	0	0	417	361	100	291	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	119	0	0	0	0
Lane Group Flow (vph)	0	1287	10	0	0	0	0	659	0	100	291	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		34.6	34.6					26.0		15.2	45.6	
Effective Green, g (s)		35.5	35.5					26.0		15.6	45.6	
Actuated g/C Ratio		0.39	0.39					0.29		0.17	0.51	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2002	604					1349		307	2576	
v/s Ratio Prot								c0.14		c0.06	0.06	
v/s Ratio Perm		0.25	0.01									
v/c Ratio		0.64	0.02					0.49		0.33	0.11	
Uniform Delay, d1		22.1	16.6					26.5		32.6	11.6	
Progression Factor		1.00	1.00					1.00		1.77	0.56	
Incremental Delay, d2		1.6	0.1					1.3		2.8	0.1	
Delay (s)		23.7	16.7					27.8		60.3	6.6	
Level of Service		C	B					C		E	A	
Approach Delay (s)		23.6			0.0			27.8			20.4	
Approach LOS		C			A			C			C	

Intersection Summary				
HCM Average Control Delay	24.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

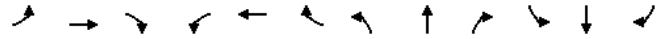
Exisitng PM
57: Seaworld Dr & Friars Rd 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1568	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1568	3433	3539	3433	1418
Volume (vph)	1153	391	270	1297	301	118
Peak-hour factor, PHF	0.96	0.96	0.99	0.99	0.93	0.93
Adj. Flow (vph)	1201	407	273	1310	324	127
RTOR Reduction (vph)	0	7	0	0	0	98
Lane Group Flow (vph)	1201	400	273	1310	324	29
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.8	41.6	7.8	41.8	12.8	12.8
Effective Green, g (s)	31.0	46.0	7.7	43.2	15.0	15.0
Actuated g/C Ratio	0.47	0.69	0.12	0.65	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1657	1184	399	2309	778	321
v/s Ratio Prot	c0.34	0.08	0.08	c0.37	c0.09	
v/s Ratio Perm		0.18				0.02
v/c Ratio	0.72	0.34	0.68	0.57	0.42	0.09
Uniform Delay, d1	14.2	4.0	28.1	6.3	21.9	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	3.8	1.0	0.1	0.0
Delay (s)	17.0	4.1	31.9	7.4	22.0	20.3
Level of Service	B	A	C	A	C	C
Approach Delay (s)	13.7			11.6	21.5	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Existing PM
58: I-5 SB On/I-5 SB Off & Seaworld Dr 12/07/2017

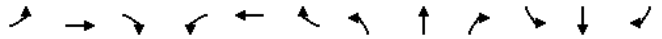


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Future Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.86	0.86	0.86	0.25	0.25	0.25	0.96	0.96	0.96
Adj. Flow (vph)	0	1116	259	340	356	0	0	0	0	347	0	1172
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1116	131	340	356	0	0	0	0	347	0	1172
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		36.8	36.8	9.4	50.4					15.0		75.0
Effective Green, g (s)		37.8	37.8	9.6	51.4					15.6		75.0
Actuated g/C Ratio		0.50	0.50	0.13	0.69					0.21		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1783	786	439	2425					368		1583
v/s Ratio Prot		0.32		0.10	0.10					c0.20		
v/s Ratio Perm			0.08									c0.74
v/c Ratio		0.63	0.17	0.77	0.15					0.94		0.74
Uniform Delay, d1		13.5	10.1	31.7	4.1					29.3		0.0
Progression Factor		1.00	1.00	0.91	1.16					1.00		1.00
Incremental Delay, d2		1.7	0.5	6.7	0.1					32.1		3.2
Delay (s)		15.1	10.5	35.5	4.9					61.3		3.2
Level of Service		B	B	D	A					E		A
Approach Delay (s)		14.3			19.9			0.0			16.4	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
59: Seaworld Dr & I-5 NB On 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3265			1775	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3265			1775	1583			
Volume (vph)	783	566	0	0	432	384	166	3	418	0	0	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.90	0.90	0.90	0.25	0.25	0.25
Adj. Flow (vph)	833	602	0	0	436	388	184	3	464	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	328	0	0	0
Lane Group Flow (vph)	833	602	0	0	622	0	0	187	136	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	19.5	55.7			32.0			9.2	9.2			
Effective Green, g (s)	19.7	56.2			32.5			9.8	9.8			
Actuated g/C Ratio	0.26	0.75			0.43			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	902	2652			1415			232	207			
v/s Ratio Prot	c0.24	0.17			c0.19			c0.11				
v/s Ratio Perm									0.09			
v/c Ratio	0.92	0.23			0.44			0.81	0.66			
Uniform Delay, d1	26.9	2.8			14.9			31.7	31.0			
Progression Factor	1.47	0.76			1.00			1.00	1.00			
Incremental Delay, d2	11.1	0.1			1.0			17.2	5.7			
Delay (s)	50.6	2.3			15.9			48.9	36.7			
Level of Service	D	A			B			D	D			
Approach Delay (s)		30.3			15.9			40.2			0.0	
Approach LOS		C			B			D			A	

Intersection Summary				
HCM Average Control Delay	28.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	87.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Appendix F
Caltrans Freeway Count Worksheets

Dist	Rte		Description	CO		Poast Mile	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak hour	Ahead Peak Month	Ahead AADT	Peak Hour
	11	8	NIMITZ BLVD	SD	T	0.466	740	11,000	10,500	4,050	48,500	46,500	8.7%
	11	8	MIDWAY DRIVE	SD	L	1.213	4,050	48,500	46,500	8,800	113,000	102,000	8.6%
	11	8	JCT RTE 5 LT LANES	SD	L	2.379	8,800	113,000	102,000	11,100	144,000	132,000	8.4%
	11	8	SAN DIEGO, MORENA BLVD	SD	R	0.364	11,100	144,000	132,000	15,700	194,000	191,000	8.2%
	11	5	CLAIREMONT DRIVE	SD	R	22.262	Ahead Peak hour 18,300	Ahead Peak Month 230,000	Ahead AADT 220,000	Back Peak Hour 16,800	Back Peak Month 208,000	Back AADT 203,000	8.3%
	11	5	MISSION BAY/SEA WORLD	SD	R	20.818	16,700	212,000	199,000	18,300	230,000	220,000	8.4%
	11	5	JCT. RTE. 8/CAMINO DEL RIO	SD	R	20.056	16,300	212,000	199,000	16,700	212,000	199,000	8.2%
	11	5	SAN DIEGO, OLD TOWN AVE	SD	R	19.033	15,400	205,000	192,000	16,300	212,000	199,000	8.0%
	11	5	SAN DIEGO, WASHINGTON ST	SD	R	18.283	11,500	152,000	142,000	15,400	205,000	192,000	8.1%
	11	5	SAN DIEGO, SASSAFRAS ST	SD	R	17.77	12,400	157,000	147,000	11,500	152,000	142,000	8.4%
	11	5	PACIFIC HIGHWAY VIADUCT	SD	R	17.53	14,400	200,000	183,000	12,400	157,000	147,000	7.9%

Location (I.D.)	Route	Dir	Period	Cars per green	Fast. rate (cyc./min.)	Slow. rate (cyc./min.)	Rate Delta	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV	Flow/lane			Total Flow
												High	Low	Average	Average
W. Mission Bay Dr (251)	8	EB	1500 - 1900	2	8.3	5.8	0.18	7.2 - 10.4	996 - 694	2	No	996	694	845	1690
Sports Arena Blvd (252)	8	EB	1500 - 1900	2	6.6	4.1	0.18	9.1 - 14.7	396 - 245	3	Lt	396	245	320.5	641
Sea World Dr (97)	5	SB	0530 - 0930	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
Sea World Dr (223)	5	NB	0530 - 0930	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555
			1500 - 1900	2	8.3	5.5	0.20	7.2 - 10.9	996 - 660	2	No	996	660	828	1656
Old Town Ave (187)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	1	No	570	352	461	461
Old Town Ave (188)	5	NB	0530 - 0930	1	9.5	5.6	0.28	6.3 - 10.8	570 - 335	2	No	570	335	452.5	905
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	No	570	318	444	888
Washington St (184)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Washington St (186)	5	NB	0530 - 0930	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Hawthorne St (181)	5	NB	0530 - 0930	2	8.3	4.8	0.25	7.2 - 12.5	996 - 576	2	No	996	576	786	1572
			1500 - 1900	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555

There are 15 separate rates or steps that depend on the mainlane volumes. The Cycles/min. have a definite rate delta whereas the seconds/cycle from one rate to another can vary from 0.1 - 0.4 sec.

RTE	DIST	CNTY	POST MILE	LEG	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
008	11	SD	T.407	A	SAN DIEGO, SUNSET CLIFFS BOULEVARD	10500	105	1	86	8	3	8	82.3	7.4	2.9	7.4	7	78E
008	11	SD	L2.379	B	JCT RTE 5 LT LANES	102000	1224	1.2	1038	87	9	91	84.8	7.1	.7	7.4	77	78V
008	11	SD	L2.379	A	JCT RTE 5 LT LANES	129000	3612	2.8	2416	520	155	520	66.9	14.4	4.3	14.4	335	83V
008	11	SD	2.41	B	SAN DIEGO, JCT. RTE. 163	201000	5427	2.7	4200	586	136	505	77.4	10.8	2.5	9.3	395	83E
008	11	SD	2.41	A	SAN DIEGO, JCT. RTE. 163	205000	5740	2.8	4483	574	138	545	78.1	10	2.4	9.5	418	83E
008	11	SD	4.378	B	SAN DIEGO, JCT. RTE. 805	194000	6208	3.2	4662	615	211	720	75.1	9.9	3.4	11.6	499	83E
008	11	SD	5.638	B	JCT. RTE. 15	241000	7230	3	4230	918	304	1779	58.5	12.7	4.2	24.6	891	83V
008	11	SD	5.638	A	JCT. RTE. 15	214000	7490	3.5	4794	861	337	1498	64	11.5	4.5	20	813	84E
008	11	SD	10.57	B	FLETCHER PARKWAY	190000	7030	3.7	4204	893	246	1687	59.8	12.7	3.5	24	847	84V
008	11	SD	10.57	A	FLETCHER PARKWAY	174000	7656	4.4	4326	1179	390	1761	56.5	15.4	5.1	23	925	78V
008	11	SD	15.8	B	EL CAJON, JCT. RTE. 67 NORTH	166000	7802	4.7	4205	1022	359	2216	53.9	13.1	4.6	28.4	1058	78V
008	11	SD	15.8	A	EL CAJON, JCT. RTE. 67 NORTH	134000	3886	2.9	2153	439	136	1158	55.4	11.3	3.5	29.8	535	78V
008	11	SD	R18.727	A	GREENFIELD DRIVE	80000	5520	6.9	2909	431	132	2048	52.7	7.8	2.4	37.1	867	86V
008	11	SD	R37.831	B	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	24900	2988	12	1174	176	90	1548	39.3	5.9	3	51.8	605	86E
008	11	SD	R37.831	A	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	19300	2625	13.6	853	205	76	1491	32.5	7.8	2.9	56.8	574	00E
008	11	SD	R51.98	B	CAMERON ROAD	15700	2013	12.82	843	94	40	1036	41.89	4.67	1.99	51.46	401	09V

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
005	11	SD	R.09	A	SAN DIEGO, MEXICAN BORDER, TIE OFF	74000	1628	2.2	1014	62	46	506	62.3	3.8	2.8	31.1	223	83E
005	11	SD	R.878	A	SOUTH JCT. RTE. 805	40000	1520	3.8	800	195	15	511	52.6	12.8	1	33.6	224	83V
005	11	SD	4.632	B	JCT. RTE. 75 WEST	117000	4914	4.2	3155	595	147	1017	64.2	12.1	3	20.7	538	78V
005	11	SD	4.632	A	JCT. RTE. 75 WEST	143000	5291	3.7	2974	857	254	1206	56.2	16.2	4.8	22.8	636	83V
005	11	SD	R11.129	B	8TH STREET	168000	8400	5	4259	1344	445	2352	50.7	16	5.3	28	1150	85V
005	11	SD	R12.647	B	JCT. RTE. 15 NORTH	187000	9350	5	4740	1496	496	2618	50.7	16	5.3	28	1280	85E
005	11	SD	R12.647	A	JCT. RTE. 15 NORTH	152000	6232	4.1	3509	897	287	1539	56.3	14.4	4.6	24.7	778	85V
005	11	SD	R14.077	B	SAN DIEGO, JCT. RTE. 75 SOUTH	159000	6519	4.1	3670	939	300	1610	56.3	14.4	4.6	24.7	814	85E
005	11	SD	R14.077	A	SAN DIEGO, JCT. RTE. 75 SOUTH	163000	6520	4	3984	782	254	1500	61.1	12	3.9	23	766	78E
005	11	SD	R15.036	B	SAN DIEGO, JCT. RTE. 94	163000	6194	3.8	3785	743	242	1425	61.1	12	3.9	23	728	78V
005	11	SD	R15.036	A	SAN DIEGO, JCT. RTE. 94	209000	8360	4	5827	920	242	1371	69.7	11	2.9	16.4	797	87V
005	11	SD	R16.069	B	SAN DIEGO, JCT. RTE. 163	209000	7733	3.7	5119	773	286	1554	66.2	10	3.7	20.1	828	78E
005	11	SD	R16.069	A	SAN DIEGO, JCT. RTE. 163	200000	8200	4.1	5150	730	230	2091	62.8	8.9	2.8	25.5	1003	85V
005	11	SD	R20.056	B	JCT. RTE. 8/CAMINO DEL RIO	197000	8077	4.1	5072	719	226	2060	62.8	8.9	2.8	25.5	988	85V
005	11	SD	R20.056	A	JCT. RTE. 8/CAMINO DEL RIO	198000	6732	3.4	4443	673	289	1326	66	10	4.3	19.7	717	84V
005	11	SD	R23.476	B	SAN DIEGO, BALBOA	162000	7290	4.5	4811	729	313	1436	66	10	4.3	19.7	777	84E

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Mainline VDS 1111514 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM T.68 (Abs PM 0.3)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	60.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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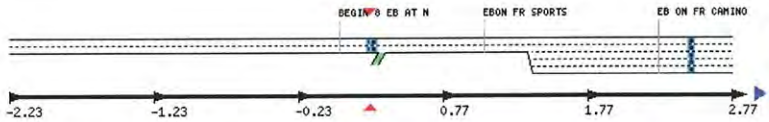
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From Sep 2010 *Max Range:*10 years

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,292	23,244		23,357	23,356	23,244	23,255	23,357	67	2,3
10/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,251	23,190		23,335	23,329	23,190	23,200	23,335	68	2,3
11/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,242	23,238		23,349	23,342	23,238	23,247	23,349	71	2,2
12/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,170	23,207		23,295	23,302	23,207	23,212	23,295	75	2,2
01/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,265	23,289		23,346	23,346	23,289	23,295	23,346	74	2,2
02/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,202	23,274		23,343	23,346	23,274	23,281	23,343	75	2,2
03/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,212	23,290		23,333	23,343	23,290	23,297	23,333	76	2,2
04/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,182	23,261		23,312	23,322	23,261	23,268	23,312	76	2,2
05/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,144	23,262		23,301	23,315	23,262	23,269	23,301	76	2,2
06/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,211	23,285		23,343	23,384	23,285	23,292	23,343	79	2,2
07/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,188	23,266		23,343	23,380	23,266	23,273	23,343	78	2,2
08/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,073	23,218		23,312	23,349	23,218	22,994	23,312	73	2,2



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Mainline VDS 1111515 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM T.54 (Abs PM 0.1)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	40.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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From Sep 2010 *Max Range:10 years*

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,684	21,626		21,708	21,722	21,626	21,630	21,708	65	2,(
10/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,627	21,547		21,675	21,686	21,547	21,550	21,675	67	2,(
11/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,616	21,598		21,686	21,694	21,598	21,601	21,686	70	2,(
12/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,535	21,566		21,637	21,654	21,566	21,566	21,637	74	2,(
01/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,637	21,649		21,685	21,701	21,649	21,651	21,685	73	2,(
02/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,576	21,631		21,682	21,697	21,631	21,633	21,682	74	2,(
03/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,594	21,658		21,685	21,703	21,658	21,660	21,685	76	2,(
04/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,557	21,624		21,658	21,678	21,624	21,626	21,658	75	2,(
05/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,505	21,606		21,633	21,653	21,606	21,607	21,633	75	2,(
06/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,551	21,610		21,649	21,691	21,610	21,611	21,649	78	2,(
07/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,516	21,589		21,646	21,682	21,589	21,589	21,646	77	2,(
08/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,391	21,548		21,621	21,647	21,548	21,358	21,621	72	2,(



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Mainline VDS 1115528 - E/O MORENA BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM R.589 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10308
LDS	1115522
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	134.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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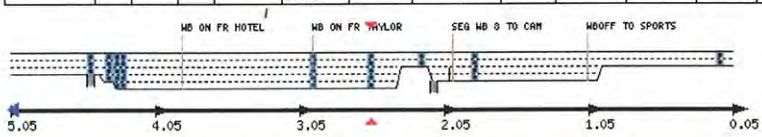
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From Sep 2010 *Max Range:10 years*

To Sep 2011

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,314	84,891		85,180	85,215	84,891	84,899	85,180	68
10/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,083	84,566		85,019	85,059	84,566	84,567	85,019	69
11/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,957	84,644		84,970	84,986	84,644	84,643	84,970	72
12/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,605	84,457		84,760	84,820	84,457	84,439	84,760	76
01/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,819	84,729		84,830	84,875	84,729	84,712	84,830	77
02/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,468	84,564		84,723	84,761	84,564	84,547	84,723	78
03/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,364	84,581		84,710	84,748	84,581	84,564	84,710	80
04/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,178	84,392		84,544	84,629	84,392	84,372	84,544	79
05/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,035	84,357		84,470	84,526	84,357	84,336	84,470	79
06/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,277	84,502		84,584	84,727	84,502	84,481	84,584	80
07/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,234	84,471		84,647	84,795	84,471	84,448	84,647	79
08/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	83,631	84,381		84,609	84,681	84,381	83,667	84,609	74



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$$\frac{85{,}000}{85000 + 92{,}000} = .48$$

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Mainline VDS 1115356 - EB 8 E/O Morena

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM R.535 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10307
LDS	1115357
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	150.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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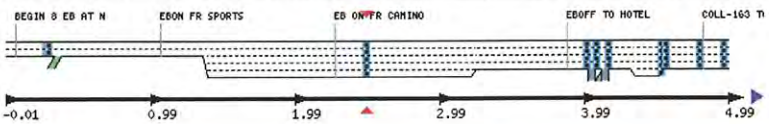
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To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,802				92,959				45	8,2
10/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
11/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
12/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	93,070				92,984				39	8,2
01/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	94,431				94,074				33	8,2
02/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,379				95,149				28	8,1
03/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	96,142				95,919				22	8,1
04/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,987				95,888				15	8,0
05/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,805				95,761				8	7,9
06/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	98,871				97,707				2	7,1



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Mainline VDS 1108457 - SEA WORLD DR

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R20.719 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 97
LDS	1108113
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	148.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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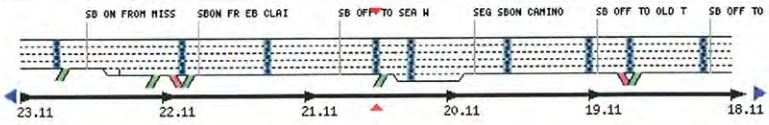
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From Sep 2010 To Sep 2011
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Dat Use
09/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,407	90,808		89,922	89,853	90,808		89,922	3
10/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,017	90,111		89,788	89,630	90,111		89,788	3
11/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,990	89,582		88,612	89,628	89,582		88,612	3
12/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,517	88,234			89,867	88,234		86,475	2
01/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,253	89,079			90,438	89,079		86,658	2
02/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,388				91,039	89,267		81,735	1
03/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,567				91,403				1
04/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,971				91,538				1
05/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,395				91,660				
06/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,053				92,054				
07/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,811				91,310				
08/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,847				90,103				



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$$\frac{88{,}000}{88{,}000 + 97{,}000} = .48$$

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Mainline VDS 1118496 - 5 NB S/O Sea World

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R20.7 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 16202
LDS	1118490
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	159.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	ISS RTMS	Mainline
2	2	ISS RTMS	Mainline
3	3	ISS RTMS	Mainline
4	4	ISS RTMS	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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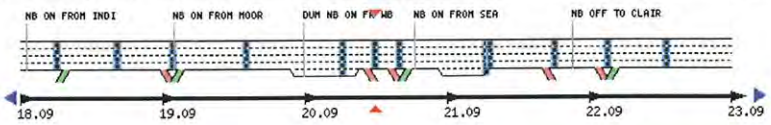
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From Sep 2010 To Sep 2011
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,464	97,291		97,753	97,684	97,291	97,355	97,753	67	8,
10/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,301	97,106		97,606	97,542	97,106	97,167	97,606	68	8,
11/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,304	97,277		97,735	97,653	97,277	97,338	97,735	71	8,
12/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,174	97,282		97,589	97,553	97,282	97,330	97,589	75	8,
01/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,496	97,618		97,746	97,678	97,618	97,669	97,746	76	8,
02/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,533		97,692	97,637	97,533	97,585	97,692	77	8,
03/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,134	97,553		97,694	97,657	97,553	97,603	97,694	79	8,
04/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,079	97,521		97,661	97,638	97,521	97,573	97,661	78	8,
05/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,086	97,619		97,729	97,696	97,619	97,673	97,729	78	8,
06/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,621		97,812	97,873	97,621	97,674	97,812	79	8,
07/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,115	97,517		97,782	97,821	97,517	97,569	97,782	78	8,
08/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	96,570	97,463		97,751	97,682	97,463	96,393	97,751	73	8,



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Mainline VDS 1115355 - SB 5 S/O 8

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From Sep 2010 *Max Range:*10 years

To Sep 2011

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Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10304
LDS	1115349
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	157.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

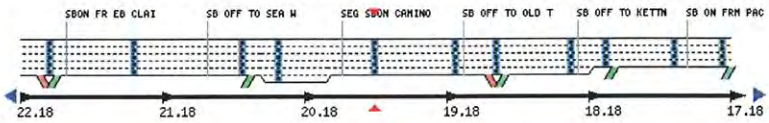
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,377	98,871		99,305	99,501	98,871	98,912	99,305	63
10/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,035	98,563		99,132	99,345	98,563	98,601	99,132	64
11/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,002	98,719		99,174	99,354	98,719	98,756	99,174	67
12/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,709	98,645		98,988	99,215	98,645	98,666	98,988	70
01/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,723	98,892		99,035	99,155	98,892	98,916	99,035	73
02/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,093	98,626		98,807	98,817	98,626	98,648	98,807	75
03/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,842	98,594		98,805	98,822	98,594	98,614	98,805	77
04/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,975	98,466		98,733	98,819	98,466	98,487	98,733	76
05/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,980	98,523		98,700	98,748	98,523	98,545	98,700	76
06/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,259	98,667		98,831	99,000	98,667	98,689	98,831	77
07/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,137	98,572		98,858	99,033	98,572	98,591	98,858	76
08/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,278	98,480		98,805	98,893	98,480	97,276	98,805	71



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$$\frac{99{,}000}{99{,}000 + 64{,}700} = .61$$

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Mainline VDS 1115269 - NB 5 @ I-8

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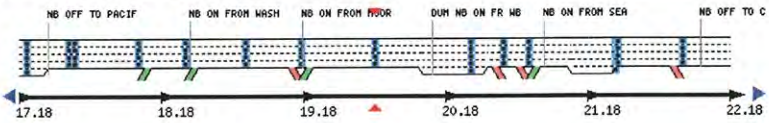
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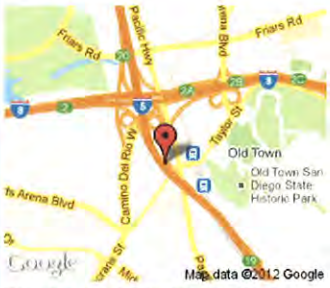
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,282				64,658				50
10/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,182				64,373				46
11/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,245				64,467				42
12/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,053				64,370				43
01/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,160				64,347				45
02/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,760				64,156				48
03/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,710				64,228				50
04/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,727				64,238				49
05/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,742				64,273				48
06/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,135				64,575				50
07/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,355				64,892				51
08/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,704				65,656				54



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10303
LDS	1115262
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	111.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1108615 - OLD TOWN AVE

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R18.931 (Abs PM 18.8)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10411
LDS	1108200
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	145.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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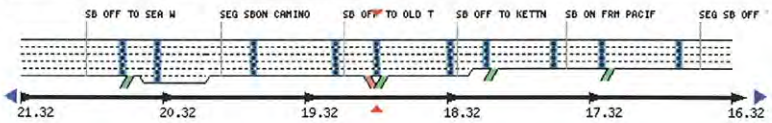
Change Log | Performance | Data Quality | Events

Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,546	87,579		88,554	88,360	87,579	86,924	88,554	60
10/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,512				88,153	87,233		88,401	57
11/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,518				88,236	87,295		88,315	54
12/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,164				88,067	87,241		88,120	58
01/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,556				88,195	87,507		88,247	57
02/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,881				88,010	87,329		88,093	59
03/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,902				88,074	87,161		87,935	57
04/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,820				88,010				50
05/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,494				87,789				43
06/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,638				87,966				42
07/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	86,430				86,950				36
08/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	84,971				86,227				32



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{88{,}500}{88{,}500 + 91{,}500} = .49$$

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Mainline VDS 1114050 - OLD TOWN AVE

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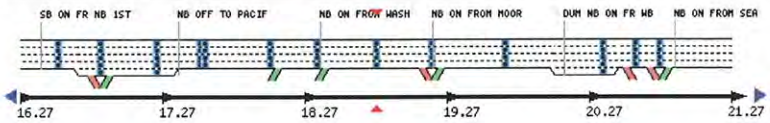
Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 Max Range:10 years

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,821	90,949			91,722	90,949	90,139	91,630	63
10/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,665	90,808			91,614	90,808	89,973	91,529	64
11/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,719	91,038			91,725	91,038	90,243	91,653	67
12/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,472	91,079			91,657	91,079	90,480	91,544	71
01/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,792	91,334			91,789	91,334	90,777	91,687	70
02/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,388	91,213			91,664	91,213	90,607	91,594	71
03/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,447	91,104			91,758	91,104	90,512	91,485	69
04/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,396				91,703	91,018			62
05/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,107				91,505				55
06/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,203				91,623				54
07/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	90,387				90,837				48
08/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	89,232				90,428				44



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R18.874 (Abs PM 18.8)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10412
LDS	1114045
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	138.8 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1117724 - SB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.681 (Abs PM 17.6)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10406
LDS	1117700
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	181.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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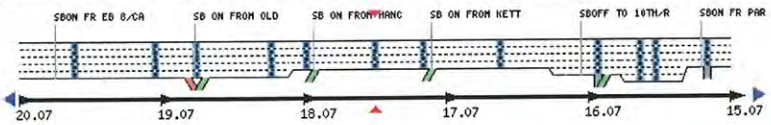
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Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	D. Us
09/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	147,017	146,263		146,781	146,818	146,263	146,432	146,781	
10/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	146,711	145,795		146,583	146,622	145,795	145,259	146,583	
11/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	144,957	144,852		144,969	144,760	144,852	143,905	144,969	
12/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	136,029	137,637		137,478	136,968	137,637	136,817	137,478	
01/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	127,132	130,565		130,273	129,050	130,565	129,832	130,273	
02/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	119,356	122,914		122,738	121,367	122,914	122,160	122,738	
03/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	111,112	115,457		115,296	113,899	115,457	114,729	115,296	
04/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	101,795	107,589		107,418	105,619	107,589	106,848	107,418	
05/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	94,870	99,619		99,395	98,300	99,619	98,839	99,395	
06/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	86,902	91,837		91,628	90,213	91,837	91,049	91,628	
07/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	80,939	83,787		83,655	82,609	83,787	82,961	83,655	
08/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	71,906	75,617		75,543	73,989	75,617	75,108	75,543	



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{115000}{115{,}000 + 75{,}000} = .62$$

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Mainline VDS 1117717 - NB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.68 (Abs PM 17.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10405
LDS	1117710
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	126.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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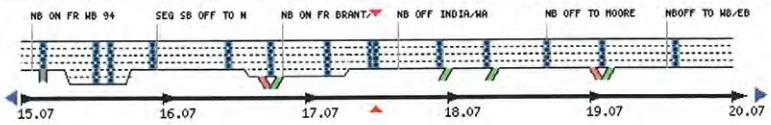
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From Sep 2010 To Sep 2011
*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,877	75,545		75,830	75,835	75,545	75,539	75,830	68
10/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,720	75,304		75,693	75,713	75,304	75,298	75,693	69
11/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,721	75,474		75,789	75,792	75,474	75,468	75,789	72
12/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,471	75,450		75,664	75,710	75,450	75,434	75,664	76
01/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,717	75,729		75,810	75,840	75,729	75,715	75,810	76
02/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,408	75,604		75,713	75,744	75,604	75,592	75,713	77
03/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,291	75,597		75,693	75,731	75,597	75,584	75,693	79
04/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,190	75,513		75,618	75,678	75,513	75,499	75,618	78
05/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,100	75,523		75,566	75,603	75,523	75,512	75,566	78
06/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,334	75,667		75,686	75,795	75,667	75,657	75,686	80
07/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,248	75,574		75,707	75,808	75,574	75,562	75,707	79
08/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	74,658	75,568		75,701	75,736	75,568	74,731	75,701	74



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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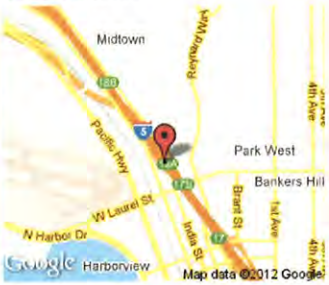
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Mainline VDS 1108605 - KETTNER BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.339 (Abs PM 17.2)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10403
LDS	1108195
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	156.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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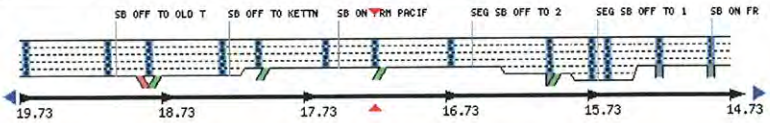
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From Sep 2010 *Max Range:10 years*

To Sep 2011

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	Da Us
09/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,935	88,657		88,989	88,883	88,657	88,698	88,989	
10/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,770	88,297		88,601	88,560	88,297	88,337	88,601	
11/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,698	88,451		88,643	88,572	88,451	88,491	88,643	
12/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,907	88,734		88,795	88,811	88,734	88,781	88,795	
01/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,772				89,521	89,594	88,303	89,515	
02/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,291				90,119				
03/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,581				90,490				
04/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,757				90,590				
05/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,722				90,572				
06/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,972				90,943				
07/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,255				90,332				
08/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,112				90,024				



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

90,000

90,000 + 86,000
(SB) (NB)

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PeMS 12.1

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Mainline VDS 1117835 - NB S/O Pacific

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.34 (Abs PM 17.2)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10404
LDS	1117827
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	160.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

Quick Links

View another VDS | Go |

Tools

Holidays
Data Clearinghouse
PeMS Forum (External Site)

Change Log | Performance | Data Quality | Events

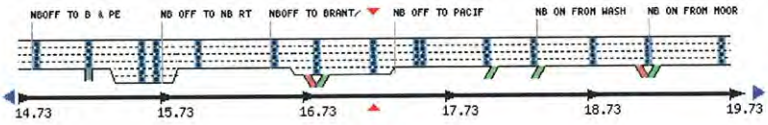
Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 To Sep 2011
Max Range: 10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,750	94,616		94,964	94,829	94,616	94,624	94,964	67
10/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,691				94,636	94,308	92,994	94,810	64
11/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,479				94,520	93,820		94,105	61
12/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	92,229				92,636	92,158		92,315	65
01/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	90,594				90,959	90,917		90,874	66
02/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	88,426				89,009	89,103		89,084	67
03/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	86,468				87,218	87,380		87,341	69
04/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	84,180				85,145	85,461		85,439	68
05/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	82,279				83,228	83,703		83,640	68
06/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	80,653				81,496	82,041		81,976	69
07/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	78,905				79,563	80,181		80,200	68
08/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	76,079				77,390	78,272		78,313	64

Average = 86,000



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Appendix G
VMT Analysis Worksheet – Preferred Plan

2035i - Alt 4 land uses (with Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	4,345,103	3,002	-	3,002	4,342,101
CHULA VISTA TOTAL	5,603,672	7,360	-	7,360	5,596,312
CORONADO TOTAL	467,777	1,329	-	1,329	466,448
DEL MAR TOTAL	101,957	57	-	57	101,900
EL CAJON TOTAL	2,445,789	3,790	-	3,790	2,441,999
ENCINITAS TOTAL	2,562,156	3,677	-	3,677	2,558,479
ESCONDIDO TOTAL	3,487,485	1,914	-	1,914	3,485,571
External TOTAL	526,717	420	-	420	526,297
IMPERIAL BEACH TOTAL	131,576	24	-	24	131,552
LA MESA TOTAL	2,098,139	6,042	-	6,042	2,092,097
LEMON GROVE TOTAL	962,437	1,696	-	1,696	960,741
NATIONAL CITY TOTAL	1,964,645	6,229	-	6,229	1,958,416
OCEANSIDE TOTAL	4,091,284	990	-	990	4,090,294
POWAY TOTAL	1,306,569	582	-	582	1,305,987
OLD TOWN TOTAL	47,316,294	272,778	18,182	254,596	47,043,516
SAN MARCOS TOTAL	2,647,413	295	-	295	2,647,118
SANTEE TOTAL	1,349,014	792	-	792	1,348,222
SOLANA BEACH TOTAL	716,916	1,354	-	1,354	715,562
Unincorporated TOTAL	24,642,294	12,551	-	12,551	24,629,743
VISTA TOTAL	2,207,380	98	-	98	2,207,282
REGIONWIDE TOTAL	108,974,617	171,581 496,561	18,182	306,798	108,649,637

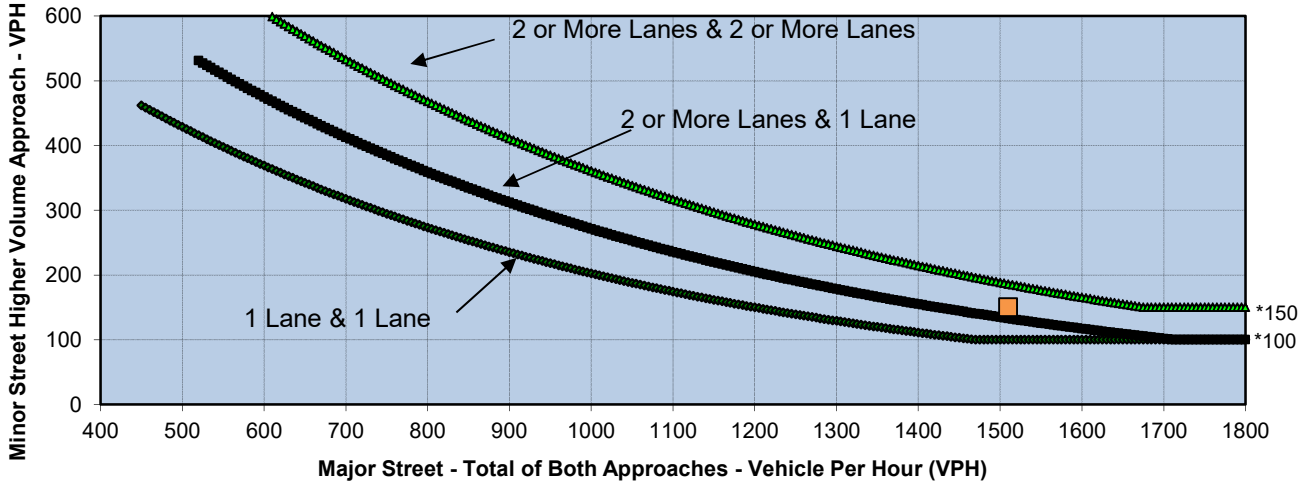
2035i - Alt 4 land uses (with Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	4,345,103	15,275	-	15,275	4,329,828
CHULA VISTA TOTAL	5,603,672	35,467	-	35,467	5,568,205
CORONADO TOTAL	467,777	6,656	-	6,656	461,121
DEL MAR TOTAL	101,957	255	-	255	101,702
EL CAJON TOTAL	2,445,789	16,722	-	16,722	2,429,067
ENCINITAS TOTAL	2,562,156	17,970	-	17,970	2,544,186
ESCONDIDO TOTAL	3,487,485	9,168	-	9,168	3,478,317
External TOTAL	526,717	2,460	-	2,460	524,257
IMPERIAL BEACH TOTAL	131,576	330	-	330	131,246
LA MESA TOTAL	2,098,139	26,516	-	26,516	2,071,623
LEMON GROVE TOTAL	962,437	8,660	-	8,660	953,777
NATIONAL CITY TOTAL	1,964,645	29,872	-	29,872	1,934,773
OCEANSIDE TOTAL	4,091,284	5,562	-	5,562	4,085,722
POWAY TOTAL	1,306,569	2,751	-	2,751	1,303,818
MIDWAY TOTAL	47,316,294	1,293,580	212,175	1,081,405	46,022,714
SAN MARCOS TOTAL	2,647,413	1,342	-	1,342	2,646,071
SANTEE TOTAL	1,349,014	3,821	-	3,821	1,345,193
SOLANA BEACH TOTAL	716,916	6,466	-	6,466	710,450
Unincorporated TOTAL	24,642,294	65,130	-	65,130	24,577,164
VISTA TOTAL	2,207,380	858	-	858	2,206,522
REGIONWIDE TOTAL	108,974,617	1,548,861 880,518	212,175	1,336,686	107,425,756

Appendix H
Signal Warrant Worksheets

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	140	0	120
Through	600	680	0	0
Right	90	0	0	30
Total	690	820	0	150

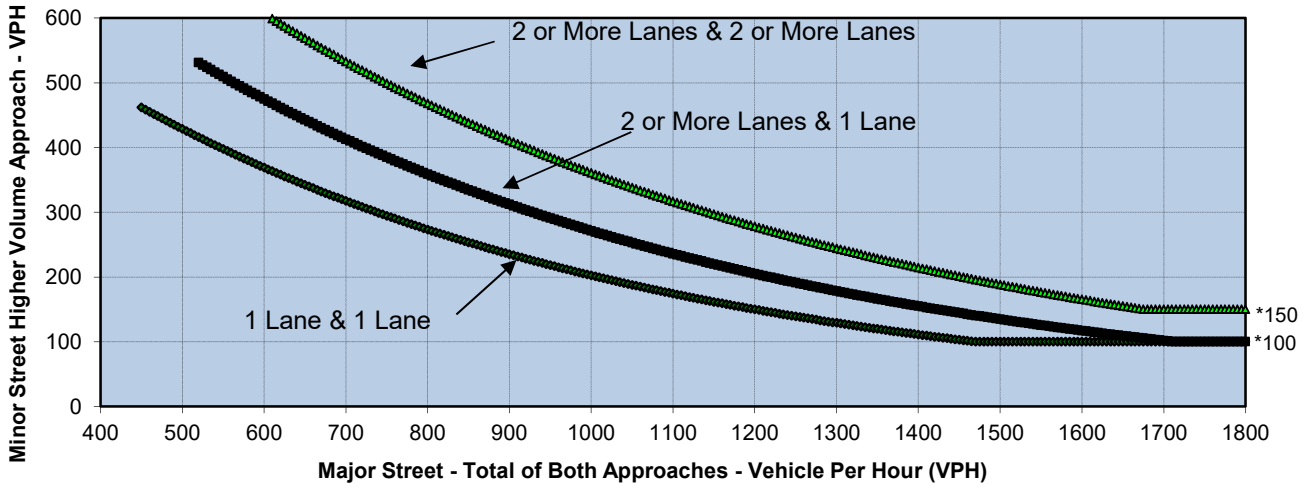
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,510**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	400	0	120
Through	780	840	0	0
Right	120	0	0	300
Total	900	1,240	0	420

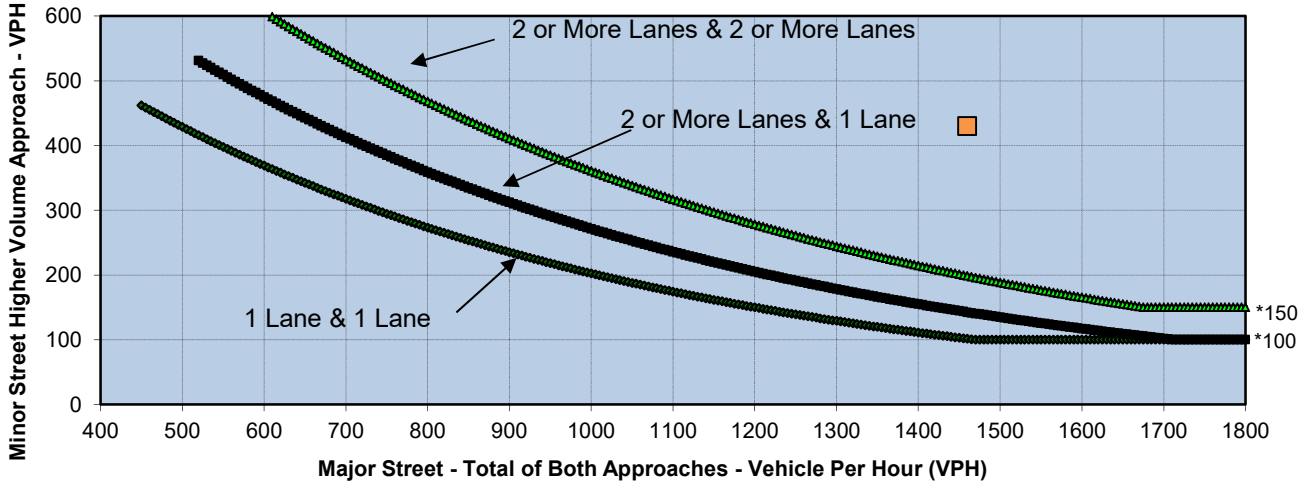
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,140	420	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	200	80	80	160
Through	410	540	50	140
Right	100	130	110	130
Total	710	750	240	430

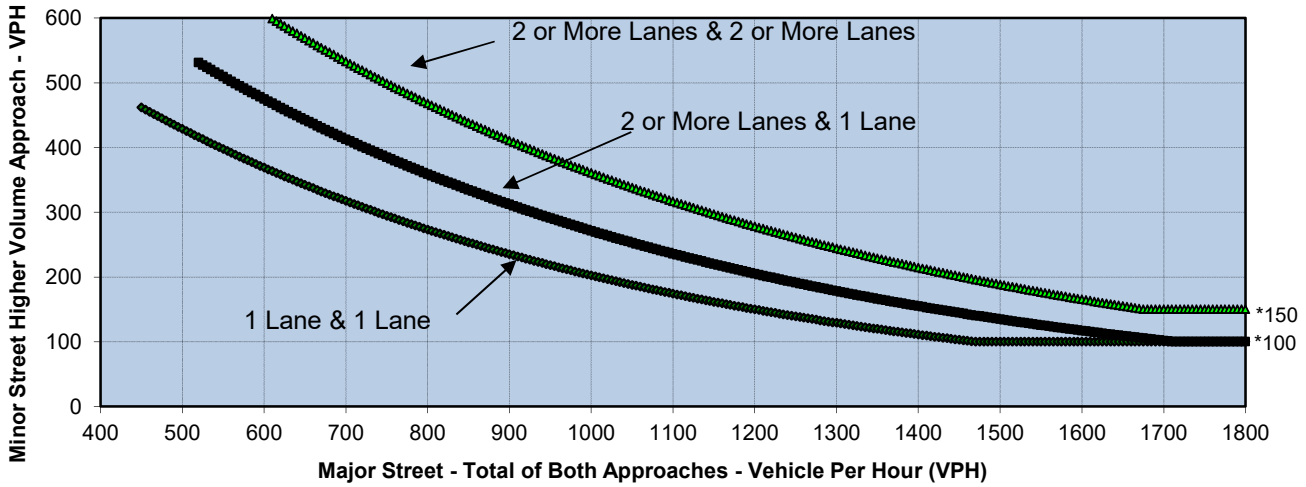
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,460**	**430**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	230	150	90	130
Through	1,120	890	130	40
Right	120	90	150	180
Total	1,470	1,130	370	350

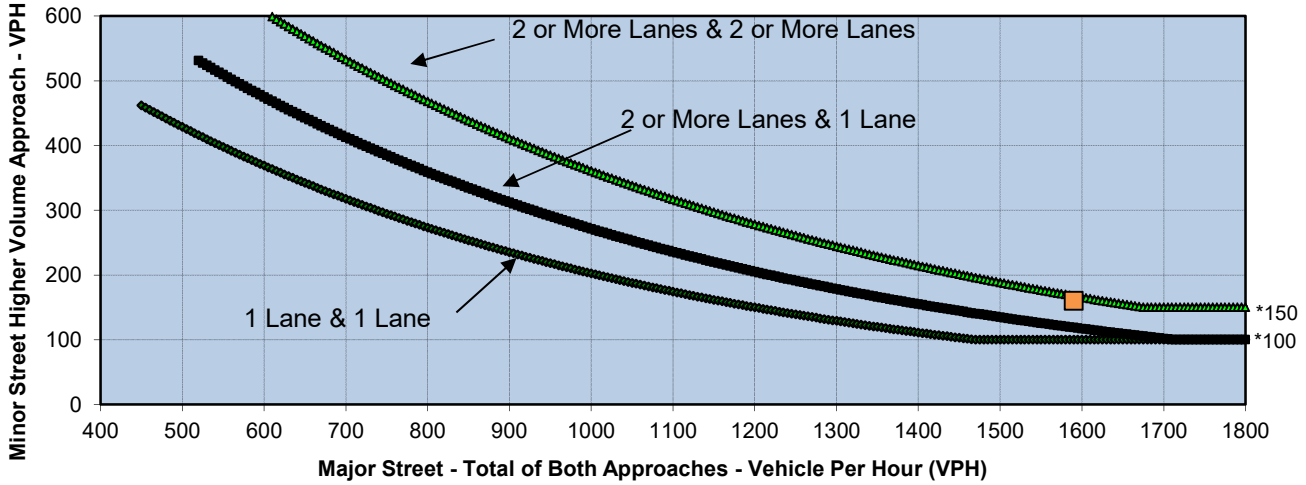
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,600	370	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	30	130	40	90
Through	620	640	20	20
Right	90	80	20	50
Total	740	850	80	160

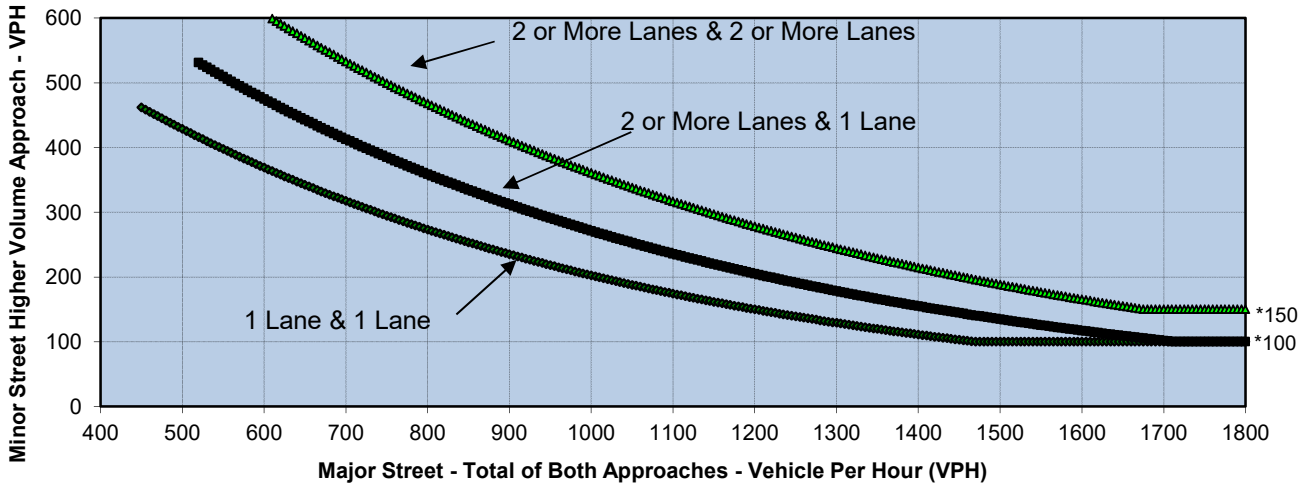
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,590**	**160**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	50	120	60	150
Through	1,250	1,080	30	30
Right	70	80	70	140
Total	1,370	1,280	160	320

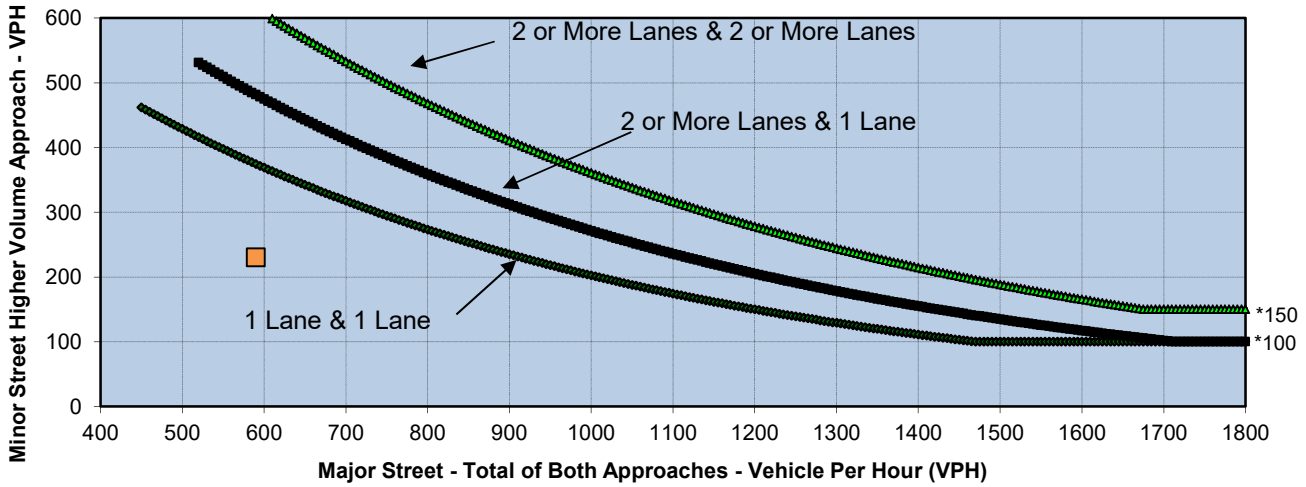
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,650	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	30	50	90
Through	50	80	130	140
Right	110	90	100	80
Total	230	200	280	310

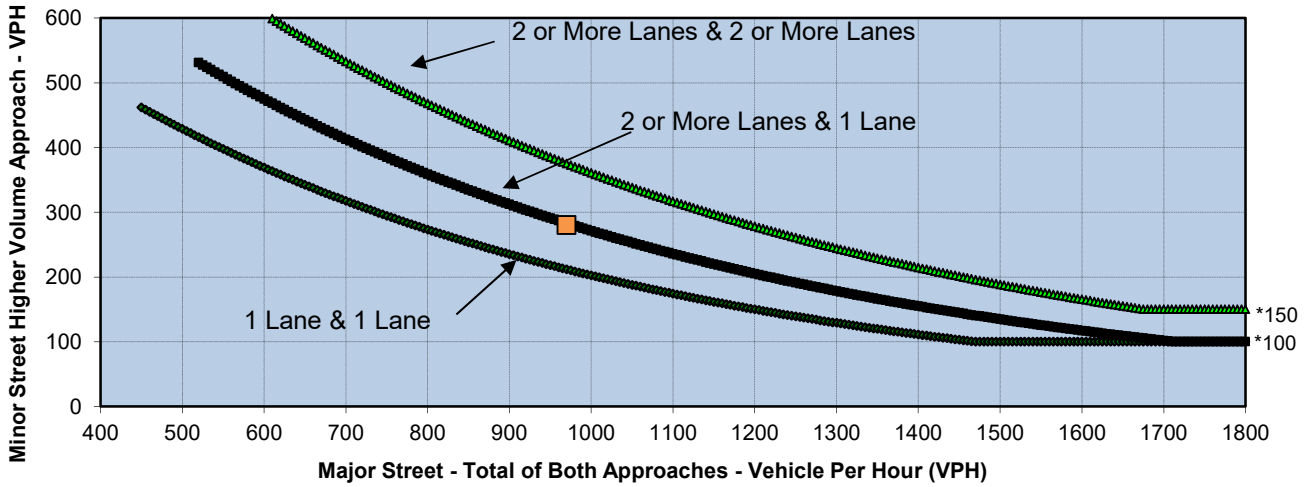
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**590**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	90	100	130
Through	90	90	120	250
Right	120	100	300	70
Total	280	280	520	450

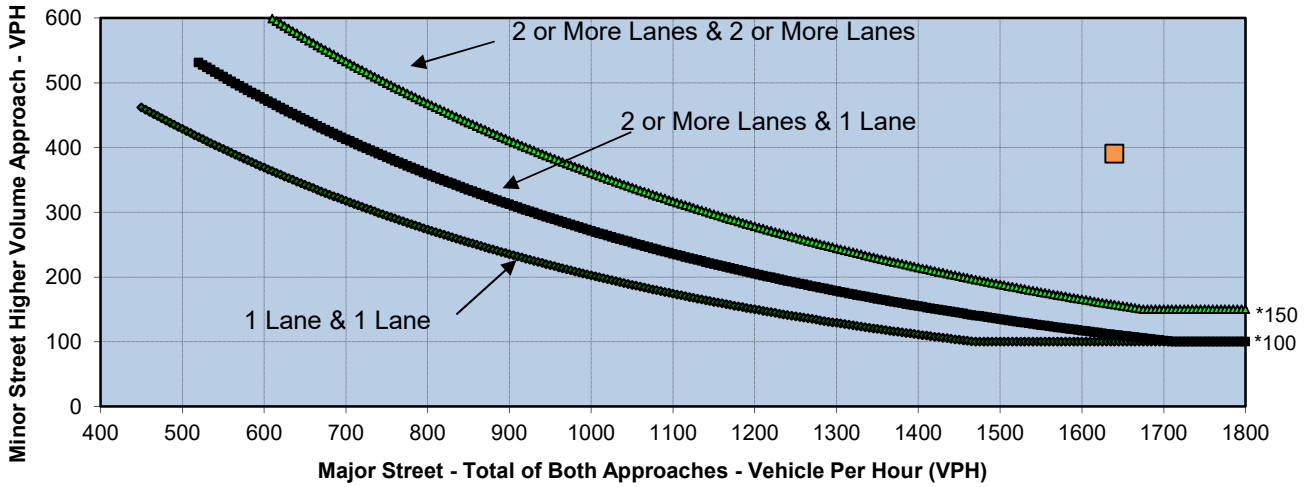
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	970	280	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway	Project	Midway & Old Town CPU
Minor Street	Sports Arena Blvd	Scenario	2A
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	300	0	200	0
Through	610	600	0	0
Right	0	130	190	0
Total	910	730	390	0

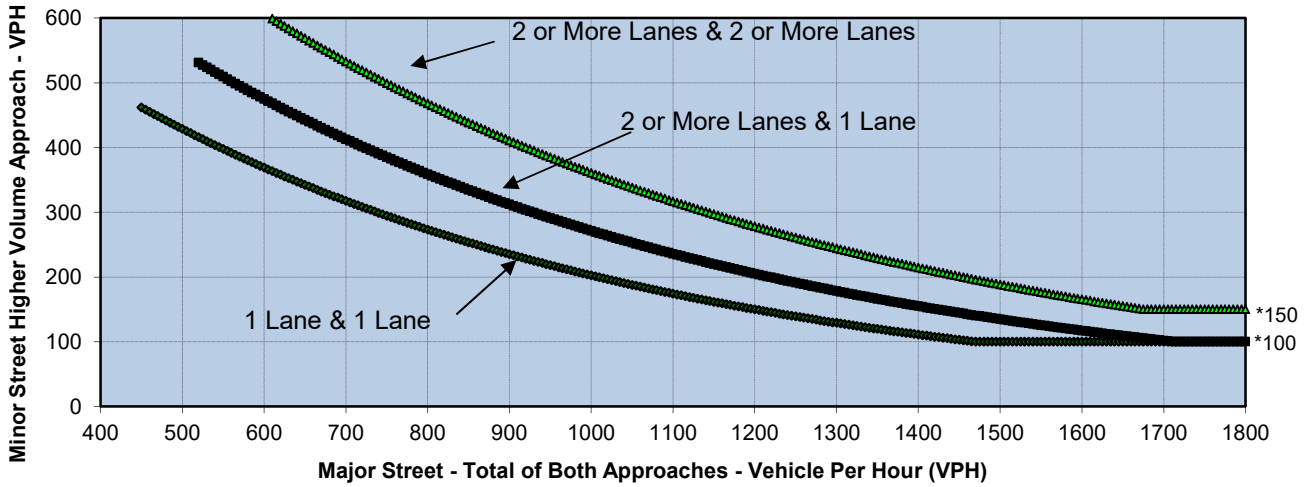
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,640**	**390**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	290	0	50	0
Through	1,320	830	0	0
Right	0	50	480	0
Total	1,610	880	530	0

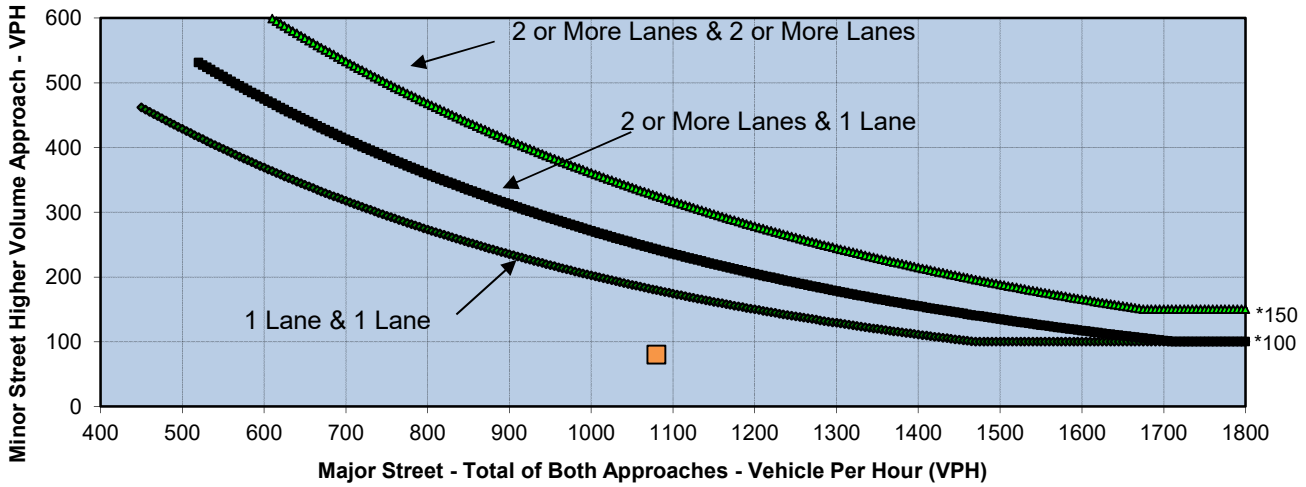
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,490	530	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18

Major Street	Kurtz Street
Minor Street	Hancock Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	30	460
Through	0	70	0	390
Right	0	10	100	100
Total	0	80	130	950

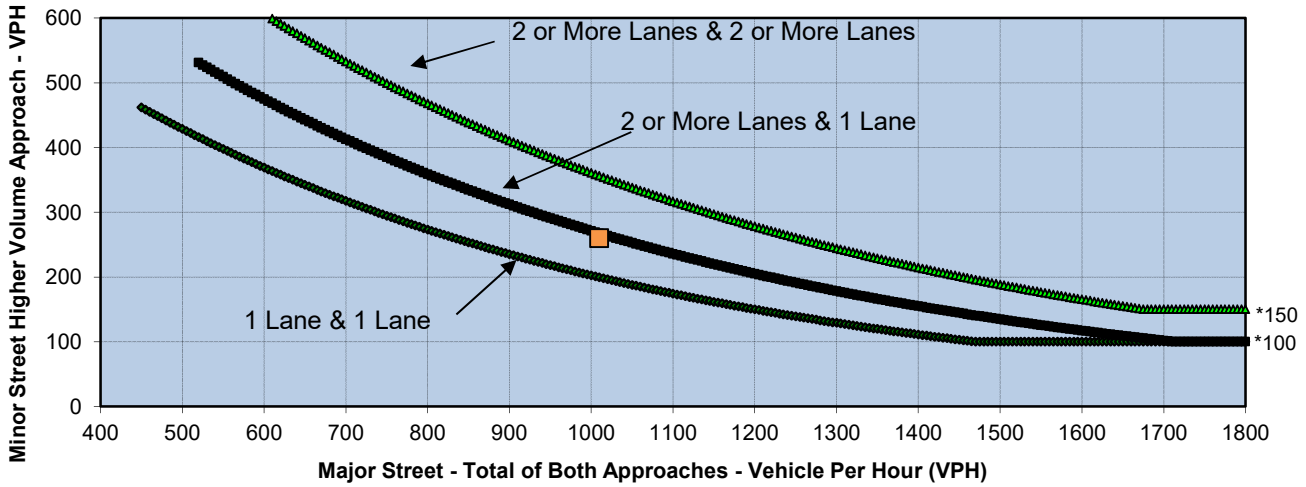
Major Street Direction

	North/South
X	East/West

	Major Street Kurtz Street	Minor Street Hancock Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,080**	**80**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	2A
Minor Street	Hancock Street	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	100	310
Through	0	170	0	310
Right	0	90	140	150
Total	0	260	240	770

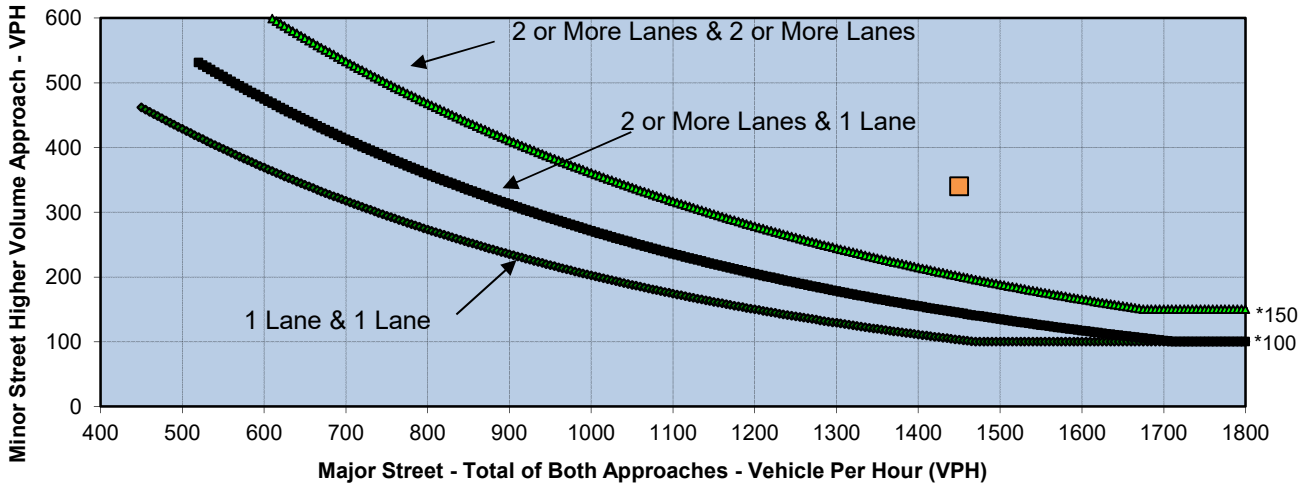
Major Street Direction

	North/South
X	East/West

	Major Street Kurtz Street	Minor Street Hancock Street	Warrant Met
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	1,010	260	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	350	0	100	0
Through	460	490	0	0
Right	0	150	240	0
Total	810	640	340	0

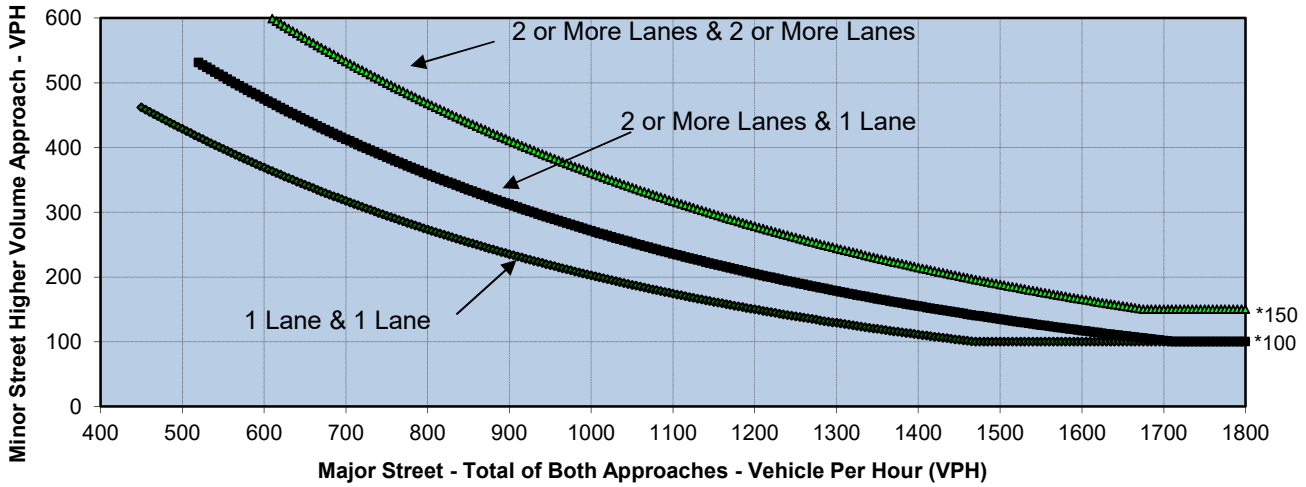
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,450**	**340**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	490	0	230	0
Through	880	430	0	0
Right	0	100	450	0
Total	1,370	530	680	0

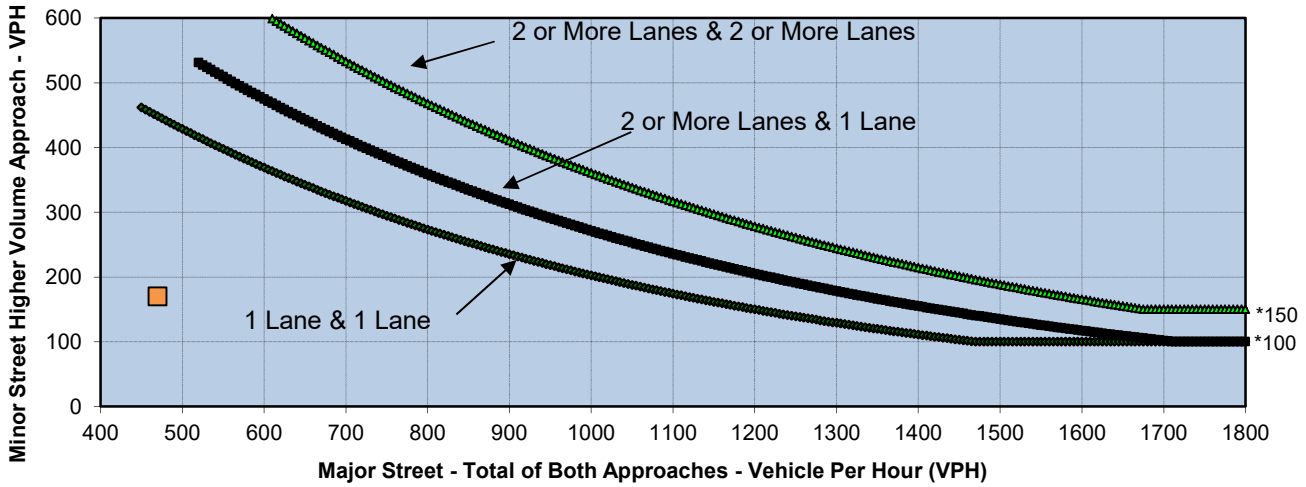
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	1,900	680	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street	Project	Midway & Old Town CPU
Minor Street	Greenwood Street	Scenario	2A
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	0	60
Through	0	420	20	90
Right	0	10	150	0
Total	0	470	170	150

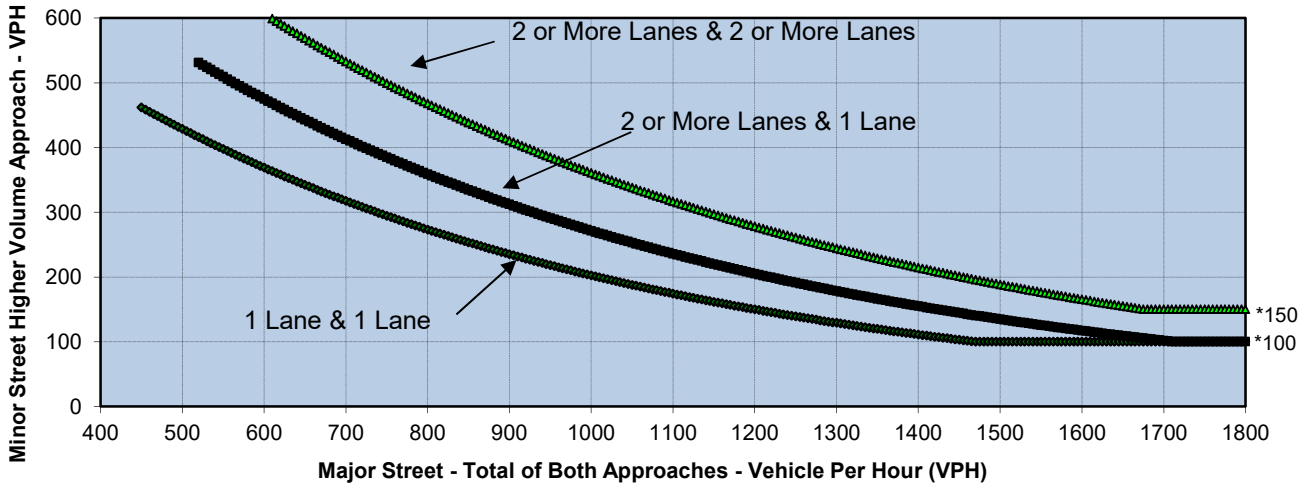
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**470**	**170**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	50	0	370
Through	0	820	30	340
Right	0	70	310	0
Total	0	940	340	710

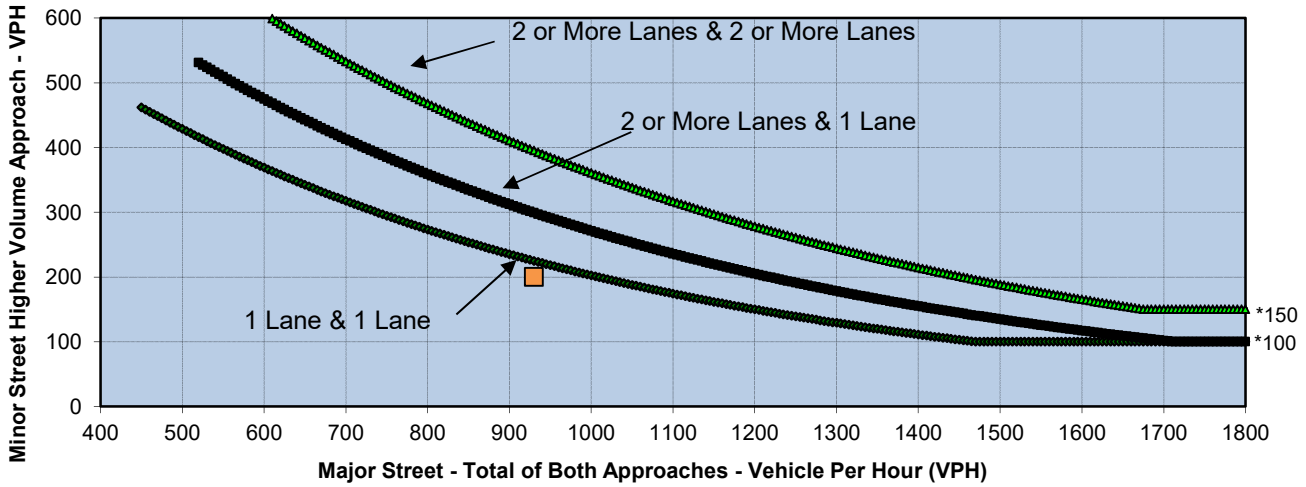
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	940	710	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	170	0	50	0
Through	330	370	0	0
Right	0	60	150	0
Total	500	430	200	0

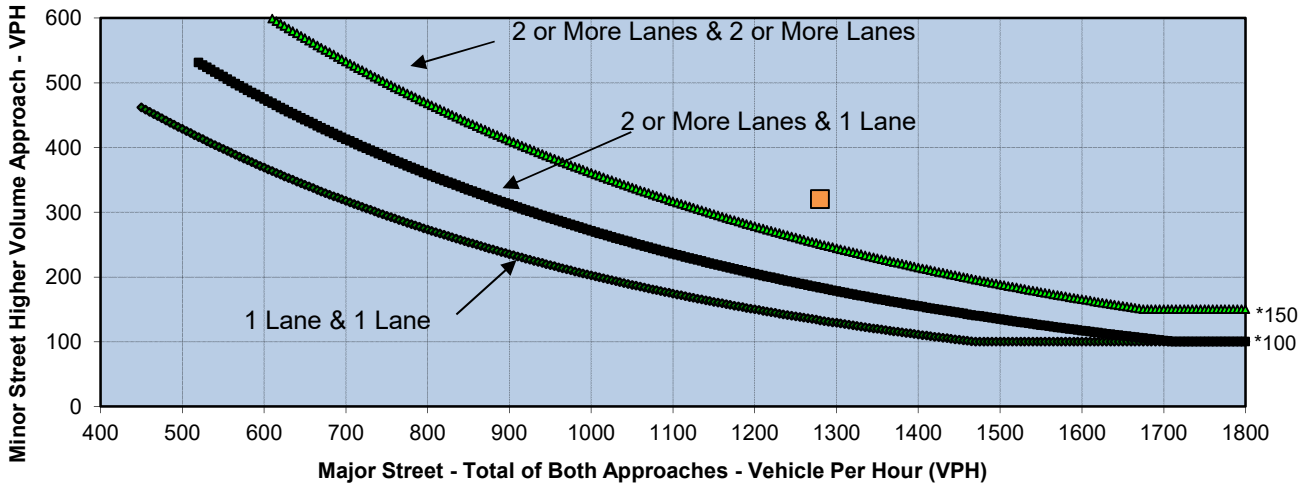
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**930**	**200**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	2A
Minor Street	Charles Lindbergh Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	180	0	120	0
Through	370	480	0	0
Right	0	250	200	0
Total	550	730	320	0

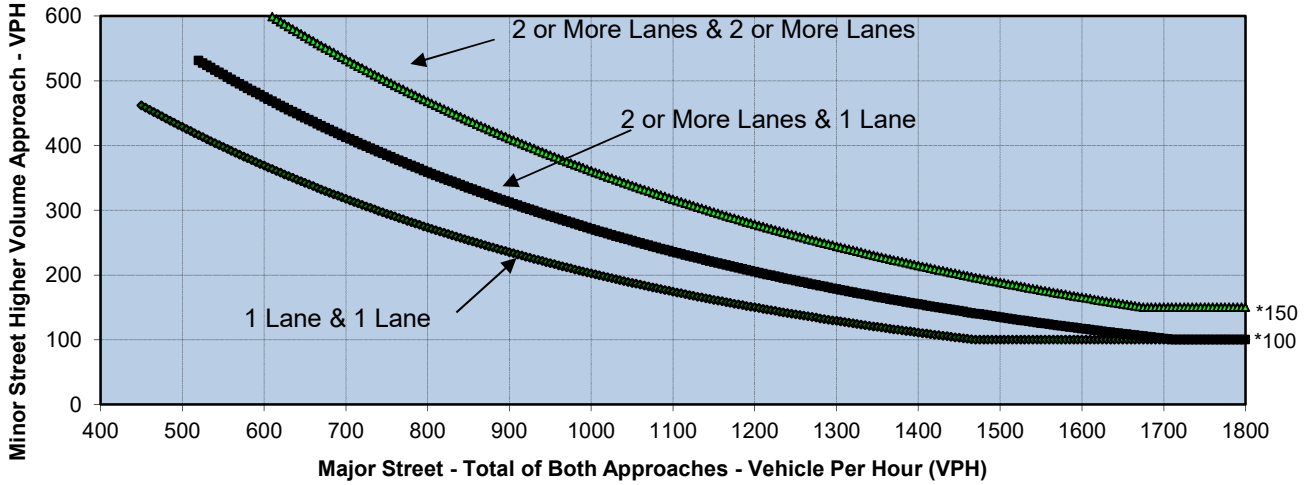
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,280	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	2A
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	50	0
Through	0	150	670	1,410
Right	0	250	0	40
Total	0	400	720	1,450

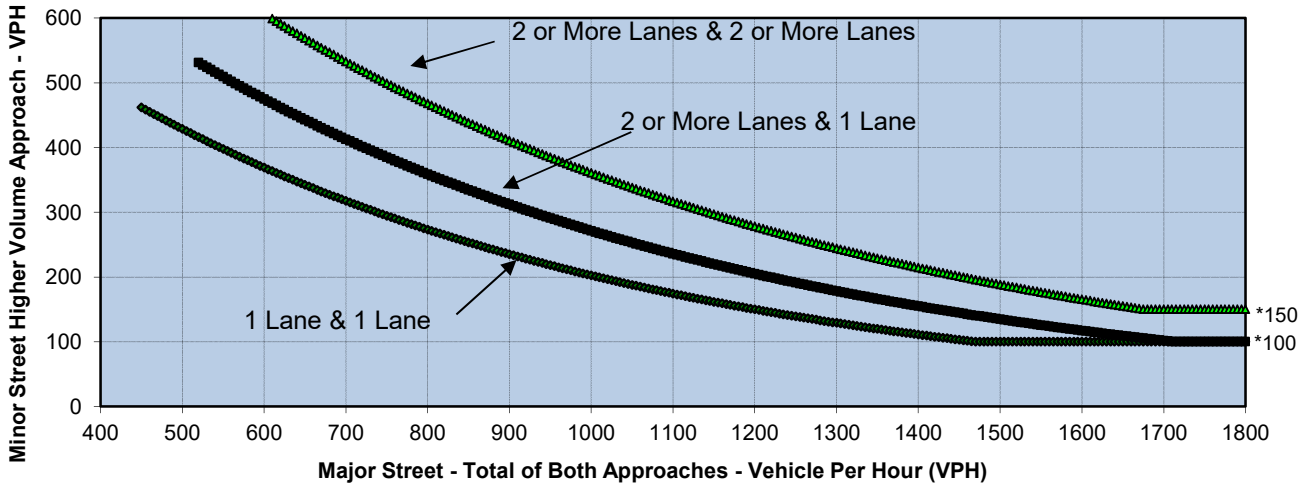
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**2,170**	**400**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	2A
Minor Street	Dutch Flats Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	60	0
Through	0	160	1,090	1,200
Right	0	240	0	70
Total	0	400	1,150	1,270

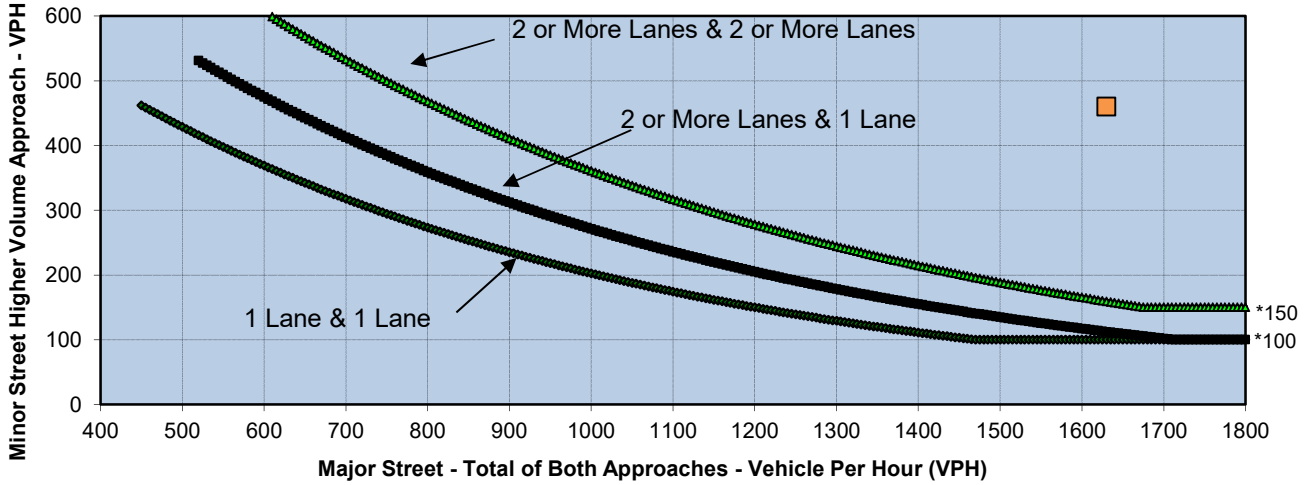
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,420	400	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65		Project	Midway & Old Town CPU
Major Street	Midway Drive	Scenario	2A
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	200	260	60	40
Through	400	450	10	180
Right	130	190	90	240
Total	730	900	160	460

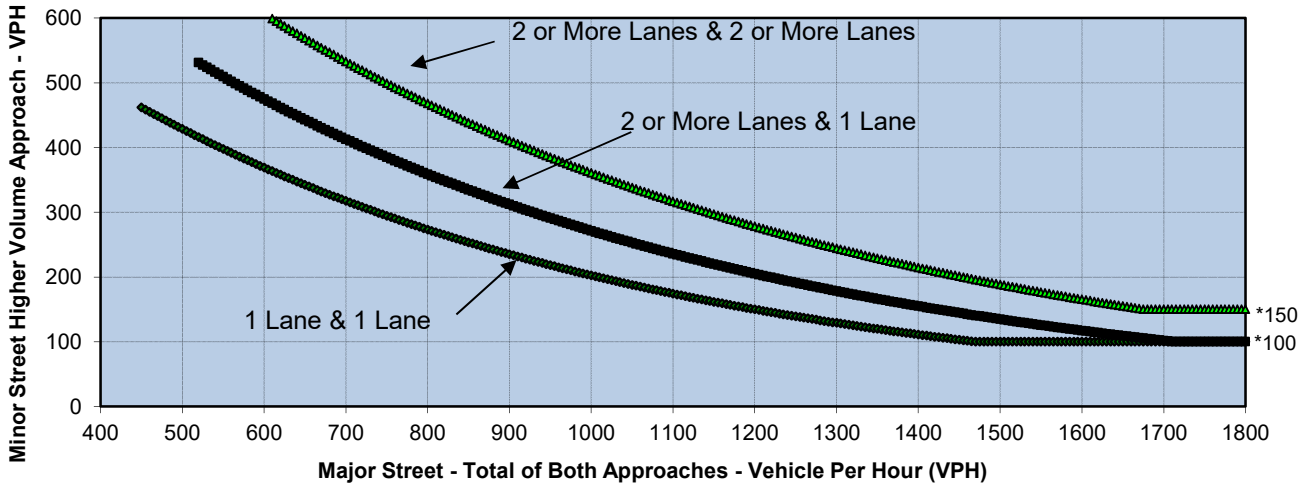
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,630**	**460**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	160	210	110	60
Through	510	520	20	110
Right	370	140	80	280
Total	1,040	870	210	450

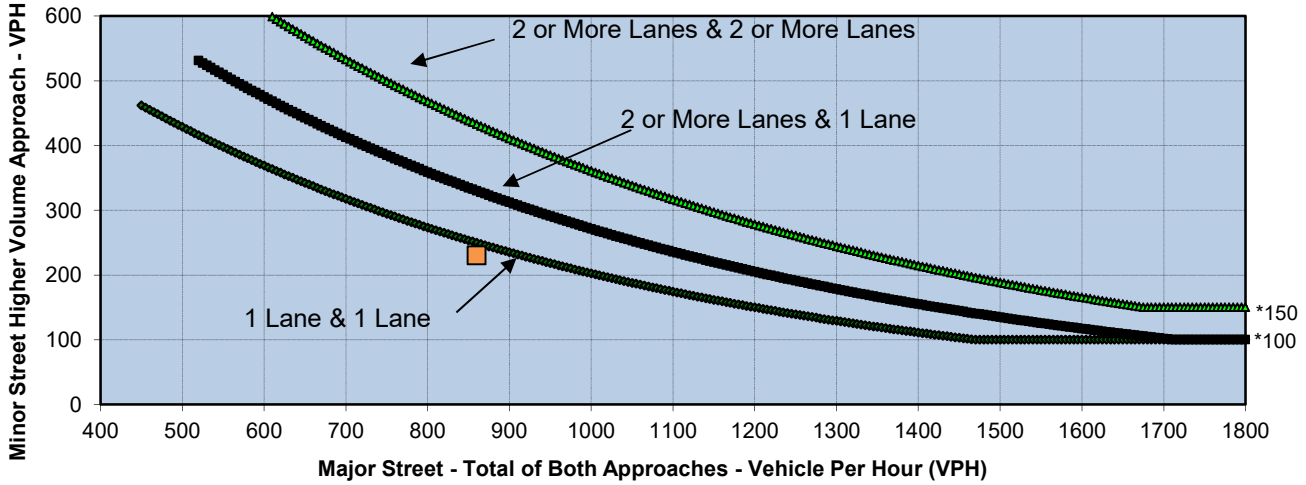
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,910	450	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	370	0	30	0
Through	210	190	0	0
Right	0	90	200	0
Total	580	280	230	0

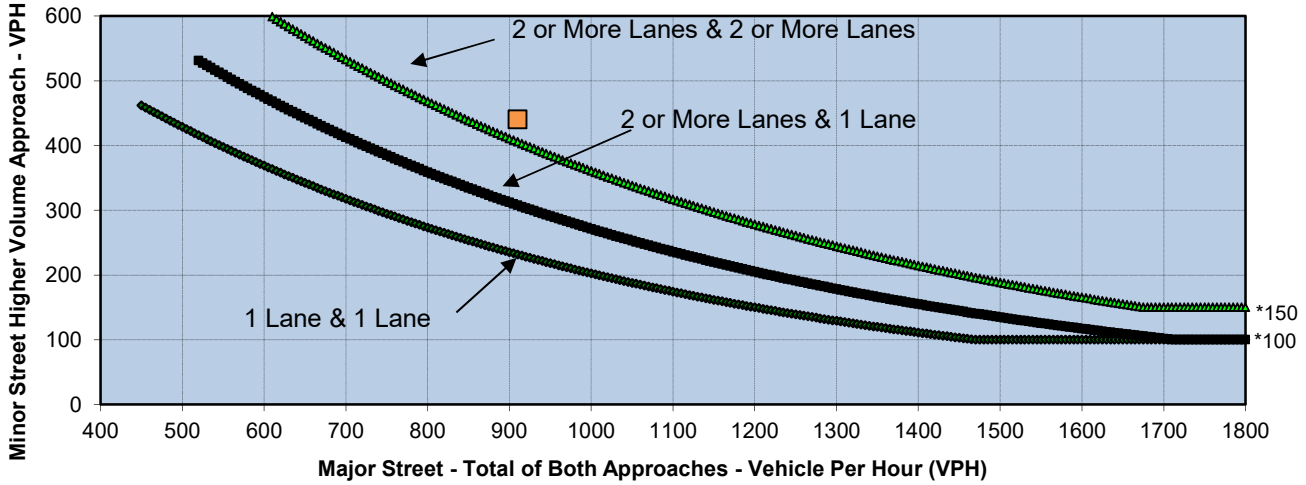
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**860**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	2A
Peak Hour	PM

Turn Movement Volumes

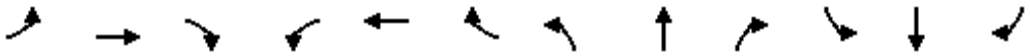
	NB	SB	EB	WB
Left	200	0	180	0
Through	140	270	0	0
Right	0	300	260	0
Total	340	570	440	0

Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	910	440	

Appendix I
Peak Hour Intersection Worksheets – Preferred Plan Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1140	390	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	50	1140	390	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1239	424	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	279	0	0	85	0	0	99	0	12	0
Lane Group Flow (vph)	54	1239	145	174	1446	111	522	435	64	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.0	37.7	37.7	10.8	44.4	44.4	31.4	33.2	33.2	35.8	35.8	
Effective Green, g (s)	4.4	39.0	39.0	11.2	45.8	45.8	31.8	34.0	34.0	34.8	37.0	
Actuated g/C Ratio	0.03	0.29	0.29	0.08	0.34	0.34	0.24	0.25	0.25	0.26	0.27	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	57	1469	451	284	1200	507	808	469	392	456	485	
v/s Ratio Prot	0.03	0.24		c0.05	c0.41		0.15	c0.23		c0.36	0.24	
v/s Ratio Perm			0.09			0.07			0.04			
v/c Ratio	0.95	0.84	0.32	0.61	1.21	0.22	0.65	0.93	0.16	1.38	0.87	
Uniform Delay, d1	65.2	45.1	37.6	59.8	44.6	31.8	46.5	49.3	39.4	50.1	46.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	98.4	6.1	1.9	2.7	100.4	1.0	1.3	24.8	0.3	185.0	14.8	
Delay (s)	163.6	51.2	39.5	62.5	145.0	32.8	47.9	74.1	39.7	235.1	61.5	
Level of Service	F	D	D	E	F	C	D	E	D	F	E	
Approach Delay (s)		51.9			125.0			56.9			164.3	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	97.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	540	1190	370	0	0	660
Future Volume (vph)	540	1190	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	587	1293	402	0	0	717
RTOR Reduction (vph)	0	301	0	0	0	0
Lane Group Flow (vph)	587	992	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	19.7	19.7	13.1			13.1
Effective Green, g (s)	19.7	19.7	13.1			13.1
Actuated g/C Ratio	0.42	0.42	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1445	1173	990			990
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.36				
v/c Ratio	0.41	0.85	0.41			0.72
Uniform Delay, d1	9.5	12.2	13.7			15.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	5.5	0.1			2.3
Delay (s)	9.5	17.7	13.8			17.5
Level of Service	A	B	B			B
Approach Delay (s)	15.2		13.8			17.5
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	46.8	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

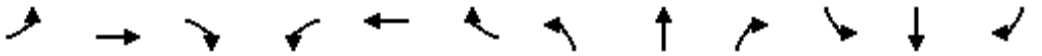
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	130	970	240	0	1200
Future Volume (Veh/h)	0	130	970	240	0	1200
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	141	1054	261	0	1304
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked	0.97	0.97			0.97	
vC, conflicting volume	1619	485			1315	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1482	340			1200	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	112	631			557	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	141	422	422	472	435	435	435
Volume Left	0	0	0	0	0	0	0
Volume Right	141	0	0	261	0	0	0
cSH	631	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.22	0.25	0.25	0.28	0.26	0.26	0.26
Queue Length 95th (ft)	21	0	0	0	0	0	0
Control Delay (s)	12.3	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	12.3	0.0			0.0		
Approach LOS	B						

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		

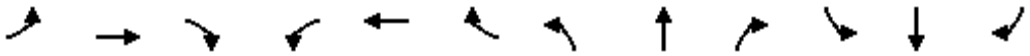


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	320	280	30	140	300	180	460	50	430	520	250
Future Volume (vph)	450	320	280	30	140	300	180	460	50	430	520	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1564	1770	3539	1574	1770	3482		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1564	1770	3539	1574	1770	3482		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	348	304	33	152	326	196	500	54	467	565	272
RTOR Reduction (vph)	0	0	56	0	0	45	0	6	0	0	0	123
Lane Group Flow (vph)	489	348	248	33	152	281	196	548	0	467	565	149
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	31.3	47.1	65.2	3.4	19.1	48.4	18.1	24.4		29.3	35.6	66.9
Effective Green, g (s)	32.2	48.0	67.0	4.4	20.1	48.4	19.0	25.3		30.2	36.5	66.9
Actuated g/C Ratio	0.26	0.39	0.55	0.04	0.16	0.40	0.16	0.21		0.25	0.30	0.55
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	467	732	858	63	583	624	275	722		438	1058	858
v/s Ratio Prot	c0.28	c0.19	0.04	0.02	0.04	0.11	0.11	c0.16		c0.26	0.16	0.04
v/s Ratio Perm			0.11			0.07						0.05
v/c Ratio	1.05	0.48	0.29	0.52	0.26	0.45	0.71	0.76		1.07	0.53	0.17
Uniform Delay, d1	44.9	27.6	14.7	57.8	44.5	27.0	48.9	45.5		45.9	35.7	13.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	54.5	0.2	0.2	7.6	1.0	0.5	8.4	4.6		61.7	1.1	0.1
Delay (s)	99.4	27.8	14.9	65.4	45.5	27.6	57.4	50.1		107.6	36.8	13.9
Level of Service	F	C	B	E	D	C	E	D		F	D	B
Approach Delay (s)		55.1			35.3			52.0			57.4	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	122.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	110	110	90	100	170	80	320	50	90	410	90
Future Volume (vph)	110	110	110	90	100	170	80	320	50	90	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	120	120	98	109	185	87	348	54	98	446	98
RTOR Reduction (vph)	0	0	96	0	0	159	0	7	0	0	0	47
Lane Group Flow (vph)	120	120	25	98	109	26	87	395	0	98	446	51
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	17.0	17.0	23.7	16.0	16.0	16.0	6.7	55.6		12.3	61.2	61.2
Effective Green, g (s)	17.9	17.9	24.5	16.9	16.9	16.9	7.1	56.5		12.7	62.1	62.1
Actuated g/C Ratio	0.15	0.15	0.20	0.14	0.14	0.14	0.06	0.47		0.11	0.52	0.52
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	250	264	317	249	262	218	203	1628		187	1831	819
v/s Ratio Prot	c0.07	0.07	0.00	0.06	c0.06		0.03	0.11		c0.06	c0.13	
v/s Ratio Perm			0.01			0.02						0.03
v/c Ratio	0.48	0.45	0.08	0.39	0.42	0.12	0.43	0.24		0.52	0.24	0.06
Uniform Delay, d1	46.8	46.6	38.6	46.9	47.0	45.0	54.5	19.0		50.8	16.0	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.27	0.71	0.71
Incremental Delay, d2	1.5	1.2	0.0	1.0	1.1	0.2	0.5	0.4		1.0	0.3	0.1
Delay (s)	48.2	47.8	38.6	47.9	48.1	45.3	55.0	19.3		65.8	11.6	10.4
Level of Service	D	D	D	D	D	D	E	B		E	B	B
Approach Delay (s)		44.9			46.7			25.7			19.7	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	20
Future Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.98		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1746			1724		1770	3475		1770	3517	
Flt Permitted		0.84			0.84		0.39	1.00		0.33	1.00	
Satd. Flow (perm)		1506			1482		730	3475		609	3517	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	22	22	33	22	33	65	717	98	33	598	22
RTOR Reduction (vph)	0	19	0	0	28	0	0	13	0	0	3	0
Lane Group Flow (vph)	0	58	0	0	60	0	65	802	0	33	617	0
Confl. Peds. (#/hr)			1			10						3
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.2			5.2		22.6	21.2		20.8	20.3	
Effective Green, g (s)		6.1			6.1		23.4	22.1		21.6	21.2	
Actuated g/C Ratio		0.15			0.15		0.57	0.54		0.53	0.52	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		223			219		461	1868		345	1814	
v/s Ratio Prot							c0.01	c0.23		0.00	0.18	
v/s Ratio Perm		0.04			c0.04		0.07			0.05		
v/c Ratio		0.26			0.27		0.14	0.43		0.10	0.34	
Uniform Delay, d1		15.5			15.5		4.0	5.7		4.7	5.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.2		0.1	0.2		0.0	0.1	
Delay (s)		15.7			15.8		4.0	5.9		4.8	5.9	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		15.7			15.8			5.7			5.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Future Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	370	1957	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	12	0	0	0	76	0	0	77	0	0	79
Lane Group Flow (vph)	239	1760	0	370	1957	250	130	359	151	250	304	117
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.8	42.6		10.4	44.3	53.5	8.5	24.0	34.4	9.2	24.7	33.5
Effective Green, g (s)	9.2	43.7		10.8	45.3	53.5	8.9	24.9	36.2	9.6	25.6	35.3
Actuated g/C Ratio	0.09	0.42		0.10	0.43	0.51	0.08	0.24	0.34	0.09	0.24	0.34
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	2074		353	2193	786	150	839	583	313	862	522
v/s Ratio Prot	0.07	c0.35		0.11	c0.38	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.80	0.85		1.05	0.89	0.32	0.87	0.43	0.26	0.80	0.35	0.22
Uniform Delay, d1	47.0	27.7		47.1	27.6	15.1	47.5	34.0	24.7	46.8	32.8	25.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	4.6		61.1	6.1	0.1	36.3	0.1	0.1	12.4	0.1	0.1
Delay (s)	59.8	32.2		108.2	33.6	15.2	83.8	34.1	24.8	59.2	32.9	25.1
Level of Service	E	C		F	C	B	F	C	C	E	C	C
Approach Delay (s)		35.5			41.8			40.2			39.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	30	600	90	140	680
Future Volume (vph)	120	30	600	90	140	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1742		3470		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1742		3470		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	33	652	98	152	739
RTOR Reduction (vph)	16	0	14	0	0	0
Lane Group Flow (vph)	147	0	736	0	152	739
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	8.9		30.4		8.6	43.5
Effective Green, g (s)	8.9		30.4		8.6	43.5
Actuated g/C Ratio	0.14		0.50		0.14	0.71
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	252		1718		247	2507
v/s Ratio Prot	c0.08		c0.21		c0.09	0.21
v/s Ratio Perm						
v/c Ratio	0.58		0.43		0.62	0.29
Uniform Delay, d1	24.5		9.9		24.8	3.3
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	3.4		0.8		4.5	0.3
Delay (s)	27.9		10.7		29.3	3.6
Level of Service	C		B		C	A
Approach Delay (s)	27.9		10.7			8.0
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		

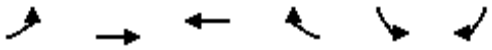
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	180	560	100	0	580
Future Volume (Veh/h)	0	180	560	100	0	580
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	609	109	0	630
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			491
pX, platoon unblocked	0.86					
vC, conflicting volume	980	364			720	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	658	364			720	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	69			100	
cM capacity (veh/h)	342	630			876	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	196	406	312	315	315
Volume Left	0	0	0	0	0
Volume Right	196	0	109	0	0
cSH	630	1700	1700	1700	1700
Volume to Capacity	0.31	0.24	0.18	0.19	0.19
Queue Length 95th (ft)	33	0	0	0	0
Control Delay (s)	13.3	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	13.3	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		



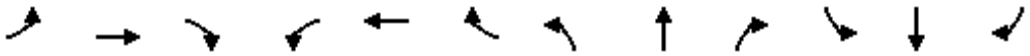
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	820	1290	660	420	160
Future Volume (vph)	0	820	1290	660	420	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	891	1402	717	457	174
RTOR Reduction (vph)	0	0	0	289	0	139
Lane Group Flow (vph)	0	891	1402	428	457	35
Confl. Peds. (#/hr)				8	8	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	8	1	
Permitted Phases						1
Actuated Green, G (s)		31.9	31.9	27.3	12.1	12.1
Effective Green, g (s)		31.9	31.9	26.8	12.1	12.1
Actuated g/C Ratio		0.52	0.52	0.44	0.20	0.20
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	3.0	2.5	2.5
Lane Grp Cap (vph)		1856	1856	1228	683	315
v/s Ratio Prot		0.25	c0.40	0.15	c0.13	
v/s Ratio Perm						0.02
v/c Ratio		0.48	0.76	0.35	0.67	0.11
Uniform Delay, d1		9.2	11.4	11.2	22.5	19.9
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	1.8	0.2	2.2	0.1
Delay (s)		9.4	13.2	11.4	24.7	20.1
Level of Service		A	B	B	C	C
Approach Delay (s)		9.4	12.6		23.5	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.8	Sum of lost time (s)	17.1
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



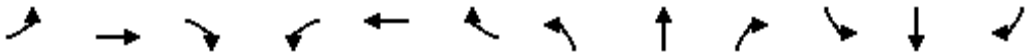
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	50	420	80	130	670
Future Volume (vph)	30	50	420	80	130	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.0	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1550	4946		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1550	4946		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	54	457	87	141	728
RTOR Reduction (vph)	0	48	13	0	0	0
Lane Group Flow (vph)	33	6	531	0	141	728
Confl. Peds. (#/hr)	4	11		9	9	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.9	11.9	70.8		13.1	88.3
Effective Green, g (s)	11.9	12.8	70.8		13.1	88.3
Actuated g/C Ratio	0.11	0.12	0.64		0.12	0.80
Clearance Time (s)	4.9	4.9	4.9		4.4	4.9
Vehicle Extension (s)	2.0	2.0	5.0		2.0	3.2
Lane Grp Cap (vph)	191	180	3183		210	4081
v/s Ratio Prot	c0.02		0.11		c0.08	c0.14
v/s Ratio Perm		0.00				
v/c Ratio	0.17	0.03	0.17		0.67	0.18
Uniform Delay, d1	44.6	43.1	7.8		46.4	2.5
Progression Factor	1.00	1.00	2.09		1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1		6.5	0.1
Delay (s)	44.7	43.1	16.5		52.9	2.6
Level of Service	D	D	B		D	A
Approach Delay (s)	43.8		16.5			10.8
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



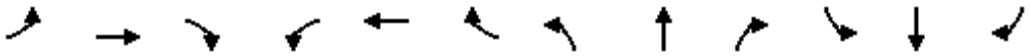
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	50	110	160	140	130	200	410	100	80	540	130
Future Volume (vph)	80	50	110	160	140	130	200	410	100	80	540	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.5	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.96		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.93		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1728		1770	4760		3433	3436	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1728		1770	4760		3433	3436	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	54	120	174	152	141	217	446	109	87	587	141
RTOR Reduction (vph)	0	87	0	0	29	0	0	34	0	0	17	0
Lane Group Flow (vph)	87	87	0	174	264	0	217	521	0	87	711	0
Confl. Peds. (#/hr)									120			
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	14.0	14.0		18.9	18.9		16.8	33.0		24.5	41.2	
Effective Green, g (s)	14.9	14.9		19.8	19.8		17.2	33.9		24.9	42.1	
Actuated g/C Ratio	0.14	0.14		0.18	0.18		0.16	0.31		0.23	0.38	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		3.9	3.9	
Lane Grp Cap (vph)	239	226		318	311		276	1466		777	1315	
v/s Ratio Prot	0.05	c0.05		0.10	c0.15		c0.12	0.11		0.03	c0.21	
v/s Ratio Perm												
v/c Ratio	0.36	0.38		0.55	0.85		0.79	0.36		0.11	0.54	
Uniform Delay, d1	43.2	43.4		41.0	43.7		44.6	29.6		33.8	26.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.94	0.95	
Incremental Delay, d2	0.9	1.1		1.0	18.3		12.7	0.7		0.1	1.6	
Delay (s)	44.2	44.4		42.1	62.0		57.3	30.2		31.9	26.8	
Level of Service	D	D		D	E		E	C		C	C	
Approach Delay (s)		44.4			54.6			37.9			27.4	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	20	90	20	50	30	620	90	130	640	80
Future Volume (vph)	40	20	20	90	20	50	30	620	90	130	640	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.97		1.00	0.89		1.00	0.98		1.00	0.98	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1749		1770	1664		1770	4972		3433	3467	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1749		1770	1664		1770	4972		3433	3467	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	22	98	22	54	33	674	98	141	696	87
RTOR Reduction (vph)	0	10	0	0	47	0	0	12	0	0	6	0
Lane Group Flow (vph)	0	77	0	98	29	0	33	760	0	141	777	0
Confl. Peds. (#/hr)			7	7			9		4	4		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		9.3		9.6	9.6		2.2	20.1		12.8	31.2	
Effective Green, g (s)		9.3		9.6	9.6		2.2	20.1		12.8	31.2	
Actuated g/C Ratio		0.13		0.13	0.13		0.03	0.28		0.18	0.44	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		227		237	223		54	1399		615	1514	
v/s Ratio Prot		c0.04		c0.06	0.02		c0.02	0.15		0.04	c0.22	
v/s Ratio Perm												
v/c Ratio		0.34		0.41	0.13		0.61	0.54		0.23	0.51	
Uniform Delay, d1		28.2		28.3	27.2		34.2	21.8		25.1	14.6	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.4	0.1		13.5	0.2		0.1	0.1	
Delay (s)		28.6		28.7	27.3		47.7	22.0		25.1	14.7	
Level of Service		C		C	C		D	C		C	B	
Approach Delay (s)		28.6			28.1			23.0			16.3	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	19.6
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	20	30	10	50	60	660	50	40	720	40
Future Volume (vph)	30	10	20	30	10	50	60	660	50	40	720	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.9	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1795	1583		1795	1583	1770	5032		1770	5046	
Flt Permitted		0.76	1.00		0.75	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1414	1583		1399	1583	1770	5032		1770	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	22	33	11	54	65	717	54	43	783	43
RTOR Reduction (vph)	0	0	19	0	0	47	0	10	0	0	8	0
Lane Group Flow (vph)	0	44	3	0	44	7	65	761	0	43	818	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		8						
Actuated Green, G (s)		7.4	7.4		7.4	7.4	4.4	33.1		2.5	31.2	
Effective Green, g (s)		7.4	7.4		6.5	7.4	4.4	33.1		2.5	31.2	
Actuated g/C Ratio		0.13	0.13		0.12	0.13	0.08	0.60		0.05	0.57	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		190	212		165	212	141	3028		80	2862	
v/s Ratio Prot							c0.04	0.15		c0.02	c0.16	
v/s Ratio Perm		0.03	0.00		c0.03	0.00						
v/c Ratio		0.23	0.01		0.27	0.03	0.46	0.25		0.54	0.29	
Uniform Delay, d1		21.3	20.6		22.1	20.7	24.2	5.1		25.7	6.1	
Progression Factor		1.00	1.00		1.00	1.00	0.81	0.62		1.00	1.00	
Incremental Delay, d2		0.6	0.0		0.9	0.1	2.0	0.2		6.8	0.3	
Delay (s)		21.9	20.7		23.0	20.8	21.6	3.3		32.5	6.4	
Level of Service		C	C		C	C	C	A		C	A	
Approach Delay (s)		21.5			21.7			4.8			7.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	220	1350	150	180	2200	380	100	270	180	140	70	170
Future Volume (vph)	220	1350	150	180	2200	380	100	270	180	140	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	7.8	5.9	5.9	5.9	5.9	5.9	5.9
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (prot)	3433	4726		1362	5085	1583	1611	1681	1610	1666	1402	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (perm)	3433	4726		1362	5085	1583	1611	1681	1610	1666	1402	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1467	163	196	2391	413	109	293	196	152	76	185
RTOR Reduction (vph)	0	1	0	75	0	34	74	0	0	0	65	0
Lane Group Flow (vph)	239	1649	0	101	2391	379	35	179	228	234	11	185
Confl. Peds. (#/hr)								9			45	18
Confl. Bikes (#/hr)											10	
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	8.0	62.9		62.9	51.1	67.3	35.1	16.2	16.2	16.2	16.2	13.0
Effective Green, g (s)	9.4	65.0		62.9	53.0	63.5	35.1	16.2	16.2	16.2	16.2	13.0
Actuated g/C Ratio	0.09	0.59		0.57	0.48	0.58	0.32	0.15	0.15	0.15	0.15	0.12
Clearance Time (s)	4.0	6.1		6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Vehicle Extension (s)	3.0	2.8		2.8	3.2	2.9	4.1	2.9	2.9	2.9	2.9	2.9
Lane Grp Cap (vph)	293	2792		778	2450	913	514	247	237	245	206	209
v/s Ratio Prot	c0.07	0.35			c0.47	0.05		0.11	c0.14	0.14		c0.10
v/s Ratio Perm				0.07		0.19	0.02				0.01	
v/c Ratio	0.82	0.59		0.13	0.98	0.42	0.07	0.72	0.96	0.96	0.05	0.89
Uniform Delay, d1	49.4	14.1		10.9	27.9	12.9	26.1	44.8	46.6	46.5	40.3	47.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.86	0.87	0.87	5.54	1.00
Incremental Delay, d2	15.9	0.9		0.3	13.3	0.3	0.1	9.8	47.1	44.3	0.1	32.8
Delay (s)	65.3	15.1		11.2	41.2	13.2	26.1	48.2	87.7	84.8	223.5	80.6
Level of Service	E	B		B	D	B	C	D	F	F	F	F
Approach Delay (s)		20.6			37.1					91.3		61.3
Approach LOS		C			D					F		E

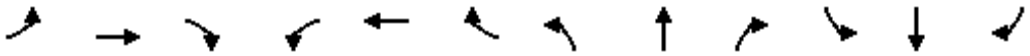
Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	85.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	170	30
Future Volume (vph)	170	30
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.9	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	185	33
RTOR Reduction (vph)	114	0
Lane Group Flow (vph)	104	0
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		1
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	13.0	
Effective Green, g (s)	13.0	
Actuated g/C Ratio	0.12	
Clearance Time (s)	5.9	
Vehicle Extension (s)	2.9	
Lane Grp Cap (vph)	329	
v/s Ratio Prot	0.04	
v/s Ratio Perm		
v/c Ratio	0.32	
Uniform Delay, d1	44.4	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	45.0	
Level of Service	D	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	130	100	90	140	80	70	50	110	30	80	90
Future Volume (vph)	50	130	100	90	140	80	70	50	110	30	80	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.95			0.97			0.94			0.94	
Flt Protected		0.99			0.99			0.99			0.99	
Satd. Flow (prot)		1757			1772			1716			1737	
Flt Permitted		0.90			0.79			0.86			0.94	
Satd. Flow (perm)		1587			1426			1500			1645	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	141	109	98	152	87	76	54	120	33	87	98
RTOR Reduction (vph)	0	40	0	0	24	0	0	41	0	0	36	0
Lane Group Flow (vph)	0	264	0	0	313	0	0	209	0	0	182	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		15.7			15.7			26.8			27.3	
Effective Green, g (s)		15.7			15.7			26.8			27.3	
Actuated g/C Ratio		0.30			0.30			0.52			0.53	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		483			434			780			872	
v/s Ratio Prot												
v/s Ratio Perm		0.17			c0.22			c0.14			0.11	
v/c Ratio		0.55			0.72			0.27			0.21	
Uniform Delay, d1		14.9			15.9			6.9			6.4	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.3			5.8			0.8			0.1	
Delay (s)		16.2			21.7			7.7			6.5	
Level of Service		B			C			A			A	
Approach Delay (s)		16.2			21.7			7.7			6.5	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	51.5	Sum of lost time (s)	9.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		

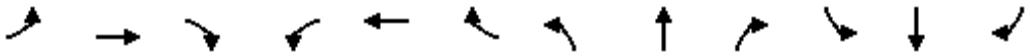
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	300	610	600	130	200	190
Future Volume (vph)	300	610	600	130	200	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	4950		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	4950		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	663	652	141	217	207
RTOR Reduction (vph)	0	0	19	0	0	172
Lane Group Flow (vph)	326	663	774	0	217	35
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	27.5	91.7	60.2		20.3	20.3
Effective Green, g (s)	27.5	91.7	60.2		20.3	20.3
Actuated g/C Ratio	0.23	0.76	0.50		0.17	0.17
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	405	3885	2483		299	267
v/s Ratio Prot	c0.18	0.13	c0.16		c0.12	
v/s Ratio Perm						0.02
v/c Ratio	0.80	0.17	0.31		0.73	0.13
Uniform Delay, d1	43.7	3.8	17.7		47.2	42.4
Progression Factor	1.14	0.17	1.00		1.00	1.00
Incremental Delay, d2	10.9	0.1	0.3		8.5	0.2
Delay (s)	60.8	0.7	17.9		55.7	42.6
Level of Service	E	A	B		E	D
Approach Delay (s)		20.5	17.9		49.3	
Approach LOS		C	B		D	

Intersection Summary			
HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

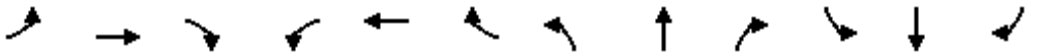
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Future Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.97						0.98	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1806						1831	
Flt Permitted	0.53		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	993		1583	1770	1806						1831	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	0	109	500	424	109	0	0	0	0	76	11
RTOR Reduction (vph)	0	0	92	292	12	0	0	0	0	0	9	0
Lane Group Flow (vph)	33	0	17	208	521	0	0	0	0	0	78	0
Turn Type	Perm		Perm	Split	NA						NA	
Protected Phases				8	8						6	
Permitted Phases	4		4									
Actuated Green, G (s)	7.5		7.5	19.5	19.5						7.9	
Effective Green, g (s)	7.5		7.5	19.5	19.5						7.9	
Actuated g/C Ratio	0.16		0.16	0.42	0.42						0.17	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	158		253	735	750						308	
v/s Ratio Prot				0.12	c0.29						c0.04	
v/s Ratio Perm	c0.03		0.01									
v/c Ratio	0.21		0.07	0.28	0.69						0.25	
Uniform Delay, d1	17.1		16.7	9.1	11.3						16.9	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.7		0.1	0.2	2.8						0.4	
Delay (s)	17.8		16.8	9.3	14.1						17.4	
Level of Service	B		B	A	B						B	
Approach Delay (s)		17.1			11.7			0.0			17.4	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

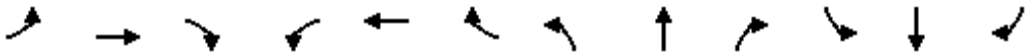
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1640	10	410	2430	0	0	0	0	390	300	150
Future Volume (vph)	0	1640	10	410	2430	0	0	0	0	390	300	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frt		1.00		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		5081		1770	6408					1681	1754	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		5081		1770	6408					1681	1754	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1783	11	446	2641	0	0	0	0	424	326	163
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	39
Lane Group Flow (vph)	0	1793	0	446	2641	0	0	0	0	352	398	124
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		52.0		33.2	89.9					35.3	35.3	35.3
Effective Green, g (s)		53.2		33.6	90.8					36.2	36.2	36.2
Actuated g/C Ratio		0.39		0.25	0.67					0.27	0.27	0.27
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2002		440	4309					450	470	424
v/s Ratio Prot		c0.35		c0.25	0.41							
v/s Ratio Perm										0.21	0.23	0.08
v/c Ratio		0.90		1.01	0.61					0.78	0.85	0.29
Uniform Delay, d1		38.3		50.7	12.3					45.7	46.8	39.2
Progression Factor		1.00		1.09	0.08					1.00	1.00	1.00
Incremental Delay, d2		6.8		16.4	0.1					8.0	12.7	0.1
Delay (s)		45.1		71.8	1.0					53.7	59.5	39.4
Level of Service		D		E	A					D	E	D
Approach Delay (s)		45.1			11.2			0.0			53.7	
Approach LOS		D			B			A			D	

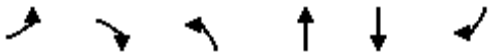
Intersection Summary			
HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



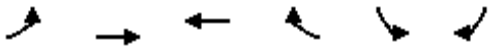
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	100	160	240	0	120	0	160	160	230	10
Future Volume (vph)	0	330	100	160	240	0	120	0	160	160	230	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3329		1749	3539		1770		1548	1770	1850	
Flt Permitted		1.00		0.41	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3329		748	3539		1770		1548	1770	1850	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	359	109	174	261	0	130	0	174	174	250	11
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	90	0	2	0
Lane Group Flow (vph)	0	453	0	174	261	0	130	0	84	174	259	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		62.1		77.1	77.1		14.9		62.1	23.8	23.8	
Effective Green, g (s)		63.0		77.5	78.0		15.3		63.0	24.7	24.7	
Actuated g/C Ratio		0.48		0.60	0.60		0.12		0.48	0.19	0.19	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1613		530	2123		208		750	336	351	
v/s Ratio Prot		0.14		c0.03	0.07		c0.07			0.10	c0.14	
v/s Ratio Perm				c0.17					0.05			
v/c Ratio		0.28		0.33	0.12		0.62		0.11	0.52	0.74	
Uniform Delay, d1		20.0		12.3	11.2		54.6		18.3	47.3	49.6	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		0.4		0.1	0.1		5.7		0.3	1.3	7.9	
Delay (s)		20.4		12.4	11.3		60.4		18.6	48.7	57.5	
Level of Service		C		B	B		E		B	D	E	
Approach Delay (s)		20.4			11.8			36.4			54.0	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	240	350	460	490	150
Future Volume (vph)	100	240	350	460	490	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.90		1.00	1.00	0.96	
Flt Protected	0.99		0.95	1.00	1.00	
Satd. Flow (prot)	1642		1770	5085	4907	
Flt Permitted	0.99		0.95	1.00	1.00	
Satd. Flow (perm)	1642		1770	5085	4907	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	261	380	500	533	163
RTOR Reduction (vph)	78	0	0	0	33	0
Lane Group Flow (vph)	292	0	380	500	663	0
Confl. Peds. (#/hr)		2				
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	25.5		32.2	86.5	50.3	
Effective Green, g (s)	25.5		31.8	86.5	49.4	
Actuated g/C Ratio	0.21		0.27	0.72	0.41	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	348		469	3665	2020	
v/s Ratio Prot	c0.18		c0.21	0.10	c0.14	
v/s Ratio Perm						
v/c Ratio	0.84		0.81	0.14	0.33	
Uniform Delay, d1	45.3		41.3	5.2	24.0	
Progression Factor	1.00		1.01	1.44	1.00	
Incremental Delay, d2	16.1		10.1	0.1	0.4	
Delay (s)	61.4		51.7	7.5	24.4	
Level of Service	E		D	A	C	
Approach Delay (s)	61.4			26.6	24.4	
Approach LOS	E			C	C	

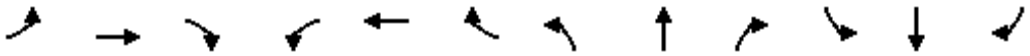
Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	140	80	40	30	40
Future Volume (Veh/h)	50	140	80	40	30	40
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	152	87	43	33	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1157	644			
pX, platoon unblocked						
vC, conflicting volume	130				368	108
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130				368	108
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				95	95
cM capacity (veh/h)	1455				608	945

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	54	152	130	76
Volume Left	54	0	0	33
Volume Right	0	0	43	43
cSH	1455	1700	1700	762
Volume to Capacity	0.04	0.09	0.08	0.10
Queue Length 95th (ft)	3	0	0	8
Control Delay (s)	7.6	0.0	0.0	10.2
Lane LOS	A			B
Approach Delay (s)	2.0		0.0	10.2
Approach LOS				B

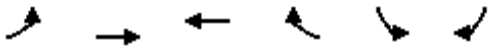
Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1970	0	0	2760	600	80	410	110	0	0	0
Future Volume (vph)	60	1970	0	0	2760	600	80	410	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frt	1.00	1.00			1.00	0.85		0.97				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1583		3419				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1583		3419				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	2141	0	0	3000	652	87	446	120	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	116	0	6	0	0	0	0
Lane Group Flow (vph)	65	2141	0	0	3000	536	0	647	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	10.9	88.4			73.1	73.1		36.8				
Effective Green, g (s)	11.3	89.3			74.0	74.0		37.7				
Actuated g/C Ratio	0.08	0.66			0.55	0.55		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	148	3363			2787	867		954				
v/s Ratio Prot	0.04	c0.42			c0.59			c0.19				
v/s Ratio Perm						0.34						
v/c Ratio	0.44	0.64			1.08	0.62		0.68				
Uniform Delay, d1	58.8	13.4			30.5	20.8		43.2				
Progression Factor	0.80	0.88			1.00	1.00		1.00				
Incremental Delay, d2	0.4	0.5			41.9	3.3		1.5				
Delay (s)	47.4	12.3			72.4	24.1		44.8				
Level of Service	D	B			E	C		D				
Approach Delay (s)		13.3			63.8			44.8			0.0	
Approach LOS		B			E			D			A	

Intersection Summary			
HCM 2000 Control Delay	44.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	640	400	340	0	0
Future Volume (Veh/h)	10	640	400	340	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	696	435	370	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		480	811			
pX, platoon unblocked	0.93				0.96	0.93
vC, conflicting volume	805				990	402
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	640				645	208
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	100
cM capacity (veh/h)	874				382	743

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	11	348	348	290	515
Volume Left	11	0	0	0	0
Volume Right	0	0	0	0	370
cSH	874	1700	1700	1700	1700
Volume to Capacity	0.01	0.20	0.20	0.17	0.30
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.2	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.1			0.0	
Approach LOS					

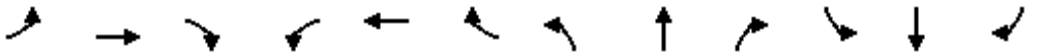
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	25.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	170	0	0	130	300	570
Future Volume (vph)	170	0	0	130	300	570
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	185	0	0	141	326	620

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	185	141	326	620
Volume Left (vph)	185	0	326	0
Volume Right (vph)	0	141	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.2	5.0	5.8	5.3
Degree Utilization, x	0.32	0.19	0.53	0.91
Capacity (veh/h)	567	702	611	675
Control Delay (s)	12.0	9.1	13.8	38.0
Approach Delay (s)	12.0	9.1	29.7	
Approach LOS	B	A	D	

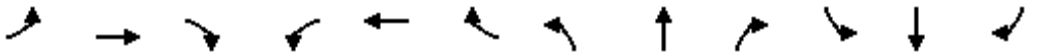
Intersection Summary			
Delay	24.8		
Level of Service	C		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Future Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	109	22	54	43	22	11	22	33	22	22	250	533

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	120	65	76	77	272	533
Volume Left (vph)	109	0	43	22	22	0
Volume Right (vph)	0	54	11	22	0	533
Hadj (s)	0.49	-0.55	0.06	-0.08	0.07	-0.67
Departure Headway (s)	7.1	6.1	6.7	6.1	5.5	4.8
Degree Utilization, x	0.24	0.11	0.14	0.13	0.42	0.71
Capacity (veh/h)	473	547	493	553	632	729
Control Delay (s)	11.1	8.6	10.9	10.1	11.3	17.5
Approach Delay (s)	10.2		10.9	10.1	15.4	
Approach LOS	B		B	B	C	

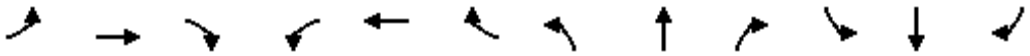
Intersection Summary				
Delay	13.9			
Level of Service	B			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	340	190	550	530	0	0	0	0	290	360	410
Future Volume (vph)	0	340	190	550	530	0	0	0	0	290	360	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	207	598	576	0	0	0	0	315	391	446
RTOR Reduction (vph)	0	0	90	0	0	0	0	0	0	0	0	222
Lane Group Flow (vph)	0	370	117	598	576	0	0	0	0	220	486	224
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		30.0	30.0	16.3	50.7					19.5	19.5	19.5
Effective Green, g (s)		30.9	30.9	16.7	51.6					20.4	20.4	20.4
Actuated g/C Ratio		0.39	0.39	0.21	0.65					0.25	0.25	0.25
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1366	611	716	2282					410	856	403
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.07							0.14	0.14	0.14
v/c Ratio		0.27	0.19	0.84	0.25					0.54	0.57	0.56
Uniform Delay, d1		16.8	16.3	30.3	6.0					25.7	26.0	25.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	8.0	0.3					0.7	0.5	0.9
Delay (s)		17.3	17.0	38.3	6.3					26.4	26.5	26.8
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.2			22.6			0.0			26.6	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

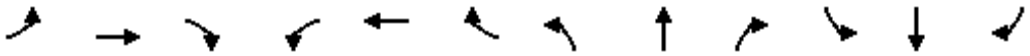
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	40	40	0	0	0	0	0	0	1490	160
Future Volume (Veh/h)	0	0	40	40	0	0	0	0	0	0	1490	160
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	43	43	0	0	0	0	0	0	1620	174
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1707	1707	627	583	1794	0	1794			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1707	1707	627	583	1794	0	1794			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	90	88	100	100	100			100		
cM capacity (veh/h)	59	90	426	356	80	1084	341			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	43	43	648	648	498
Volume Left	0	43	0	0	0
Volume Right	43	0	0	0	174
cSH	426	356	1700	1700	1700
Volume to Capacity	0.10	0.12	0.38	0.38	0.29
Queue Length 95th (ft)	8	10	0	0	0
Control Delay (s)	14.4	16.5	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	14.4	16.5	0.0		
Approach LOS	B	C			

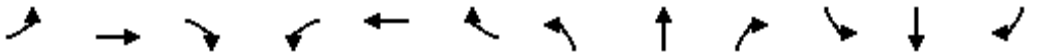
Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	190	160	190	370	0	0	0	0	460	1270	360
Future Volume (vph)	0	190	160	190	370	0	0	0	0	460	1270	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3480					1770	4917	
Flt Permitted		1.00	1.00		0.76					0.95	1.00	
Satd. Flow (perm)		1863	1583		2673					1770	4917	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	207	174	207	402	0	0	0	0	500	1380	391
RTOR Reduction (vph)	0	0	35	0	0	0	0	0	0	0	78	0
Lane Group Flow (vph)	0	207	139	0	609	0	0	0	0	500	1693	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		21.3	21.3		21.3					30.7	30.7	
Effective Green, g (s)		24.0	24.0		24.0					33.0	33.0	
Actuated g/C Ratio		0.37	0.37		0.37					0.51	0.51	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		687	584		986					898	2496	
v/s Ratio Prot		0.11									c0.34	
v/s Ratio Perm			0.09		c0.23					0.28		
v/c Ratio		0.30	0.24		0.62					0.56	0.68	
Uniform Delay, d1		14.5	14.2		16.8					11.0	12.0	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		1.1	1.0		2.9					2.5	1.5	
Delay (s)		15.7	15.1		19.7					13.5	13.5	
Level of Service		B	B		B					B	B	
Approach Delay (s)		15.4			19.7			0.0			13.5	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

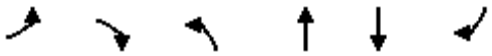


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	710	90	40	500	0	0	0	0	540	330	520
Future Volume (vph)	0	710	90	40	500	0	0	0	0	540	330	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3479		1770	3539						4661	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3479		1770	3539						4661	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	772	98	43	543	0	0	0	0	587	359	565
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	124
Lane Group Flow (vph)	0	856	0	43	543	0	0	0	0	0	946	441
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.5		2.8	28.0						25.0	25.0
Effective Green, g (s)		20.7		3.2	27.9						24.1	26.4
Actuated g/C Ratio		0.32		0.05	0.43						0.37	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1107		87	1519						1728	553
v/s Ratio Prot		c0.25		0.02	c0.15							
v/s Ratio Perm											0.20	c0.32
v/c Ratio		0.77		0.49	0.36						0.94dl	0.80
Uniform Delay, d1		20.0		30.1	12.5						16.1	16.9
Progression Factor		1.00		1.34	0.84						1.00	1.00
Incremental Delay, d2		5.3		1.5	0.6						0.2	7.3
Delay (s)		25.3		42.0	11.1						16.3	24.3
Level of Service		C		D	B						B	C
Approach Delay (s)		25.3			13.3			0.0			19.3	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



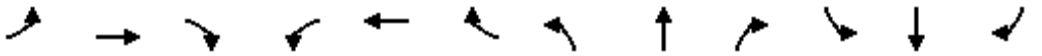
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	1120	1810	790	650	140
Future Volume (vph)	120	1120	1810	790	650	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2766	3433	5085	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2766	3433	5085	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	1217	1967	859	707	152
RTOR Reduction (vph)	0	19	0	0	0	1
Lane Group Flow (vph)	130	1198	1967	859	707	151
Confl. Peds. (#/hr)	129	61	34			
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	14.1	76.0	61.9	97.9	32.0	46.1
Effective Green, g (s)	14.1	76.0	61.9	97.9	32.0	46.1
Actuated g/C Ratio	0.12	0.63	0.52	0.82	0.27	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	1844	1770	4148	1356	660
v/s Ratio Prot	0.07	c0.34	c0.57	0.17	c0.14	0.03
v/s Ratio Perm		0.10				0.07
v/c Ratio	0.63	0.65	1.11	0.21	0.52	0.23
Uniform Delay, d1	50.5	13.7	29.1	2.4	37.5	24.9
Progression Factor	1.00	1.00	0.41	0.57	0.78	0.90
Incremental Delay, d2	5.8	0.8	53.4	0.0	1.4	0.2
Delay (s)	56.3	14.5	65.3	1.4	30.6	22.6
Level of Service	E	B	E	A	C	C
Approach Delay (s)	18.5			45.9	29.2	
Approach LOS	B			D	C	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	100	290	0	0	620	320	60	0	60	260	20	180
Future Volume (vph)	100	290	0	0	620	320	60	0	60	260	20	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.95	0.95	1.00
Frt	1.00	1.00			1.00	0.85		0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539			3539	1583		1695		1681	1697	1583
Flt Permitted	0.95	1.00			1.00	1.00		0.76		0.50	0.54	1.00
Satd. Flow (perm)	1770	3539			3539	1583		1321		892	961	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	315	0	0	674	348	65	0	65	283	22	196
RTOR Reduction (vph)	0	0	0	0	0	233	0	118	0	0	0	150
Lane Group Flow (vph)	109	315	0	0	674	115	0	12	0	153	152	46
Turn Type	Prot	NA			NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		7
Actuated Green, G (s)	4.6	28.2			19.6	19.6		5.3		14.0	14.0	14.0
Effective Green, g (s)	4.6	28.2			19.6	19.6		5.3		14.0	14.0	14.0
Actuated g/C Ratio	0.08	0.47			0.33	0.33		0.09		0.24	0.24	0.24
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	136	1677			1165	521		117		209	226	372
v/s Ratio Prot	c0.06	0.09			c0.19							
v/s Ratio Perm						0.07		c0.01		c0.17	0.16	0.03
v/c Ratio	0.80	0.19			0.58	0.22		0.10		0.73	0.67	0.12
Uniform Delay, d1	27.0	9.0			16.5	14.4		24.9		21.0	20.7	17.9
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	27.7	0.2			2.1	1.0		0.4		12.4	7.7	0.2
Delay (s)	54.7	9.3			18.6	15.4		25.3		33.4	28.3	18.1
Level of Service	D	A			B	B		C		C	C	B
Approach Delay (s)		21.0			17.5			25.3			25.9	
Approach LOS		C			B			C			C	

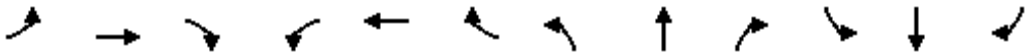
Intersection Summary			
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	59.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



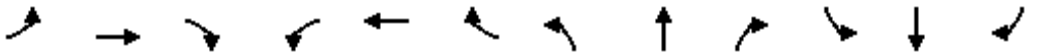
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	220	60	330	610	0	0	0	0	170	30	240
Future Volume (vph)	0	220	60	330	610	0	0	0	0	170	30	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3413		1763	1863					1681	1708	1583
Flt Permitted		1.00		0.57	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3413		1051	1863					1681	1708	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	239	65	359	663	0	0	0	0	185	33	261
RTOR Reduction (vph)	0	31	0	0	0	0	0	0	0	0	0	76
Lane Group Flow (vph)	0	273	0	359	663	0	0	0	0	100	118	185
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Perm	NA					Perm	NA	custom
Protected Phases		7			8						6	7
Permitted Phases				8						6		6
Actuated Green, G (s)		11.4		26.2	26.2					10.0	10.0	21.4
Effective Green, g (s)		11.4		26.5	26.5					12.2	12.2	25.8
Actuated g/C Ratio		0.18		0.43	0.43					0.20	0.20	0.42
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		629		450	798					331	337	706
v/s Ratio Prot		c0.08			c0.36							0.06
v/s Ratio Perm				0.34						0.06	0.07	0.06
v/c Ratio		0.43		0.80	0.83					0.30	0.35	0.26
Uniform Delay, d1		22.3		15.3	15.7					21.2	21.4	11.8
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5		8.9	7.0					0.5	0.6	0.2
Delay (s)		22.8		24.2	22.7					21.7	22.0	12.0
Level of Service		C		C	C					C	C	B
Approach Delay (s)		22.8			23.2			0.0			16.5	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	11.7
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



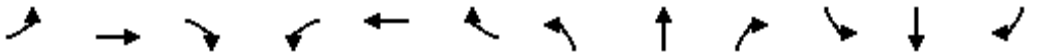
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Future Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1697		1770	4981		1770	4955	
Flt Permitted	0.46	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	864	1710		1326	1697		1770	4981		1770	4955	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1446	228	152	804	141
RTOR Reduction (vph)	0	21	0	0	59	0	0	23	0	0	26	0
Lane Group Flow (vph)	22	45	0	478	235	0	43	1651	0	152	919	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	33.9	33.9		33.2	33.2		3.6	33.3		9.3	38.8	
Effective Green, g (s)	33.9	33.9		33.6	33.6		3.6	34.7		9.8	40.9	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.04	0.38		0.11	0.45	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	324	641		492	630		70	1911		191	2241	
v/s Ratio Prot		0.03			0.14		0.02	c0.33		c0.09	0.19	
v/s Ratio Perm	0.03			c0.36								
v/c Ratio	0.07	0.07		0.97	0.37		0.61	0.86		0.80	0.41	
Uniform Delay, d1	18.1	18.1		27.9	20.7		42.7	25.7		39.3	16.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		33.1	0.4		10.7	5.5		20.1	0.6	
Delay (s)	18.1	18.2		61.1	21.1		53.4	31.2		59.4	17.2	
Level of Service	B	B		E	C		D	C		E	B	
Approach Delay (s)		18.2			45.8			31.7			23.0	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	12.3
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	680	580	170	140	720	160	300	690	110	110	710	260
Future Volume (vph)	680	580	170	140	720	160	300	690	110	110	710	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3419		1770	3432		1770	4971		1770	5085	1571
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3419		1770	3432		1770	4971		1770	5085	1571
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	739	630	185	152	783	174	326	750	120	120	772	283
RTOR Reduction (vph)	0	20	0	0	15	0	0	17	0	0	0	51
Lane Group Flow (vph)	739	795	0	152	942	0	326	853	0	120	772	232
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	40.6	57.2		15.0	31.0		18.6	29.7		9.2	20.2	60.8
Effective Green, g (s)	41.0	58.4		15.4	32.8		19.0	30.6		9.6	21.2	61.6
Actuated g/C Ratio	0.32	0.45		0.12	0.25		0.15	0.24		0.07	0.16	0.47
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	558	1535		209	865		258	1170		130	829	744
v/s Ratio Prot	c0.42	0.23		0.09	c0.27		c0.18	0.17		0.07	c0.15	0.10
v/s Ratio Perm												0.05
v/c Ratio	1.32	0.52		0.73	1.09		1.26	0.73		0.92	0.93	0.31
Uniform Delay, d1	44.5	25.7		55.3	48.6		55.5	45.9		59.8	53.7	21.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	158.1	0.4		10.2	57.7		145.8	4.0		55.0	18.4	0.1
Delay (s)	202.6	26.1		65.5	106.3		201.3	49.9		114.8	72.1	21.2
Level of Service	F	C		E	F		F	D		F	E	C
Approach Delay (s)		110.0			100.7			91.2			64.2	
Approach LOS		F			F			F			E	

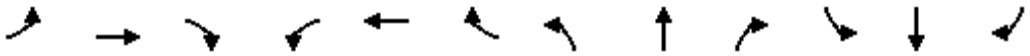
Intersection Summary			
HCM 2000 Control Delay	92.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	360	160	330	410	110	230	120	210	80	150	100
Future Volume (vph)	120	360	160	330	410	110	230	120	210	80	150	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	391	174	359	446	120	250	130	228	87	163	109
RTOR Reduction (vph)	0	0	95	0	0	74	0	0	154	0	0	85
Lane Group Flow (vph)	130	391	79	359	446	46	250	130	74	87	163	24
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.6	32.8	40.4	10.9	34.1	34.1	7.6	20.8	31.7	7.3	20.5	20.5
Effective Green, g (s)	10.0	33.7	41.2	11.3	35.0	35.0	8.0	20.2	29.5	7.7	20.0	20.0
Actuated g/C Ratio	0.11	0.37	0.46	0.12	0.39	0.39	0.09	0.22	0.33	0.09	0.22	0.22
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	195	1319	1270	429	1370	612	303	416	516	150	1125	350
v/s Ratio Prot	0.07	0.11	0.01	c0.10	c0.13		c0.07	c0.07	0.02	0.05	0.03	
v/s Ratio Perm			0.02			0.03			0.03			0.02
v/c Ratio	0.67	0.30	0.06	0.84	0.33	0.08	0.83	0.31	0.14	0.58	0.14	0.07
Uniform Delay, d1	38.6	20.0	13.8	38.6	19.4	17.5	40.5	29.3	21.5	39.8	28.3	27.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.6	0.0	12.7	0.6	0.2	15.8	0.7	0.0	3.4	0.1	0.1
Delay (s)	45.1	20.6	13.8	51.4	20.1	17.7	56.3	30.0	21.6	43.1	28.4	28.0
Level of Service	D	C	B	D	C	B	E	C	C	D	C	C
Approach Delay (s)		23.5			31.9			37.7			31.9	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

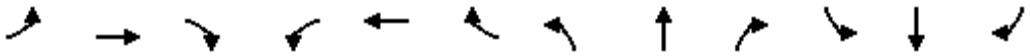


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	220	70	20	140	220	50	180	250	20	20	30
Future Volume (vph)	140	220	70	20	140	220	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.92			0.93			0.94	
Flt Protected		0.98			1.00			0.99			0.99	
Satd. Flow (prot)		1785			1712			1691			1728	
Flt Permitted		0.77			0.97			0.96			0.80	
Satd. Flow (perm)		1395			1664			1634			1398	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	239	76	22	152	239	54	196	272	22	22	33
RTOR Reduction (vph)	0	10	0	0	42	0	0	57	0	0	23	0
Lane Group Flow (vph)	0	457	0	0	371	0	0	465	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		39.1			39.1			20.3			20.3	
Effective Green, g (s)		40.0			40.0			21.2			21.2	
Actuated g/C Ratio		0.58			0.58			0.31			0.31	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		806			961			500			428	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.22			c0.28			0.04	
v/c Ratio		0.57			0.39			0.93			0.13	
Uniform Delay, d1		9.2			7.9			23.3			17.3	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.5			1.2			23.8			0.0	
Delay (s)		9.7			9.1			47.1			17.4	
Level of Service		A			A			D			B	
Approach Delay (s)		9.7			9.1			47.1			17.4	
Approach LOS		A			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	440	160	240	680	150	150
Future Volume (vph)	440	160	240	680	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4843		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4843		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	174	261	739	163	163
RTOR Reduction (vph)	85	0	0	0	0	124
Lane Group Flow (vph)	567	0	261	739	163	39
Confl. Peds. (#/hr)		7	7		30	15
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	21.5		10.8	36.7	13.4	13.4
Effective Green, g (s)	23.4		11.2	36.7	14.3	14.3
Actuated g/C Ratio	0.39		0.19	0.61	0.24	0.24
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1891		330	2168	422	377
v/s Ratio Prot	0.12		c0.15	c0.21	c0.09	0.02
v/s Ratio Perm						
v/c Ratio	0.30		0.79	0.34	0.39	0.10
Uniform Delay, d1	12.6		23.2	5.7	19.1	17.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4		11.4	0.4	0.2	0.0
Delay (s)	13.0		34.6	6.1	19.3	17.8
Level of Service	B		C	A	B	B
Approach Delay (s)	13.0			13.6	18.6	
Approach LOS	B			B	B	

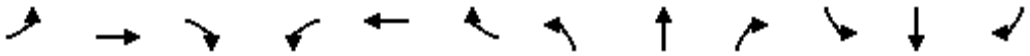
Intersection Summary			
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	59.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	10	20	40	10	40	30	150	30	50	180	40
Future Volume (vph)	20	10	20	40	10	40	30	150	30	50	180	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	11	22	43	11	43	33	163	33	54	196	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	97	229	293
Volume Left (vph)	22	43	33	54
Volume Right (vph)	22	43	33	43
Hadj (s)	-0.13	-0.14	-0.02	-0.02
Departure Headway (s)	5.1	5.1	4.6	4.6
Degree Utilization, x	0.08	0.14	0.29	0.37
Capacity (veh/h)	619	637	744	756
Control Delay (s)	8.6	8.9	9.5	10.2
Approach Delay (s)	8.6	8.9	9.5	10.2
Approach LOS	A	A	A	B

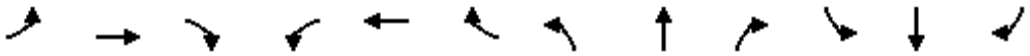
Intersection Summary			
Delay	9.7		
Level of Service	A		
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Future Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	22	22	33	22	33	152	33	43	130	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	77	77	218	238
Volume Left (vph)	33	22	33	43
Volume Right (vph)	22	22	33	65
Hadj (s)	-0.05	-0.08	-0.03	-0.09
Departure Headway (s)	5.0	5.0	4.5	4.5
Degree Utilization, x	0.11	0.11	0.28	0.30
Capacity (veh/h)	646	649	757	768
Control Delay (s)	8.6	8.6	9.3	9.3
Approach Delay (s)	8.6	8.6	9.3	9.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.1			
Level of Service	A			
Intersection Capacity Utilization	31.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	100	20	20	30	260	300	10	100	20
Future Volume (vph)	20	20	20	100	20	20	30	260	300	10	100	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	109	22	22	33	283	326	11	109	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	153	316	326	142
Volume Left (vph)	22	109	33	0	11
Volume Right (vph)	22	22	0	326	22
Hadj (s)	-0.10	0.09	0.09	-0.67	-0.04
Departure Headway (s)	5.8	5.7	5.4	4.7	5.3
Degree Utilization, x	0.11	0.24	0.48	0.42	0.21
Capacity (veh/h)	562	577	651	754	639
Control Delay (s)	9.4	10.6	12.0	9.8	9.7
Approach Delay (s)	9.4	10.6	10.9		9.7
Approach LOS	A	B	B		A

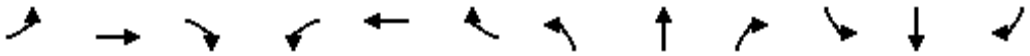
Intersection Summary				
Delay	10.6			
Level of Service	B			
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	30	20	40	40	50	150
Future Volume (vph)	30	20	40	40	50	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	43	43	54	163

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	55	86	217
Volume Left (vph)	0	43	54
Volume Right (vph)	22	0	163
Hadj (s)	-0.21	0.13	-0.37
Departure Headway (s)	4.2	4.5	3.9
Degree Utilization, x	0.06	0.11	0.23
Capacity (veh/h)	800	744	900
Control Delay (s)	7.5	8.1	8.0
Approach Delay (s)	7.5	8.1	8.0
Approach LOS	A	A	A

Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Future Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	54	33	33	22	152	109	22	43	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	283	87
Volume Left (vph)	22	54	22	22
Volume Right (vph)	22	33	109	22
Hadj (s)	-0.10	-0.04	-0.18	-0.07
Departure Headway (s)	4.8	4.8	4.3	4.6
Degree Utilization, x	0.09	0.16	0.34	0.11
Capacity (veh/h)	679	691	806	728
Control Delay (s)	8.3	8.7	9.5	8.2
Approach Delay (s)	8.3	8.7	9.5	8.2
Approach LOS	A	A	A	A

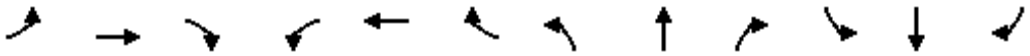
Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	38.2%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	110	90	10	40	20	260	270	40	20	50	80
Future Volume (vph)	290	110	90	10	40	20	260	270	40	20	50	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.96		1.00	0.98		1.00	0.91	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760			1769		1763	1821		1764	1665	
Flt Permitted		0.77			0.93		0.67	1.00		0.48	1.00	
Satd. Flow (perm)		1404			1660		1238	1821		890	1665	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	120	98	11	43	22	283	293	43	22	54	87
RTOR Reduction (vph)	0	14	0	0	13	0	0	7	0	0	50	0
Lane Group Flow (vph)	0	519	0	0	63	0	283	329	0	22	91	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		
Actuated Green, G (s)		24.5			24.5		24.4	24.4		24.4	24.4	
Effective Green, g (s)		24.5			24.5		24.4	24.4		24.4	24.4	
Actuated g/C Ratio		0.43			0.43		0.43	0.43		0.43	0.43	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		4.4	4.4		2.1	2.1	
Lane Grp Cap (vph)		604			714		530	780		381	713	
v/s Ratio Prot								0.18			0.05	
v/s Ratio Perm		c0.37			0.04		c0.23			0.02		
v/c Ratio		0.86			0.09		0.53	0.42		0.06	0.13	
Uniform Delay, d1		14.6			9.6		12.0	11.3		9.5	9.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.2			0.0		3.8	1.7		0.3	0.4	
Delay (s)		25.9			9.6		15.9	13.0		9.8	10.2	
Level of Service		C			A		B	B		A	B	
Approach Delay (s)		25.9			9.6			14.3			10.1	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	56.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	430	160	230	720	90	110	20	270	20	10	30
Future Volume (vph)	50	430	160	230	720	90	110	20	270	20	10	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.98			0.91			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1769	4878		1770	3471			1646			1706	
Flt Permitted	0.32	1.00		0.31	1.00			0.89			0.82	
Satd. Flow (perm)	587	4878		573	3471			1478			1424	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	467	174	250	783	98	120	22	293	22	11	33
RTOR Reduction (vph)	0	82	0	0	12	0	0	127	0	0	24	0
Lane Group Flow (vph)	54	559	0	250	869	0	0	308	0	0	42	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	22.5	20.3		33.3	26.7			15.5			15.5	
Effective Green, g (s)	23.3	21.3		33.7	27.6			16.4			16.4	
Actuated g/C Ratio	0.40	0.36		0.58	0.47			0.28			0.28	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	285	1773		511	1634			413			398	
v/s Ratio Prot	0.01	0.11		c0.07	c0.25							
v/s Ratio Perm	0.07			0.21				c0.21			0.03	
v/c Ratio	0.19	0.32		0.49	0.53			0.74			0.11	
Uniform Delay, d1	11.0	13.4		6.6	10.9			19.2			15.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.5		0.3	1.2			6.3			0.0	
Delay (s)	11.1	13.9		6.8	12.2			25.5			15.7	
Level of Service	B	B		A	B			C			B	
Approach Delay (s)		13.7			11.0			25.5			15.7	
Approach LOS		B			B			C			B	

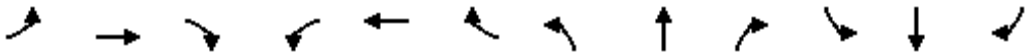
Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	58.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Future Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	22	22	22	22	22	22	174	43	65	130	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	120	66	239	271
Volume Left (vph)	76	22	22	65
Volume Right (vph)	22	22	43	76
Hadj (s)	0.05	-0.10	-0.06	-0.09
Departure Headway (s)	5.3	5.2	4.7	4.6
Degree Utilization, x	0.18	0.10	0.31	0.35
Capacity (veh/h)	618	611	732	741
Control Delay (s)	9.4	8.7	9.8	10.1
Approach Delay (s)	9.4	8.7	9.8	10.1
Approach LOS	A	A	A	B

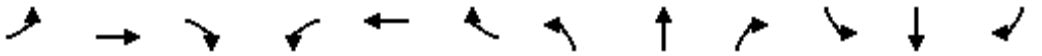
Intersection Summary			
Delay	9.7		
Level of Service	A		
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Future Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	43	11	11	22	65	163	11	33	98	54

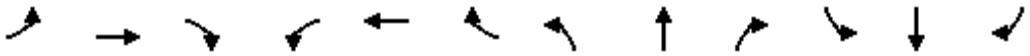
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	44	239	185
Volume Left (vph)	43	11	65	33
Volume Right (vph)	43	22	11	54
Hadj (s)	-0.13	-0.22	0.06	-0.11
Departure Headway (s)	4.8	4.8	4.6	4.5
Degree Utilization, x	0.14	0.06	0.30	0.23
Capacity (veh/h)	680	667	759	766
Control Delay (s)	8.6	8.1	9.5	8.8
Approach Delay (s)	8.6	8.1	9.5	8.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	35.2%	ICU Level of Service	A	
Analysis Period (min)	15			



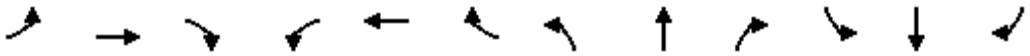
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Future Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3478		1770	3387				1590	1681	1736	1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3478		1770	3387				1590	1681	1736	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	293	33	11	707	283	0	0	22	217	163	348
RTOR Reduction (vph)	0	8	0	0	46	0	0	0	0	0	0	214
Lane Group Flow (vph)	435	318	0	11	944	0	0	0	22	113	267	134
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	11.2	38.3		0.7	27.8				71.2	17.6	17.6	17.6
Effective Green, g (s)	11.6	39.2		1.1	28.7				71.2	18.9	18.9	18.9
Actuated g/C Ratio	0.16	0.55		0.02	0.40				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	559	1914		27	1365				1590	446	460	420
v/s Ratio Prot	c0.13	0.09		0.01	c0.28					0.07	c0.15	
v/s Ratio Perm									0.01			0.08
v/c Ratio	0.78	0.17		0.41	0.69				0.01	0.25	0.58	0.32
Uniform Delay, d1	28.6	7.9		34.7	17.6				0.0	20.6	22.7	21.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.2		3.6	2.9				0.0	0.5	2.5	0.7
Delay (s)	34.7	8.1		38.3	20.5				0.0	21.1	25.2	21.7
Level of Service	C	A		D	C				A	C	C	C
Approach Delay (s)		23.3			20.7			0.0			22.9	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	700	90	70	1410	60	230	30	70	70	50	20
Future Volume (vph)	30	700	90	70	1410	60	230	30	70	70	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.98		1.00	0.99		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1678	3363		1671	3411		1635	1527			1669	
Flt Permitted	0.95	1.00		0.95	1.00		0.63	1.00			0.80	
Satd. Flow (perm)	1678	3363		1671	3411		1078	1527			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	761	98	76	1533	65	250	33	76	76	54	22
RTOR Reduction (vph)	0	7	0	0	2	0	0	56	0	0	5	0
Lane Group Flow (vph)	33	852	0	76	1596	0	250	53	0	0	147	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	67.0		8.0	71.9		30.8	30.8			30.8	
Effective Green, g (s)	3.5	67.9		8.4	72.8		31.7	31.7			31.7	
Actuated g/C Ratio	0.03	0.57		0.07	0.61		0.26	0.26			0.26	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	48	1902		116	2069		284	403			362	
v/s Ratio Prot	0.02	0.25		c0.05	c0.47			0.03				
v/s Ratio Perm							c0.23				0.11	
v/c Ratio	0.69	0.45		0.66	0.77		0.88	0.13			0.41	
Uniform Delay, d1	57.7	15.1		54.4	17.4		42.3	33.7			36.4	
Progression Factor	1.00	1.00		0.84	1.51		1.00	1.00			1.00	
Incremental Delay, d2	27.8	0.8		2.8	0.8		25.0	0.1			0.3	
Delay (s)	85.5	15.9		48.7	27.1		67.3	33.7			36.7	
Level of Service	F	B		D	C		E	C			D	
Approach Delay (s)		18.5			28.1			57.1			36.7	
Approach LOS		B			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	650	80	170	1240	70	60	130	110	260	380	250
Future Volume (vph)	180	650	80	170	1240	70	60	130	110	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3461		1770	3501		1770	3539	1550	1770	3267	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3461		1770	3501		1770	3539	1550	1770	3267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	707	87	185	1348	76	65	141	120	283	413	272
RTOR Reduction (vph)	0	7	0	0	3	0	0	0	45	0	92	0
Lane Group Flow (vph)	196	787	0	185	1421	0	65	141	75	283	593	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	13.9	41.0		16.3	42.9		7.0	21.4	37.7	22.6	37.1	
Effective Green, g (s)	14.3	41.9		16.7	44.3		7.4	22.4	38.5	23.0	38.0	
Actuated g/C Ratio	0.12	0.35		0.14	0.37		0.06	0.19	0.32	0.19	0.32	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	210	1208		246	1292		109	660	497	339	1034	
v/s Ratio Prot	c0.11	0.23		0.10	c0.41		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.03			
v/c Ratio	0.93	0.65		0.75	1.10		0.60	0.21	0.15	0.83	0.57	
Uniform Delay, d1	52.4	32.9		49.7	37.9		54.8	41.3	29.1	46.7	34.2	
Progression Factor	1.20	0.78		1.04	0.85		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	41.4	2.6		9.2	55.2		5.7	0.2	0.1	15.4	0.7	
Delay (s)	104.2	28.3		61.0	87.3		60.6	41.6	29.1	62.1	34.9	
Level of Service	F	C		E	F		E	D	C	E	C	
Approach Delay (s)		43.3			84.3			40.8			42.9	
Approach LOS		D			F			D			D	

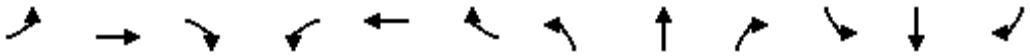
Intersection Summary			
HCM 2000 Control Delay	59.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	980	80	320	1370	60	70	20	150	70	20	20
Future Volume (vph)	10	980	80	320	1370	60	70	20	150	70	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5014		1770	3513			1792	1552		1750	
Flt Permitted	0.95	1.00		0.95	1.00			0.70	1.00		0.70	
Satd. Flow (perm)	1770	5014		1770	3513			1309	1552		1267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1065	87	348	1489	65	76	22	163	76	22	22
RTOR Reduction (vph)	0	6	0	0	2	0	0	0	135	0	7	0
Lane Group Flow (vph)	11	1146	0	348	1552	0	0	98	28	0	113	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	0.8	57.1		28.3	84.6			20.0	20.0		20.0	
Effective Green, g (s)	1.2	58.4		28.7	85.9			20.9	20.9		20.9	
Actuated g/C Ratio	0.01	0.49		0.24	0.72			0.17	0.17		0.17	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	17	2440		423	2514			227	270		220	
v/s Ratio Prot	0.01	0.23		c0.20	c0.44							
v/s Ratio Perm								0.07	0.02		c0.09	
v/c Ratio	0.65	0.47		0.82	0.62			0.43	0.11		0.51	
Uniform Delay, d1	59.2	20.5		43.2	8.7			44.2	41.7		44.9	
Progression Factor	0.81	1.50		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	40.3	0.5		11.6	1.1			0.5	0.1		0.8	
Delay (s)	88.4	31.3		54.9	9.8			44.7	41.7		45.8	
Level of Service	F	C		D	A			D	D		D	
Approach Delay (s)		31.8			18.1			42.9			45.8	
Approach LOS		C			B			D			D	

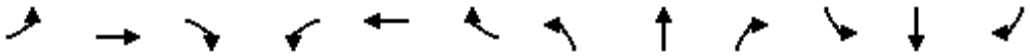
Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	250	3100	0	0	0	0	0	150	150
Future Volume (vph)	0	0	0	250	3100	0	0	0	0	0	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.93	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5063						4651	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5063						4651	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	272	3370	0	0	0	0	0	163	163
RTOR Reduction (vph)	0	0	0	0	8	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3634	0	0	0	0	0	326	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3549						976	
v/s Ratio Prot											c0.07	
v/s Ratio Perm					0.72							
v/c Ratio					1.02						0.33	
Uniform Delay, d1					13.4						30.2	
Progression Factor					1.00						1.00	
Incremental Delay, d2					21.6						0.1	
Delay (s)					35.0						30.3	
Level of Service					D						C	
Approach Delay (s)		0.0			35.0			0.0			30.3	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

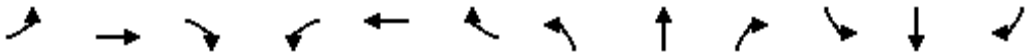


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	890	90	0	0	0	0	0	0	160	330	0
Future Volume (vph)	0	890	90	0	0	0	0	0	0	160	330	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5004									4977	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5004									4977	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	967	98	0	0	0	0	0	0	174	359	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	73	0
Lane Group Flow (vph)	0	1052	0	0	0	0	0	0	0	0	460	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		47.0									19.0	
Effective Green, g (s)		47.0									20.0	
Actuated g/C Ratio		0.63									0.27	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3135									1327	
v/s Ratio Prot		c0.21										
v/s Ratio Perm											0.09	
v/c Ratio		0.34									0.35	
Uniform Delay, d1		6.6									22.2	
Progression Factor		0.58									1.00	
Incremental Delay, d2		0.3									0.2	
Delay (s)		4.1									22.4	
Level of Service		A									C	
Approach Delay (s)		4.1			0.0			0.0			22.4	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1080	40	120	780	190	50	40	90	80	80	210
Future Volume (vph)	230	1080	40	120	780	190	50	40	90	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1174	43	130	848	207	54	43	98	87	87	228
RTOR Reduction (vph)	0	3	0	0	0	192	0	0	84	0	0	187
Lane Group Flow (vph)	250	1214	0	130	848	15	54	43	14	87	87	41
Confl. Peds. (#/hr)	2											2
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	8.5	34.2		7.1	32.9	5.5	2.8	8.9	8.9	5.5	12.5	12.5
Effective Green, g (s)	8.5	35.7		7.1	34.3	5.5	2.8	10.7	10.7	5.5	13.4	13.4
Actuated g/C Ratio	0.11	0.48		0.09	0.46	0.07	0.04	0.14	0.14	0.07	0.18	0.18
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	389	1675		167	1618	116	66	265	225	251	332	279
v/s Ratio Prot	0.07	c0.34		c0.07	0.24		c0.03	0.02		0.03	c0.05	
v/s Ratio Perm						0.01			0.01			0.03
v/c Ratio	0.64	0.73		0.78	0.52	0.13	0.82	0.16	0.06	0.35	0.26	0.15
Uniform Delay, d1	31.8	15.7		33.2	14.5	32.5	35.8	28.2	27.8	33.0	26.5	26.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	2.8		18.5	1.2	0.2	50.1	0.1	0.0	0.3	0.4	0.2
Delay (s)	34.5	18.5		51.7	15.7	32.7	85.9	28.3	27.9	33.3	27.0	26.2
Level of Service	C	B		D	B	C	F	C	C	C	C	C
Approach Delay (s)		21.2			22.7			44.0			27.9	
Approach LOS		C			C			D			C	

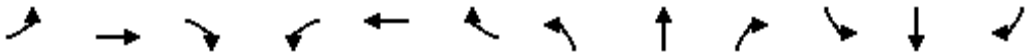
Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	520	2530	170	300	290	0	0	220	90
Future Volume (vph)	0	0	0	520	2530	170	300	290	0	0	220	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			0.99	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6274		1770	3539			3367	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6274		1770	3539			3367	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	547	2663	179	316	305	0	0	232	95
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	27	0
Lane Group Flow (vph)	0	0	0	0	3382	0	316	305	0	0	300	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					62.5		20.6	37.7			12.2	
Effective Green, g (s)					62.5		20.6	37.7			12.2	
Actuated g/C Ratio					0.57		0.19	0.34			0.11	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					3564		331	1212			373	
v/s Ratio Prot							c0.18	0.09			c0.09	
v/s Ratio Perm					0.54							
v/c Ratio					0.95		0.95	0.25			0.81	
Uniform Delay, d1					22.3		44.2	26.0			47.7	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					7.1		37.3	0.1			11.6	
Delay (s)					29.4		81.5	26.1			59.3	
Level of Service					C		F	C			E	
Approach Delay (s)		0.0			29.4			54.3			59.3	
Approach LOS		A			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

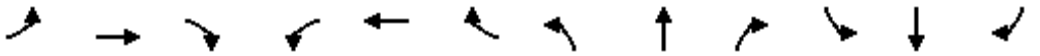


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	690	60	0	0	0	0	510	230	70	680	0
Future Volume (vph)	70	690	60	0	0	0	0	510	230	70	680	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5061	1551					4809		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5061	1551					4809		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	750	65	0	0	0	0	554	250	76	739	0
RTOR Reduction (vph)	0	0	36	0	0	0	0	108	0	0	0	0
Lane Group Flow (vph)	0	826	29	0	0	0	0	696	0	76	739	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		32.2	32.2					22.0		6.6	33.0	
Effective Green, g (s)		33.1	33.1					22.0		7.0	33.0	
Actuated g/C Ratio		0.44	0.44					0.29		0.09	0.44	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2233	684					1410		165	2237	
v/s Ratio Prot								c0.14		c0.04	0.15	
v/s Ratio Perm		0.16	0.02									
v/c Ratio		0.37	0.04					0.49		0.46	0.33	
Uniform Delay, d1		14.0	11.9					21.9		32.2	13.8	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1					1.2		9.0	0.4	
Delay (s)		14.5	12.0					23.1		41.2	14.2	
Level of Service		B	B					C		D	B	
Approach Delay (s)		14.3			0.0			23.1			16.7	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1170	530	280	890	310	200
Future Volume (vph)	1170	530	280	890	310	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.98	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3377	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3377	1421
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1272	576	304	967	337	217
RTOR Reduction (vph)	0	5	0	0	24	116
Lane Group Flow (vph)	1272	571	304	967	378	36
Confl. Peds. (#/hr)						2
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.6	42.3	8.0	41.8	13.7	13.7
Effective Green, g (s)	30.8	46.7	7.9	43.2	15.9	15.9
Actuated g/C Ratio	0.46	0.70	0.12	0.64	0.24	0.24
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1624	1196	404	2278	800	336
v/s Ratio Prot	c0.36	c0.11	c0.09	0.27	0.11	
v/s Ratio Perm		0.25				0.03
v/c Ratio	0.78	0.48	0.75	0.42	0.47	0.11
Uniform Delay, d1	15.3	4.6	28.7	5.9	22.0	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	0.1	6.9	0.6	0.2	0.1
Delay (s)	19.2	4.8	35.5	6.4	22.2	20.1
Level of Service	B	A	D	A	C	C
Approach Delay (s)	14.7			13.4	21.6	
Approach LOS	B			B	C	

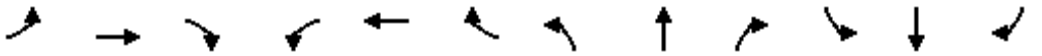
Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	67.1	Sum of lost time (s)	12.5
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1060	140	380	330	0	0	0	0	340	0	670
Future Volume (vph)	0	1060	140	380	330	0	0	0	0	340	0	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1152	152	413	359	0	0	0	0	370	0	728
RTOR Reduction (vph)	0	0	87	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1152	65	413	359	0	0	0	0	370	0	728
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		25.9	25.9	9.0	39.1					14.5		63.2
Effective Green, g (s)		26.9	26.9	9.2	40.1					15.1		63.2
Actuated g/C Ratio		0.43	0.43	0.15	0.63					0.24		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1506	664	499	2245					422		1583
v/s Ratio Prot		c0.33		c0.12	0.10					c0.21		
v/s Ratio Perm			0.04									0.46
v/c Ratio		0.76	0.10	0.83	0.16					0.88		0.46
Uniform Delay, d1		15.5	10.9	26.2	4.7					23.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.8	0.3	10.3	0.2					17.6		1.0
Delay (s)		19.2	11.2	36.6	4.9					40.8		1.0
Level of Service		B	B	D	A					D		A
Approach Delay (s)		18.3			21.8			0.0			14.4	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

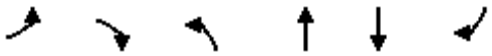
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	880	650	0	0	620	590	190	0	300	0	0	0
Future Volume (vph)	880	650	0	0	620	590	190	0	300	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3280			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3280			1770	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	957	707	0	0	674	641	207	0	326	0	0	0
RTOR Reduction (vph)	0	0	0	0	201	0	0	0	277	0	0	0
Lane Group Flow (vph)	957	707	0	0	1114	0	0	207	49	0	0	0
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	23.5	59.4			31.7			10.0	10.0			
Effective Green, g (s)	23.7	59.9			32.2			10.6	10.6			
Actuated g/C Ratio	0.30	0.75			0.41			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1023	2666			1328			236	211			
v/s Ratio Prot	c0.28	0.20			c0.34			c0.12				
v/s Ratio Perm									0.03			
v/c Ratio	0.94	0.27			0.84			0.88	0.23			
Uniform Delay, d1	27.2	3.0			21.3			33.8	30.8			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	14.8	0.2			6.5			27.8	0.2			
Delay (s)	41.9	3.3			27.8			61.6	31.0			
Level of Service	D	A			C			E	C			
Approach Delay (s)		25.5			27.8			42.9			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	79.5	Sum of lost time (s)	13.0
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

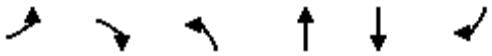
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	210	210	110	500	700	110
Future Volume (vph)	210	210	110	500	700	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.93		1.00	1.00	0.98	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1695		1770	3539	3467	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1695		1770	3539	3467	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	228	120	543	761	120
RTOR Reduction (vph)	35	0	0	0	9	0
Lane Group Flow (vph)	421	0	120	543	872	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	35.5		13.1	76.5	59.4	
Effective Green, g (s)	35.5		13.1	76.5	59.4	
Actuated g/C Ratio	0.30		0.11	0.64	0.49	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	501		193	2256	1716	
v/s Ratio Prot	c0.25		c0.07	0.15	c0.25	
v/s Ratio Perm						
v/c Ratio	0.84		0.62	0.24	0.51	
Uniform Delay, d1	39.6		51.1	9.3	20.4	
Progression Factor	1.00		1.01	0.91	1.00	
Incremental Delay, d2	11.8		6.0	0.2	1.1	
Delay (s)	51.4		57.4	8.8	21.5	
Level of Service	D		E	A	C	
Approach Delay (s)	51.4			17.6	21.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

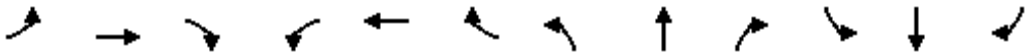
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	300	0	0	250	30
Future Volume (Veh/h)	0	300	0	0	250	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	326	0	0	272	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				973	1298	
pX, platoon unblocked						
vC, conflicting volume	288	152	305			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	288	152	305			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	62	100			
cM capacity (veh/h)	678	866	1253			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	326	181	124
Volume Left	0	0	0
Volume Right	326	0	33
cSH	866	1700	1700
Volume to Capacity	0.38	0.11	0.07
Queue Length 95th (ft)	44	0	0
Control Delay (s)	11.6	0.0	0.0
Lane LOS	B		
Approach Delay (s)	11.6	0.0	
Approach LOS	B		

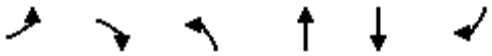
Intersection Summary			
Average Delay	6.0		
Intersection Capacity Utilization	33.1%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	150	60	90	0	0	0	0	40	420	10
Future Volume (vph)	0	20	150	60	90	0	0	0	0	40	420	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.88			1.00						1.00	
Flt Protected		1.00			0.98						1.00	
Satd. Flow (prot)		1641			1826						3513	
Flt Permitted		1.00			0.84						1.00	
Satd. Flow (perm)		1641			1565						3513	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	22	163	65	98	0	0	0	0	43	457	11
RTOR Reduction (vph)	0	84	0	0	0	0	0	0	0	0	2	0
Lane Group Flow (vph)	0	101	0	0	163	0	0	0	0	0	509	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases				6						4		
Actuated Green, G (s)		31.5			31.5						24.5	
Effective Green, g (s)		31.5			31.5						24.5	
Actuated g/C Ratio		0.48			0.48						0.38	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		795			758						1324	
v/s Ratio Prot		0.06										
v/s Ratio Perm					c0.10						0.14	
v/c Ratio		0.13			0.22						0.38	
Uniform Delay, d1		9.2			9.6						14.8	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			0.6						0.8	
Delay (s)		9.3			10.3						15.6	
Level of Service		A			B						B	
Approach Delay (s)		9.3			10.3			0.0			15.6	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

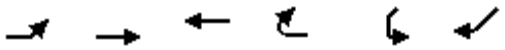
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	150	170	330	370	60
Future Volume (vph)	50	150	170	330	370	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.90			1.00	0.98	
Flt Protected	0.99			0.98	1.00	
Satd. Flow (prot)	1653			1832	1828	
Flt Permitted	0.99			0.73	1.00	
Satd. Flow (perm)	1653			1359	1828	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	163	185	359	402	65
RTOR Reduction (vph)	141	0	0	0	6	0
Lane Group Flow (vph)	76	0	0	544	461	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.3			45.5	45.5	
Effective Green, g (s)	8.3			45.5	45.5	
Actuated g/C Ratio	0.13			0.74	0.74	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	222			1000	1345	
v/s Ratio Prot	c0.05				0.25	
v/s Ratio Perm				c0.40		
v/c Ratio	0.34			0.54	0.34	
Uniform Delay, d1	24.3			3.6	2.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.9			2.1	0.7	
Delay (s)	25.2			5.7	3.6	
Level of Service	C			A	A	
Approach Delay (s)	25.2			5.7	3.6	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

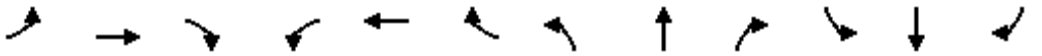
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	50	670	1410	40	150	250
Future Volume (vph)	50	670	1410	40	150	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3525		1674	
Flt Permitted	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	3525		1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	728	1533	43	163	272
RTOR Reduction (vph)	0	0	3	0	74	0
Lane Group Flow (vph)	54	728	1573	0	361	0
Turn Type	Prot	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases						
Actuated Green, G (s)	3.5	45.7	37.7		23.6	
Effective Green, g (s)	3.5	45.7	37.7		23.6	
Actuated g/C Ratio	0.04	0.58	0.48		0.30	
Clearance Time (s)	4.5	4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	79	2065	1697		504	
v/s Ratio Prot	c0.03	0.21	c0.45		c0.22	
v/s Ratio Perm						
v/c Ratio	0.68	0.35	0.93		0.72	
Uniform Delay, d1	36.9	8.5	19.0		24.4	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	21.7	0.1	9.2		8.5	
Delay (s)	58.6	8.6	28.2		32.8	
Level of Service	E	A	C		C	
Approach Delay (s)		12.1	28.2		32.8	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.3	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

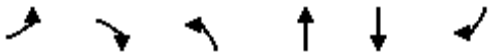
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	10	90	40	180	240	200	400	130	260	450	190
Future Volume (vph)	60	10	90	40	180	240	200	400	130	260	450	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.92			0.93		1.00	0.96		1.00	0.96	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1690			1724		1770	3409		1770	3381	
Flt Permitted		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1690			1724		1770	3409		1770	3381	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	11	98	43	196	261	217	435	141	283	489	207
RTOR Reduction (vph)	0	56	0	0	42	0	0	35	0	0	51	0
Lane Group Flow (vph)	0	118	0	0	458	0	217	541	0	283	645	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		10.7			21.6		11.6	15.9		15.4	19.7	
Effective Green, g (s)		10.7			21.6		11.6	15.9		15.4	19.7	
Actuated g/C Ratio		0.13			0.26		0.14	0.19		0.19	0.24	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		221			456		251	664		334	816	
v/s Ratio Prot		c0.07			c0.27		0.12	0.16		c0.16	c0.19	
v/s Ratio Perm												
v/c Ratio		0.53			1.00		0.86	0.82		0.85	0.79	
Uniform Delay, d1		33.1			30.0		34.2	31.4		32.0	29.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.5			43.3		25.1	7.6		17.7	5.3	
Delay (s)		35.6			73.3		59.4	39.1		49.7	34.3	
Level of Service		D			E		E	D		D	C	
Approach Delay (s)		35.6			73.3			44.6			38.7	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	47.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	81.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

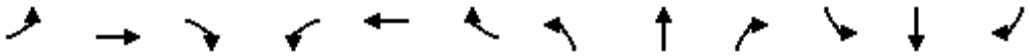
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	200	370	210	190	90
Future Volume (vph)	30	200	370	210	190	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			4.5	4.5	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.88			1.00	0.96	
Flt Protected	0.99			0.97	1.00	
Satd. Flow (prot)	1634			1805	1782	
Flt Permitted	0.99			0.64	1.00	
Satd. Flow (perm)	1634			1187	1782	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	217	402	228	207	98
RTOR Reduction (vph)	188	0	0	0	19	0
Lane Group Flow (vph)	62	0	0	630	286	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.1			43.5	43.5	
Effective Green, g (s)	8.1			43.5	43.5	
Actuated g/C Ratio	0.13			0.72	0.72	
Clearance Time (s)	4.5			4.5	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	218			852	1279	
v/s Ratio Prot	c0.04				0.16	
v/s Ratio Perm				c0.53		
v/c Ratio	0.28			0.74	0.22	
Uniform Delay, d1	23.6			5.1	2.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.7			5.7	0.4	
Delay (s)	24.4			10.9	3.3	
Level of Service	C			B	A	
Approach Delay (s)	24.4			10.9	3.3	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	11.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	60.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

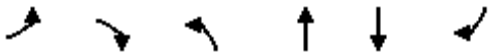
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	50	200	180	150	70	2400	70	80	1640	50
Future Volume (vph)	50	20	50	200	180	150	70	2400	70	80	1640	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.89		1.00	0.93		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3162		1770	3298		1770	5064		1770	5063	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3162		1770	3298		1770	5064		1770	5063	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	54	217	196	163	76	2609	76	87	1783	54
RTOR Reduction (vph)	0	46	0	0	122	0	0	2	0	0	2	0
Lane Group Flow (vph)	54	30	0	217	237	0	76	2683	0	87	1835	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Effective Green, g (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Actuated g/C Ratio	0.06	0.14		0.12	0.21		0.07	0.54		0.07	0.53	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	101	442		221	684		122	2713		116	2696	
v/s Ratio Prot	0.03	0.01		c0.12	c0.07		0.04	c0.53		c0.05	0.36	
v/s Ratio Perm												
v/c Ratio	0.53	0.07		0.98	0.35		0.62	0.99		0.75	0.68	
Uniform Delay, d1	55.0	44.8		52.4	40.6		54.3	27.5		55.1	20.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.82	0.94	
Incremental Delay, d2	5.4	0.3		55.1	1.4		9.5	14.9		18.9	1.1	
Delay (s)	60.3	45.1		107.5	42.0		63.8	42.3		63.9	20.4	
Level of Service	E	D		F	D		E	D		E	C	
Approach Delay (s)		51.4			66.7			42.9			22.4	
Approach LOS		D			E			D			C	

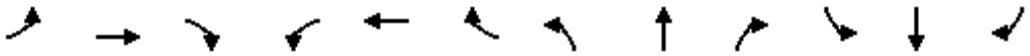
Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	110	0	200	870	0	0
Future Volume (vph)	110	0	200	870	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	0	217	946	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	120	0	217	946	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.07			c0.27		
v/s Ratio Perm			0.12			
v/c Ratio	0.17		0.31	0.67		
Uniform Delay, d1	7.7		8.2	9.8		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		1.1	2.5		
Delay (s)	8.2		9.3	12.4		
Level of Service	A		A	B		
Approach Delay (s)	8.2			11.8	0.0	
Approach LOS	A			B	A	

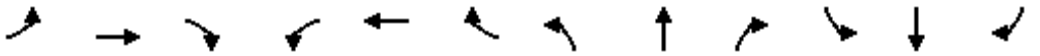
Intersection Summary			
HCM 2000 Control Delay	11.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	410	840	0	0	390	200	150	200	20	0	0	0
Future Volume (vph)	410	840	0	0	390	200	150	200	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.95			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (prot)	3433	1863			3359			3465	1583			
Flt Permitted	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (perm)	3433	1863			3359			3465	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	913	0	0	424	217	163	217	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	92	0	0	0	18	0	0	0
Lane Group Flow (vph)	446	913	0	0	549	0	0	380	4	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	14.4	43.5			24.7			11.7	11.7			
Effective Green, g (s)	14.4	43.5			24.7			11.7	11.7			
Actuated g/C Ratio	0.22	0.67			0.38			0.18	0.18			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	760	1246			1276			623	284			
v/s Ratio Prot	0.13	c0.49			0.16							
v/s Ratio Perm								0.11	0.00			
v/c Ratio	0.59	0.73			0.43			0.61	0.01			
Uniform Delay, d1	22.6	7.0			14.9			24.5	21.9			
Progression Factor	1.00	1.22			1.00			1.00	1.00			
Incremental Delay, d2	0.9	3.0			1.1			1.2	0.0			
Delay (s)	23.5	11.5			16.0			25.7	21.9			
Level of Service	C	B			B			C	C			
Approach Delay (s)		15.4			16.0			25.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1660	550	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	80	1660	550	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	1804	598	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	237	0	0	159	0	0	95	0	4	0
Lane Group Flow (vph)	87	1804	361	130	1261	232	500	380	101	326	322	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.2	59.6	59.6	10.0	61.3	61.3	23.1	32.9	32.9	30.0	38.0	
Effective Green, g (s)	8.6	60.9	60.9	10.4	62.7	62.7	23.5	33.7	33.7	29.0	39.2	
Actuated g/C Ratio	0.06	0.41	0.41	0.07	0.42	0.42	0.16	0.22	0.22	0.19	0.26	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	101	2064	633	238	1479	629	537	418	348	342	476	
v/s Ratio Prot	c0.05	0.35		0.04	c0.36		0.15	c0.20		c0.18	0.18	
v/s Ratio Perm			0.23			0.15			0.06			
v/c Ratio	0.86	0.87	0.57	0.55	0.85	0.37	0.93	0.91	0.29	0.95	0.68	
Uniform Delay, d1	70.1	41.0	34.4	67.5	39.5	30.0	62.5	56.7	48.2	59.8	49.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	47.2	5.5	3.7	1.4	6.4	1.7	22.8	23.5	0.6	36.0	3.0	
Delay (s)	117.3	46.5	38.1	68.9	45.9	31.7	85.3	80.2	48.8	95.8	52.7	
Level of Service	F	D	D	E	D	C	F	F	D	F	D	
Approach Delay (s)		47.0			44.5			76.8			74.3	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	54.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	820	1790	930	0	0	880
Future Volume (vph)	820	1790	930	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	891	1946	1011	0	0	957
RTOR Reduction (vph)	0	5	0	0	0	0
Lane Group Flow (vph)	891	1941	1011	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	94.0	94.0	42.0			42.0
Effective Green, g (s)	94.0	94.0	42.0			42.0
Actuated g/C Ratio	0.63	0.63	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	2151	1746	990			990
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.70				
v/c Ratio	0.41	1.11	1.02			0.97
Uniform Delay, d1	14.1	28.0	54.0			53.3
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.0	59.0	34.1			20.6
Delay (s)	14.2	87.0	88.1			73.9
Level of Service	B	F	F			E
Approach Delay (s)	64.1		88.1			73.9
Approach LOS	E		F			E

Intersection Summary			
HCM 2000 Control Delay	71.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		

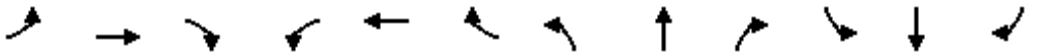
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	290	1450	140	0	1510
Future Volume (Veh/h)	0	290	1450	140	0	1510
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	315	1576	152	0	1641
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.82					
vC, conflicting volume	2199	604			1728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1702	604			1728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	28			100	
cM capacity (veh/h)	68	440			361	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	315	630	630	467	547	547	547
Volume Left	0	0	0	0	0	0	0
Volume Right	315	0	0	152	0	0	0
cSH	440	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.72	0.37	0.37	0.27	0.32	0.32	0.32
Queue Length 95th (ft)	139	0	0	0	0	0	0
Control Delay (s)	31.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D						
Approach Delay (s)	31.2	0.0			0.0		
Approach LOS	D						

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	430	320	80	540	700	450	510	120	400	710	400
Future Volume (vph)	380	430	320	80	540	700	450	510	120	400	710	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1568	1770	3539	1568	1770	3438		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1568	1770	3539	1568	1770	3438		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	467	348	87	587	761	489	554	130	435	772	435
RTOR Reduction (vph)	0	0	31	0	0	32	0	14	0	0	0	50
Lane Group Flow (vph)	413	467	317	87	587	729	489	670	0	435	772	385
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	29.1	50.2	84.3	11.0	32.1	68.5	34.1	32.7		36.4	35.0	64.1
Effective Green, g (s)	30.0	51.1	86.1	12.0	33.1	68.5	35.0	33.6		37.3	35.9	64.1
Actuated g/C Ratio	0.20	0.34	0.57	0.08	0.22	0.46	0.23	0.22		0.25	0.24	0.43
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	354	634	941	141	780	767	413	770		440	847	669
v/s Ratio Prot	c0.23	0.25	0.08	0.05	0.17	c0.23	c0.28	0.19		0.25	0.22	0.11
v/s Ratio Perm			0.12			0.23						0.13
v/c Ratio	1.17	0.74	0.34	0.62	0.75	0.95	1.18	0.87		0.99	0.91	0.58
Uniform Delay, d1	60.0	43.5	16.9	66.8	54.6	39.1	57.5	56.1		56.1	55.5	32.6
Progression Factor	1.00	1.00	1.00	1.19	0.71	1.17	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	101.3	7.5	0.2	16.5	6.3	21.1	104.9	10.6		39.8	14.8	0.7
Delay (s)	161.3	51.0	17.1	95.9	45.1	66.7	162.4	66.7		96.0	70.3	33.4
Level of Service	F	D	B	F	D	E	F	E		F	E	C
Approach Delay (s)		78.5			59.6			106.6			67.3	
Approach LOS		E			E			F			E	

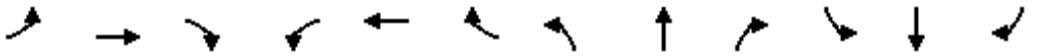
Intersection Summary			
HCM 2000 Control Delay	76.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	106.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	140	170	70	160	90	240	640	70	150	730	170
Future Volume (vph)	200	140	170	70	160	90	240	640	70	150	730	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	152	185	76	174	98	261	696	76	163	793	185
RTOR Reduction (vph)	0	0	132	0	0	80	0	5	0	0	0	106
Lane Group Flow (vph)	174	195	53	76	174	18	261	767	0	163	793	79
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	36.2	22.4	22.4	22.4	12.3	50.2		14.4	52.3	52.3
Effective Green, g (s)	24.8	24.8	37.0	23.3	23.3	23.3	12.7	51.1		14.8	53.2	53.2
Actuated g/C Ratio	0.19	0.19	0.28	0.18	0.18	0.18	0.10	0.39		0.11	0.41	0.41
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	320	333	443	317	333	277	335	1366		201	1448	626
v/s Ratio Prot	0.10	c0.11	0.01	0.04	c0.09		0.08	0.22		c0.09	c0.22	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.54	0.59	0.12	0.24	0.52	0.06	0.78	0.56		0.81	0.55	0.13
Uniform Delay, d1	47.5	47.9	34.4	45.8	48.3	44.3	57.3	30.7		56.2	29.2	23.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.41	0.66	0.41
Incremental Delay, d2	1.9	2.6	0.0	0.4	1.5	0.1	10.0	1.7		14.8	1.0	0.3
Delay (s)	49.4	50.5	34.5	46.1	49.8	44.4	67.3	32.4		93.9	20.3	10.1
Level of Service	D	D	C	D	D	D	E	C		F	C	B
Approach Delay (s)		44.8			47.5			41.2			29.1	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Future Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.97		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.94		1.00	0.98		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1696			1659		1770	3435		1770	3523	
Flt Permitted		0.78			0.71		0.22	1.00		0.16	1.00	
Satd. Flow (perm)		1351			1208		414	3435		296	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	54	87	22	76	98	1141	217	65	1043	33
RTOR Reduction (vph)	0	22	0	0	18	0	0	7	0	0	1	0
Lane Group Flow (vph)	0	97	0	0	167	0	98	1351	0	65	1075	0
Confl. Peds. (#/hr)	33					33			3	3		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		23.6			23.6		113.9	107.3		110.5	105.6	
Effective Green, g (s)		24.5			24.5		114.7	108.2		111.3	106.5	
Actuated g/C Ratio		0.16			0.16		0.76	0.72		0.74	0.71	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		220			197		379	2477		271	2501	
v/s Ratio Prot							c0.01	c0.39		0.01	0.31	
v/s Ratio Perm		0.07			c0.14		0.19			0.17		
v/c Ratio		0.44			0.85		0.26	0.55		0.24	0.43	
Uniform Delay, d1		56.6			60.9		5.7	9.6		7.1	9.1	
Progression Factor		1.00			1.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			24.3		0.1	0.9		0.2	0.5	
Delay (s)		57.1			101.0		5.8	10.5		7.3	9.6	
Level of Service		E			F		A	B		A	A	
Approach Delay (s)		57.1			101.0			10.2			9.5	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4954		3433	5085	1464	1770	3539	1521	3433	3539	1516
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4954		3433	5085	1464	1770	3539	1521	3433	3539	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2033	217	554	1685	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	9	0	0	0	39	0	0	55	0	0	55
Lane Group Flow (vph)	413	2241	0	554	1685	385	250	696	391	380	576	260
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.7	58.7		19.9	59.0	75.9	16.2	30.7	50.6	16.9	31.4	51.1
Effective Green, g (s)	20.1	59.8		20.3	60.0	75.9	16.6	31.6	52.4	17.3	32.3	52.9
Actuated g/C Ratio	0.14	0.41		0.14	0.41	0.52	0.11	0.22	0.36	0.12	0.22	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	475	2043		480	2104	766	202	771	586	409	788	553
v/s Ratio Prot	0.12	c0.45		c0.16	0.33	0.06	c0.14	c0.20	0.10	c0.11	0.16	0.07
v/s Ratio Perm						0.20			0.16			0.10
v/c Ratio	0.87	1.10		1.15	0.80	0.50	1.24	0.90	0.67	0.93	0.73	0.47
Uniform Delay, d1	61.2	42.6		62.4	37.3	22.4	64.2	55.2	39.0	63.2	52.3	35.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.0	52.0		90.8	2.4	0.2	141.9	13.6	2.2	26.8	3.0	0.2
Delay (s)	76.2	94.6		153.2	39.6	22.5	206.1	68.8	41.2	90.1	55.3	35.5
Level of Service	E	F		F	D	C	F	E	D	F	E	D
Approach Delay (s)		91.8			60.5			84.6			60.8	
Approach LOS		F			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	75.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	300	780	120	400	840
Future Volume (vph)	120	300	780	120	400	840
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.90		0.98		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1659		3469		1770	3539
Flt Permitted	0.99		1.00		0.95	1.00
Satd. Flow (perm)	1659		3469		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	326	848	130	435	913
RTOR Reduction (vph)	130	0	17	0	0	0
Lane Group Flow (vph)	326	0	961	0	435	913
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	15.2		21.7		18.8	45.0
Effective Green, g (s)	15.2		21.7		18.8	45.0
Actuated g/C Ratio	0.22		0.31		0.27	0.65
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	364		1087		480	2301
v/s Ratio Prot	c0.20		c0.28		c0.25	0.26
v/s Ratio Perm						
v/c Ratio	0.89		0.88		0.91	0.40
Uniform Delay, d1	26.2		22.6		24.3	5.7
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	23.2		10.5		20.5	0.5
Delay (s)	49.5		33.1		44.8	6.2
Level of Service	D		C		D	A
Approach Delay (s)	49.5		33.1			18.7
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

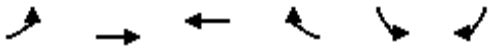
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	350	690	170	0	660
Future Volume (Veh/h)	0	350	690	170	0	660
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	380	750	185	0	717
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			407
pX, platoon unblocked	0.83					
vC, conflicting volume	1203	472			937	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	844	472			937	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	29			100	
cM capacity (veh/h)	251	536			726	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	380	500	435	358	358
Volume Left	0	0	0	0	0
Volume Right	380	0	185	0	0
cSH	536	1700	1700	1700	1700
Volume to Capacity	0.71	0.29	0.26	0.21	0.21
Queue Length 95th (ft)	142	0	0	0	0
Control Delay (s)	26.5	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	26.5	0.0		0.0	
Approach LOS	D				

Intersection Summary				
Average Delay	4.9			
Intersection Capacity Utilization	53.2%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1250	970	860	360	300
Future Volume (vph)	0	1250	970	860	360	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1359	1054	935	391	326
RTOR Reduction (vph)	0	0	0	429	0	267
Lane Group Flow (vph)	0	1359	1054	506	391	59
Confl. Peds. (#/hr)				6	3	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	2	1	
Permitted Phases				8		1
Actuated Green, G (s)		34.2	34.2	34.2	11.2	11.2
Effective Green, g (s)		34.2	34.2	33.7	11.2	11.2
Actuated g/C Ratio		0.55	0.55	0.54	0.18	0.18
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	2.9	2.5	2.5
Lane Grp Cap (vph)		1942	1942	1507	617	284
v/s Ratio Prot		c0.38	0.30	0.18	c0.11	
v/s Ratio Perm						0.04
v/c Ratio		0.70	0.54	0.34	0.63	0.21
Uniform Delay, d1		10.3	9.0	8.0	23.7	21.8
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1	0.3	0.1	1.9	0.3
Delay (s)		11.4	9.3	8.1	25.5	22.0
Level of Service		B	A	A	C	C
Approach Delay (s)		11.4	8.8		23.9	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	16.6
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	230	1090	130	130	970
Future Volume (vph)	70	230	1090	130	130	970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.1	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.94	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1495	4984		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1495	4984		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	250	1185	141	141	1054
RTOR Reduction (vph)	0	229	5	0	0	0
Lane Group Flow (vph)	76	22	1321	0	141	1054
Confl. Peds. (#/hr)	11	16		18	18	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	12.0	12.0	108.4		16.3	129.1
Effective Green, g (s)	12.0	12.9	108.4		16.3	129.1
Actuated g/C Ratio	0.08	0.09	0.72		0.11	0.86
Clearance Time (s)	4.0	4.0	4.9		4.4	4.9
Vehicle Extension (s)	3.0	3.0	5.0		2.0	3.2
Lane Grp Cap (vph)	141	128	3601		192	4376
v/s Ratio Prot	c0.04		c0.27		c0.08	0.21
v/s Ratio Perm		0.01				
v/c Ratio	0.54	0.17	0.37		0.73	0.24
Uniform Delay, d1	66.3	63.6	7.8		64.8	1.8
Progression Factor	1.00	1.00	1.74		1.13	1.23
Incremental Delay, d2	3.9	0.6	0.2		8.0	0.1
Delay (s)	70.3	64.2	13.9		81.3	2.4
Level of Service	E	E	B		F	A
Approach Delay (s)	65.6		13.9			11.7
Approach LOS	E		B			B

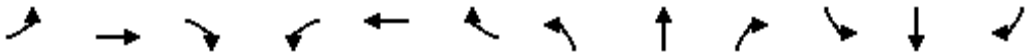
Intersection Summary			
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	130	150	130	40	180	230	1120	120	150	890	90
Future Volume (vph)	90	130	150	130	40	180	230	1120	120	150	890	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1690		1770	1606		1770	4993		3433	3478	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1690		1770	1606		1770	4993		3433	3478	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	141	163	141	43	196	250	1217	130	163	967	98
RTOR Reduction (vph)	0	29	0	0	111	0	0	9	0	0	5	0
Lane Group Flow (vph)	98	275	0	141	128	0	250	1338	0	163	1060	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.2	28.2		15.0	15.0		24.3	68.1		19.6	63.4	
Effective Green, g (s)	29.1	29.1		15.9	15.9		24.7	69.0		20.0	64.3	
Actuated g/C Ratio	0.19	0.19		0.11	0.11		0.16	0.46		0.13	0.43	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		2.0	3.9	
Lane Grp Cap (vph)	343	327		187	170		291	2296		457	1490	
v/s Ratio Prot	0.06	c0.16		0.08	c0.08		c0.14	0.27		0.05	c0.30	
v/s Ratio Perm												
v/c Ratio	0.29	0.84		0.75	0.75		0.86	0.58		0.36	0.71	
Uniform Delay, d1	51.6	58.2		65.1	65.1		61.0	29.9		59.1	35.2	
Progression Factor	1.00	1.00		1.00	1.00		1.05	0.53		0.91	1.25	
Incremental Delay, d2	0.5	17.4		14.1	15.4		18.5	0.9		0.2	2.9	
Delay (s)	52.0	75.6		79.3	80.5		82.2	16.8		54.1	46.9	
Level of Service	D	E		E	F		F	B		D	D	
Approach Delay (s)		69.9			80.1			27.1			47.9	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM 2000 Control Delay	44.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	30	70	150	30	140	50	1250	70	120	1080	80
Future Volume (vph)	60	30	70	150	30	140	50	1250	70	120	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.94		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1706		1770	1633		1770	5024		3433	3492	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1706		1770	1633		1770	5024		3433	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	33	76	163	33	152	54	1359	76	130	1174	87
RTOR Reduction (vph)	0	22	0	0	115	0	0	3	0	0	3	0
Lane Group Flow (vph)	0	152	0	163	70	0	54	1432	0	130	1258	0
Confl. Peds. (#/hr)			6	6			7		18	18		7
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		19.9		17.6	17.6		7.1	79.4		14.0	86.3	
Effective Green, g (s)		19.9		17.6	17.6		7.1	79.4		14.0	86.3	
Actuated g/C Ratio		0.13		0.12	0.12		0.05	0.53		0.09	0.58	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		226		207	191		83	2659		320	2009	
v/s Ratio Prot		c0.09		c0.09	0.04		0.03	c0.28		0.04	c0.36	
v/s Ratio Perm												
v/c Ratio		0.67		0.79	0.37		0.65	0.54		0.41	0.63	
Uniform Delay, d1		62.0		64.4	61.1		70.2	23.2		64.1	21.1	
Progression Factor		1.00		1.00	1.00		1.08	0.96		0.65	0.41	
Incremental Delay, d2		6.1		16.5	0.4		12.7	0.8		0.2	1.1	
Delay (s)		68.1		80.9	61.5		88.6	23.0		42.2	9.8	
Level of Service		E		F	E		F	C		D	A	
Approach Delay (s)		68.1			70.6			25.4			12.8	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.1
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	70	30	110	210	140	1110	30	40	1140	120
Future Volume (vph)	50	20	70	30	110	210	140	1110	30	40	1140	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		5.8	4.0	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.99		1.00	1.00	1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799	1562		1842	1583	1770	5055		1770	4966	
Flt Permitted		0.45	1.00		0.90	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		840	1562		1669	1583	1770	5055		1770	4966	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	76	33	120	228	152	1207	33	43	1239	130
RTOR Reduction (vph)	0	0	67	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	0	76	9	0	153	228	152	1239	0	43	1362	0
Confl. Peds. (#/hr)			1	1			19		19	19		19
Turn Type	Perm	NA	Perm	Perm	NA	Free	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		Free						
Actuated Green, G (s)		18.5	18.5		18.5	150.0	31.5	110.2		7.1	85.8	
Effective Green, g (s)		18.5	18.5		17.6	150.0	31.5	110.2		7.1	85.8	
Actuated g/C Ratio		0.12	0.12		0.12	1.00	0.21	0.73		0.05	0.57	
Clearance Time (s)		4.9	4.9		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.9		2.0	3.9	
Lane Grp Cap (vph)		103	192		195	1583	371	3713		83	2840	
v/s Ratio Prot							c0.09	0.25		0.02	c0.27	
v/s Ratio Perm		0.09	0.01		c0.09	0.14						
v/c Ratio		0.74	0.05		0.78	0.14	0.41	0.33		0.52	0.48	
Uniform Delay, d1		63.4	58.0		64.4	0.0	51.2	7.0		69.8	18.9	
Progression Factor		1.24	2.62		1.00	1.00	0.89	0.83		0.95	1.40	
Incremental Delay, d2		19.2	0.0		17.1	0.2	0.1	0.1		1.8	0.5	
Delay (s)		97.9	152.0		81.5	0.2	45.5	5.9		68.1	27.0	
Level of Service		F	F		F	A	D	A		E	C	
Approach Delay (s)		125.0			32.8			10.2			28.3	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

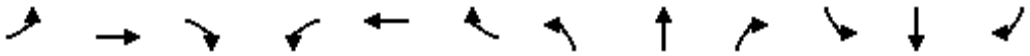
Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	300	1660	460	210	2030	660	160	350	400	130	220	200
Future Volume (vph)	300	1660	460	210	2030	660	160	350	400	130	220	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	5.9	5.9	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.94	1.00	1.00	1.00	1.00	0.81	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (prot)	3433	4585		1362	5085	1486	1611	1681	1610	1645	1289	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (perm)	3433	4585		1362	5085	1486	1611	1681	1610	1645	1289	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	1804	500	228	2207	717	174	380	435	141	239	217
RTOR Reduction (vph)	0	0	0	62	0	14	111	0	0	0	155	0
Lane Group Flow (vph)	326	2327	0	143	2207	703	63	243	354	359	84	217
Confl. Peds. (#/hr)	29		31			29		10			63	63
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	15.8	83.9		83.9	64.3	97.3	54.1	33.0	33.0	33.0	33.0	19.0
Effective Green, g (s)	17.2	86.0		83.9	66.2	93.5	54.1	33.0	33.0	33.0	33.0	19.0
Actuated g/C Ratio	0.11	0.57		0.56	0.44	0.62	0.36	0.22	0.22	0.22	0.22	0.13
Clearance Time (s)	4.0	6.1		6.1	5.9	4.0	5.9	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	2.8		2.8	3.2	3.0	4.1	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	393	2628		761	2244	926	581	369	354	361	283	224
v/s Ratio Prot	0.09	c0.51			c0.43	0.16		0.14	c0.22	0.22		c0.12
v/s Ratio Perm				0.11		0.32	0.04				0.06	
v/c Ratio	0.83	0.89		0.19	0.98	0.76	0.11	0.66	1.00	0.99	0.30	0.97
Uniform Delay, d1	65.0	27.7		16.3	41.4	20.2	31.9	53.4	58.5	58.4	48.8	65.2
Progression Factor	1.00	1.00		1.00	1.03	1.41	1.00	0.83	0.83	0.83	0.94	1.00
Incremental Delay, d2	13.5	4.8		0.5	12.9	2.7	0.1	3.8	45.5	43.3	0.5	50.7
Delay (s)	78.5	32.6		16.8	55.7	31.2	32.0	47.9	94.0	91.8	46.3	115.9
Level of Service	E	C		B	E	C	C	D	F	F	D	F
Approach Delay (s)		36.7			49.7					74.4		103.0
Approach LOS		D			D					E		F

Intersection Summary			
HCM 2000 Control Delay	52.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	330	50
Future Volume (vph)	330	50
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	359	54
RTOR Reduction (vph)	83	0
Lane Group Flow (vph)	330	0
Confl. Peds. (#/hr)		31
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	19.0	
Effective Green, g (s)	19.0	
Actuated g/C Ratio	0.13	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	353	
v/s Ratio Prot	0.12	
v/s Ratio Perm		
v/c Ratio	0.93	
Uniform Delay, d1	64.9	
Progression Factor	1.00	
Incremental Delay, d2	31.4	
Delay (s)	96.3	
Level of Service	F	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	120	300	130	250	70	70	90	120	90	90	100
Future Volume (vph)	100	120	300	130	250	70	70	90	120	90	90	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.92			0.98			0.94			0.95	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		1701			1798			1734			1745	
Flt Permitted		0.83			0.70			0.87			0.83	
Satd. Flow (perm)		1431			1277			1520			1474	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	130	326	141	272	76	76	98	130	98	98	109
RTOR Reduction (vph)	0	91	0	0	12	0	0	37	0	0	28	0
Lane Group Flow (vph)	0	474	0	0	477	0	0	267	0	0	277	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.8			23.8			21.9			22.4	
Effective Green, g (s)		23.8			23.8			21.9			22.4	
Actuated g/C Ratio		0.44			0.44			0.40			0.41	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		622			555			608			603	
v/s Ratio Prot												
v/s Ratio Perm		0.33			c0.37			0.18			c0.19	
v/c Ratio		0.76			0.86			0.44			0.46	
Uniform Delay, d1		13.1			13.9			11.9			11.7	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		5.5			12.5			2.3			0.6	
Delay (s)		18.6			26.4			14.2			12.3	
Level of Service		B			C			B			B	
Approach Delay (s)		18.6			26.4			14.2			12.3	
Approach LOS		B			C			B			B	

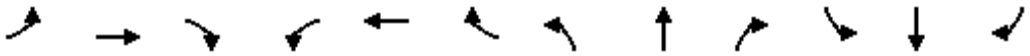
Intersection Summary			
HCM 2000 Control Delay	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	54.7	Sum of lost time (s)	9.0
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	290	1320	830	50	50	480
Future Volume (vph)	290	1320	830	50	50	480
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5042		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5042		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	1435	902	54	54	522
RTOR Reduction (vph)	0	0	3	0	0	468
Lane Group Flow (vph)	315	1435	953	0	54	54
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.6	99.6	69.0		12.4	12.4
Effective Green, g (s)	26.6	99.6	69.0		12.4	12.4
Actuated g/C Ratio	0.22	0.83	0.58		0.10	0.10
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	392	4220	2899		182	163
v/s Ratio Prot	c0.18	c0.28	0.19		0.03	
v/s Ratio Perm						c0.03
v/c Ratio	0.80	0.34	0.33		0.30	0.33
Uniform Delay, d1	44.2	2.4	13.4		49.8	49.9
Progression Factor	1.00	1.00	0.60		1.00	1.00
Incremental Delay, d2	11.3	0.2	0.2		0.9	1.2
Delay (s)	55.5	2.6	8.2		50.7	51.1
Level of Service	E	A	A		D	D
Approach Delay (s)		12.2	8.2		51.1	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	0	140	310	310	150	0	0	0	0	70	90
Future Volume (vph)	100	0	140	310	310	150	0	0	0	0	70	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.95						0.92	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1772						1721	
Flt Permitted	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1770		1583	1770	1772						1721	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	152	337	337	163	0	0	0	0	76	98
RTOR Reduction (vph)	0	0	135	198	23	0	0	0	0	0	78	0
Lane Group Flow (vph)	109	0	17	139	477	0	0	0	0	0	96	0
Turn Type	Prot		Perm	Split	NA						NA	
Protected Phases	2!			8	8						6!	
Permitted Phases			4									
Actuated Green, G (s)	8.5		4.9	17.8	17.8						8.5	
Effective Green, g (s)	8.5		4.9	17.8	17.8						8.5	
Actuated g/C Ratio	0.20		0.11	0.41	0.41						0.20	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	348		179	729	730						338	
v/s Ratio Prot	c0.06			0.08	c0.27						0.06	
v/s Ratio Perm			c0.01									
v/c Ratio	0.31		0.10	0.19	0.65						0.28	
Uniform Delay, d1	14.9		17.2	8.1	10.2						14.8	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.5		0.2	0.1	2.1						0.5	
Delay (s)	15.4		17.4	8.2	12.3						15.2	
Level of Service	B		B	A	B						B	
Approach Delay (s)		16.6			10.7			0.0			15.2	
Approach LOS		B			B			A			B	

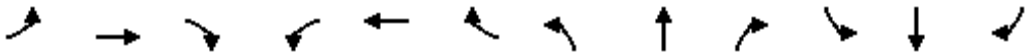
Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	43.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

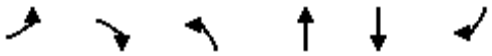
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1890	170	290	2370	0	0	0	0	790	280	320
Future Volume (vph)	0	1890	170	290	2370	0	0	0	0	790	280	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.98	0.99	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		5022		1770	6408					1656	1725	1559
Flt Permitted		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (perm)		5022		1770	6408					1656	1725	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2054	185	315	2576	0	0	0	0	859	304	348
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	31
Lane Group Flow (vph)	0	2232	0	315	2576	0	0	0	0	661	502	317
Confl. Peds. (#/hr)				13						14		3
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		60.8		23.6	89.1					51.1	51.1	51.1
Effective Green, g (s)		62.0		24.0	90.0					52.0	52.0	52.0
Actuated g/C Ratio		0.41		0.16	0.60					0.35	0.35	0.35
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2075		283	3844					574	598	540
v/s Ratio Prot		c0.44		c0.18	0.40							
v/s Ratio Perm										c0.40	0.29	0.20
v/c Ratio		1.08		1.11	0.67					1.15	0.84	0.59
Uniform Delay, d1		44.0		63.0	20.1					49.0	45.2	40.2
Progression Factor		1.00		1.30	0.05					1.00	1.00	1.00
Incremental Delay, d2		39.1		56.0	0.1					86.9	9.6	1.1
Delay (s)		83.1		137.8	1.2					135.9	54.8	41.2
Level of Service		F		F	A					F	D	D
Approach Delay (s)		83.1			16.0			0.0			87.2	
Approach LOS		F			B			A			F	

Intersection Summary			
HCM 2000 Control Delay	54.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



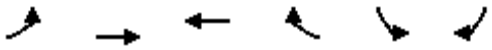
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	800	220	180	390	0	180	0	300	390	370	10
Future Volume (vph)	0	800	220	180	390	0	180	0	300	390	370	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3317		1770	3539		1770		1556	1770	1854	
Flt Permitted		1.00		0.11	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3317		204	3539		1770		1556	1770	1854	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	870	239	196	424	0	196	0	326	424	402	11
RTOR Reduction (vph)	0	28	0	0	0	0	0	0	206	0	1	0
Lane Group Flow (vph)	0	1081	0	196	424	0	196	0	120	424	412	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		32.2		42.9	42.9		11.9		32.2	21.0	21.0	
Effective Green, g (s)		33.1		43.3	43.8		12.3		33.1	21.9	21.9	
Actuated g/C Ratio		0.37		0.48	0.49		0.14		0.37	0.24	0.24	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1219		214	1722		241		572	430	451	
v/s Ratio Prot		0.33		c0.07	0.12		c0.11			c0.24	0.22	
v/s Ratio Perm				c0.37					0.08			
v/c Ratio		0.89		0.92	0.25		0.81		0.21	0.99	0.91	
Uniform Delay, d1		26.7		19.1	13.5		37.7		19.5	33.9	33.1	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		9.7		38.2	0.3		18.5		0.8	39.4	22.8	
Delay (s)		36.4		57.3	13.8		56.3		20.3	73.3	56.0	
Level of Service		D		E	B		E		C	E	E	
Approach Delay (s)		36.4			27.6			33.8			64.7	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	450	490	880	430	100
Future Volume (vph)	230	450	490	880	430	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.97	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1668		1770	5085	4915	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1668		1770	5085	4915	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	489	533	957	467	109
RTOR Reduction (vph)	59	0	0	0	32	0
Lane Group Flow (vph)	680	0	533	957	544	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	49.0		37.0	63.0	22.0	
Effective Green, g (s)	49.0		36.6	63.0	21.1	
Actuated g/C Ratio	0.41		0.31	0.52	0.18	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	681		539	2669	864	
v/s Ratio Prot	c0.41		c0.30	0.19	c0.11	
v/s Ratio Perm						
v/c Ratio	1.00		0.99	0.36	0.63	
Uniform Delay, d1	35.5		41.5	16.7	45.8	
Progression Factor	1.00		1.05	1.21	1.00	
Incremental Delay, d2	34.0		34.7	0.4	3.5	
Delay (s)	69.5		78.1	20.5	49.3	
Level of Service	E		E	C	D	
Approach Delay (s)	69.5			41.1	49.3	
Approach LOS	E			D	D	

Intersection Summary			
HCM 2000 Control Delay	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



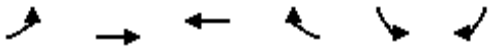
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	90	170	80	110	170
Future Volume (Veh/h)	70	90	170	80	110	170
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	98	185	87	120	185
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1226	738			
pX, platoon unblocked						
vC, conflicting volume	272				478	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				478	228
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				77	77
cM capacity (veh/h)	1291				514	811

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	76	98	272	305
Volume Left	76	0	0	120
Volume Right	0	0	87	185
cSH	1291	1700	1700	660
Volume to Capacity	0.06	0.06	0.16	0.46
Queue Length 95th (ft)	5	0	0	61
Control Delay (s)	8.0	0.0	0.0	15.0
Lane LOS	A			C
Approach Delay (s)	3.5		0.0	15.0
Approach LOS				C

Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	2540	0	0	2530	690	130	360	250	0	0	0
Future Volume (vph)	140	2540	0	0	2530	690	130	360	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frpb, ped/bikes	1.00	1.00			1.00	0.96		0.99				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1519		3294				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1519		3294				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	2761	0	0	2750	750	141	391	272	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	94	0	2	0	0	0	0
Lane Group Flow (vph)	152	2761	0	0	2750	656	0	802	0	0	0	0
Confl. Peds. (#/hr)	15		2			15	1		20			
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	19.8	99.3			75.1	75.1		40.9				
Effective Green, g (s)	20.2	100.2			76.0	76.0		41.8				
Actuated g/C Ratio	0.13	0.67			0.51	0.51		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	238	3396			2576	769		917				
v/s Ratio Prot	0.09	c0.54			c0.54			c0.24				
v/s Ratio Perm						0.43						
v/c Ratio	0.64	0.81			1.07	0.85		0.87				
Uniform Delay, d1	61.4	18.1			37.0	32.2		51.6				
Progression Factor	0.74	0.56			1.00	1.00		1.00				
Incremental Delay, d2	0.4	0.2			39.0	11.6		9.0				
Delay (s)	45.8	10.3			76.0	43.7		60.6				
Level of Service	D	B			E	D		E				
Approach Delay (s)		12.2			69.1			60.6			0.0	
Approach LOS		B			E			E			A	

Intersection Summary			
HCM 2000 Control Delay	45.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	1360	570	150	0	0
Future Volume (Veh/h)	130	1360	570	150	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	1478	620	163	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		345	945			
pX, platoon unblocked	0.94				0.75	0.94
vC, conflicting volume	783				1722	392
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	652				960	238
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	84				100	100
cM capacity (veh/h)	878				160	721

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	141	739	739	413	370
Volume Left	141	0	0	0	0
Volume Right	0	0	0	0	163
cSH	878	1700	1700	1700	1700
Volume to Capacity	0.16	0.43	0.43	0.24	0.22
Queue Length 95th (ft)	14	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.9			0.0	
Approach LOS					

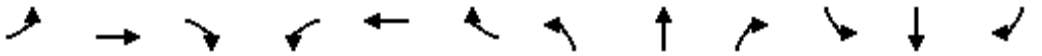
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	130	0	0	590	360	280
Future Volume (vph)	130	0	0	590	360	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	0	0	641	391	304

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	141	641	391	304
Volume Left (vph)	141	0	391	0
Volume Right (vph)	0	641	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.9	4.7	6.2	5.7
Degree Utilization, x	0.27	0.84	0.67	0.48
Capacity (veh/h)	499	751	565	624
Control Delay (s)	12.4	27.4	19.7	12.6
Approach Delay (s)	12.4	27.4	16.6	
Approach LOS	B	D	C	

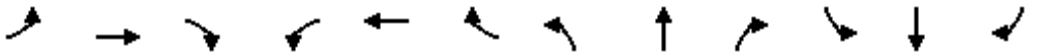
Intersection Summary			
Delay	20.9		
Level of Service	C		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	440	50	150	20	20	30	60	130	10	20	200	190
Future Volume (vph)	440	50	150	20	20	30	60	130	10	20	200	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	478	54	163	22	22	33	65	141	11	22	217	207

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	505	190	77	217	239	207
Volume Left (vph)	478	0	22	65	22	0
Volume Right (vph)	0	163	33	11	0	207
Hadj (s)	0.51	-0.57	-0.17	0.06	0.08	-0.67
Departure Headway (s)	7.3	6.2	7.8	7.5	7.4	6.6
Degree Utilization, x	1.03	0.33	0.17	0.45	0.49	0.38
Capacity (veh/h)	485	567	432	457	478	531
Control Delay (s)	73.1	11.0	12.3	16.7	16.1	12.5
Approach Delay (s)	56.2		12.3	16.7	14.4	
Approach LOS	F		B	C	B	

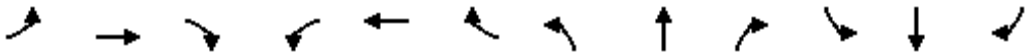
Intersection Summary				
Delay	34.9			
Level of Service	D			
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	700	280	430	490	0	0	0	0	410	540	1080
Future Volume (vph)	0	700	280	430	490	0	0	0	0	410	540	1080
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	761	304	467	533	0	0	0	0	446	587	1174
RTOR Reduction (vph)	0	0	168	0	0	0	0	0	0	0	0	84
Lane Group Flow (vph)	0	761	136	467	533	0	0	0	0	446	587	1090
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.7	26.7	15.0	46.1					64.1	64.1	64.1
Effective Green, g (s)		27.6	27.6	15.4	47.0					65.0	65.0	65.0
Actuated g/C Ratio		0.23	0.23	0.13	0.39					0.54	0.54	0.54
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		813	364	440	1386					872	1836	857
v/s Ratio Prot		c0.22		c0.14	0.15							
v/s Ratio Perm			0.09							0.28	0.17	c0.69
v/c Ratio		0.94	0.37	1.06	0.38					0.51	0.32	1.27
Uniform Delay, d1		45.3	38.9	52.3	26.1					17.4	15.2	27.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		19.4	2.9	60.1	0.8					0.2	0.0	131.6
Delay (s)		64.7	41.8	112.4	27.0					17.6	15.3	159.1
Level of Service		E	D	F	C					B	B	F
Approach Delay (s)		58.2			66.9			0.0			92.2	
Approach LOS		E			E			A			F	

Intersection Summary			
HCM 2000 Control Delay	77.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

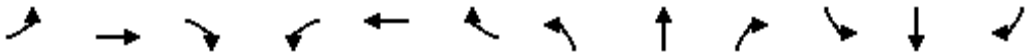
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	60	50	0	0	0	0	0	0	1620	150
Future Volume (Veh/h)	0	0	60	50	0	0	0	0	0	0	1620	150
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	65	54	0	0	0	0	0	0	1761	163
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1842	1842	668	652	1924	0	1924			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1842	1842	668	652	1924	0	1924			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	84	82	100	100	100			100		
cM capacity (veh/h)	47	74	400	296	66	1084	303			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	65	54	704	704	515
Volume Left	0	54	0	0	0
Volume Right	65	0	0	0	163
cSH	400	296	1700	1700	1700
Volume to Capacity	0.16	0.18	0.41	0.41	0.30
Queue Length 95th (ft)	14	16	0	0	0
Control Delay (s)	15.7	19.9	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	15.7	19.9	0.0		
Approach LOS	C	C			

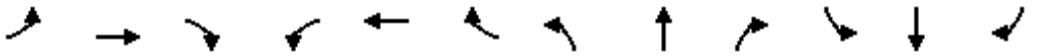
Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	53.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	440	260	100	160	0	0	0	0	400	860	490
Future Volume (vph)	0	440	260	100	160	0	0	0	0	400	860	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.95	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3472					1770	4808	
Flt Permitted		1.00	1.00		0.63					0.95	1.00	
Satd. Flow (perm)		1863	1583		2228					1770	4808	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	478	283	109	174	0	0	0	0	435	935	533
RTOR Reduction (vph)	0	0	38	0	0	0	0	0	0	0	158	0
Lane Group Flow (vph)	0	478	245	0	283	0	0	0	0	435	1310	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		25.3	25.3		25.3					26.7	26.7	
Effective Green, g (s)		28.0	28.0		28.0					29.0	29.0	
Actuated g/C Ratio		0.43	0.43		0.43					0.45	0.45	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		802	681		959					789	2145	
v/s Ratio Prot		c0.26									c0.27	
v/s Ratio Perm			0.16		0.13					0.25		
v/c Ratio		0.60	0.36		0.30					0.55	0.61	
Uniform Delay, d1		14.2	12.5		12.1					13.2	13.7	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		3.3	1.5		0.8					2.8	1.3	
Delay (s)		17.4	13.9		12.8					16.0	15.0	
Level of Service		B	B		B					B	B	
Approach Delay (s)		16.1			12.8			0.0			15.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

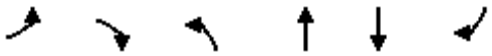


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1110	370	50	700	0	0	0	0	740	1100	660
Future Volume (vph)	0	1110	370	50	700	0	0	0	0	740	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3407		1770	3539						4711	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3407		1770	3539						4711	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1207	402	54	761	0	0	0	0	804	1196	717
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	1576	0	54	761	0	0	0	0	0	2000	665
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		31.5		3.4	37.6						40.4	40.4
Effective Green, g (s)		29.7		3.8	37.5						39.5	41.8
Actuated g/C Ratio		0.33		0.04	0.42						0.44	0.46
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1124		74	1474						2067	632
v/s Ratio Prot		c0.46		c0.03	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		1.40		0.73	0.52						1.09dl	1.05
Uniform Delay, d1		30.1		42.6	19.5						24.6	24.1
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		186.2		26.0	1.3						12.8	50.3
Delay (s)		216.3		68.6	20.8						37.5	74.4
Level of Service		F		E	C						D	E
Approach Delay (s)		216.3			24.0			0.0			47.2	
Approach LOS		F			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	96.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	340	1270	1700	1270	1180	130
Future Volume (vph)	340	1270	1700	1270	1180	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2787	3433	5085	5085	1566
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2787	3433	5085	5085	1566
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.92
Adj. Flow (vph)	370	1337	1789	1337	1283	141
RTOR Reduction (vph)	0	0	0	0	0	4
Lane Group Flow (vph)	370	1337	1789	1337	1283	137
Confl. Peds. (#/hr)			3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	24.0	87.0	63.0	98.0	31.0	55.0
Effective Green, g (s)	24.0	87.0	63.0	98.0	31.0	55.0
Actuated g/C Ratio	0.18	0.67	0.48	0.75	0.24	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	326	1950	1663	3833	1212	710
v/s Ratio Prot	c0.21	0.33	c0.52	0.26	c0.25	0.04
v/s Ratio Perm		0.15				0.05
v/c Ratio	1.13	0.69	1.08	0.35	1.06	0.19
Uniform Delay, d1	53.0	13.1	33.5	5.3	49.5	23.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	91.5	1.0	45.6	0.3	42.9	0.1
Delay (s)	144.5	14.2	79.1	5.6	92.4	23.7
Level of Service	F	B	E	A	F	C
Approach Delay (s)	42.4			47.7	85.6	
Approach LOS	D			D	F	

Intersection Summary			
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

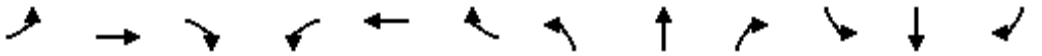
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	240	520	0	0	930	640	40	0	120	250	30	420
Future Volume (vph)	240	520	0	0	930	640	40	0	120	250	30	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.91	0.91	
Frt	1.00	1.00			1.00	0.85		0.90		1.00	0.87	
Flt Protected	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	3539			3539	1583		1653		1610	2933	
Flt Permitted	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	3539			3539	1583		1653		1610	2933	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	565	0	0	1011	696	43	0	130	272	33	457
RTOR Reduction (vph)	0	0	0	0	0	427	0	111	0	0	399	0
Lane Group Flow (vph)	261	565	0	0	1011	269	0	62	0	245	118	0
Turn Type	Prot	NA			NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6						
Actuated Green, G (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Effective Green, g (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Actuated g/C Ratio	0.12	0.56			0.39	0.39		0.14		0.13	0.13	
Clearance Time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5		2.0		2.0	2.0	
Lane Grp Cap (vph)	214	1994			1366	611		238		204	372	
v/s Ratio Prot	c0.15	0.16			c0.29			c0.04		c0.15	0.04	
v/s Ratio Perm						0.17						
v/c Ratio	1.22	0.28			0.74	0.44		0.26		1.20	0.32	
Uniform Delay, d1	38.4	9.9			23.0	19.8		33.2		38.1	34.7	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	133.4	0.4			3.6	2.3		0.2		127.8	0.2	
Delay (s)	171.8	10.3			26.7	22.1		33.4		165.9	34.8	
Level of Service	F	B			C	C		C		F	C	
Approach Delay (s)		61.3			24.8			33.4			77.0	
Approach LOS		E			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	45.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.3	Sum of lost time (s)	19.3
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

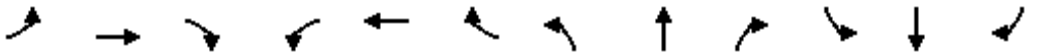
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	410	70	630	0	0	0	0	0	350	40	370
Future Volume (vph)	0	410	70	630	0	0	0	0	0	350	40	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9						1.8	1.8	1.8
Lane Util. Factor		0.95		1.00						0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00						1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00						1.00	1.00	1.00
Frt		0.98		1.00						1.00	1.00	0.85
Flt Protected		1.00		0.95						0.95	0.96	1.00
Satd. Flow (prot)		3453		1770						1681	1701	1583
Flt Permitted		1.00		0.95						0.95	0.96	1.00
Satd. Flow (perm)		3453		1770						1681	1701	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	446	76	685	0	0	0	0	0	380	43	402
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	0	230
Lane Group Flow (vph)	0	504	0	685	0	0	0	0	0	201	222	172
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Split						Split	NA	custom
Protected Phases		7		8	8					6	6	6
Permitted Phases												7
Actuated Green, G (s)		14.2		29.2						10.6	10.6	24.8
Effective Green, g (s)		14.2		29.5						12.8	12.8	29.2
Actuated g/C Ratio		0.21		0.43						0.19	0.19	0.43
Clearance Time (s)		4.0		6.2						4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0						3.0	3.0	3.0
Lane Grp Cap (vph)		718		765						315	319	719
v/s Ratio Prot		c0.15		c0.39						0.12	c0.13	0.04
v/s Ratio Perm												0.06
v/c Ratio		0.70		0.90						0.64	0.70	0.24
Uniform Delay, d1		25.0		17.9						25.6	25.9	12.4
Progression Factor		1.00		1.00						1.00	1.00	1.00
Incremental Delay, d2		3.1		12.7						4.2	6.5	0.2
Delay (s)		28.1		30.6						29.8	32.3	12.6
Level of Service		C		C						C	C	B
Approach Delay (s)		28.1			30.6			0.0			22.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	68.2	Sum of lost time (s)	11.7
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



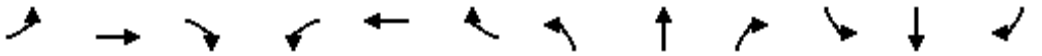
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Future Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1624		1770	4945		1770	5052	
Flt Permitted	0.43	1.00		0.55	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	805	1809		1020	1624		1770	4945		1770	5052	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	250	33	1728	391	272	576	22
RTOR Reduction (vph)	0	6	0	0	162	0	0	30	0	0	3	0
Lane Group Flow (vph)	43	190	0	413	131	0	33	2089	0	272	595	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.1	43.1		42.4	42.4		3.6	46.1		19.0	60.8	
Effective Green, g (s)	43.1	43.1		42.8	42.8		3.6	47.5		16.8	62.9	
Actuated g/C Ratio	0.35	0.35		0.35	0.35		0.03	0.39		0.14	0.52	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	285	641		359	571		52	1931		244	2613	
v/s Ratio Prot		0.11			0.08		0.02	c0.42		c0.15	0.12	
v/s Ratio Perm	0.05			c0.40								
v/c Ratio	0.15	0.30		1.15	0.23		0.63	1.08		1.11	0.23	
Uniform Delay, d1	26.8	28.3		39.4	27.8		58.3	37.0		52.4	16.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		95.0	0.2		17.1	46.6		91.9	0.2	
Delay (s)	26.9	28.4		134.4	28.0		75.4	83.6		144.3	16.3	
Level of Service	C	C		F	C		E	F		F	B	
Approach Delay (s)		28.1			90.2			83.5			56.3	
Approach LOS		C			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	75.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	102.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	650	1070	320	250	950	160	460	1060	240	170	700	340
Future Volume (vph)	650	1070	320	250	950	160	460	1060	240	170	700	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3417		1770	3454		1770	4931		1770	5085	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3417		1770	3454		1770	4931		1770	5085	1569
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	707	1163	348	272	1033	174	500	1152	261	185	761	370
RTOR Reduction (vph)	0	19	0	0	9	0	0	24	0	0	0	50
Lane Group Flow (vph)	707	1492	0	272	1198	0	500	1389	0	185	761	320
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	38.6	58.2		22.2	41.2		28.6	42.1		8.6	22.0	60.6
Effective Green, g (s)	39.0	59.4		22.6	43.0		29.0	43.0		9.0	23.0	61.4
Actuated g/C Ratio	0.26	0.40		0.15	0.29		0.19	0.29		0.06	0.15	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	460	1353		266	990		342	1413		106	779	642
v/s Ratio Prot	c0.40	0.44		0.15	c0.35		c0.28	c0.28		c0.10	0.15	0.13
v/s Ratio Perm												0.07
v/c Ratio	1.54	1.10		1.02	1.21		1.46	0.98		1.75	0.98	0.50
Uniform Delay, d1	55.5	45.3		63.7	53.5		60.5	53.1		70.5	63.2	32.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	252.4	57.8		61.1	103.9		223.4	20.2		371.3	27.1	0.2
Delay (s)	307.9	103.1		124.8	157.4		283.9	73.3		441.8	90.3	33.1
Level of Service	F	F		F	F		F	E		F	F	C
Approach Delay (s)		168.3			151.4			128.4			123.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	145.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	121.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	880	320	220	370	90	280	240	630	70	110	70
Future Volume (vph)	160	880	320	220	370	90	280	240	630	70	110	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.71	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	957	348	239	402	98	304	261	685	76	120	76
RTOR Reduction (vph)	0	0	190	0	0	63	0	0	58	0	0	58
Lane Group Flow (vph)	174	957	158	239	402	35	304	261	627	76	120	18
Confl. Peds. (#/hr)			27	27		170	23		15	15		23
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.0	33.2	41.1	10.1	32.3	32.3	7.9	24.0	34.1	6.6	22.7	22.7
Effective Green, g (s)	11.4	34.1	41.9	10.5	33.2	33.2	8.3	23.4	31.9	7.0	22.2	22.2
Actuated g/C Ratio	0.12	0.37	0.45	0.11	0.36	0.36	0.09	0.25	0.34	0.08	0.24	0.24
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	218	1304	1227	389	1270	405	308	471	536	133	1220	368
v/s Ratio Prot	0.10	c0.27	0.01	0.07	0.11		c0.09	0.14	c0.11	0.04	0.02	
v/s Ratio Perm			0.05			0.03			0.29			0.01
v/c Ratio	0.80	0.73	0.13	0.61	0.32	0.09	0.99	0.55	1.17	0.57	0.10	0.05
Uniform Delay, d1	39.4	25.3	14.7	39.1	21.4	19.6	42.0	30.0	30.3	41.3	27.4	27.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.0	3.7	0.0	2.0	0.7	0.4	47.2	2.1	94.8	3.6	0.1	0.1
Delay (s)	56.5	29.0	14.7	41.1	22.1	20.0	89.2	32.1	125.1	44.9	27.4	27.1
Level of Service	E	C	B	D	C	C	F	C	F	D	C	C
Approach Delay (s)		28.8			28.0			96.9			32.2	
Approach LOS		C			C			F			C	

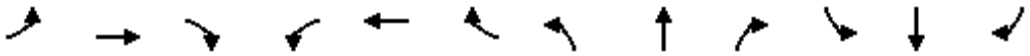
Intersection Summary			
HCM 2000 Control Delay	51.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	92.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.94			0.95			0.93	
Flt Protected		0.97			1.00			0.99			0.99	
Satd. Flow (prot)		1784			1727			1722			1698	
Flt Permitted		0.62			0.92			0.86			0.79	
Satd. Flow (perm)		1147			1592			1495			1365	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	174	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	3	0	0	17	0	0	19	0	0	32	0
Lane Group Flow (vph)	0	1029	0	0	342	0	0	308	0	0	55	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		79.2			79.2			21.0			21.0	
Effective Green, g (s)		80.1			80.1			21.9			21.9	
Actuated g/C Ratio		0.73			0.73			0.20			0.20	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		835			1159			297			271	
v/s Ratio Prot												
v/s Ratio Perm		c0.90			0.22			c0.21			0.04	
v/c Ratio		1.23			0.30			1.04			0.20	
Uniform Delay, d1		15.0			5.2			44.0			36.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		115.1			0.6			62.0			0.1	
Delay (s)		130.0			5.8			106.0			36.9	
Level of Service		F			A			F			D	
Approach Delay (s)		130.0			5.8			106.0			36.9	
Approach LOS		F			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	96.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1090	490	240	500	180	260
Future Volume (vph)	1090	490	240	500	180	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.95		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4686		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4686		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1185	533	261	543	196	283
RTOR Reduction (vph)	91	0	0	0	0	221
Lane Group Flow (vph)	1627	0	261	543	196	62
Confl. Peds. (#/hr)		53	53		46	81
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.3		12.9	46.6	14.8	14.8
Effective Green, g (s)	31.2		13.3	46.6	15.7	15.7
Actuated g/C Ratio	0.44		0.19	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2053		330	2316	390	349
v/s Ratio Prot	c0.35		c0.15	0.15	c0.11	0.04
v/s Ratio Perm						
v/c Ratio	0.79		0.79	0.23	0.50	0.18
Uniform Delay, d1	17.2		27.6	5.0	24.3	22.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2		11.4	0.2	0.4	0.1
Delay (s)	20.5		39.0	5.3	24.7	22.6
Level of Service	C		D	A	C	C
Approach Delay (s)	20.5			16.2	23.5	
Approach LOS	C			B	C	

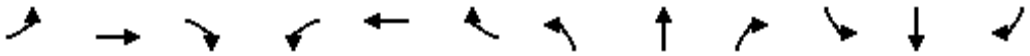
Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	11.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	30	20	60	40	140	40	90	190	60
Future Volume (vph)	20	20	20	30	20	60	40	140	40	90	190	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	33	22	65	43	152	43	98	207	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	238	370
Volume Left (vph)	22	33	43	98
Volume Right (vph)	22	65	43	65
Hadj (s)	-0.10	-0.24	-0.04	-0.02
Departure Headway (s)	5.5	5.2	4.8	4.7
Degree Utilization, x	0.10	0.17	0.32	0.48
Capacity (veh/h)	572	610	707	735
Control Delay (s)	9.1	9.3	10.1	12.0
Approach Delay (s)	9.1	9.3	10.1	12.0
Approach LOS	A	A	B	B

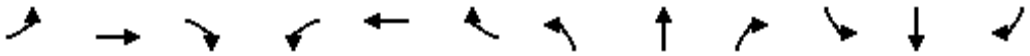
Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	48.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	20	30	40	20	30	130	30	50	130	70
Future Volume (vph)	40	20	20	30	40	20	30	130	30	50	130	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	22	33	43	22	33	141	33	54	141	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	87	98	207	271
Volume Left (vph)	43	33	33	54
Volume Right (vph)	22	22	33	76
Hadj (s)	-0.02	-0.03	-0.03	-0.09
Departure Headway (s)	5.2	5.1	4.7	4.6
Degree Utilization, x	0.12	0.14	0.27	0.34
Capacity (veh/h)	626	631	729	751
Control Delay (s)	8.9	9.0	9.4	9.9
Approach Delay (s)	8.9	9.0	9.4	9.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.5			
Level of Service	A			
Intersection Capacity Utilization	36.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	70	30	30	20	220	400	10	160	20
Future Volume (vph)	20	20	20	70	30	30	20	220	400	10	160	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	76	33	33	22	239	435	11	174	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	142	261	435	207
Volume Left (vph)	22	76	22	0	11
Volume Right (vph)	22	33	0	435	22
Hadj (s)	-0.10	0.00	0.08	-0.67	-0.02
Departure Headway (s)	6.0	5.9	5.5	4.7	5.4
Degree Utilization, x	0.11	0.23	0.40	0.57	0.31
Capacity (veh/h)	531	555	645	747	638
Control Delay (s)	9.7	10.7	10.8	12.6	10.7
Approach Delay (s)	9.7	10.7	11.9		10.7
Approach LOS	A	B	B		B

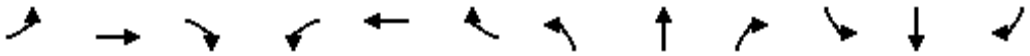
Intersection Summary				
Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	40	40	60	50	60	110
Future Volume (vph)	40	40	60	50	60	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	43	65	54	65	120

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	86	119	185
Volume Left (vph)	0	65	65
Volume Right (vph)	43	0	120
Hadj (s)	-0.27	0.14	-0.28
Departure Headway (s)	4.2	4.5	4.1
Degree Utilization, x	0.10	0.15	0.21
Capacity (veh/h)	818	751	840
Control Delay (s)	7.6	8.3	8.2
Approach Delay (s)	7.6	8.3	8.2
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	30	30	50	30	20	80	160	140	20	80	20
Future Volume (vph)	30	30	30	50	30	20	80	160	140	20	80	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	33	33	54	33	22	87	174	152	22	87	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	99	109	413	131
Volume Left (vph)	33	54	87	22
Volume Right (vph)	33	22	152	22
Hadj (s)	-0.10	0.01	-0.14	-0.03
Departure Headway (s)	5.3	5.4	4.5	4.9
Degree Utilization, x	0.14	0.16	0.52	0.18
Capacity (veh/h)	607	600	773	676
Control Delay (s)	9.2	9.4	12.2	9.0
Approach Delay (s)	9.2	9.4	12.2	9.0
Approach LOS	A	A	B	A

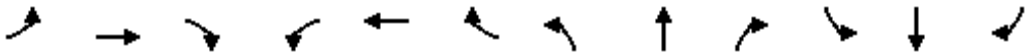
Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	50.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	40	110	20	60	50	120	300	30	20	70	170
Future Volume (vph)	270	40	110	20	60	50	120	300	30	20	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.99		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1737			1742		1765	1833		1764	1637	
Flt Permitted		0.76			0.92		0.57	1.00		0.47	1.00	
Satd. Flow (perm)		1357			1608		1068	1833		873	1637	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	43	120	22	65	54	130	326	33	22	76	185
RTOR Reduction (vph)	0	26	0	0	32	0	0	4	0	0	104	0
Lane Group Flow (vph)	0	430	0	0	109	0	130	355	0	22	157	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		20.7			20.7		22.5	22.5		22.5	22.5	
Effective Green, g (s)		20.7			20.7		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.40			0.40		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		548			650		469	805		383	719	
v/s Ratio Prot								c0.19			0.10	
v/s Ratio Perm		c0.32			0.07		0.12			0.03		
v/c Ratio		0.79			0.17		0.28	0.44		0.06	0.22	
Uniform Delay, d1		13.3			9.7		9.2	10.0		8.3	8.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		6.7			0.0		1.5	1.7		0.3	0.7	
Delay (s)		20.1			9.8		10.6	11.7		8.5	9.6	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		20.1			9.8			11.4			9.5	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1060	220	310	590	20	130	20	220	30	20	20
Future Volume (vph)	70	1060	220	310	590	20	130	20	220	30	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	1.00			0.92			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1765	4916		1770	3517			1668			1744	
Flt Permitted	0.40	1.00		0.15	1.00			0.86			0.77	
Satd. Flow (perm)	743	4916		287	3517			1466			1371	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1152	239	337	641	22	141	22	239	33	22	22
RTOR Reduction (vph)	0	41	0	0	3	0	0	85	0	0	16	0
Lane Group Flow (vph)	76	1351	0	337	660	0	0	318	0	0	61	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	24.2	21.5		36.6	29.5			16.6			16.6	
Effective Green, g (s)	25.0	22.5		37.0	30.4			17.5			17.5	
Actuated g/C Ratio	0.40	0.36		0.59	0.48			0.28			0.28	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	345	1755		427	1697			407			380	
v/s Ratio Prot	0.01	0.27		c0.14	0.19							
v/s Ratio Perm	0.08			c0.33				c0.22			0.04	
v/c Ratio	0.22	0.77		0.79	0.39			0.78			0.16	
Uniform Delay, d1	12.0	18.0		12.2	10.4			21.0			17.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	3.3		8.7	0.7			8.7			0.1	
Delay (s)	12.1	21.3		20.9	11.1			29.6			17.3	
Level of Service	B	C		C	B			C			B	
Approach Delay (s)		20.8			14.4			29.6			17.3	
Approach LOS		C			B			C			B	

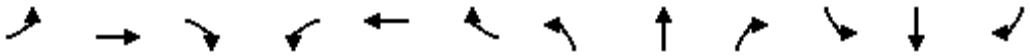
Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	63.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Future Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	22	33	11	22	22	22	120	33	43	174	98

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	175	55	175	315
Volume Left (vph)	120	11	22	43
Volume Right (vph)	33	22	33	98
Hadj (s)	0.06	-0.17	-0.05	-0.13
Departure Headway (s)	5.2	5.2	4.9	4.6
Degree Utilization, x	0.25	0.08	0.24	0.40
Capacity (veh/h)	631	608	692	739
Control Delay (s)	10.0	8.6	9.4	10.7
Approach Delay (s)	10.0	8.6	9.4	10.7
Approach LOS	A	A	A	B

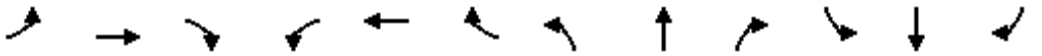
Intersection Summary				
Delay	10.1			
Level of Service	B			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	60	10	20	20	40	100	20	20	150	50
Future Volume (vph)	40	20	60	10	20	20	40	100	20	20	150	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	65	11	22	22	43	109	22	22	163	54

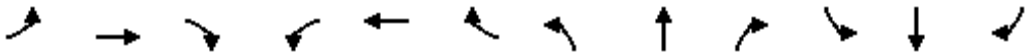
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	130	55	174	239
Volume Left (vph)	43	11	43	22
Volume Right (vph)	65	22	22	54
Hadj (s)	-0.20	-0.17	0.01	-0.08
Departure Headway (s)	4.7	4.9	4.7	4.5
Degree Utilization, x	0.17	0.07	0.22	0.30
Capacity (veh/h)	692	660	734	761
Control Delay (s)	8.7	8.3	9.0	9.4
Approach Delay (s)	8.7	8.3	9.0	9.4
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	37.0%	ICU Level of Service	A	
Analysis Period (min)	15			



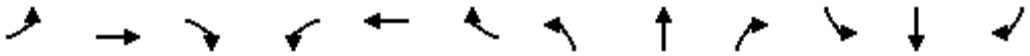
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	670	60	30	580	160	0	0	30	220	150	340
Future Volume (vph)	580	670	60	30	580	160	0	0	30	220	150	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3487		1770	3412				1611	1681	1734	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3487		1770	3412				1611	1681	1734	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	728	65	33	630	174	0	0	33	239	163	370
RTOR Reduction (vph)	0	7	0	0	28	0	0	0	0	0	0	259
Lane Group Flow (vph)	630	786	0	33	776	0	0	0	33	127	275	111
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	13.5	36.6		2.0	25.1				71.1	17.9	17.9	17.9
Effective Green, g (s)	13.9	37.5		2.4	26.0				71.1	19.2	19.2	19.2
Actuated g/C Ratio	0.20	0.53		0.03	0.37				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	671	1839		59	1247				1611	453	468	421
v/s Ratio Prot	c0.18	0.23		0.02	c0.23					0.08	c0.16	
v/s Ratio Perm									0.02			0.07
v/c Ratio	0.94	0.43		0.56	0.62				0.02	0.28	0.59	0.26
Uniform Delay, d1	28.2	10.3		33.8	18.5				0.0	20.5	22.5	20.4
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	20.6	0.7		6.4	2.3				0.0	0.6	2.5	0.6
Delay (s)	48.8	11.0		40.2	20.9				0.0	21.1	25.0	20.9
Level of Service	D	B		D	C				A	C	C	C
Approach Delay (s)		27.7			21.6			0.0			22.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	71.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1430	100	70	1010	60	120	110	140	40	90	20
Future Volume (vph)	60	1430	100	70	1010	60	120	110	140	40	90	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3406		1671	3405		1646	1575			1704	
Flt Permitted	0.95	1.00		0.95	1.00		0.49	1.00			0.44	
Satd. Flow (perm)	1678	3406		1671	3405		852	1575			764	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1554	109	76	1098	65	130	120	152	43	98	22
RTOR Reduction (vph)	0	3	0	0	3	0	0	34	0	0	4	0
Lane Group Flow (vph)	65	1660	0	76	1160	0	130	238	0	0	159	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	9.3	94.7		10.0	95.4		26.1	26.1			26.1	
Effective Green, g (s)	9.7	95.6		10.4	96.3		27.0	27.0			27.0	
Actuated g/C Ratio	0.07	0.66		0.07	0.66		0.19	0.19			0.19	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	112	2245		119	2261		158	293			142	
v/s Ratio Prot	0.04	c0.49		c0.05	0.34			0.15				
v/s Ratio Perm							0.15				c0.21	
v/c Ratio	0.58	0.74		0.64	0.51		0.82	0.81			1.12	
Uniform Delay, d1	65.7	16.4		65.5	12.4		56.7	56.6			59.0	
Progression Factor	1.00	1.00		0.99	0.85		1.00	1.00			1.00	
Incremental Delay, d2	4.9	2.2		3.2	0.3		26.8	14.8			111.1	
Delay (s)	70.5	18.7		68.2	10.9		83.5	71.4			170.1	
Level of Service	E	B		E	B		F	E			F	
Approach Delay (s)		20.6			14.4			75.3			170.1	
Approach LOS		C			B			E			F	

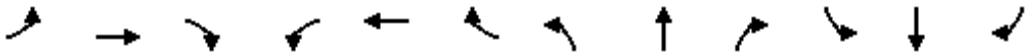
Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	430	1400	150	220	840	220	90	430	240	310	220	160
Future Volume (vph)	430	1400	150	220	840	220	90	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3468		1770	3380		1770	3539	1526	1770	3180	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3468		1770	3380		1770	3539	1526	1770	3180	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	467	1522	163	239	913	239	98	467	261	337	239	174
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	62	0	89	0
Lane Group Flow (vph)	467	1679	0	239	1136	0	98	467	199	337	324	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	31.6	59.1		15.6	42.6		11.9	25.9	41.5	25.7	39.8	
Effective Green, g (s)	32.0	60.0		16.0	44.0		12.3	26.9	42.3	26.1	40.7	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.08	0.19	0.29	0.18	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	390	1435		195	1025		150	656	445	318	892	
v/s Ratio Prot	c0.26	c0.48		0.14	0.34		0.06	c0.13	0.05	c0.19	0.10	
v/s Ratio Perm									0.08			
v/c Ratio	1.20	1.17		1.23	1.11		0.65	0.71	0.45	1.06	0.36	
Uniform Delay, d1	56.5	42.5		64.5	50.5		64.3	55.4	41.8	59.5	41.8	
Progression Factor	1.07	0.95		1.09	0.93		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	107.5	83.0		134.1	61.0		7.5	3.9	0.3	67.1	0.2	
Delay (s)	168.0	123.4		204.7	107.9		71.8	59.3	42.1	126.6	42.0	
Level of Service	F	F		F	F		E	E	D	F	D	
Approach Delay (s)		133.0			124.5			55.4			80.0	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	110.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



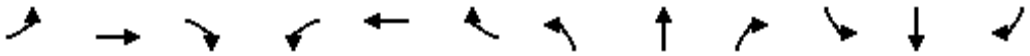
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1920	100	160	1270	50	100	20	220	50	20	20
Future Volume (vph)	10	1920	100	160	1270	50	100	20	220	50	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5038		1770	3517			1788	1553		1742	
Flt Permitted	0.95	1.00		0.95	1.00			0.67	1.00		0.63	
Satd. Flow (perm)	1770	5038		1770	3517			1248	1553		1126	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	2087	109	174	1380	54	109	22	239	54	22	22
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	202	0	8	0
Lane Group Flow (vph)	11	2193	0	174	1432	0	0	131	37	0	90	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	2.0	90.1		18.6	106.7			21.7	21.7		21.7	
Effective Green, g (s)	2.4	91.4		19.0	108.0			22.6	22.6		22.6	
Actuated g/C Ratio	0.02	0.63		0.13	0.74			0.16	0.16		0.16	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	29	3175		231	2619			194	242		175	
v/s Ratio Prot	0.01	c0.44		c0.10	0.41							
v/s Ratio Perm								c0.10	0.02		0.08	
v/c Ratio	0.38	0.69		0.75	0.55			0.68	0.15		0.52	
Uniform Delay, d1	70.6	17.5		60.7	8.0			57.7	52.9		56.2	
Progression Factor	0.86	1.21		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.3	0.1		11.6	0.8			7.1	0.1		1.1	
Delay (s)	60.9	21.4		72.4	8.8			64.8	53.0		57.3	
Level of Service	E	C		E	A			E	D		E	
Approach Delay (s)		21.5			15.7			57.2			57.3	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	350	2020	0	0	0	0	0	350	190
Future Volume (vph)	0	0	0	350	2020	0	0	0	0	0	350	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.95	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5041						4778	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5041						4778	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	380	2196	0	0	0	0	0	380	207
RTOR Reduction (vph)	0	0	0	0	12	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2564	0	0	0	0	0	587	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3534						1003	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.51							
v/c Ratio					0.73						0.59	
Uniform Delay, d1					8.2						32.0	
Progression Factor					1.00						0.93	
Incremental Delay, d2					1.3						0.1	
Delay (s)					9.5						29.8	
Level of Service					A						C	
Approach Delay (s)		0.0			9.5			0.0			29.8	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

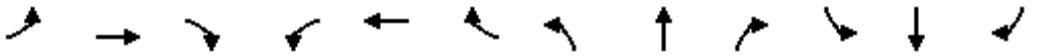


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1610	120	0	0	0	0	0	0	310	420	0
Future Volume (vph)	0	1610	120	0	0	0	0	0	0	310	420	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5024									4938	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5024									4938	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1750	130	0	0	0	0	0	0	337	457	0
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	16	0
Lane Group Flow (vph)	0	1872	0	0	0	0	0	0	0	0	778	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		59.1									21.9	
Effective Green, g (s)		59.1									22.9	
Actuated g/C Ratio		0.66									0.25	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3299									1256	
v/s Ratio Prot		c0.37										
v/s Ratio Perm											0.16	
v/c Ratio		0.57									0.62	
Uniform Delay, d1		8.5									29.7	
Progression Factor		0.38									0.74	
Incremental Delay, d2		0.5									0.8	
Delay (s)		3.7									22.9	
Level of Service		A									C	
Approach Delay (s)		3.7			0.0			0.0			22.9	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1270	120	150	1410	120	120	50	130	80	80	210
Future Volume (vph)	240	1270	120	150	1410	120	120	50	130	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1380	130	163	1533	130	130	54	141	87	87	228
RTOR Reduction (vph)	0	6	0	0	0	121	0	0	118	0	0	136
Lane Group Flow (vph)	261	1504	0	163	1533	9	130	54	23	87	87	92
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	7.0	40.8		9.0	42.9	5.7	7.0	12.2	12.2	5.7	11.8	11.8
Effective Green, g (s)	7.0	42.3		9.0	44.3	5.7	7.0	14.0	14.0	5.7	12.7	12.7
Actuated g/C Ratio	0.08	0.49		0.10	0.51	0.07	0.08	0.16	0.16	0.07	0.15	0.15
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	276	1698		183	1802	102	142	299	254	224	271	228
v/s Ratio Prot	0.08	0.43		c0.09	c0.43		c0.07	0.03		0.03	0.05	
v/s Ratio Perm						0.01			0.01			c0.06
v/c Ratio	0.95	0.89		0.89	0.85	0.08	0.92	0.18	0.09	0.39	0.32	0.40
Uniform Delay, d1	39.8	20.2		38.5	18.5	38.2	39.7	31.5	31.1	39.0	33.3	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	39.0	7.2		36.8	5.3	0.1	49.8	0.1	0.1	0.4	0.7	1.2
Delay (s)	78.8	27.4		75.3	23.8	38.3	89.5	31.6	31.1	39.4	34.0	34.9
Level of Service	E	C		E	C	D	F	C	C	D	C	C
Approach Delay (s)		35.0			29.4			54.6			35.7	
Approach LOS		C			C			D			D	

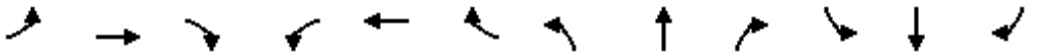
Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	180	1780	200	330	570	0	0	350	120
Future Volume (vph)	0	0	0	180	1780	200	330	570	0	0	350	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6268		1770	3539			3389	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6268		1770	3539			3389	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	189	1874	211	347	600	0	0	368	126
RTOR Reduction (vph)	0	0	0	0	14	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	0	0	0	2260	0	347	600	0	0	463	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					51.8		25.3	48.4			18.2	
Effective Green, g (s)					51.8		25.3	48.4			18.2	
Actuated g/C Ratio					0.47		0.23	0.44			0.17	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					2951		407	1557			560	
v/s Ratio Prot							c0.20	0.17			c0.14	
v/s Ratio Perm					0.36							
v/c Ratio					0.77		0.85	0.39			0.83	
Uniform Delay, d1					24.1		40.6	20.8			44.4	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					2.0		15.7	0.2			9.5	
Delay (s)					26.0		56.3	20.9			53.9	
Level of Service					C		E	C			D	
Approach Delay (s)		0.0			26.0			33.9			53.9	
Approach LOS		A			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1180	70	0	0	0	0	800	420	130	320	0
Future Volume (vph)	90	1180	70	0	0	0	0	800	420	130	320	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5066	1532					4775		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5066	1532					4775		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1283	76	0	0	0	0	870	457	141	348	0
RTOR Reduction (vph)	0	0	46	0	0	0	0	92	0	0	0	0
Lane Group Flow (vph)	0	1381	30	0	0	0	0	1235	0	141	348	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		35.1	35.1					25.1		15.6	45.1	
Effective Green, g (s)		36.0	36.0					25.1		16.0	45.1	
Actuated g/C Ratio		0.40	0.40					0.28		0.18	0.50	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2026	612					1331		314	2548	
v/s Ratio Prot								c0.26		c0.08	0.07	
v/s Ratio Perm		0.27	0.02									
v/c Ratio		0.68	0.05					0.93		0.45	0.14	
Uniform Delay, d1		22.3	16.5					31.6		33.1	12.0	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		1.9	0.2					12.5		4.6	0.1	
Delay (s)		24.2	16.7					44.1		37.6	12.1	
Level of Service		C	B					D		D	B	
Approach Delay (s)		23.8			0.0			44.1			19.5	
Approach LOS		C			A			D			B	

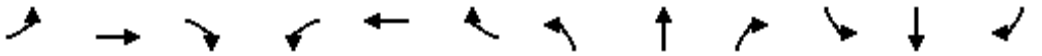
Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1420	750	500	1490	460	260
Future Volume (vph)	1420	750	500	1490	460	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1569	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1569	3433	3539	3433	1418
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1543	815	543	1620	500	283
RTOR Reduction (vph)	0	3	0	0	0	217
Lane Group Flow (vph)	1543	812	543	1620	500	66
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	40.6	60.1	15.8	61.6	19.5	19.5
Effective Green, g (s)	42.8	64.5	15.7	63.0	21.7	21.7
Actuated g/C Ratio	0.46	0.70	0.17	0.68	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1633	1159	581	2405	803	331
v/s Ratio Prot	c0.44	c0.16	c0.16	0.46	0.15	
v/s Ratio Perm		0.35				0.05
v/c Ratio	0.94	0.70	0.93	0.67	0.62	0.20
Uniform Delay, d1	23.8	8.4	38.0	8.8	31.8	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.5	1.6	22.1	1.5	1.1	0.1
Delay (s)	36.4	10.0	60.1	10.3	32.9	28.6
Level of Service	D	A	E	B	C	C
Approach Delay (s)	27.2			22.8	31.4	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	92.7	Sum of lost time (s)	12.5
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

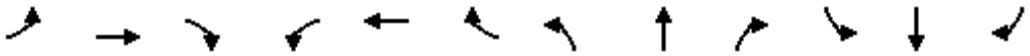
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1080	330	360	350	0	0	0	0	390	0	1180
Future Volume (vph)	0	1080	330	360	350	0	0	0	0	390	0	1180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1174	359	391	380	0	0	0	0	424	0	1283
RTOR Reduction (vph)	0	0	229	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1174	130	391	380	0	0	0	0	424	0	1283
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		26.2	26.2	13.6	44.0					21.4		75.0
Effective Green, g (s)		27.2	27.2	13.8	45.0					22.0		75.0
Actuated g/C Ratio		0.36	0.36	0.18	0.60					0.29		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1283	565	631	2123					519		1583
v/s Ratio Prot		0.33		0.11	0.11					0.24		
v/s Ratio Perm			0.08									c0.81
v/c Ratio		0.92	0.23	0.62	0.18					0.82		0.81
Uniform Delay, d1		22.8	16.6	28.2	6.7					24.6		0.0
Progression Factor		1.00	1.00	0.87	1.39					1.00		1.00
Incremental Delay, d2		11.6	1.0	0.7	0.1					9.2		4.6
Delay (s)		34.4	17.6	25.1	9.4					33.8		4.6
Level of Service		C	B	C	A					C		A
Approach Delay (s)		30.5			17.4			0.0			11.9	
Approach LOS		C			B			A			B	

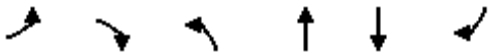
Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	870	720	0	0	590	500	190	20	450	0	0	0
Future Volume (vph)	870	720	0	0	590	500	190	20	450	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (prot)	3433	3539			3272			1782	1583			
Flt Permitted	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (perm)	3433	3539			3272			1782	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	946	783	0	0	641	543	207	22	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	185	0	0	0	231	0	0	0
Lane Group Flow (vph)	946	783	0	0	999	0	0	229	258	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	20.8	54.5			29.5			10.4	10.4			
Effective Green, g (s)	21.0	55.0			30.0			11.0	11.0			
Actuated g/C Ratio	0.28	0.73			0.40			0.15	0.15			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	961	2595			1308			261	232			
v/s Ratio Prot	c0.28	0.22			c0.31			0.13				
v/s Ratio Perm									c0.16			
v/c Ratio	0.98	0.30			0.76			0.88	1.11			
Uniform Delay, d1	26.8	3.4			19.4			31.3	32.0			
Progression Factor	1.39	0.64			1.00			1.00	1.00			
Incremental Delay, d2	19.2	0.2			4.3			25.8	92.1			
Delay (s)	56.4	2.4			23.7			57.1	124.1			
Level of Service	E	A			C			E	F			
Approach Delay (s)		32.0			23.7			102.7			0.0	
Approach LOS		C			C			F			A	

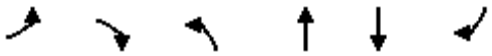
Intersection Summary			
HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	200	150	870	890	180
Future Volume (vph)	230	200	150	870	890	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1700		1770	3539	3450	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1700		1770	3539	3450	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	217	163	946	967	196
RTOR Reduction (vph)	26	0	0	0	11	0
Lane Group Flow (vph)	441	0	163	946	1152	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	37.9		16.0	83.1	62.6	
Effective Green, g (s)	37.9		16.0	83.1	62.6	
Actuated g/C Ratio	0.29		0.12	0.64	0.48	
Clearance Time (s)	4.5		4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	495		217	2262	1661	
v/s Ratio Prot	c0.26		c0.09	0.27	c0.33	
v/s Ratio Perm						
v/c Ratio	0.89		0.75	0.42	0.69	
Uniform Delay, d1	44.1		55.1	11.5	26.2	
Progression Factor	1.00		1.04	1.26	1.00	
Incremental Delay, d2	18.0		12.5	0.5	2.4	
Delay (s)	62.1		69.6	15.0	28.6	
Level of Service	E		E	B	C	
Approach Delay (s)	62.1			23.0	28.6	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

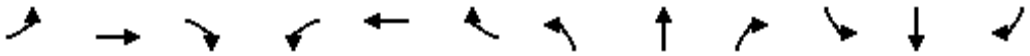
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	480	0	0	410	160
Future Volume (Veh/h)	0	480	0	0	410	160
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	522	0	0	446	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				897	1285	
pX, platoon unblocked						
vC, conflicting volume	533	310	620			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	533	310	620			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	24	100			
cM capacity (veh/h)	477	686	956			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	522	297	323
Volume Left	0	0	0
Volume Right	522	0	174
cSH	686	1700	1700
Volume to Capacity	0.76	0.17	0.19
Queue Length 95th (ft)	177	0	0
Control Delay (s)	25.0	0.0	0.0
Lane LOS	C		
Approach Delay (s)	25.0	0.0	
Approach LOS	C		

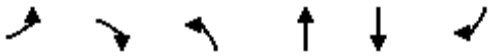
Intersection Summary			
Average Delay	11.4		
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	30	310	370	340	0	0	0	0	50	820	70
Future Volume (vph)	0	30	310	370	340	0	0	0	0	50	820	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.88		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1634		1770	1863						3490	
Flt Permitted		1.00		0.47	1.00						1.00	
Satd. Flow (perm)		1634		873	1863						3490	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	33	337	402	370	0	0	0	0	54	891	76
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	354	0	402	370	0	0	0	0	0	1013	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		32.4		32.4	32.4						24.3	
Effective Green, g (s)		32.4		32.4	32.4						24.3	
Actuated g/C Ratio		0.50		0.50	0.50						0.38	
Clearance Time (s)		4.0		4.0	4.0						4.0	
Vehicle Extension (s)		3.0		3.0	3.0						3.0	
Lane Grp Cap (vph)		818		437	932						1310	
v/s Ratio Prot		0.22			0.20							
v/s Ratio Perm				c0.46							0.29	
v/c Ratio		0.43		0.92	0.40						0.77	
Uniform Delay, d1		10.3		14.9	10.1						17.8	
Progression Factor		1.00		1.00	1.00						1.00	
Incremental Delay, d2		0.4		24.2	0.3						4.5	
Delay (s)		10.7		39.2	10.3						22.3	
Level of Service		B		D	B						C	
Approach Delay (s)		10.7			25.4			0.0			22.3	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	200	180	370	480	250
Future Volume (vph)	120	200	180	370	480	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.95	
Flt Protected	0.98			0.98	1.00	
Satd. Flow (prot)	1674			1833	1777	
Flt Permitted	0.98			0.48	1.00	
Satd. Flow (perm)	1674			897	1777	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	217	196	402	522	272
RTOR Reduction (vph)	89	0	0	0	25	0
Lane Group Flow (vph)	258	0	0	598	769	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	13.9			47.0	47.0	
Effective Green, g (s)	13.9			47.0	47.0	
Actuated g/C Ratio	0.20			0.68	0.68	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	337			611	1212	
v/s Ratio Prot	c0.15				0.43	
v/s Ratio Perm				c0.67		
v/c Ratio	0.77			0.98	0.63	
Uniform Delay, d1	26.0			10.5	6.1	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	10.0			31.6	2.5	
Delay (s)	36.0			42.0	8.7	
Level of Service	D			D	A	
Approach Delay (s)	36.0			42.0	8.7	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	68.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	60	1090	1200	70	160	240
Future Volume (vph)	60	1090	1200	70	160	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	0.99		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3510		1678	
Flt Permitted	0.13	1.00	1.00		0.98	
Satd. Flow (perm)	237	3539	3510		1678	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1185	1304	76	174	261
RTOR Reduction (vph)	0	0	7	0	27	0
Lane Group Flow (vph)	65	1185	1373	0	408	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)	31.5	31.5	31.5		22.1	
Effective Green, g (s)	31.5	31.5	31.5		22.1	
Actuated g/C Ratio	0.51	0.51	0.51		0.36	
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	121	1809	1794		602	
v/s Ratio Prot		0.33	c0.39		c0.24	
v/s Ratio Perm	0.27					
v/c Ratio	0.54	0.66	0.77		0.68	
Uniform Delay, d1	10.1	11.1	12.1		16.7	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.5	0.9	2.0		6.0	
Delay (s)	14.7	11.9	14.1		22.8	
Level of Service	B	B	B		C	
Approach Delay (s)		12.1	14.1		22.8	
Approach LOS		B	B		C	

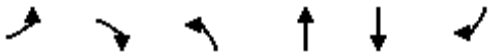
Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	20	80	60	110	280	160	510	370	210	520	140
Future Volume (vph)	110	20	80	60	110	280	160	510	370	210	520	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.95			0.92		1.00	0.94		1.00	0.97	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1722			1695		1770	3316		1770	3427	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1722			1695		1770	3316		1770	3427	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	22	87	65	120	304	174	554	402	228	565	152
RTOR Reduction (vph)	0	22	0	0	59	0	0	131	0	0	24	0
Lane Group Flow (vph)	0	207	0	0	430	0	174	825	0	228	693	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		14.7			25.5		12.8	26.4		13.9	27.5	
Effective Green, g (s)		14.7			25.5		12.8	26.4		13.9	27.5	
Actuated g/C Ratio		0.15			0.26		0.13	0.27		0.14	0.28	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		256			438		230	888		249	956	
v/s Ratio Prot		c0.12			c0.25		0.10	c0.25		c0.13	0.20	
v/s Ratio Perm												
v/c Ratio		0.81			0.98		0.76	0.93		0.92	0.73	
Uniform Delay, d1		40.5			36.3		41.3	35.1		41.7	32.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		16.8			38.2		13.2	15.6		35.0	2.8	
Delay (s)		57.4			74.5		54.6	50.7		76.7	34.8	
Level of Service		E			E		D	D		E	C	
Approach Delay (s)		57.4			74.5			51.3			44.9	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

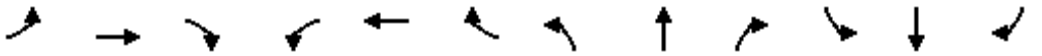
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	180	260	200	140	270	300
Future Volume (vph)	180	260	200	140	270	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.93	
Flt Protected	0.98			0.97	1.00	
Satd. Flow (prot)	1680			1810	1730	
Flt Permitted	0.98			0.42	1.00	
Satd. Flow (perm)	1680			785	1730	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	283	217	152	293	326
RTOR Reduction (vph)	82	0	0	0	59	0
Lane Group Flow (vph)	397	0	0	369	560	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	17.4			38.1	38.1	
Effective Green, g (s)	17.4			38.1	38.1	
Actuated g/C Ratio	0.27			0.60	0.60	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	460			471	1038	
v/s Ratio Prot	c0.24				0.32	
v/s Ratio Perm				c0.47		
v/c Ratio	0.86			0.78	0.54	
Uniform Delay, d1	21.9			9.6	7.5	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	15.3			12.3	2.0	
Delay (s)	37.2			21.9	9.5	
Level of Service	D			C	A	
Approach Delay (s)	37.2			21.9	9.5	
Approach LOS	D			C	A	

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	63.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		

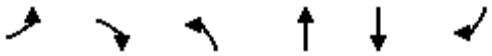
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	200	100	90	100	80	100	2790	240	200	2200	50
Future Volume (vph)	100	200	100	90	100	80	100	2790	240	200	2200	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.93		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3362		1770	3304		1770	5025		1770	5068	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3362		1770	3304		1770	5025		1770	5068	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	217	109	98	109	87	109	3033	261	217	2391	54
RTOR Reduction (vph)	0	41	0	0	78	0	0	7	0	0	1	0
Lane Group Flow (vph)	109	285	0	98	118	0	109	3287	0	217	2444	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Effective Green, g (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Actuated g/C Ratio	0.06	0.11		0.06	0.11		0.08	0.63		0.09	0.64	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	358		106	352		149	3182		165	3253	
v/s Ratio Prot	c0.06	c0.08		0.06	0.04		0.06	c0.65		c0.12	0.48	
v/s Ratio Perm												
v/c Ratio	1.03	0.80		0.92	0.34		0.73	1.03		1.32	0.75	
Uniform Delay, d1	70.5	65.4		70.2	62.1		67.0	27.5		68.0	18.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	95.2	16.6		63.3	2.6		16.8	25.3		178.1	1.6	
Delay (s)	165.7	82.0		133.5	64.6		83.8	52.8		246.1	20.2	
Level of Service	F	F		F	E		F	D		F	C	
Approach Delay (s)		103.0			87.6			53.8			38.6	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.4%	ICU Level of Service	F
Analysis Period (min)	15		

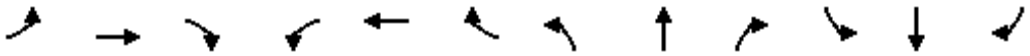
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	0	470	720	0	0
Future Volume (vph)	100	0	470	720	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	511	783	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	109	0	511	783	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.06			0.22		
v/s Ratio Perm			c0.29			
v/c Ratio	0.15		0.72	0.55		
Uniform Delay, d1	7.7		10.1	9.2		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		6.3	1.6		
Delay (s)	8.1		16.4	10.8		
Level of Service	A		B	B		
Approach Delay (s)	8.1			13.0	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Peak Hour Intersection Calculation Worksheets - Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1140	390	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	50	1140	390	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	5085	1531	3433	1863	1565	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	5085	1531	3433	1863	1565	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1239	424	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	126	0	0	65	0	0	35	0	12	0
Lane Group Flow (vph)	54	1239	298	174	1446	131	522	435	128	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	5.4	43.8	69.3	11.0	49.3	77.2	25.5	34.8	45.8	27.9	35.4	
Effective Green, g (s)	5.8	45.1	71.9	11.4	50.7	80.0	25.9	35.6	47.4	26.9	36.6	
Actuated g/C Ratio	0.04	0.33	0.53	0.08	0.38	0.59	0.19	0.26	0.35	0.20	0.27	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	76	1698	872	289	1909	925	658	491	591	684	480	
v/s Ratio Prot	0.03	0.24	0.07	c0.05	c0.28	0.03	0.15	0.23	0.02	c0.18	c0.24	
v/s Ratio Perm			0.12			0.05			0.06			
v/c Ratio	0.71	0.73	0.34	0.60	0.76	0.14	0.79	0.89	0.22	0.92	0.88	
Uniform Delay, d1	63.8	39.6	18.0	59.6	36.8	12.2	52.0	47.7	30.8	53.0	47.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	22.8	2.8	0.1	2.4	2.9	0.0	6.1	17.6	0.1	17.6	16.0	
Delay (s)	86.5	42.4	18.1	62.0	39.7	12.3	58.1	65.4	30.8	70.6	63.1	
Level of Service	F	D	B	E	D	B	E	E	C	E	E	
Approach Delay (s)		37.8			38.8			57.0			67.5	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	47.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

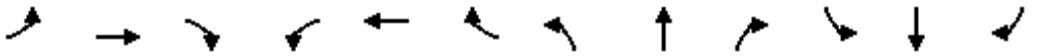
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	540	1190	370	0	0	660
Future Volume (vph)	540	1190	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	587	1293	402	0	0	717
RTOR Reduction (vph)	0	549	0	0	0	0
Lane Group Flow (vph)	587	744	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	9.8	9.8	12.2			12.2
Effective Green, g (s)	9.8	9.8	12.2			12.2
Actuated g/C Ratio	0.27	0.27	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	934	982	1199			1199
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.21				
v/c Ratio	0.63	0.76	0.34			0.60
Uniform Delay, d1	11.5	12.0	8.9			9.9
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	1.0	3.0	0.1			0.5
Delay (s)	12.5	15.0	8.9			10.4
Level of Service	B	B	A			B
Approach Delay (s)	14.2		8.9			10.4
Approach LOS	B		A			B

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	36.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

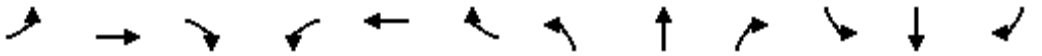
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	320	280	30	140	300	180	460	50	430	520	250
Future Volume (vph)	450	320	280	30	140	300	180	460	50	430	520	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1565	1770	3539	1569	3433	3482		3433	3539	1565
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1565	1770	3539	1569	3433	3482		3433	3539	1565
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	348	304	33	152	326	196	500	54	467	565	272
RTOR Reduction (vph)	0	0	99	0	0	86	0	9	0	0	0	158
Lane Group Flow (vph)	489	348	205	33	152	240	196	545	0	467	565	114
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	10.4	27.2	34.5	1.8	18.5	28.9	7.3	18.1		10.4	21.2	31.6
Effective Green, g (s)	11.3	28.1	36.3	2.8	19.5	28.9	8.2	19.0		11.3	22.1	31.6
Actuated g/C Ratio	0.15	0.37	0.48	0.04	0.26	0.38	0.11	0.25		0.15	0.29	0.42
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	515	695	754	65	916	602	373	878		515	1038	656
v/s Ratio Prot	c0.14	c0.19	0.03	0.02	0.04	0.06	0.06	c0.16		c0.14	c0.16	0.02
v/s Ratio Perm			0.10			0.10						0.05
v/c Ratio	0.95	0.50	0.27	0.51	0.17	0.40	0.53	0.62		0.91	0.54	0.17
Uniform Delay, d1	31.7	18.2	11.6	35.6	21.6	16.9	31.7	25.0		31.5	22.4	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	27.1	0.2	0.2	6.1	0.4	0.4	1.3	1.4		19.5	1.2	0.1
Delay (s)	58.8	18.4	11.8	41.7	22.0	17.3	33.0	26.3		51.0	23.5	13.8
Level of Service	E	B	B	D	C	B	C	C		D	C	B
Approach Delay (s)		34.0			20.3			28.1			31.3	
Approach LOS		C			C			C			C	

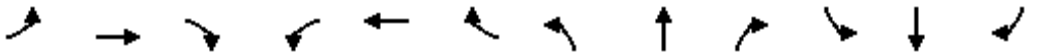
Intersection Summary			
HCM 2000 Control Delay	30.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	75.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Future Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6280		3433	6408	1544	1770	3539	1545	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6280		3433	6408	1544	1770	3539	1545	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	370	1957	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	17	0	0	0	77	0	0	74	0	0	80
Lane Group Flow (vph)	239	1755	0	370	1957	249	130	359	154	250	304	116
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.8	39.3		13.4	44.0	53.5	9.5	24.0	37.4	9.5	24.0	32.8
Effective Green, g (s)	9.2	40.4		13.8	45.0	53.5	9.9	24.9	39.2	9.9	24.9	34.6
Actuated g/C Ratio	0.09	0.38		0.13	0.43	0.51	0.09	0.24	0.37	0.09	0.24	0.33
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	2416		451	2746	786	166	839	628	323	839	512
v/s Ratio Prot	0.07	c0.28		0.11	c0.31	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.80	0.73		0.82	0.71	0.32	0.78	0.43	0.25	0.77	0.36	0.23
Uniform Delay, d1	47.0	27.6		44.4	24.7	15.1	46.5	34.0	22.7	46.5	33.4	25.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	1.9		10.9	1.6	0.1	19.6	0.1	0.1	10.1	0.1	0.1
Delay (s)	59.8	29.5		55.3	26.3	15.2	66.1	34.1	22.8	56.5	33.5	25.6
Level of Service	E	C		E	C	B	E	C	C	E	C	C
Approach Delay (s)		33.1			29.0			36.3			39.1	
Approach LOS		C			C			D			D	

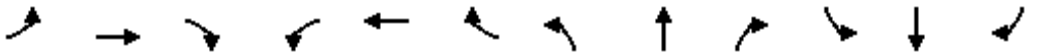
Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	340	190	550	530	0	0	0	0	290	360	410
Future Volume (vph)	0	340	190	550	530	0	0	0	0	290	360	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	370	207	598	576	0	0	0	0	315	391	446
RTOR Reduction (vph)	0	0	90	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	370	117	598	576	0	0	0	0	220	486	114
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		30.0	30.0	16.3	50.7					19.5	19.5	19.5
Effective Green, g (s)		30.9	30.9	16.7	51.6					20.4	20.4	20.4
Actuated g/C Ratio		0.39	0.39	0.21	0.65					0.25	0.25	0.25
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1366	611	716	2282					410	856	710
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.07							0.14	0.14	0.04
v/c Ratio		0.27	0.19	0.84	0.25					0.54	0.57	0.16
Uniform Delay, d1		16.8	16.3	30.3	6.0					25.7	26.0	23.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	8.0	0.3					0.7	0.5	0.0
Delay (s)		17.3	17.0	38.3	6.3					26.4	26.5	23.2
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.2			22.6			0.0			25.2	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

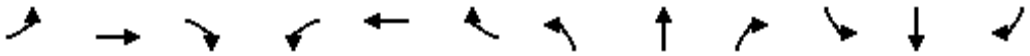


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	710	90	40	500	0	0	0	0	540	330	520
Future Volume (vph)	0	710	90	40	500	0	0	0	0	540	330	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		4999		1770	3539						4661	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		4999		1770	3539						4661	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	772	98	43	543	0	0	0	0	587	359	565
RTOR Reduction (vph)	0	23	0	0	0	0	0	0	0	0	0	114
Lane Group Flow (vph)	0	847	0	43	543	0	0	0	0	0	946	451
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.1		2.4	27.2						25.8	25.8
Effective Green, g (s)		20.3		2.8	27.1						24.9	27.2
Actuated g/C Ratio		0.31		0.04	0.42						0.38	0.42
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1561		76	1475						1785	569
v/s Ratio Prot		c0.17		0.02	c0.15							
v/s Ratio Perm											0.20	c0.33
v/c Ratio		0.54		0.57	0.37						0.91dl	0.79
Uniform Delay, d1		18.5		30.5	13.1						15.5	16.4
Progression Factor		1.00		1.35	0.83						1.00	1.00
Incremental Delay, d2		1.4		5.2	0.7						0.1	7.0
Delay (s)		19.9		46.4	11.4						15.7	23.4
Level of Service		B		D	B						B	C
Approach Delay (s)		19.9			14.0			0.0			18.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

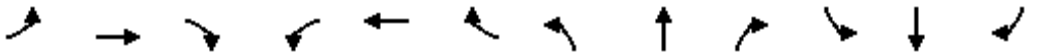
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



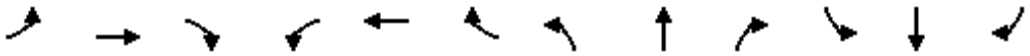
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Future Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1765	1697		1770	4981		3433	4955	
Flt Permitted	0.48	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	897	1710		1326	1697		1770	4981		3433	4955	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1446	228	152	804	141
RTOR Reduction (vph)	0	20	0	0	68	0	0	26	0	0	29	0
Lane Group Flow (vph)	22	46	0	478	226	0	43	1648	0	152	916	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	31.0	31.0		30.3	30.3		3.5	30.3		4.5	31.1	
Effective Green, g (s)	31.0	31.0		30.7	30.7		3.5	31.7		5.0	33.2	
Actuated g/C Ratio	0.39	0.39		0.39	0.39		0.04	0.40		0.06	0.42	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	348	665		510	653		77	1981		215	2064	
v/s Ratio Prot		0.03			0.13		0.02	c0.33		c0.04	0.18	
v/s Ratio Perm	0.02			c0.36								
v/c Ratio	0.06	0.07		0.94	0.35		0.56	0.83		0.71	0.44	
Uniform Delay, d1	15.3	15.3		23.6	17.4		37.3	21.6		36.6	16.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		24.9	0.3		4.9	4.3		10.1	0.7	
Delay (s)	15.3	15.3		48.5	17.7		42.2	25.9		46.8	17.3	
Level of Service	B	B		D	B		D	C		D	B	
Approach Delay (s)		15.3			36.7			26.3			21.4	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	79.7	Sum of lost time (s)	12.3
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



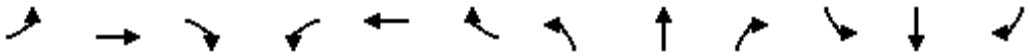
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	680	580	170	140	720	160	300	690	110	110	710	260
Future Volume (vph)	680	580	170	140	720	160	300	690	110	110	710	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.94	0.91		0.97	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	4990	4912		3433	4933		3433	5085	1562	1770	5085	1566
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	4990	4912		3433	4933		3433	5085	1562	1770	5085	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	739	630	185	152	783	174	326	750	120	120	772	283
RTOR Reduction (vph)	0	56	0	0	38	0	0	0	90	0	0	47
Lane Group Flow (vph)	739	759	0	152	919	0	326	750	30	120	772	236
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	16.4	33.8		7.6	24.4		11.3	22.6	22.6	8.8	20.0	36.4
Effective Green, g (s)	16.8	35.0		8.0	26.2		11.7	23.5	22.6	9.2	21.0	37.2
Actuated g/C Ratio	0.18	0.38		0.09	0.29		0.13	0.26	0.25	0.10	0.23	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	914	1874		299	1409		438	1303	384	177	1164	635
v/s Ratio Prot	c0.15	0.15		0.04	c0.19		c0.09	0.15		0.07	c0.15	0.07
v/s Ratio Perm									0.02			0.08
v/c Ratio	0.81	0.40		0.51	0.65		0.74	0.58	0.08	0.68	0.66	0.37
Uniform Delay, d1	35.9	20.7		40.0	28.8		38.6	29.7	26.5	39.8	32.1	19.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	0.2		0.5	1.0		5.9	1.9	0.4	7.8	3.0	0.1
Delay (s)	40.9	20.9		40.5	29.8		44.5	31.6	26.9	47.7	35.1	19.2
Level of Service	D	C		D	C		D	C	C	D	D	B
Approach Delay (s)		30.4			31.2			34.6			32.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	91.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	220	70	20	140	220	50	180	250	20	20	30
Future Volume (vph)	140	220	70	20	140	220	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.91			0.93			0.94	
Flt Protected		0.98			1.00			0.99			0.99	
Satd. Flow (prot)		1695			1612			1691			1728	
Flt Permitted		0.68			0.97			0.96			0.85	
Satd. Flow (perm)		1173			1563			1637			1493	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	239	76	22	152	239	54	196	272	22	22	33
RTOR Reduction (vph)	0	6	0	0	33	0	0	51	0	0	22	0
Lane Group Flow (vph)	0	461	0	0	380	0	0	471	0	0	55	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)		33.2			33.2			21.6			21.6	
Effective Green, g (s)		34.1			34.1			22.5			22.5	
Actuated g/C Ratio		0.53			0.53			0.35			0.35	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		619			825			570			520	
v/s Ratio Prot												
v/s Ratio Perm		c0.39			0.24			c0.29			0.04	
v/c Ratio		0.75			0.46			0.83			0.11	
Uniform Delay, d1		11.9			9.5			19.3			14.2	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.3			0.4			9.1			0.0	
Delay (s)		16.1			9.9			28.4			14.3	
Level of Service		B			A			C			B	
Approach Delay (s)		16.1			9.9			28.4			14.3	
Approach LOS		B			A			C			B	

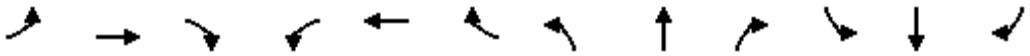
Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	64.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	650	80	170	1240	70	60	130	110	260	380	250
Future Volume (vph)	180	650	80	170	1240	70	60	130	110	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4978		1770	5033		1770	3539	1555	3433	3278	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4978		1770	5033		1770	3539	1555	3433	3278	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	707	87	185	1348	76	65	141	120	283	413	272
RTOR Reduction (vph)	0	18	0	0	6	0	0	0	59	0	143	0
Lane Group Flow (vph)	196	776	0	185	1418	0	65	141	61	283	542	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	7.9	24.3		13.0	28.9		6.1	17.6	30.6	11.4	23.0	
Effective Green, g (s)	8.3	25.2		13.4	30.3		6.5	18.6	31.4	11.8	23.9	
Actuated g/C Ratio	0.10	0.30		0.16	0.36		0.08	0.22	0.37	0.14	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	335	1475		279	1794		135	774	574	476	921	
v/s Ratio Prot	0.06	0.16		c0.10	c0.28		c0.04	0.04	0.02	0.08	c0.17	
v/s Ratio Perm									0.02			
v/c Ratio	0.59	0.53		0.66	0.79		0.48	0.18	0.11	0.59	0.59	
Uniform Delay, d1	36.7	24.9		33.7	24.5		37.6	27.0	17.6	34.4	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.3		4.5	3.6		1.0	0.2	0.0	1.3	0.8	
Delay (s)	38.4	26.3		38.2	28.1		38.6	27.2	17.6	35.7	27.1	
Level of Service	D	C		D	C		D	C	B	D	C	
Approach Delay (s)		28.7			29.3			25.9			29.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1660	550	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	80	1660	550	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	5085	1537	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	5085	1537	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	1804	598	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	139	0	0	117	0	0	50	0	5	0
Lane Group Flow (vph)	87	1804	459	130	1261	274	500	380	146	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	7.7	41.6	57.2	5.7	39.5	54.8	15.6	29.9	35.6	15.3	27.8	
Effective Green, g (s)	8.1	42.9	59.8	6.1	40.9	57.6	16.0	30.7	37.2	14.3	29.0	
Actuated g/C Ratio	0.07	0.39	0.54	0.06	0.37	0.52	0.15	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	130	1983	852	190	1890	804	499	519	527	446	480	
v/s Ratio Prot	c0.05	c0.35	0.08	0.04	0.25	0.05	c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.21			0.13			0.08			
v/c Ratio	0.67	0.91	0.54	0.68	0.67	0.34	1.00	0.73	0.28	0.73	0.67	
Uniform Delay, d1	49.6	31.7	16.2	51.0	28.9	15.2	47.0	35.9	26.6	46.0	36.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.7	7.7	0.3	7.9	1.9	0.1	40.8	5.6	0.1	5.3	2.7	
Delay (s)	59.3	39.4	16.5	58.9	30.7	15.3	87.8	41.5	26.7	51.3	38.9	
Level of Service	E	D	B	E	C	B	F	D	C	D	D	
Approach Delay (s)		34.6			29.4			60.3			45.1	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	38.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		

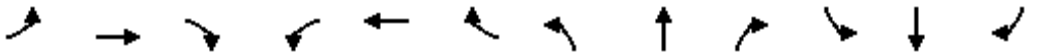
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	820	1790	930	0	0	880
Future Volume (vph)	820	1790	930	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	891	1946	1011	0	0	957
RTOR Reduction (vph)	0	13	0	0	0	0
Lane Group Flow (vph)	891	1933	1011	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	48.0	48.0	26.6			26.6
Effective Green, g (s)	48.0	48.0	26.6			26.6
Actuated g/C Ratio	0.54	0.54	0.30			0.30
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1859	1955	1062			1062
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.54				
v/c Ratio	0.48	0.99	0.95			0.90
Uniform Delay, d1	12.6	20.0	30.4			29.7
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	17.5	17.1			10.3
Delay (s)	12.6	37.5	47.5			40.0
Level of Service	B	D	D			D
Approach Delay (s)	29.7		47.5			40.0
Approach LOS	C		D			D

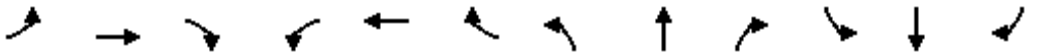
Intersection Summary			
HCM 2000 Control Delay	35.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	88.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



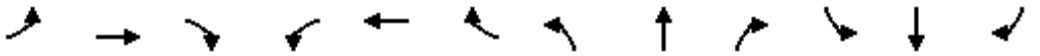
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	430	320	80	540	700	450	510	120	400	710	400
Future Volume (vph)	380	430	320	80	540	700	450	510	120	400	710	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1567	1770	3539	1569	3433	3438		3433	3539	1561
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1567	1770	3539	1569	3433	3438		3433	3539	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	467	348	87	587	761	489	554	130	435	772	435
RTOR Reduction (vph)	0	0	44	0	0	41	0	14	0	0	0	46
Lane Group Flow (vph)	413	467	304	87	587	720	489	670	0	435	772	389
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	19.1	45.2	71.0	8.4	34.5	78.5	25.8	32.7		44.0	50.9	70.0
Effective Green, g (s)	20.0	46.1	72.8	9.4	35.5	78.5	26.7	33.6		44.9	51.8	70.0
Actuated g/C Ratio	0.13	0.31	0.49	0.06	0.24	0.52	0.18	0.22		0.30	0.35	0.47
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	457	572	802	110	837	872	611	770		1027	1222	728
v/s Ratio Prot	0.12	c0.25	0.07	0.05	0.17	c0.24	0.14	c0.19		0.13	0.22	0.07
v/s Ratio Perm			0.13			0.22						0.18
v/c Ratio	0.90	0.82	0.38	0.79	0.70	0.83	0.80	0.87		0.42	0.63	0.53
Uniform Delay, d1	64.1	48.0	24.3	69.3	52.4	30.0	59.1	56.1		42.2	41.1	28.4
Progression Factor	1.00	1.00	1.00	1.23	0.70	1.46	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	20.6	12.2	0.3	38.0	4.6	7.0	7.5	10.6		0.7	1.6	0.4
Delay (s)	84.6	60.2	24.7	123.1	41.3	50.7	66.6	66.7		42.9	42.8	28.8
Level of Service	F	E	C	F	D	D	E	E		D	D	C
Approach Delay (s)		58.3			51.3			66.6			39.1	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.93	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6247		3433	6408	1475	1770	3539	1526	3433	3539	1522
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6247		3433	6408	1475	1770	3539	1526	3433	3539	1522
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2033	217	554	1685	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	13	0	0	0	44	0	0	56	0	0	59
Lane Group Flow (vph)	413	2237	0	554	1685	380	250	696	390	380	576	256
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.3	48.4		20.6	49.8	66.6	18.6	30.4	51.0	16.8	28.6	47.9
Effective Green, g (s)	19.7	49.5		21.0	50.8	66.6	19.0	31.3	52.8	17.2	29.5	49.7
Actuated g/C Ratio	0.15	0.37		0.16	0.38	0.49	0.14	0.23	0.39	0.13	0.22	0.37
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	500	2290		534	2411	727	249	820	636	437	773	560
v/s Ratio Prot	0.12	c0.36		c0.16	0.26	0.07	c0.14	c0.20	0.10	c0.11	0.16	0.07
v/s Ratio Perm						0.19			0.16			0.10
v/c Ratio	0.83	0.98		1.04	0.70	0.52	1.00	0.85	0.61	0.87	0.75	0.46
Uniform Delay, d1	56.0	42.2		57.0	35.6	23.4	58.0	49.6	32.9	57.8	49.2	32.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.2	14.1		49.0	1.0	0.3	58.1	7.9	1.2	16.1	3.4	0.2
Delay (s)	66.2	56.3		106.0	36.6	23.7	116.1	57.5	34.2	73.9	52.7	32.6
Level of Service	E	E		F	D	C	F	E	C	E	D	C
Approach Delay (s)		57.8			49.0			60.5			54.1	
Approach LOS		E			D			E			D	

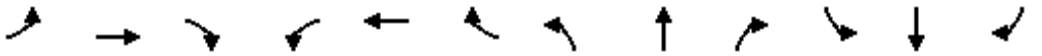
Intersection Summary			
HCM 2000 Control Delay	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	700	280	430	490	0	0	0	0	410	540	1080
Future Volume (vph)	0	700	280	430	490	0	0	0	0	410	540	1080
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	761	304	467	533	0	0	0	0	446	587	1174
RTOR Reduction (vph)	0	0	67	0	0	0	0	0	0	0	0	355
Lane Group Flow (vph)	0	761	237	467	533	0	0	0	0	446	587	819
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		23.7	23.7	12.1	40.2					25.0	25.0	25.0
Effective Green, g (s)		24.6	24.6	12.5	41.1					25.9	25.9	25.9
Actuated g/C Ratio		0.33	0.33	0.17	0.55					0.35	0.35	0.35
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1160	519	572	1939					555	1170	962
v/s Ratio Prot		c0.22		c0.14	0.15							
v/s Ratio Perm			0.15							0.28	0.17	c0.29
v/c Ratio		0.66	0.46	0.82	0.27					0.80	0.50	0.85
Uniform Delay, d1		21.6	19.9	30.1	9.0					22.2	19.4	22.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		2.9	2.9	8.4	0.4					7.8	0.1	7.1
Delay (s)		24.5	22.8	38.5	9.4					30.0	19.6	29.8
Level of Service		C	C	D	A					C	B	C
Approach Delay (s)		24.0			23.0			0.0			27.1	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

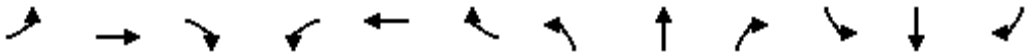


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1110	370	50	700	0	0	0	0	740	1100	660
Future Volume (vph)	0	1110	370	50	700	0	0	0	0	740	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		4895		1770	3539						4711	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		4895		1770	3539						4711	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1207	402	54	761	0	0	0	0	804	1196	717
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	0	0	0	47
Lane Group Flow (vph)	0	1577	0	54	761	0	0	0	0	0	2000	670
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		38.5		3.4	44.6						53.4	53.4
Effective Green, g (s)		36.7		3.8	44.5						52.5	54.8
Actuated g/C Ratio		0.33		0.03	0.40						0.48	0.50
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1633		61	1431						2248	678
v/s Ratio Prot		c0.32		c0.03	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		0.97		0.89	0.53						1.00dl	0.99
Uniform Delay, d1		36.0		52.9	24.8						26.1	27.3
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		15.5		73.6	1.4						4.6	31.1
Delay (s)		51.5		126.5	26.3						30.7	58.4
Level of Service		D		F	C						C	E
Approach Delay (s)		51.5			32.9			0.0			38.0	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

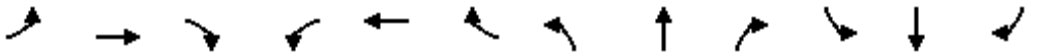
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



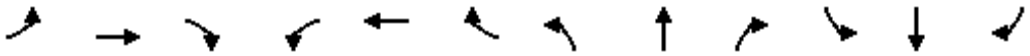
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Future Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1758	1624		1770	4945		3433	5052	
Flt Permitted	0.45	1.00		0.57	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	841	1809		1051	1624		1770	4945		3433	5052	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	250	33	1728	391	272	576	22
RTOR Reduction (vph)	0	8	0	0	95	0	0	36	0	0	4	0
Lane Group Flow (vph)	43	188	0	413	198	0	33	2083	0	272	594	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	37.2	37.2		36.5	36.5		3.6	41.0		10.0	46.7	
Effective Green, g (s)	37.2	37.2		36.9	36.9		3.6	42.4		7.8	48.8	
Actuated g/C Ratio	0.37	0.37		0.36	0.36		0.04	0.42		0.08	0.48	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	307	662		381	589		62	2063		263	2426	
v/s Ratio Prot		0.10			0.12		0.02	c0.42		c0.08	0.12	
v/s Ratio Perm	0.05			c0.39								
v/c Ratio	0.14	0.28		1.08	0.34		0.53	1.01		1.03	0.24	
Uniform Delay, d1	21.5	22.8		32.3	23.5		48.2	29.6		46.9	15.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		70.5	0.3		4.3	22.2		64.7	0.2	
Delay (s)	21.6	22.9		102.8	23.8		52.5	51.8		111.6	15.8	
Level of Service	C	C		F	C		D	D		F	B	
Approach Delay (s)		22.6			70.0			51.8			45.7	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	52.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	101.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



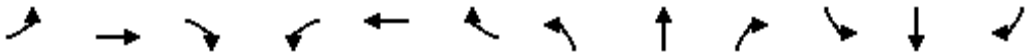
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	650	1070	320	250	950	160	460	1060	240	170	700	340
Future Volume (vph)	650	1070	320	250	950	160	460	1060	240	170	700	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4910		1770	4964		3433	5085	1562	1770	5085	1567
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4910		1770	4964		3433	5085	1562	1770	5085	1567
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	707	1163	348	272	1033	174	500	1152	261	185	761	370
RTOR Reduction (vph)	0	50	0	0	21	0	0	0	200	0	0	42
Lane Group Flow (vph)	707	1461	0	272	1186	0	500	1152	61	185	761	328
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	22.6	35.6		17.6	30.0		15.8	25.3	25.3	11.6	21.0	43.6
Effective Green, g (s)	23.0	36.8		18.0	31.8		16.2	26.2	25.3	12.0	22.0	44.4
Actuated g/C Ratio	0.21	0.34		0.17	0.29		0.15	0.24	0.23	0.11	0.20	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	724	1657		292	1448		510	1222	362	194	1026	638
v/s Ratio Prot	c0.21	c0.30		0.15	0.24		c0.15	c0.23		0.10	0.15	0.11
v/s Ratio Perm									0.04			0.10
v/c Ratio	0.98	0.88		0.93	0.82		0.98	0.94	0.17	0.95	0.74	0.51
Uniform Delay, d1	42.7	34.1		44.9	35.9		46.2	40.7	33.4	48.2	40.8	24.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.3	6.1		34.5	3.7		34.6	15.2	1.0	50.7	4.8	0.3
Delay (s)	70.0	40.1		79.4	39.6		80.8	55.9	34.4	98.9	45.7	24.5
Level of Service	E	D		E	D		F	E	C	F	D	C
Approach Delay (s)		49.6			46.9			59.5			47.2	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	51.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	109.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.93			0.95			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1800		1770	1709			1724			1696	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.84	
Satd. Flow (perm)	1770	1800		1770	1709			1538			1437	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	174	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	8	0	0	35	0	0	24	0	0	33	0
Lane Group Flow (vph)	630	394	0	22	302	0	0	303	0	0	54	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	32.0	53.8		1.5	22.9			18.7			18.7	
Effective Green, g (s)	32.4	54.7		2.4	23.8			19.6			19.6	
Actuated g/C Ratio	0.37	0.62		0.03	0.27			0.22			0.22	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	653	1121		48	463			343			320	
v/s Ratio Prot	c0.36	0.22		0.01	c0.18							
v/s Ratio Perm								c0.20			0.04	
v/c Ratio	0.96	0.35		0.46	0.65			0.88			0.17	
Uniform Delay, d1	27.1	8.0		42.1	28.3			33.0			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	26.3	0.9		6.8	7.0			21.9			0.1	
Delay (s)	53.5	8.9		48.9	35.3			54.9			27.6	
Level of Service	D	A		D	D			D			C	
Approach Delay (s)		36.1			36.1			54.9			27.6	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	87.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

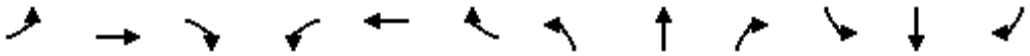


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	430	1400	150	220	840	220	90	430	240	310	220	160
Future Volume (vph)	430	1400	150	220	840	220	90	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.97	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4988		1770	4872		1770	3539	1540	3433	3210	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4988		1770	4872		1770	3539	1540	3433	3210	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	467	1522	163	239	913	239	98	467	261	337	239	174
RTOR Reduction (vph)	0	12	0	0	43	0	0	0	47	0	124	0
Lane Group Flow (vph)	467	1673	0	239	1109	0	98	467	214	337	289	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	16.6	33.5		15.8	32.2		8.5	24.1	39.9	12.9	28.6	
Effective Green, g (s)	17.0	34.4		16.2	33.6		8.9	25.1	40.7	13.3	29.5	
Actuated g/C Ratio	0.16	0.33		0.15	0.32		0.08	0.24	0.39	0.13	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	555	1634		273	1559		150	845	596	434	901	
v/s Ratio Prot	c0.14	c0.34		0.14	0.23		c0.06	c0.13	0.06	c0.10	0.09	
v/s Ratio Perm									0.08			
v/c Ratio	0.84	1.02		0.88	0.71		0.65	0.55	0.36	0.78	0.32	
Uniform Delay, d1	42.7	35.3		43.4	31.4		46.6	35.0	22.9	44.4	29.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.7	28.5		24.7	2.8		7.5	1.0	0.1	7.8	0.2	
Delay (s)	53.4	63.8		68.1	34.2		54.1	36.0	23.0	52.2	30.0	
Level of Service	D	E		E	C		D	D	C	D	C	
Approach Delay (s)		61.5			40.0			34.0			40.0	
Approach LOS		E			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	48.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

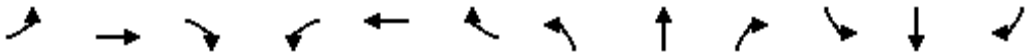
Peak Hour Intersection Calculation Worksheets - Partial Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1140	390	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	50	1140	390	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	3539	1531	3433	1863	1566	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	3539	1531	3433	1863	1566	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1239	424	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	129	0	0	65	0	0	34	0	12	0
Lane Group Flow (vph)	54	1239	295	174	1446	131	522	435	129	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	5.3	42.0	67.5	12.8	49.4	77.3	25.5	34.8	47.6	27.9	35.4	
Effective Green, g (s)	5.7	43.3	70.1	13.2	50.8	80.1	25.9	35.6	49.2	26.9	36.6	
Actuated g/C Ratio	0.04	0.32	0.52	0.10	0.38	0.59	0.19	0.26	0.36	0.20	0.27	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	74	1630	851	335	1331	926	658	491	612	684	480	
v/s Ratio Prot	0.03	0.24	0.07	c0.05	c0.41	0.03	0.15	0.23	0.02	c0.18	c0.24	
v/s Ratio Perm			0.12			0.06			0.06			
v/c Ratio	0.73	0.76	0.35	0.52	1.09	0.14	0.79	0.89	0.21	0.92	0.88	
Uniform Delay, d1	63.9	41.2	19.0	57.9	42.1	12.2	52.0	47.7	29.5	53.0	47.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.0	3.4	0.1	0.6	51.7	0.0	6.1	17.6	0.1	17.6	16.0	
Delay (s)	89.9	44.6	19.1	58.5	93.8	12.2	58.1	65.4	29.6	70.6	63.1	
Level of Service	F	D	B	E	F	B	E	E	C	E	E	
Approach Delay (s)		39.7			81.6			56.8			67.5	
Approach LOS		D			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	61.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1660	550	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	80	1660	550	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	3539	1537	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	3539	1537	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	1804	598	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	139	0	0	117	0	0	50	0	5	0
Lane Group Flow (vph)	87	1804	459	130	1261	274	500	380	146	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	7.7	41.6	57.2	5.7	39.5	54.8	15.6	29.9	35.6	15.3	27.8	
Effective Green, g (s)	8.1	42.9	59.8	6.1	40.9	57.6	16.0	30.7	37.2	14.3	29.0	
Actuated g/C Ratio	0.07	0.39	0.54	0.06	0.37	0.52	0.15	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	130	1983	852	190	1315	804	499	519	527	446	480	
v/s Ratio Prot	c0.05	0.35	0.08	0.04	c0.36	0.05	c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.21			0.13			0.08			
v/c Ratio	0.67	0.91	0.54	0.68	0.96	0.34	1.00	0.73	0.28	0.73	0.67	
Uniform Delay, d1	49.6	31.7	16.2	51.0	33.7	15.2	47.0	35.9	26.6	46.0	36.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.7	7.7	0.3	7.9	16.8	0.1	40.8	5.6	0.1	5.3	2.7	
Delay (s)	59.3	39.4	16.5	58.9	50.5	15.3	87.8	41.5	26.7	51.3	38.9	
Level of Service	E	D	B	E	D	B	F	D	C	D	D	
Approach Delay (s)		34.6			43.4			60.3			45.1	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	43.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix J
VMT Analysis Worksheet – Adopted Plan

2035a - Adopted GP - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	3,087	-	3,087	4,336,442
CHULA VISTA TOTAL	5,601,350	7,698	-	7,698	5,593,652
CORONADO TOTAL	466,994	1,344	-	1,344	465,650
DEL MAR TOTAL	101,376	60	-	60	101,316
EL CAJON TOTAL	2,442,502	3,987	-	3,987	2,438,515
ENCINITAS TOTAL	2,556,112	3,788	-	3,788	2,552,324
ESCONDIDO TOTAL	3,482,331	1,991	-	1,991	3,480,340
External TOTAL	526,485	428	-	428	526,057
IMPERIAL BEACH TOTAL	131,328	26	-	26	131,302
LA MESA TOTAL	2,089,142	6,352	-	6,352	2,082,790
LEMON GROVE TOTAL	959,602	1,726	-	1,726	957,876
NATIONAL CITY TOTAL	1,962,160	6,474	-	6,474	1,955,686
OCEANSIDE TOTAL	4,088,716	1,017	-	1,017	4,087,699
POWAY TOTAL	1,304,035	615	-	615	1,303,420
SAN DIEGO TOTAL	47,221,594	277,444	18,009	259,435	46,944,150
SAN MARCOS TOTAL	2,642,965	296	-	296	2,642,669
SANTEE TOTAL	1,347,654	846	-	846	1,346,808
SOLANA BEACH TOTAL	715,186	1,390	-	1,390	713,796
Unincorporated TOTAL	24,605,963	12,944	-	12,944	24,593,019
VISTA TOTAL	1,899,984	104	-	104	1,899,880
REGIONWIDE TOTAL	108,485,008	331,617	18,009	313,608	108,153,391

2035a - Adopted GP - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	13,654	-	13,654	4,325,875
CHULA VISTA TOTAL	5,601,350	32,436	-	32,436	5,568,914
CORONADO TOTAL	466,994	6,103	-	6,103	460,891
DEL MAR TOTAL	101,376	232	-	232	101,144
EL CAJON TOTAL	2,442,502	15,077	-	15,077	2,427,425
ENCINITAS TOTAL	2,556,112	16,034	-	16,034	2,540,078
ESCONDIDO TOTAL	3,482,331	8,349	-	8,349	3,473,982
External TOTAL	526,485	2,332	-	2,332	524,153
IMPERIAL BEACH TOTAL	131,328	293	-	293	131,035
LA MESA TOTAL	2,089,142	23,565	-	23,565	2,065,577
LEMON GROVE TOTAL	959,602	7,337	-	7,337	952,265
NATIONAL CITY TOTAL	1,962,160	27,348	-	27,348	1,934,812
OCEANSIDE TOTAL	4,088,716	5,026	-	5,026	4,083,690
POWAY TOTAL	1,304,035	2,464	-	2,464	1,301,571
SAN DIEGO TOTAL	47,221,594	1,228,648	204,475	1,024,173	45,992,946
SAN MARCOS TOTAL	2,642,965	1,173	-	1,173	2,641,792
SANTEE TOTAL	1,347,654	3,470	-	3,470	1,344,184
SOLANA BEACH TOTAL	715,186	5,763	-	5,763	709,423
Unincorporated TOTAL	24,605,963	59,614	-	59,614	24,546,349
VISTA TOTAL	1,899,984	657	-	657	1,899,327
REGIONWIDE TOTAL	108,485,008	832,025 2,291,600	204,475	1,255,100	107,025,433

Midway-Pacific Highway & Old Town Mobility Element Updates

Transportation Impact Study

Midway-Pacific Highway: Alternative 2 Without Sports Arena
Old Town: Alternative 3

Draft Report

December 2017

Prepared for:

The City of SAN DIEGO

Prepared by:

CHEN RYAN
3900 Fifth Avenue, Suite 210
San Diego, CA 92103

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1.0 Introduction

1.1 Purpose of the Report

This Transportation Impact Study (TIS) serves to identify and document potential traffic impacts related to the buildout of the Preferred Plan alternative of the Midway-Pacific Highway and Old Town Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway impacts. This technical report also provides vehicle miles traveled (VMT) for the Existing conditions and buildout of the Community Plan Updates and compares these to the projected 2035 VMT per person and average trip length for the entire Region.

Figure 1-1 displays the project study area for both the Midway-Pacific Highway Corridor and Old Town communities. This report identifies significant traffic impacts and potential mitigation measures associated with the implementation of the Preferred Plan for the Midway-Pacific Highway and Old Town Community Plan Updates and is intended to support the Environmental Impact Report (EIR).

Study Scenarios

Two (2) scenarios were evaluated for this Mobility Element Update transportation impact study, including:

- Existing Conditions – utilized to establish the existing base line traffic operations within the project study area.
- Preferred Plan – represents the preferred land use plan and proposed roadway network. Improvements resulting in the preferred plan roadway network were developed in collaboration between community members, City staff, and the project consultant team. Initially, the mobility issues and needs identified in the Existing Conditions Report were compared to the mobility issues and needs identified in other on-going or recent planning efforts. The Preferred Plan was modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the Preferred Plan Community Plan land uses and adopted Year 2035 land uses outside of the study communities for regional growth.

1.2 Report Organization

Following this introductory chapter, the report is organized into the following chapters:

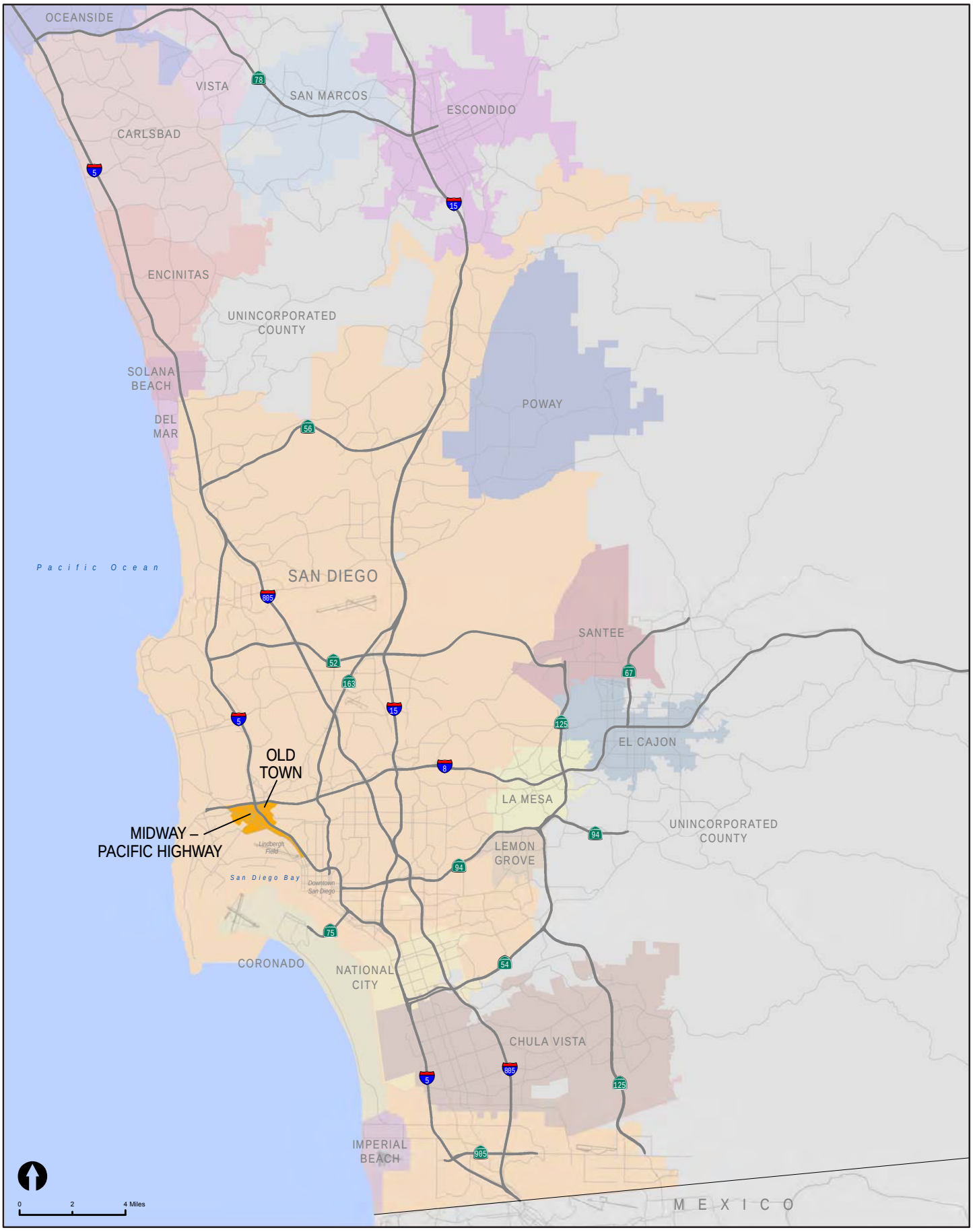
2.0 *Analysis Methodology* – This chapter describes the methodologies and standards utilized to analyze roadway, intersection, and freeway segment and freeway ramp meter traffic conditions.

3.0 *Existing Conditions* - This chapter describes the existing traffic network within the study area and provides analysis results for existing traffic conditions.

4.0 *Preferred Plan* – This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to the Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters were evaluated. Mitigation measures for significant impacts identified, if feasible.

5.0 *Adopted Plan* – This chapter is included for informational purposes and includes a description and high-level analysis of the currently adopted plan for both the Midway-Pacific Highway Corridor and Old Town communities. No impact analyses were conducted for this scenario.

6.0 *Summary* – This chapter summarizes the analysis and impact findings outlined in chapters three through five.



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Figure 1-1
Midway-Pacific Highway and Old Town within the Region

2.0 Analysis Methodology

This chapter describes the various methodologies utilized to analyze the mobility network within the Midway-Pacific Highway and Old Town communities. Analysis of the vehicular systems – roadways, intersections and freeways – were prepared for this study in accordance with the *City of San Diego Traffic Impact Study Guidelines,* SANTEC/ITE Guidelines, and the enhanced California Environmental Quality Act (CEQA) project review process.

2.1 Selection of the Study Area

This section describes the process used to identify roadway segments and intersections for analysis.

2.1.1 Roadway Segments

Roadway segments were evaluated if one or more of the following circumstances applied:

- The roadway segment is an existing or planned circulation element roadway as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The roadway segment provides freeway access to/from the Midway-Pacific Highway or Old Town communities.
- The roadway segment is located outside of either study community; however, it may influence or impact the flow of transportation within either of the communities.

2.1.2 Intersections

Intersections were evaluated if one or more of the following circumstances applied:

- The intersection is comprised of a circulation element roadway intersecting with another circulation element roadway. This includes existing and future/planned circulation element roadways as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The intersection is at a freeway ramp interchange located within the Midway-Pacific Highway or Old Town communities or is a major gateway to either community.
- The intersection is a major intersection located outside of either community, however, it may influence or impact the flow of transportation within the communities.
- The intersection meets criteria used in previous studies, whereby both streets meet one of the following:
    - 4 lanes or greater
    - 3 lanes and carries over 15,000 ADT
    - 2 lanes and carries over 10,000 ADT
- Intersections at freeway access ramps.
- Significant intersections where travel time analysis is performed.

A total of 59 intersections were identified based on the criteria listed above, which include 11 intersections located outside the study communities. These intersections were added to the study area because of their proximity to the communities, and the likelihood that changes within the communities could directly affect traffic in/out of the communities. Figure 2-1 displays the location of the 59 study intersections and roadway segments.

2.2 Level of Service Definition

Vehicular level of service (LOS) is a quantitative measure that represents quality of service for the driver. These conditions are generally described in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents the best operating conditions from a driver's perspective, while LOS F represents the worst. Table 2-1 describes generalized definitions of auto LOS A through F.

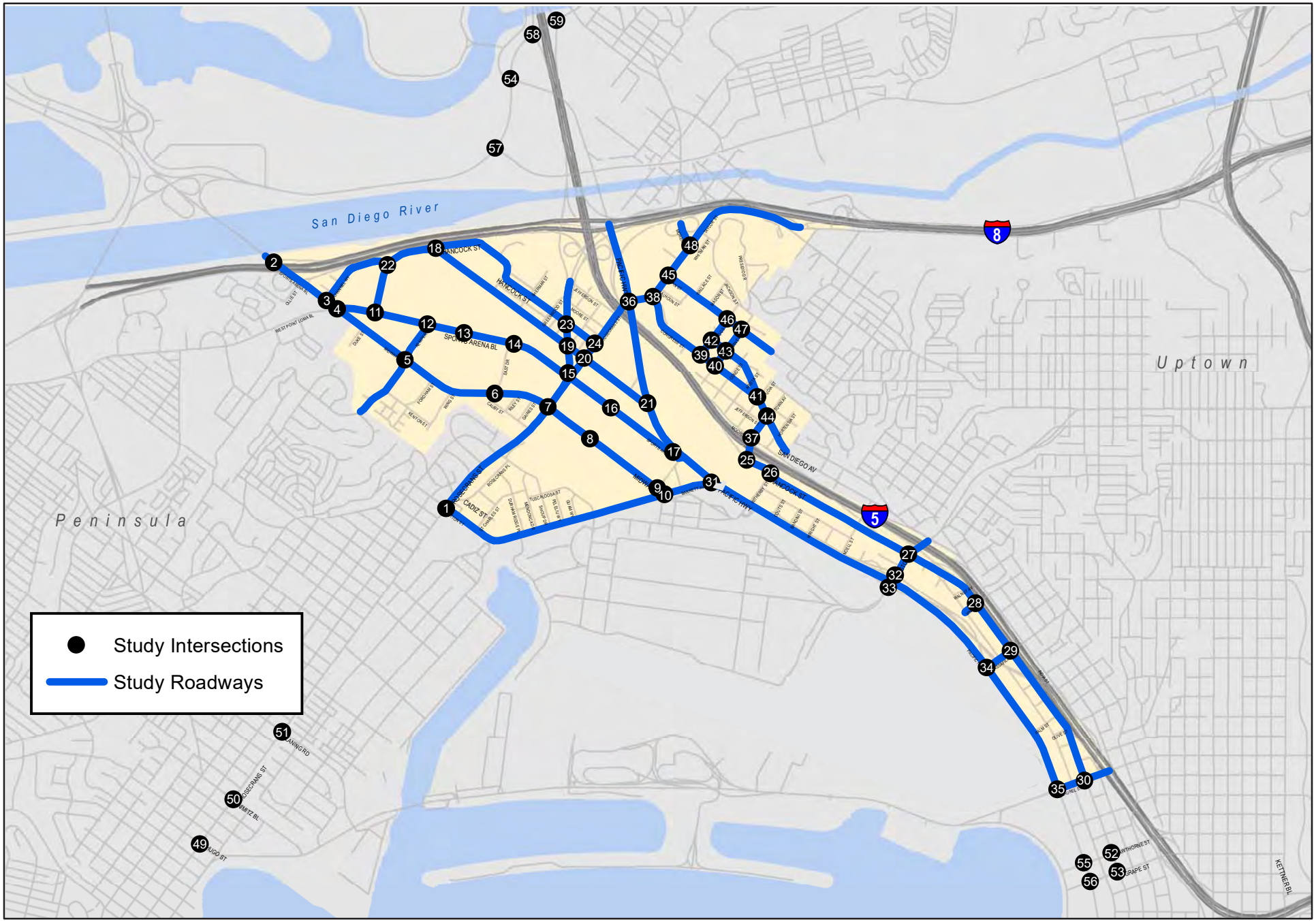
Table 2-1 Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual (2010)

2.2.1 Roadway Segment Level of Service Standards and Thresholds

Roadway segment level of service standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment level of service is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted Average Daily Traffic (ADT) volumes. Table 2-2 presents the roadway segment capacity and LOS standards utilized to analyze roadways in this report.



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Figure 2-1
Project Study Area

Table 2-2 City of San Diego Roadway Segment Daily Capacity and Level of Service Standards

Roadway Functional Classification	Lanes	Level of Service				
		A	B	C	D	E
Freeway	8	60,000	84,000	120,000	140,000	150,000
Freeway	6	45,000	63,000	90,000	110,000	120,000
Freeway	4	30,000	42,000	60,000	70,000	80,000
Expressway	6	30,000	42,000	60,000	70,000	80,000
Prime Arterial	8	35,000	50,000	70,000	75,000	80,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
Major Arterial	7	22,500	31,500	45,000	50,000	55,000
Major Arterial	6	20,000	28,000	40,000	45,000	50,000
Major Arterial	5	17,500	24,500	35,000	40,000	45,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Major Arterial	3	11,250	15,750	22,500	26,250	30,000
Major Arterial	2	7,500	10,500	15,000	17,500	20,000
Major Arterial (one-way)	3	12,500	16,500	22,500	25,000	27,500
Major Arterial (one-way)	2	10,000	13,000	17,500	20,000	22,500
Collector (w/ two-way left turn lane)	4	10,000	14,000	20,000	25,000	30,000
Collector (w/ two-way left turn lane)	3	7,500	10,500	15,000	18,750	22,500
Collector (w/ two-way left turn lane)	2	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	4	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	3	4,000	5,000	7,500	10,000	11,000
Collector (w/o two-way left turn lane)	2	2,500	3,500	5,000	6,500	8,000
Collector (w/o two-way left turn lane) – no fronting property	2	4,000	5,500	7,500	9,000	10,000
Collector (one-way)	3	11,000	14,000	19,000	22,500	26,000
Collector (one-way)	2	7,500	9,500	12,500	15,000	17,500
Collector (one-way)	1	2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2	-	-	2,200	-	-

Source: City of San Diego Traffic Impact Study Manual (1998);
Updated with input from City of San Diego Planning Department Mobility Staff (2017)

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. LOS D is considered acceptable for Mobility Element roadway segments in the City of San Diego. Often, a roadway segment that is analyzed to be LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized (or intersection analysis, if arterial analysis is not applicable) to provide a more accurate indication of LOS.

2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Based on existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all study area.
- Peak Hour Factor: Based on existing peak hour counts.
- Existing Conditions Signal Timing: Based on existing signal timing plans (as of November 2012).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in *2000 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209*. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (sec/veh).

The *2000 HCM* methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections, based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The level of service criteria used for this technique is described in Table 2-3. The computerized analysis of intersection operations was performed utilizing the *Synchro 9.0 (2000 HCM methodology)* traffic analysis software (by Trafficware, 2011).

Table 2-3 Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board Special Report 209 (2000)

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections, were analyzed using the *2000 HCM* unsignalized intersection analysis methodology. The Synchro 8.0 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or

measured average control delay of all movements. Table 2-4 summarizes the level of service criteria for unsignalized intersections.

Table 2-4 Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: Highway Capacity Manual (2000)

The City of San Diego considers LOS D or better during the AM and PM peak hours to be acceptable intersection LOS.

2.2.3 Freeway/State Highway Level of Service Standards and Thresholds

Freeway LOS analysis is based upon procedures developed by Caltrans District 11. The procedure for calculating freeway LOS involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour ("K"), directional ("D") and truck ("T") factors to Average Daily Traffic (ADT) volumes. The base capacities were assumed to be 2,350 passenger-cars per hour per main lane (pc/h/ln) and 1,410 pc/h/ln for auxiliary lanes. A 0.95 peak-hour factor (PHF) is utilized for this analysis.

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in Table 2-5. The corresponding level of service represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour. LOS D or better is used in this study as the threshold for acceptable freeway operations based upon Caltrans and the SANDAG Regional Growth Management Strategy (RGMS) requirements.

2.2.4 Ramp Metering Analysis

Ramp metering is a means of controlling the volume of traffic entering the freeway with the goal of improving freeway main lane traffic operations and flow. Freeway ramp meter analyses estimate peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location.

Meter rates, which represent the number of vehicles permitted through the signal, onto the ramp and freeway, were obtained from Caltrans for use in the analysis. Ramp metering analyses to calculate delays at study area freeway ramps were conducted following the procedures outlined in the *City of San Diego Traffic Impact Study Manual (1998)*.

Table 2-5 Caltrans District 11 Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways and conventional highways			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for conventional highways			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
Used for freeways and expressways			
"F0"	1.01–1.25	Considerable (0-1 hour delay)	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe (1-2 hour delay)	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe (2-3 hour delay)	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe (3+ hours of delay)	Gridlock.

Source: SANTEC/ITE Guidelines for TIS in the San Diego Region.

2.2.5 Determination of Significant Impacts

This section outlines the thresholds for determining significant project-related impacts to roadways, intersections, and freeways in the City of San Diego. Generally, a significant impact is identified when the addition of project traffic results in a level of service dropping from LOS D or better to substandard LOS E or F. Table 2-6 summarizes the significant impact thresholds for facilities operating at a substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the (V/C) ratio.

Table 2-6 City of San Diego Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering*
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E	0.01	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Source: CEQA Significance Determination Thresholds, City of San Diego Development Services Department (2007)

Note:
* For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

3.0 Existing Conditions

This section describes study area intersections, roadways and freeway segments, as well as existing peak hour intersection traffic volumes, and daily roadway and freeway traffic volumes. A Vehicle Miles Traveled (VMT) comparison is also presented. Level of service analysis results for all study area facilities under Existing Conditions are presented separately below.

3.1 Vehicle Miles Traveled

The VMT generated within the communities were estimated using the SANDAG Series 12 Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to/from and within the community. Table 3-1 displays the total VMT generated within the Midway-Pacific Highway and Old Town communities and the average trip length under both the Base Year conditions. VMT calculations for the Midway-Pacific Highway and Old Town communities are included as Appendix A.

As shown, the Midway-Pacific Highway community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.5 miles vs. 5.2 miles; VMT of 156 miles vs. 27 miles, respectively).

The Old Town community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.6 miles vs. 5.2 miles; VMT of 182 miles vs. 27 miles, respectively).

Table 3-1 Vehicle Miles Traveled (VMT) Comparison Existing Conditions

Measure	Midway-Pacific Highway	Old Town	San Diego Region
	Base Year	Base Year	Base Year
Total VMT (miles)	730,121	151,300	85,182,063
Total # of Auto Trips	294,796	57,989	16,458,692
Average Trip Length[1] (miles)	2.5	2.6	5.2
Population	4,670	830	3,130,717
Daily VMT by Population (miles)	156	182	27

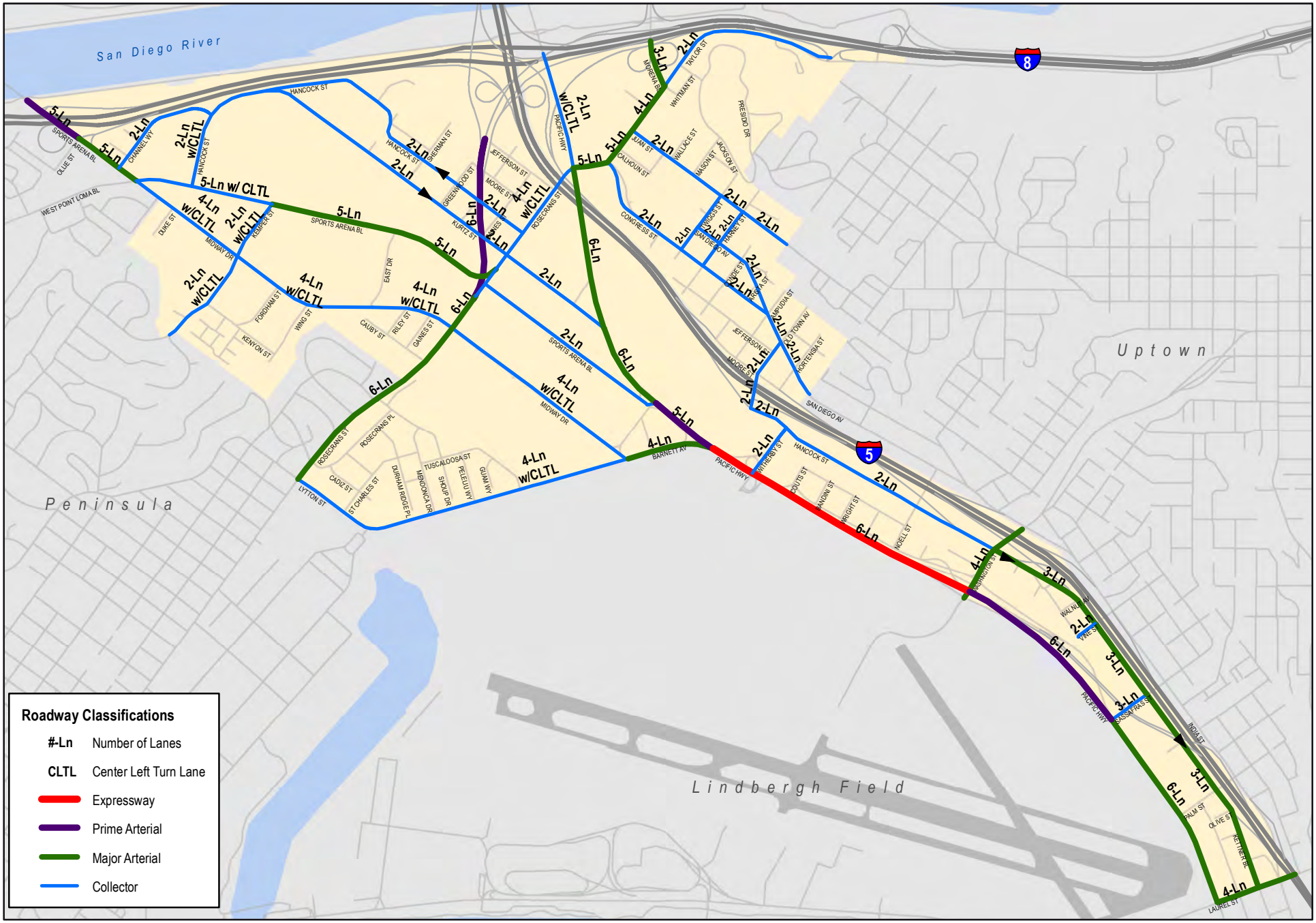
Source: SANDAG (2017); Chen Ryan Associates (2017)

Note:

[1]Average trip length is estimated by dividing the total VMT by the total # of auto trips.

3.2 Roadway Segment Analysis

Chapter 2 documents the selection of study area roadway segments and study intersections. The roadway network is comprised of regional facilities such as I-5 and I-8, as well as numerous arterials and local streets. Roadways outside the boundary of the Midway-Pacific Highway and Old Town communities were included in this assessment due to their location within the sphere of influence and will be required for the environmental studies. Figure 3-1 displays the functional classification for study area roadway segments. Table 3-2 provides a description of the study area roadway segments.



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Figure 3-1
Existing Roadway Classifications

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
North-South									
Midway/Pacific Highway Corridor									
Lytton St / Barnett Ave	Rosecrans St	Midway Dr	4-Lane Collector w/ CLTL	Commercial & Military Use	None	40	Yes	Class II	76'/86'
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76
	Kemper St	East Dr	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76'
	East Dr	Rosecrans St	4-Lane Collector w/ CLTL	Commercial	Parallel (NE Side)	35	Yes	None	60'/80'
	Rosecrans St	Barnett Ave	4-Lane Collector w/ CLTL	Commercial & Industrial	None	35	Yes	None	56'/72'
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	None	None	35	Yes	Class III	72'/84
	I-8 EB Ramps	W. Point Loma Blvd/ Sports Arena Blvd	6-Lane Major Arterial	Commercial & Multi-Family Residential	Parallel (SW Side)	35	Yes	Class III	76'/88'
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector w/ CLTL	Commercial & Multi-Family Residential	Parallel (Both)	35	Yes	None	96'/106'
	Kemper St	East Dr	5-Lane Major Arterial	Commercial & Private Recreation	Parallel (SW Side)	35	Yes	None	96'/106'
	East Dr	Rosecrans St	5-Lane Major Arterial	Commercial	None	35	Yes	None	82'/92'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	35	Intermittent	None	52'/82'
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	Commercial & Industrial	Parallel (Both)	30	Yes	None	40'/48'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	30	Gutter Only	None	48'/48'
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector w/ CLTL	Industrial	Parallel (Both)	30	Only on south side	None	62'/78'
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	Industrial	Parallel (Both)	30	Yes	None	40'/50'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Hancock St	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	Industrial	None	30	Yes	None	40'/50'
	Old Town Ave	Witherby St	2-Lane Collector	Industrial	None	30	Curb Only	None	44'/44'
	Witherby St	Washington St	2-Lane Collector	Industrial	Parallel (North) Diagonal (south)	30	Yes	None	60'/70'
Kettner Blvd	Washington St	Vine St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	None	40	Sidewalk on SW Side	None	42'/58'
	Vine St	Sassafras St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Sidewalk on SW Side	None	52'/58'
	Sassafras St	Laurel St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Yes	None	52'/68'
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector w/ CLTL	Transportation Related Utilities	Parallel (Both)	45	Yes	Class II	86'/108'
	Taylor St	Kurtz St	6-Lane Major Arterial	Institutional & Industrial	None	45	Yes	Class II	88'/110'
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	Industrial	None	45	Yes	Class II	88'/110'
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	Commercial & Industrial	None	45	Sidewalk on NE Side	Class III	92'/110'
	Barnett Ave	Washington St	Expressway	Commercial & Industrial	None	55	None	Class II	118'/118'
	Washington St	Sassafras St	6-Lane Prime Arterial	Commercial & Industrial	None	45	None	Class III	42' SB / 46' NB
	Sassafras St	Laurel St	6-Lane Major Arterial	Commercial & Industrial	None	45	Yes	Class III	98'/110'
Old Town									
Congress St	Taylor St	Twiggs St	2-Lane Collector	Commercial & Transit Station	Parallel (Both)	25	Yes	Class III	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	Class III	36'/48'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Congress St	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	Commercial, Single Family Residential & School	Parallel (Both)	25	Yes	Class III	36'/48'
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	52'/70'
	Harney St	Ampudia St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	40'/52'
	Ampudia St	Old Town Ave	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	Class III	42'/54'
	Old Town Ave	Hortensia St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	Class III	40'/56'
Juan St	Taylor St	Twiggs St	2-Lane Collector	Institutional, Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Harney St	San Juan Rd	2-Lane Collector	Commercial & Park	Parallel (Both)	30	Yes	None	36'/48'
Morena Boulevard	I-8 EB Ramps	Taylor Street	3-Lane Major	Commercial	None	Not Posted	Yes	None	56'/68'
East-West									
Midway/Pacific Highway Corridor									
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	None	40'/50'
Kemper St	Kenyon St	Midway Dr	2-Lane Collector w/ CLTL	Commercial & Industrial	Parallel (NW Side)	25	NW side only	None	62'/76'
	Midway Dr	Sports Arena Blvd	2-Lane Collector w/ CLTL	Commercial	Parallel (Both)	25	Yes	None	50'/60'
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	Commercial	None	35	Yes	None	106'/120'
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	Commercial, Multi-Family Residential & Industrial	None	35	Yes	None	106'/120'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	Commercial	None	35	Yes	None	106'/120'
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector w/ CLTL	Commercial & Institutional	Parallel (Both)	35	NW side only	None	82'/100'
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	Commercial & Industrial	None	40	Yes	Class III	92'/108'
Washington St	Frontage Rd	Pacific Hwy	4-Lane Major Arterial	None	None	25	Yes	None	62'/70'
	Pacific Hwy	Hancock St	4-Lane Major Arterial	Commercial	Parallel (SE Side)	25	Yes	None	60'/74'
Vine St	California St	Kettner Blvd	2-Lane Collector	Industrial	Diagonal (SE Side)	25	Yes	None	50'/78'
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	Institutional	None	25	Yes	None	52'/74'
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	Commercial	None	25	Yes	Class III	54'/70'
Old Town									
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	Transit Station	None	35	Yes	None	94'/118'
	Congress St	Juan St	5-Lane Major Arterial	Institutional	None	35	Yes	None	80'/98'
	Juan St	Morena Blvd	4-Lane Major Arterial	Commercial & Park	None	35	Yes	None	80'/100'
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	Commercial & Park	None	35	Curb Only	Class II	42'42'
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	30'/42'
	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (Both)	25	Yes	None	30'/50'
Harney St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	None	30/42'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Harney St	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (SE Side)	25	Yes	None	30'/46'
Old Town Ave	Hancock St	Moore St	2-Lane Collector	None	None	25	SE Side Only	None	28'/36'
	Moore St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	38'/48'

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Figure 3-2 displays existing average daily traffic volumes for the study roadway segments, along with the current LOS. Table 3-3 displays existing roadway segment ADT and LOS for the Midway-Pacific Highway and Old Town San Diego communities. Appendix B contains the average daily traffic counts utilized in this report.

It should be noted that the existing conditions report was completed in November 2012; therefore, the traffic counts conducted to evaluate Existing conditions were collected in year 2012 as well. To ensure the counts used to evaluate existing conditions are still relevant to current conditions, a sampling of the 2012 counts were validated with recently conducted counts (collected in 2015 and 2016). Through the validation process limited growth was observed in the traffic volumes between year 2012 and year 2015/2016 conditions. Therefore, the counts used to evaluate existing conditions would still be considered valid.

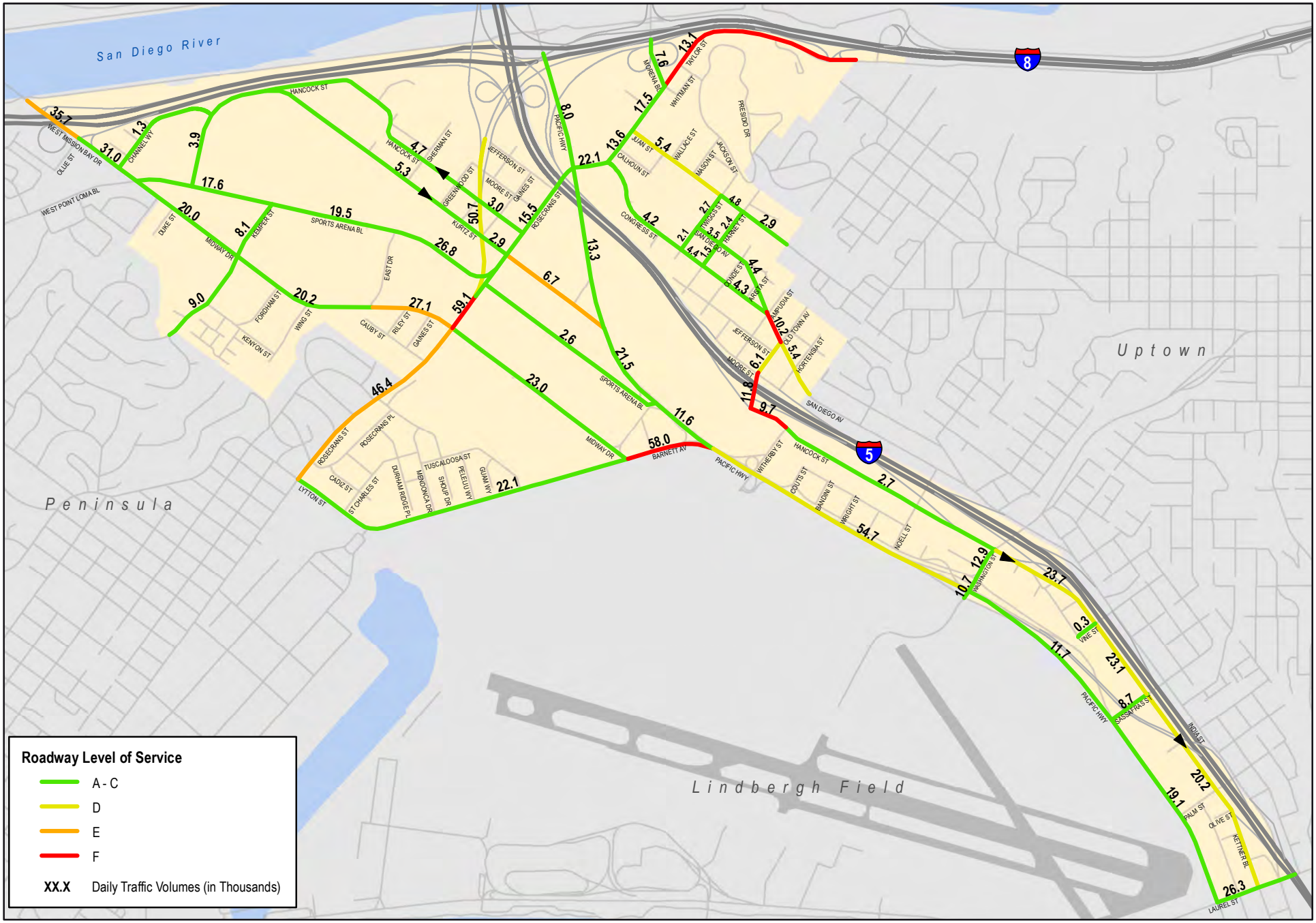
As shown in Table 3-2, the following nine (9) roadway segments operate at LOS E or F under Existing Conditions:

Midway/Pacific Highway Corridor

- Midway Drive, between East Drive and Rosecrans Street (LOS E)
- Kurtz Street, between Rosecrans Street and Pacific Highway (LOS E)
- Hancock Street, between Old Town Avenue and Witherby Street (LOS F)
- Rosecrans Street between Lytton Street and Midway Drive (LOS E)
- Rosecrans Street, between Midway Drive and Sports Arena Boulevard (LOS F)
- Barnett Avenue, between Midway Drive and Pacific Highway (LOS F)

Old Town

- San Diego Avenue, between Ampudia Street and Old Town Avenue (LOS F)
- Taylor Street, between Morena Blvd and I-8 EB Ramps (LOS F)
- Old Town Avenue, Hancock Street to Moore Street (LOS F)



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Figure 3-2
Existing Roadway Segment Traffic Volumes and Level of Service

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
North-South							
Midway/Pacific Highway Corridor							
Lytton Street/ Barnett Avenue	Rosecrans St	Midway Dr	4-Lane Collector (CLTL)	30,000	22,070	0.74	D
Midway Dr	W. Point Loma Blvd/Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	19,960	0.67	C
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,240	0.67	D
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	27,600	0.92	**E**
	Rosecrans St	Barnett Ave	4-Lane Collector (CLTL)	30,000	23,000	0.77	D
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	50,000	35,670	0.71	C
	I-8 EB Ramps	W. Point Loma Blvd/Sports Arena Blvd	6-Lane Major Arterial	50,000	31,010	0.62	C
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector (CLTL)	37,500	17,600	0.47	B
	Kemper St	East Dr	5-Lane Major Arterial	45,000	19,520	0.43	B
	East Dr	Rosecrans St	5-Lane Major Arterial	45,000	26,800	0.6	C
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	2,600	0.33	B
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	5,340	0.31	A
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	6,690	0.84	**E**
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	3,930	0.26	A
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	17,500	4,710	0.27	A
	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	17,500	2,990	0.17	A
	Old Town Ave	Witherby St	2-Lane Collector	8,000	9,680	1.21	**F**
	Witherby St	Washington St	2-Lane Collector	8,000	2,740	0.34	B
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	23,720	0.86	D
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	23,080	0.84	D
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	20,150	0.73	C
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	7,460	0.5	C
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	13,300	0.27	A
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	21,470	0.43	B
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	50,000	11,600	0.23	A
	Barnett Ave	Washington St	Expressway	80,000	54,690	0.68	C
	Washington St	Sassafras St	6-Lane Prime Arterial	60,000	11,650	0.19	A

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	19,160	0.38	B
Old Town							
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	4,230	0.53	C
	Twiggs St	Harney St	2-Lane Collector	8,000	4,380	0.55	C
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	4,280	0.54	C
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	3,540	0.44	C
	Conde St	Arista Ave	2-Lane Collector	8,000	4,350	0.54	C
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	10,160	1.27	**F**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	5,400	0.68	D
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	5,430	0.68	D
	Twiggs St	Harney St	2-Lane Collector	8,000	4,810	0.6	C
	Harney St	San Juan Rd	2-Lane Collector	8,000	4,230	0.53	C
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	7,585	.25	A
East-West							
Midway/Pacific Highway Corridor							
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	8,000	1,280	0.16	A
Kemper St	Kenyon St	Midway Dr	2-Lane Collector (CLTL)	15,000	9,010	0.6	C
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,120	0.54	C
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	50,700	0.85	D
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	50,000	46,400	0.93	**E**
	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	50,000	59,100	1.18	**F**
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Major (CLTL)	30,000	15,500	0.52	C
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	40,000	57,954	1.45	**F**
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	10,680	0.27	A
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	12,870	0.32	A
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	250	0.03	A
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	15,000	8,700	0.58	B
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	26,290	0.66	C
Old Town							
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	5-Lane Major Arterial	45,000	22,100	0.49	B
	Congress St	Juan St	5-Lane Collector (CLTL)	37,500	13,560	0.36	A
	Juan St	Morena Blvd	4-Lane Collector (CLTL)	30,000	17,530	0.58	B
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	13,140	1.64	**F**
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,080	0.26	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,670	0.33	B

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,520	0.19	A
Harney St	San Diego Ave	Juan St	2-Lane Collector	8,000	2,350	0.29	A
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	11,750	1.47	**F**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,120	0.77	D

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

3.3 Intersection Analysis

As described in Chapter 2, a total of fifty-nine (59) study intersections were analyzed as part of the Existing Conditions assessment, including thirty-five (35) intersections located within Midway-Pacific Highway, thirteen (13) intersections located within Old Town, and eleven (11) intersections in adjacent communities.

Figure 3-3 displays current intersection geometries, while Figure 3-4 shows existing AM and PM peak period turning movements. The study area intersection traffic counts are provided in Appendix D.

Table 3-4 displays the existing AM and PM peak hour LOS analysis results for the key study area intersections. LOS analyses were conducted using the methodologies described in Chapter 2.0. Intersection LOS calculation worksheets for Existing Conditions are provided in Appendix E. As shown, the following four (4) study intersections currently operate at LOS E or F:

Midway-Pacific Highway

- Lytton Street & Rosecrans Street (LOS E – AM peak hour)
- West Mission Bay Drive & I-8 WB Off-Ramp (LOS E – PM peak hour)

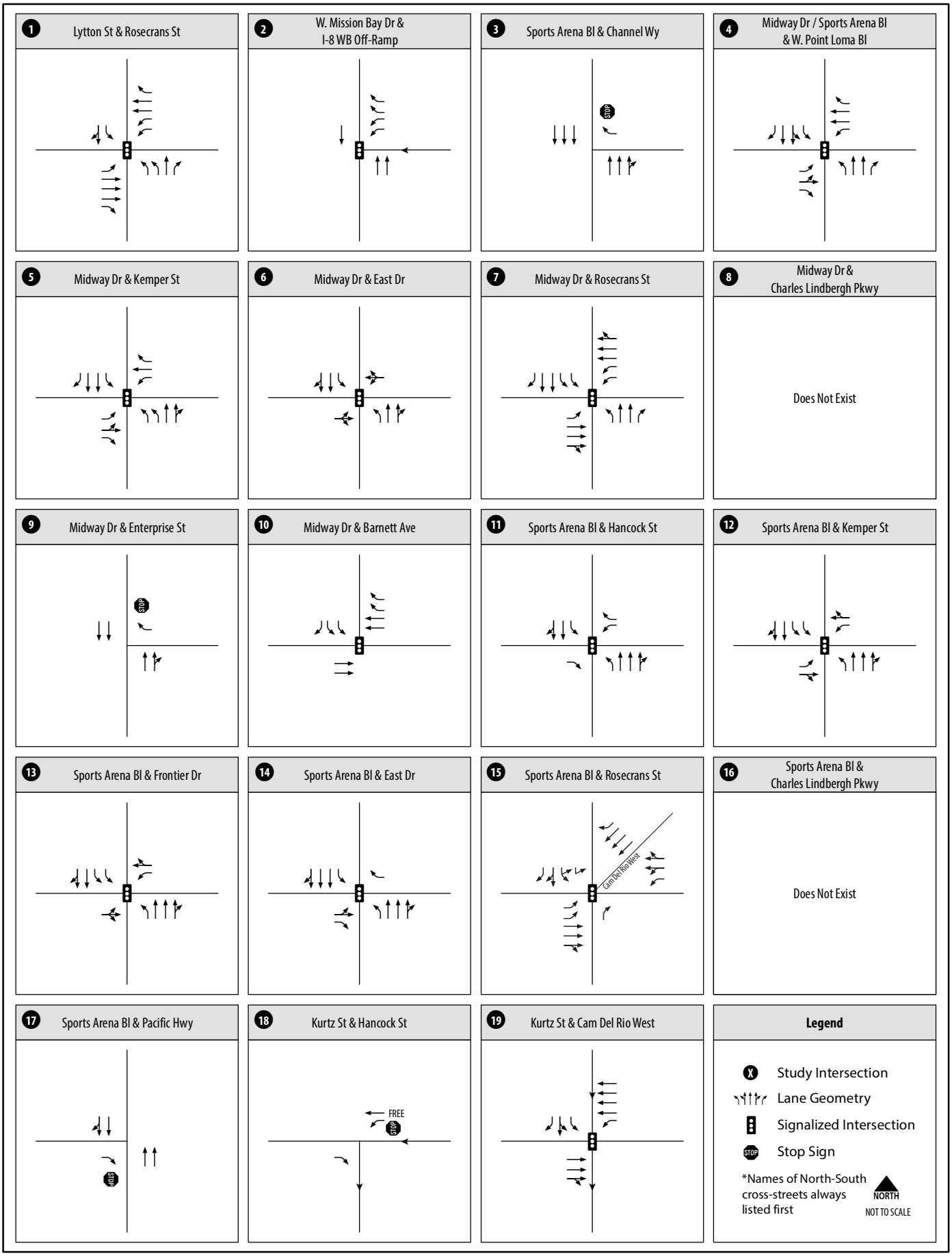
Old Town

- Pacific Highway & Taylor Street (LOS E – AM peak hour)

Intersections Outside of Study Communities

- Lowell Street/Nimitz Boulevard & Rosecrans Street (LOS E – PM peak hour)

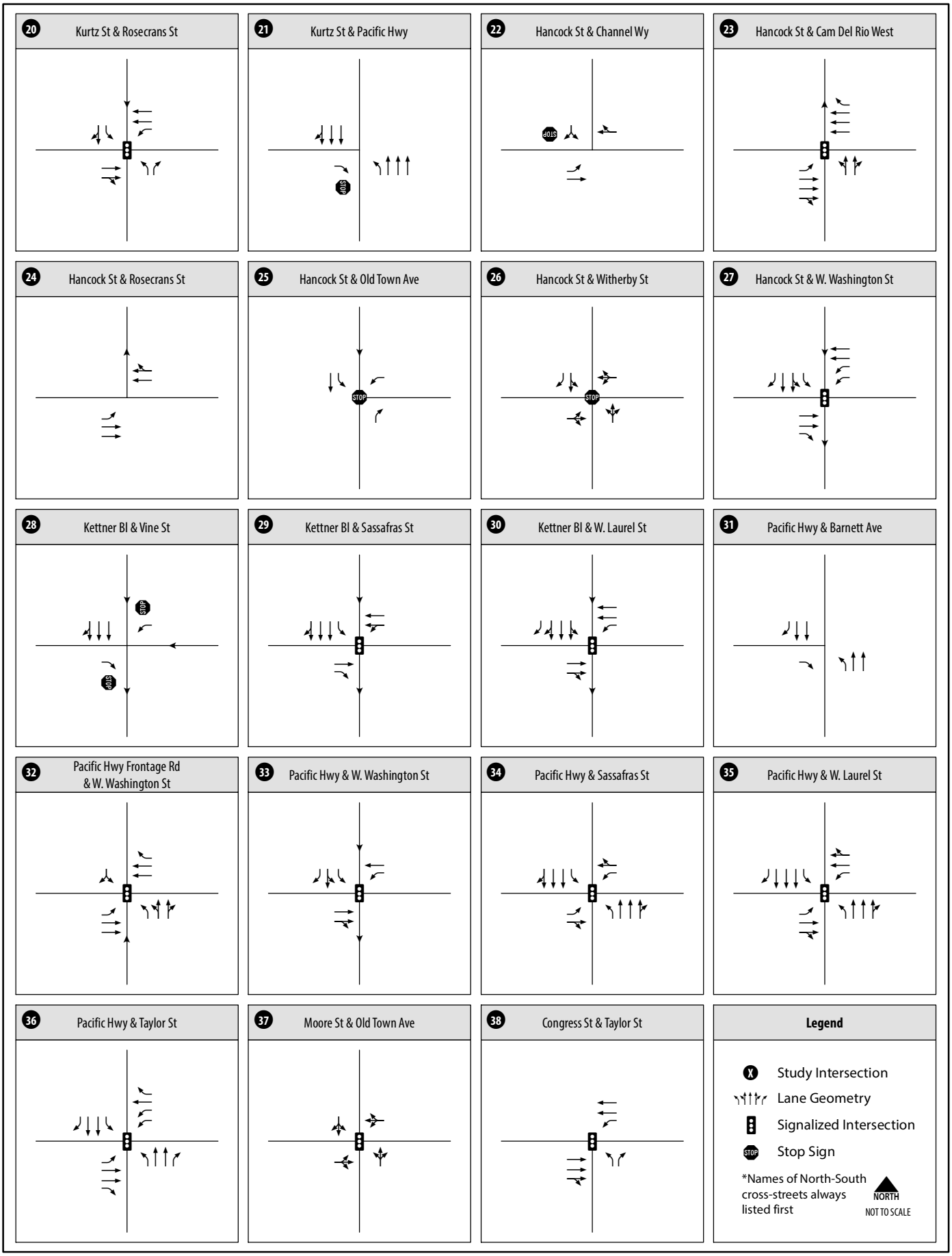
Figure 3-5 graphically displays the existing AM and PM peak hour intersection LOS results.



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Figure 3-3
Existing Intersection Geometrics (Intersections 1-19)



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Figure 3-3
Existing Intersection Geometrics (Intersections 20-38)

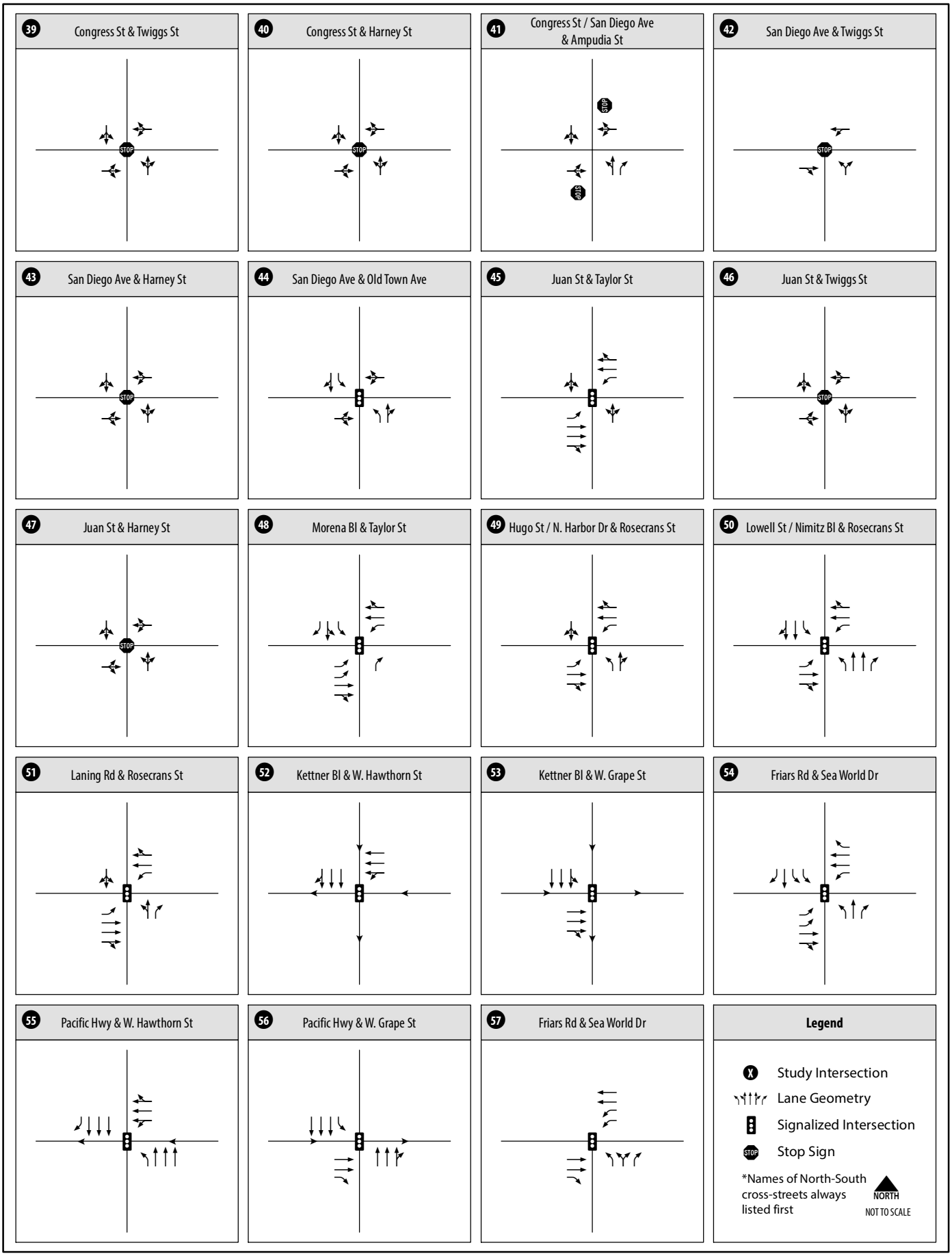
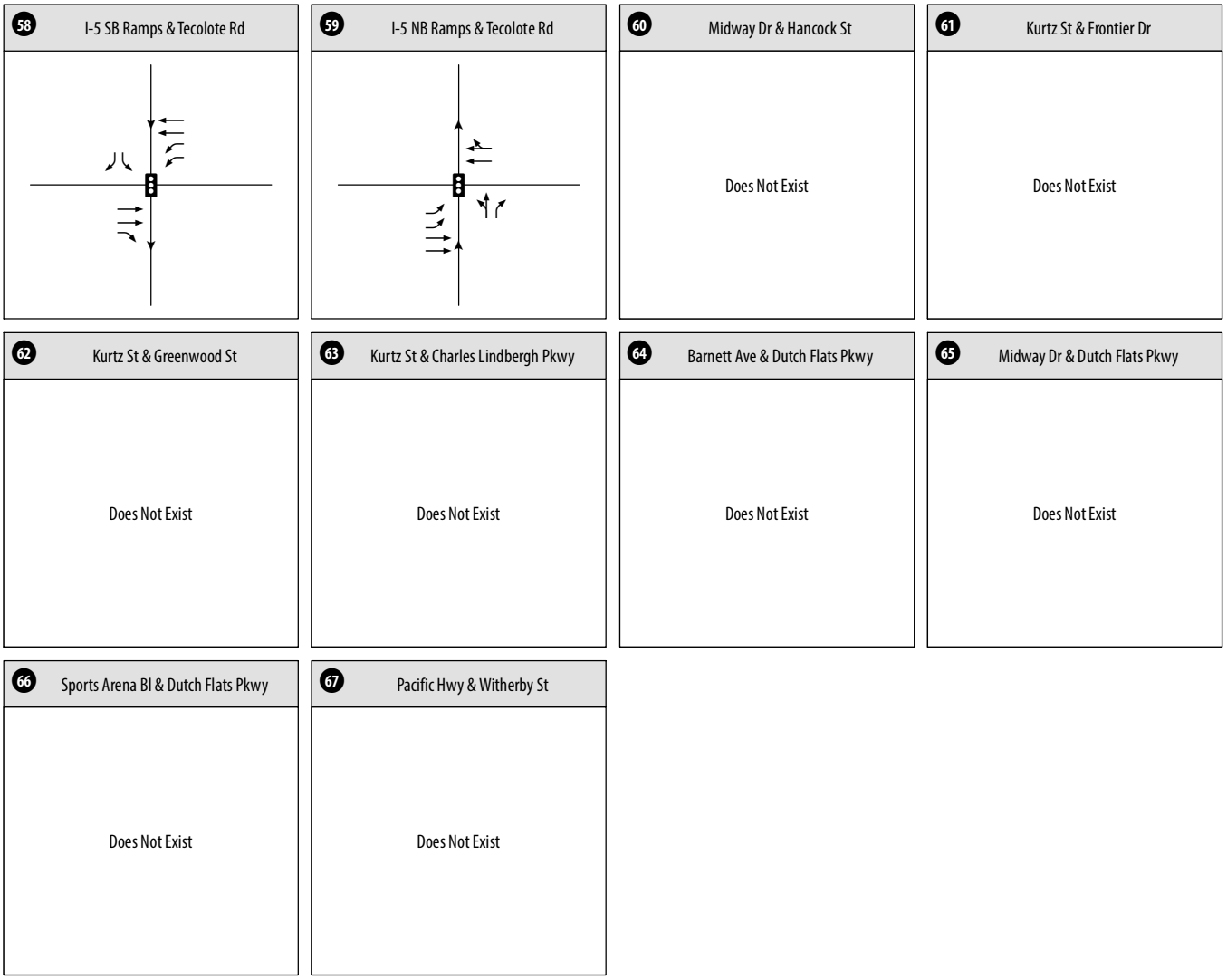


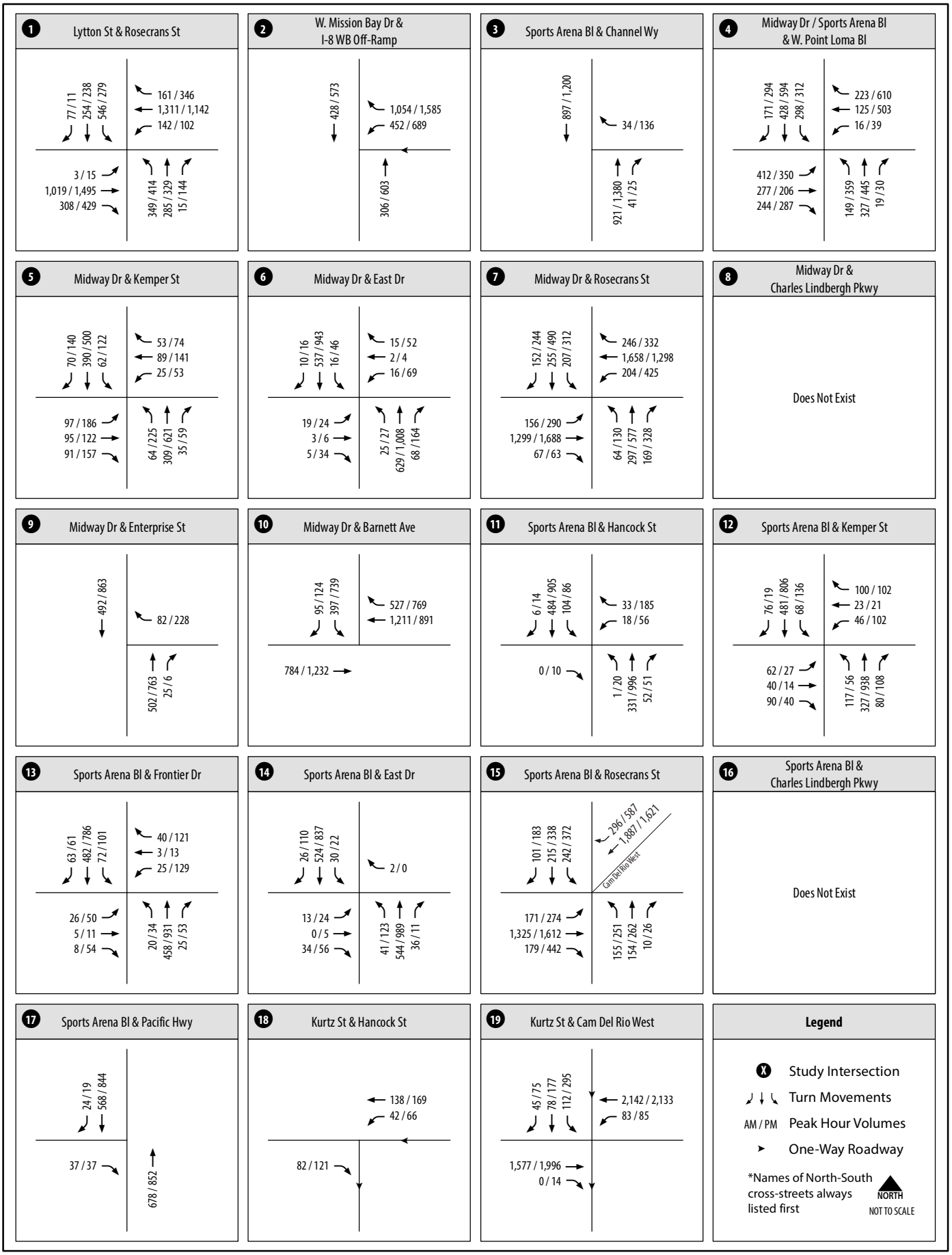
Figure 3-3
Existing Intersection Geometrics (Intersections 39-57)



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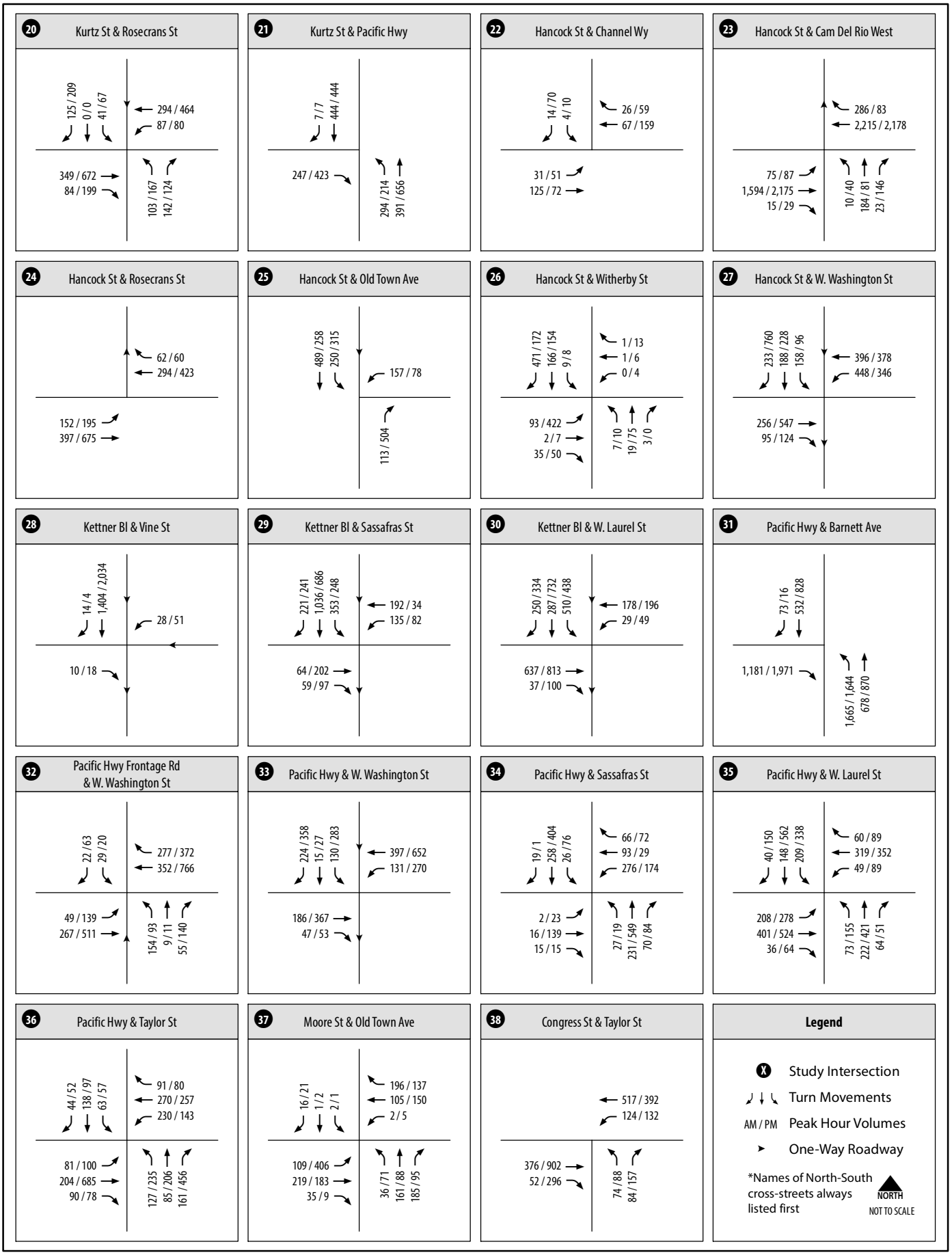
Figure 3-3
Existing Intersection Geometrics (Intersections 58-67)



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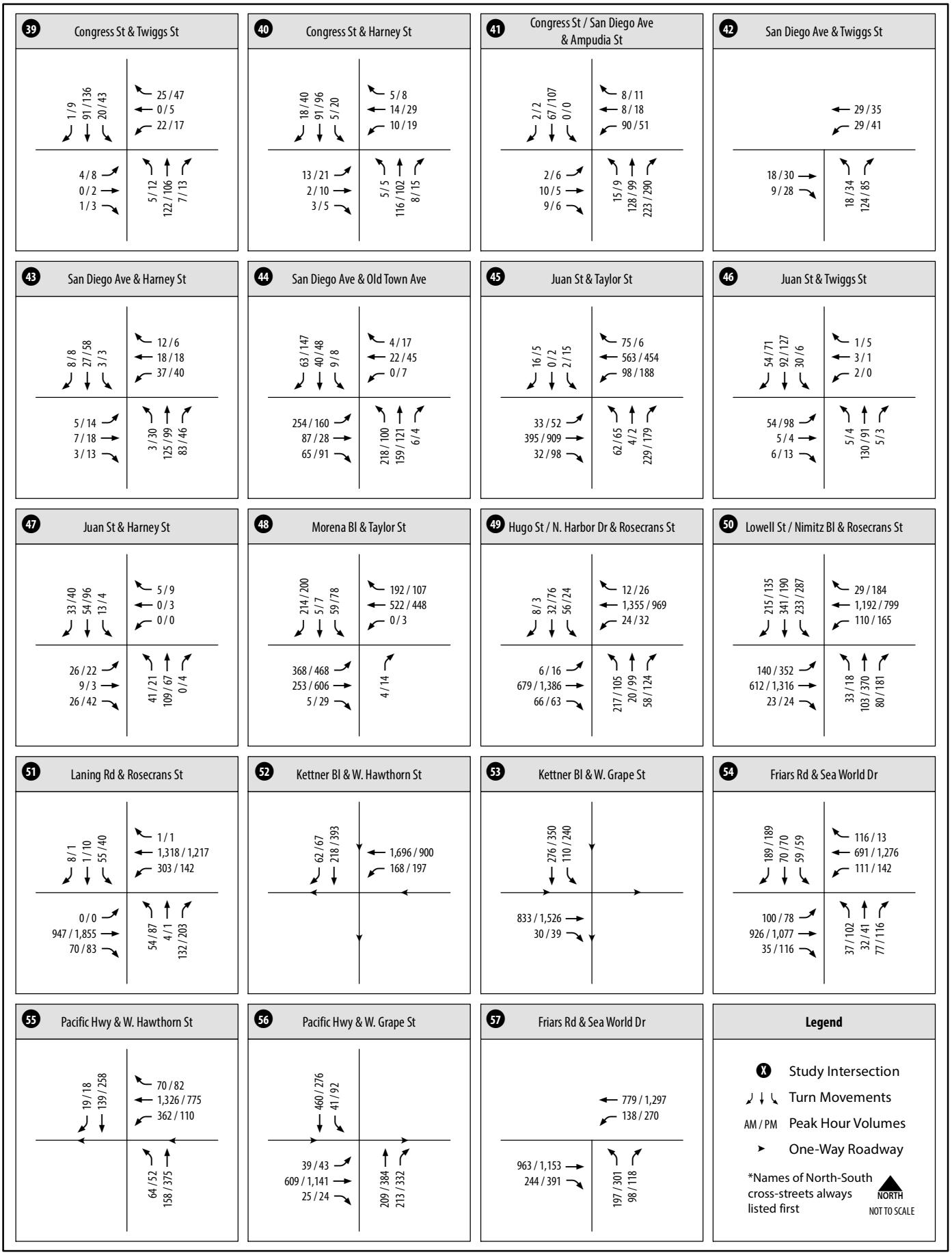
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 1-19)



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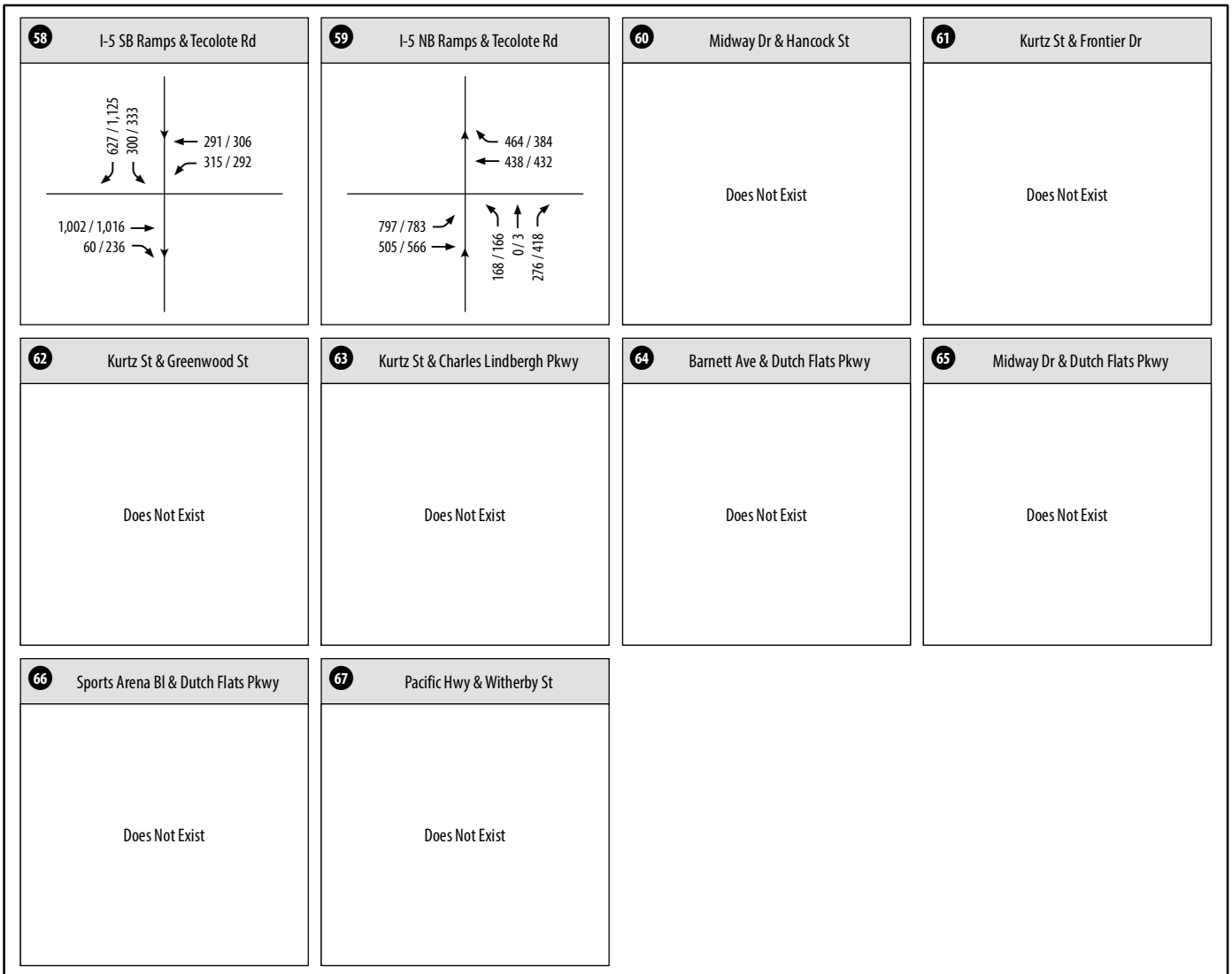
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 20-38)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movement (Intersections 39-57)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 58-67)

Table 3-4 Existing AM/PM Peak Hour Level of Service

No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
Midway-Pacific Highway						
1	Lytton St and Rosecrans St	Signal	**65.4**	**E**	44.5	D
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	14.8	B	**59.5**	**E**
3	Sports Arena Blvd and Channel Way	OWSC	11.2	B	14.7	B
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	36.6	D	47.2	D
5	Midway Dr and Kemper St	Signal	22.7	C	37.3	D
6	Midway Dr and East Dr	Signal	4.8	A	13.0	B
7	Midway Dr and Rosecrans St	Signal	34.9	C	49.1	D
8	Midway Dr and Unknown Future Connector 1	Unknown	*Does Not Exist*			
9	Midway Dr and Enterprise St	OWSC	11.0	B	18.1	C
10	Midway Dr and Barnett Ave	Signal	13.8	B	19.8	B
11	Sports Arena Blvd and Hancock St	Signal	10.0	A	13.1	B
12	Sports Arena Blvd and Kemper St	Signal	18.8	B	17.5	B
13	Sports Arena Blvd and Sports Arena Driveway	Signal	17.1	B	24.8	C
14	Sports Arena Blvd and East Dr	Signal	26.0	C	11.9	B
15	Sports Arena Blvd and Rosecrans St	Signal	35.7	D	43.2	D
16	Sports Arena Blvd and Unknown Future Connector 1	Unknown	*Does Not Exist*			
17	Sports Arena Blvd and Pacific Hwy	OWSC	10.6	B	12.0	B
18	Kurtz St and Hancock St	OWSC	*No Control Delay*			
19	Kurtz St and Camino Del Rio West	Signal	9.4	A	20.2	C
20	Kurtz St and Rosecrans St	Signal	20.0	B	31.7	C
21	Kurtz St and Pacific Hwy	OWSC	11.2	B	13.7	B
22	Hancock St and Channel Wy	OWSC	9.3	A	10.5	B
23	Hancock St and Camino Del Rio West	Signal	24.3	C	20.3	C
24	Hancock St and Rosecrans St	Unsignalized	*No Conflicting Movements*			
25	Hancock St and Old Town Ave	AWSC	16.9	C	14.6	B
26	Hancock St and Witherby St	AWSC	16.0	C	23.5	C
27	Hancock St and Washington St	Signal	22.8	C	25.9	C
28	Kettner Blvd and Vine St	TWSC	14.3	B	23.2	C
29	Kettner Blvd and Sassafras St	Signal	12.0	B	11.9	B
30	Kettner Blvd and West Laurel St	Signal	20.0	B	29.7	C
31	Pacific Hwy and Barnett Ave	Grade Separated	*No Control Delay*			
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	19.4	B	36.0	D
33	Pacific Hwy and Washington St @ Pacific St	Signal	18.7	B	31.2	C
34	Pacific Hwy and Sassafras St	Signal	14.4	B	27.3	C
35	Pacific Hwy and West Laurel St	Signal	48.4	D	42.9	D
Old Town						
36	Pacific Hwy and Taylor St	Signal	**64.6**	**E**	33.5	C
37	Moore St and Old Town Ave	Signal	16.4	B	16.4	B

Table 3-4 Existing AM/PM Peak Hour Level of Service

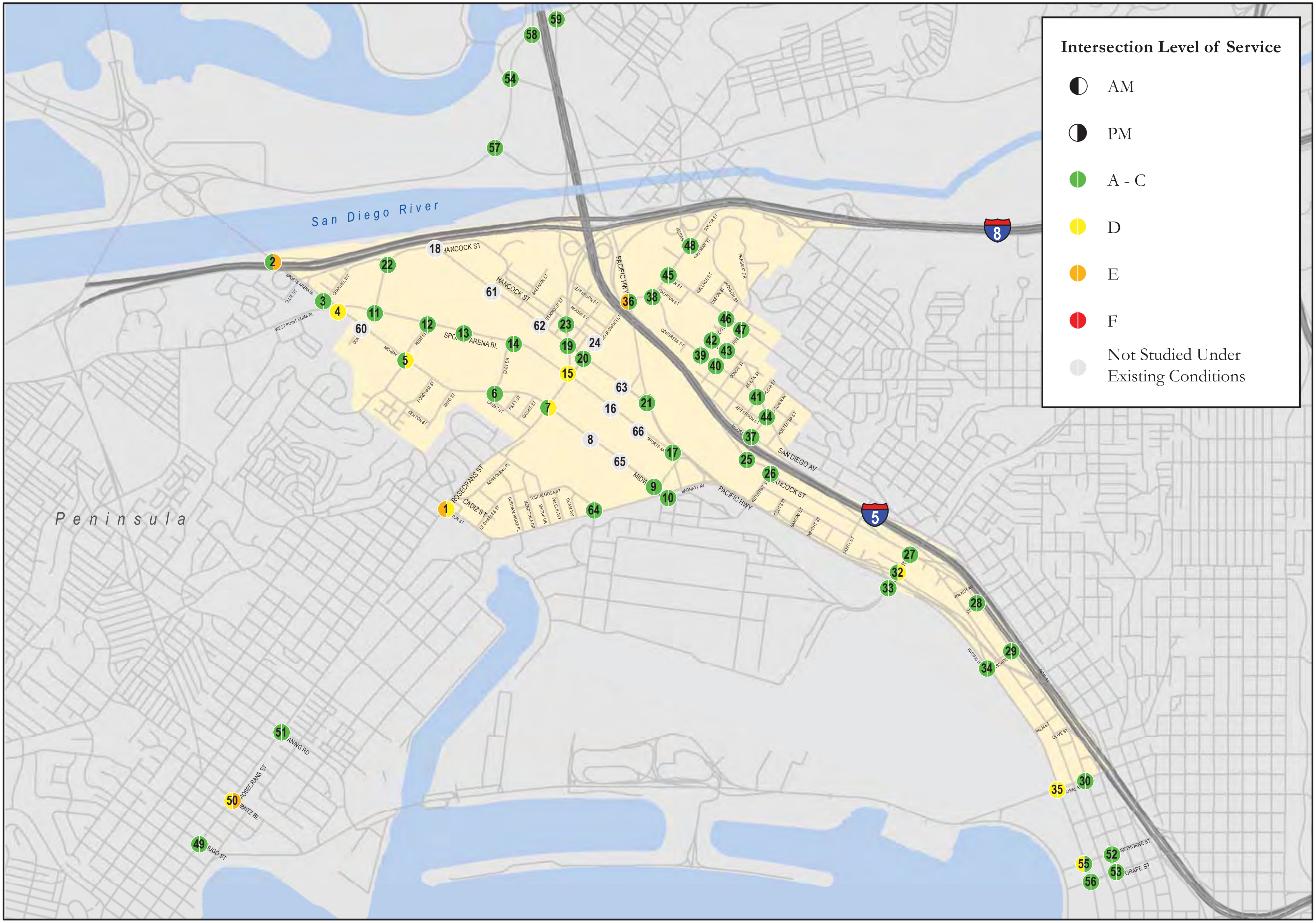
No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
38	Congress St and Taylor St	Signal	19.9	B	21.7	C
39	Congress St and Twiggs St	AWSC	8.1	A	8.6	A
40	Congress St and Harney St	AWSC	8.1	A	8.3	A
41	Congress St and San Diego Ave/Ampudia St	TWSC	12.3	B	11.5	B
42	San Diego Ave and Twiggs St	AWSC	7.9	A	8.0	A
43	San Diego Ave and Harney St	AWSC	8.2	A	8.2	A
44	San Diego Ave and Old Town Ave	Signal	18.4	B	11.6	B
45	Juan St and Taylor St	Signal	10.4	B	10.7	B
46	Juan St and Twiggs St	AWSC	8.8	A	8.5	A
47	Juan St and Harney St	AWSC	8.3	A	7.9	A
48	Morena Blvd and Taylor St	Signal	22.4	C	16.4	B
Intersections Outside of Study Communities						
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	14.7	B	20.7	C
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	41.2	D	**63.3**	**E**
51	Laning Rd and Rosecrans St	Signal	15.5	B	12.9	B
52	Kettner Blvd and West Hawthorn St	Signal	11.1	B	15.0	B
53	Kettner Blvd and West Grape St	Signal	7.4	A	8.7	A
54	Pacific Hwy and Sea World Dr	Signal	19.9	B	25.6	C
55	Pacific Hwy and West Hawthorn St	Signal	35.4	D	20.2	C
56	Pacific Hwy and West Grape St	Signal	16.8	B	24.2	C
57	Friars Rd and Sea World Dr	Signal	11.5	B	13.8	B
58	I-5 SB Ramps and Sea World Dr	Signal	15.5	B	16.3	B
59	I-5 NB Ramps and Sea World Dr	Signal	21.4	C	28.4	C

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Notes:

Bold letter indicates substandard LOS.

1 Signal = Traffic Signal; OWSC = One-Way Stop-Control; 3WSC = Three-Way Stop-Control; AWSC = All-Way Stop-Control;



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Figure 3-5
Existing AM/PM Peak Hour Intersection LOS Results

3.4 Freeway Segment Analysis

Two regional corridors run adjacent to the Midway-Pacific Highway and Old Town communities, providing regional access to and from the communities.

Interstate 5 (I-5) is a north-south freeway that traverses the United States from the Mexican to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the major metropolitan areas of San Diego, Los Angeles, Sacramento and the eastern portion of the San Francisco Bay Area. I-5 bisects the two study communities and can be accessed via the following roadway interchanges:

Midway-Pacific Highway

- Camino Del Rio West (NB on & SB off only)
- Pacific Highway (SB on & NB off only)
- Washington Street
- Palm Street (SB on only)
- Sassafras Street (NB & SB off only)

Old Town

- Old Town Avenue

Interstate 8 (I-8) is an east-west freeway that extends from the western coast of San Diego to central Arizona. I-8 runs just north of the study communities, with access provided via the following roadway interchanges:

Midway-Pacific Highway

- West Mission Bay Drive (EB & WB off only)
- Camino Del Rio West (EB on & WB off only)

Old Town

- Taylor Street

Table 3-5 displays freeway segment LOS analysis results for key freeway segments in the vicinity of the Midway-Pacific Highway and Old Town communities. Caltrans freeway volume worksheets are provided in Appendix F.

As shown, all key freeway segments are currently operating at LOS D or better with the exception of the following three (3) segments:

- I-5 NB, between Sea World Drive and I-8 (LOS E: PM Peak Period)
- I-5 SB, between I-8 and Old Town Avenue (LOS E: PM Peak Period)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: PM Peak Period)

Table 3-5 Existing Freeway Segment Level of Service Results

Freeway	Segment	ADT	Heavy Vehicle	Dir	Lanes	Capacity	AM Peak Hr %	AM Split	AM Peak Hr Vol	AM V/C	AM LOS	PM Peak Hr %	PM Split	PM Peak Hr Vol	PM V/C	PM LOS
I-8	Beginning of Freeway to Sports Arena Blvd	46,500	1.2%	EB	2M + 0A	4,700	6.3%	60%	1,900	0.40	A	8.5%	72%	3,200	0.68	C
				WB	2M + 0A	4,700		40%	1,300	0.28	A		28%	1,300	0.28	A
	Sports Arena Blvd to I-5	102,000	2.8%	EB	3M + 1A	8,450	6.4%	60%	4,400	0.52	B	7.8%	63%	5,600	0.66	C
				WB	3M + 1A	8,450		40%	2,900	0.34	A		37%	3,400	0.40	A
	I-5 to Morena Blvd	132,000	2.8%	EB	4M + 1A	10,800	6.4%	41%	3,900	0.36	A	7.2%	51%	5,500	0.51	B
				WB	5M + 0A	11,750		59%	5,500	0.47	B		49%	5,200	0.44	B
	Morena Blvd to Hotel Circle	191,000	2.8%	EB	4M + 1A	10,800	6.5%	47%	6,500	0.60	B	8.2%	55%	9,700	0.90	D
				WB	5M + 0A	11,750		53%	7,400	0.63	C		45%	8,000	0.68	C
I-5	Clairemont Dr to Sea World Dr	220,000	4.5%	NB	5M + 0A	11,750	6.4%	61%	10,000	0.85	D	8.3%	51%	10,700	0.91	D
				SB	5M + 0A	11,750		39%	6,200	0.53	B		49%	10,300	0.88	D
	Sea World Dr to I-8	199,000	4.5%	NB	4M + 1A	10,800	6.4%	62%	9,000	0.83	D	8.4%	52%	10,000	0.93	**E**
				SB	4M + 2A	12,200		38%	5,400	0.44	B		48%	9,200	0.75	C
	I-8 to Old Town Ave	199,000	4.1%	NB	4M + 1A	10,800	6.9%	49%	7,700	0.71	C	8.2%	39%	7,300	0.68	C
				SB	5M + 0A	11,750		51%	7,900	0.67	C		61%	11,400	0.97	**E**
	Old Town Ave to Washington St	192,000	4.1%	NB	4M + 0A	9,400	6.9%	49%	7,500	0.80	D	8.0%	51%	9,000	0.96	**E**
				SB	5M + 0A	11,750		51%	7,700	0.66	C		49%	8,600	0.73	C
	Washington St to Pacific Highway	142,000	4.1%	NB	4M + 0A	9,400	6.9%	54%	6,000	0.64	C	8.1%	36%	4,800	0.51	B
				SB	4M + 0A	9,400		46%	5,200	0.55	B		64%	8,400	0.89	D
	Pacific Highway to Laurel Street	147,000	4.1%	NB	4M + 1A	10,800	6.7%	58%	6,600	0.61	B	7.0%	49%	5,800	0.54	B
				SB	4M + 1A	10,800		42%	4,700	0.44	B		51%	6,100	0.56	B
	Laurel Street to Hawthorne Street	183,000	4.1%	NB	4M + 1A	10,800	6.7%	57%	8,100	0.75	C	7.3%	46%	7,100	0.66	C
				SB	4M + 1A	10,800		43%	6,000	0.56	B		54%	8,200	0.76	C

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (2016)

3.5 Freeway Ramp Metering Analysis

Table 3-6 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 3-6 Existing Freeway Ramp Meter Analysis

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Volume	Excess Demand	Delay (Minutes)	Queue (Feet)
I-8 EB / Sports Arena Boulevard	PM	2	1	490	913	423	51.8	12,267
I-5 SB / Sea World Drive	AM	1	1	318	375	57	10.8	1,653
	PM	1	1	318	528	210	39.6	6,090
I-5 NB / Sea World Drive	AM	2	0	1,118	1,261	143	7.7	4,147
	PM	2	0	1,320	1,170	0	0.0	0
I-5 SB / Old Town Avenue	PM	1	0	352	360	8	1.4	232
I-5 NB / Old Town Avenue	AM	2	0	670	466	0	0.0	0
	PM	2	0	636	631	0	0.0	0

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

As shown in Table 3-6, the following ramp meters within the study communities experience delays in excess of 15 minutes:

- I-8 EB / Sports Arena Boulevard (PM Peak) – 51.8 minute delay and 12,267 feet of queue
- I-5 SB / Sea World Drive (PM Peak) – 39.6 minute delay and 6,090 feet of queue

4.0 Preferred Plan

This chapter assess the potential traffic impacts of the Preferred Plan by comparing Preferred Plan conditions to Existing Conditions. Evaluations are provided for vehicle miles traveled (VMT), roadway segment and intersection peak hour operations, and freeway segment and ramp meter operations.

The Preferred Plan forecast traffic volumes were developed utilizing the SANDAG Series 12 Preferred Plan Future Year 2035. The modeling methodology and assumptions are provided in Chapter 5 of the Midway-Pacific Highway and Old Town Community Plan Update Mobility Report. Final SANDAG Series 12 Forecast Model Results for Year 2035, including manual adjustments, are provided in Appendix F.

4.1 Vehicle Miles Traveled

The vehicle miles traveled (VMT) within the communities were estimated using the SANDAG Series 12 Preferred Plan Future Year 2035 and Base Year models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to, from, and within the communities. Table 4-1A and Table 4-1B display the total VMT generated and average trip length within the Midway-Pacific Highway and Old Town communities, respectively, under both Preferred Plan and Base Year conditions. The results for the San Diego region are also presented in the tables for comparison purposes. VMT calculations are provided as Appendix G.

Table 4-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	881,487	151,366	20.7%	85,182,063	108,962,049	23,779,986	27.9%
Total # of Auto Trips	294,796	324,927	30,131	10.2%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	9.5%	5.2	5.4	0.2	3.7%
Population	4,670	23,630	18,960	406.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	37	-119	-76.1%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:
1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Preferred Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 9.5%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-76.1%).

Table 4-1B Vehicle Miles Traveled Comparison – Old Town Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,492	20,192	13.3%	85,182,063	108,962,049	23,779,986	27.9%
Total # of Auto Trips	57,989	59,792	1,803	3.1%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	9.9%	5.2	5.4	0.2	3.7%
Population	830	2,430	1,600	192.8%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	182	71	-112	-61.3%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region. With the implementation of the Preferred Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 9.9%. However, the anticipated population increase within the community results in an overall decrease in the daily VMT by population (-61.3%).

4.2 Roadway Segment Analysis

The majority of roadways within the Midway-Pacific Highway and Old Town communities will remain unchanged from existing conditions, however, the Preferred Plan includes roadway improvements and new roadway segments intended to accommodate anticipated future traffic demands. Table 4-2 identifies the proposed roadway segment modifications, including new roadways, in the Midway-Pacific Highway community.

Due to the historic nature of the Old Town community, the Preferred Plan does not propose any roadway widenings or other roadway capacity improvements. However, San Diego Avenue, between Twiggs Street and Conde Street, has a large curb-to-curb width (50 feet) for a standard two-lane collector roadway (typically 40 feet wide). Therefore, in order to better utilize the curb-to-curb right-of-way, it is recommended that the parallel parking on the east side of the roadway be converted to angled parking. The recommended improvement will not affect the capacity of the roadway and will increase the already constrained parking capacity within the Old Town community.

Table 4-2 Summary of Roadway Improvements

Roadway	Segment	Existing Configuration	Recommended Classification
Segment Modifications			
Lytton St / Barnett Ave	Rosecrans St and Midway Dr	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Sports Arena Blvd	I-8 WB Ramps and I-8 EB Ramps	5-Lane Prime Arterial	6-Lane Prime Arterial
Sports Arena Blvd	I-8 EB Ramps and Rosecrans St	5-Lane Major Arterial	6-Lane Major Arterial
Sports Arena Blvd	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Kurtz St	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Rosecrans St	Lytton St and Sports Arena Blvd	6-Lane Major Arterial	6-Lane Prime Arterial
Rosecrans St	Sports Arena Blvd and Taylor St	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Hancock St	Kurtz St and Rosecrans Street	2-Lane Collector (One-Way)	3-Lane Major (One-Way)
Hancock St	Old Town Ave and Witherby St	2-Lane Collector	4-Lane Collector
Barnett Ave	Midway Dr and Pacific Hwy	4-Lane Major Arterial	6-Lane Prime Arterial
Midway Drive	Rosecrans St and Barnett Avenue	4-Lane Collector W/CLTL	4-Lane Major Arterial
New Roadways			
Kemper St	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Frontier Dr	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Greenwood St	Kurtz St and Sports Arena Blvd	Does Not Exist	2-Lane Collector
Charles Lindbergh Pkwy	Kurtz St and Midway Dr	Does Not Exist	2-Lane Collector W/ CLTL
Dutch Flats Pkwy	Sports Arena Blvd and Barnett Ave	Does Not Exist	2-Lane Collector W/ CLTL

Source: Chen Ryan Associates (June 2016)

Table 4-3 displays the level of service analysis results for the study area roadway segments under both the Preferred Plan and Existing Conditions within the Midway-Pacific Highway and Old Town communities. The proposed roadway classifications and forecast ADT and LOS under buildout of the Preferred Plan are shown in Figure 4-1 and Figure 4-2.

Table 4-3 Roadway Segment Level of Service Results

Roadway	From	To	Preferred Plan Conditions					Existing Conditions						
			Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
North-South														
Midway Pacific Highway														
Lytton Street/ Barnett Ave	Rosecrans St	Midway Dr	4-Lane Major Arterial	40,000	23,900	0.60	C	4-Lane Major (CLTL)	30,000	22,070	0.74	D	-0.14	No
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	23,700	0.79	D	4-Lane Collector (CLTL)	30,000	19,960	0.67	C	0.12	No
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,200	0.67	D	4-Lane Collector (CLTL)	30,000	20,240	0.67	D	0.00	No
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	26,700	0.89	E	4-Lane Collector (CLTL)	30,000	27,600	0.92	E	-0.03	No
	Rosecrans St	Barnett Ave	4-Lane Major Arterial	40,000	28,100	0.70	C	4-Lane Collector (CLTL)	30,000	23,000	0.77	D	-0.07	No
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	6-Lane Prime Arterial	60,000	46,900	0.78	C	5-Lane Prime Arterial	50,000	35,670	0.71	C	0.07	No
	I-8 EB Ramps	W. Point Loma Blvd	6-Lane Major Arterial	50,000	41,300	0.83	D	6-Lane Major Arterial	50,000	31,010	0.62	C	0.21	No
	W. Point Loma Blvd/Midway Dr	Kemper St	6-Lane Major Arterial	50,000	20,600	0.41	B	5-Lane Collector (CLTL)	37,500	17,600	0.47	B	-0.06	No
	Kemper St	East Dr	6-Lane Major Arterial	50,000	26,000	0.52	B	5-Lane Major Arterial	45,000	19,520	0.43	B	0.09	No
	East Dr	Rosecrans St	6-Lane Major Arterial	50,000	17,800	0.36	A	5-Lane Major Arterial	45,000	26,800	0.6	C	-0.24	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	10,700	0.71	D	2-Lane Collector	8,000	2,600	0.33	B	0.38	No
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	14,700	0.84	D	2-Lane Collector (One-Way)	17,500	5,340	0.31	A	0.53	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	7,200	0.48	C	2-Lane Collector	8,000	6,690	0.84	E	-0.36	No

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Hancock St	Sports Arena Blvd	Kurtz St	4-Lane Collector	15,000	2,800	0.19	A	2-Lane Collector (CLTL)	15,000	3,930	0.26	A	-0.07	No
	Kurtz St	Camino Del Rio West	3-Lane Major (One-Way)	27,500	18,200	0.66	C	2-Lane Collector (One-Way)	17,500	4,710	0.27	A	0.39	No
	Camino Del Rio West	Rosecrans St	3-Lane Major (One-Way)	27,500	8,200	0.30	A	2-Lane Collector (One-Way)	17,500	2,990	0.17	A	0.13	No
	Old Town Ave	Witherby St	4-Lane Collector	15,000	11,000	0.73	D	2-Lane Collector	8,000	9,680	1.21	F	-0.48	No
	Witherby St	Washington St	2-Lane Collector	8,000	5,400	0.68	D	2-Lane Collector	8,000	2,740	0.34	B	0.34	No
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	34,100	1.24	F	3-Lane Major (One-Way)	27,500	23,720	0.86	D	0.38	Yes
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	34,100	1.24	F	3-Lane Major (One-Way)	27,500	23,080	0.84	D	0.40	Yes
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	34,800	1.27	F	3-Lane Major (One-Way)	27,500	20,150	0.73	C	0.54	Yes
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	10,700	0.71	D	2-Lane Collector (CLTL)	15,000	7,460	0.50	C	0.21	No
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	19,500	0.39	A	6-Lane Major Arterial	50,000	13,300	0.27	A	0.12	No
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	24,500	0.49	B	6-Lane Major Arterial	50,000	21,470	0.43	B	0.06	No
	Sports Arena Blvd	Barnett Ave	5-Lane Major Arterial	45,000	17,900	0.40	B	5-Lane Prime Arterial	50,000	11,600	0.23	A	0.17	No
	Barnett Ave	Washington St	Expressway	80,000	51,300	0.64	C	Expressway	80,000	54,690	0.70	B	-0.06	No
	Washington St	Sassafras St	6-Lane Major Arterial	50,000	17,400	0.35	A	6-Lane Prime Arterial	60,000	11,650	0.19	A	0.16	No
	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	30,800	0.62	C	6-Lane Major Arterial	50,000	19,160	0.38	B	0.24	No
Old Town														
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,500	0.94	E	2-Lane Collector	8,000	4,230	0.53	C	0.41	Yes

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Congress St	Twiggs St	Harney St	2-Lane Collector	8,000	6,400	0.80	D	2-Lane Collector	8,000	4,380	0.55	C	0.25	No
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	6,200	0.78	D	2-Lane Collector	8,000	4,280	0.54	C	0.24	No
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	4,900	0.61	C	2-Lane Collector	8,000	3,540	0.44	C	0.17	No
	Conde St	Arista Ave	2-Lane Collector	8,000	4,500	0.56	C	2-Lane Collector	8,000	4,350	0.54	C	0.02	No
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	12,200	1.53	**F**	2-Lane Collector	8,000	10,160	1.27	**F**	0.26	**Yes**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	6,900	0.86	**E**	2-Lane Collector	8,000	5,400	0.68	D	0.18	**Yes**
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,000	0.88	**E**	2-Lane Collector	8,000	5,430	0.68	D	0.20	**Yes**
	Twiggs St	Harney St	2-Lane Collector	8,000	6,700	0.84	**E**	2-Lane Collector	8,000	4,810	0.6	C	0.24	**Yes**
	Harney St	San Juan Rd	2-Lane Collector	8,000	3,800	0.48	C	2-Lane Collector	8,000	2,930	0.37	B	0.11	No
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	21,900	0.73	C	3-lane Major Arterial	30,000	7,585	0.25	A	0.48	No
East-West														
Midway Pacific Highway														
Channel Wy	W. Mission Bay Dr	Hancock St	4-Lane Collector	15,000	7,800	0.52	C	2-Lane Collector	8,000	1,280	0.16	A	0.36	No
Kemper St	Kenyon St	Midway Dr	4-Lane Collector	15,000	9,700	0.65	C	2-Lane Collector (CLTL)	15,000	9,010	0.6	C	0.05	No
	Midway Dr	Sports Arena Blvd	4-Lane Collector	15,000	10,000	0.67	D	2-Lane Collector (CLTL)	15,000	8,120	0.54	C	0.13	No
	Sports Arena Blvd	Hancock St	2-Lane Collector (CLTL)	15,000	9,900	0.66	C	*Does Not Exist*						No
Frontier Dr	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	13,600	0.91	**E**	*Does Not Exist*						**Yes**
Greenwood St	Sports Arena Blvd	Kurtz St	2-Lane Collector	8,000	7,200	0.90	**E**	*Does Not Exist*						**Yes**
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	68,900	1.15	**F**	6-Lane Prime Arterial	60,000	50,700	0.85	D	0.30	**Yes**
Rosecrans St	Lytton St	Midway Dr	6-Lane Prime Arterial	60,000	54,000	0.90	D	6-Lane Major Arterial	50,000	46,400	0.93	**E**	-0.03	No

Table 4-3 Roadway Segment Level of Service Results

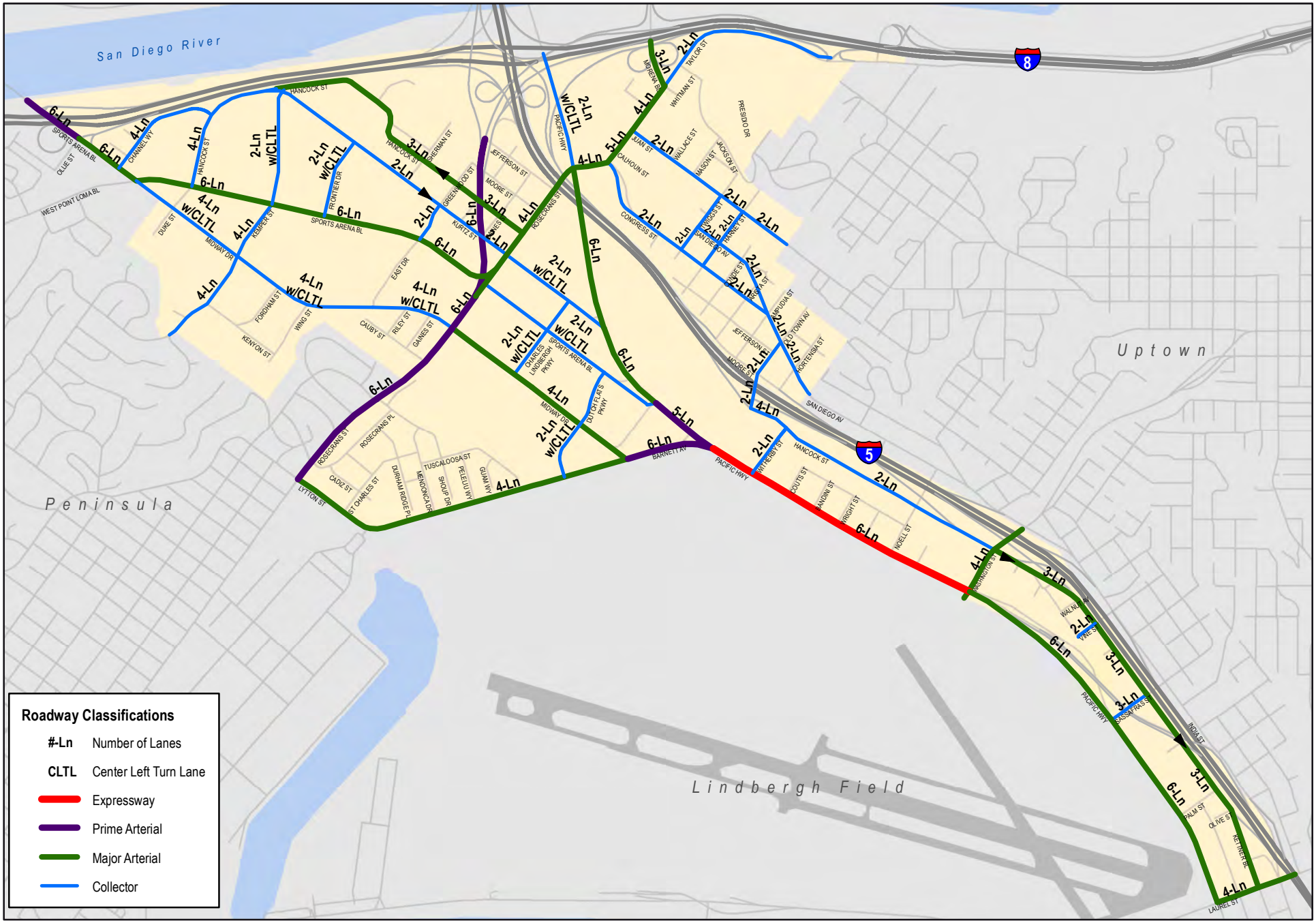
			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Prime Arterial	60,000	56,500	0.94	**E**	6-Lane Major Arterial	50,000	59,100	1.18	**F**	-0.24	No
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Major Arterial	40,000	22,500	0.56	C	4-Lane Collector (CLTL)	30,000	15,500	0.52	C	0.04	No
Charles Lindbergh Pkwy	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	6,000	0.40	B	*Does Not Exist*						No
	Sports Arena Blvd	Kurtz Street	2-Lane Collector (CLTL)	15,000	7,700	0.51	C	*Does Not Exist*						No
Dutch Flats Pkwy	Barnett Avenue	Midway Dr	2-Lane Collector (CLTL)	15,000	12,800	0.85	D	*Does Not Exist*						No
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,400	0.56	C	*Does Not Exist*						No
Barnett Ave	Midway Dr	Pacific Hwy	6-Lane Prime Arterial	60,000	51,400	0.86	D	4-Lane Major Arterial	40,000	57,954	1.45	**F**	-0.59	No
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	15,900	0.40	B	4-Lane Major Arterial	40,000	10,680	0.27	A	0.13	No
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	21,800	0.55	C	4-Lane Major Arterial	40,000	12,870	0.32	A	0.23	No
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	2,200	0.28	A	2-Lane Collector	8,000	250	0.03	A	0.25	No
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	21,000	1.90	**F**	3-Lane Collector	11,000	8,700	0.79	D	1.11	**Yes**
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	30,500	0.76	D	4-Lane Major Arterial	40,000	26,290	0.66	C	0.10	No
Old Town														
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	30,500	0.76	D	4-Lane Major Arterial	40,000	22,100	0.55	C	0.21	No
	Congress St	Juan St	5-Lane Major Arterial	45,000	21,400	0.48	B	5-Lane Major Arterial	45,000	13,560	0.30	A	0.18	No
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	25,700	0.64	C	4-Lane Major Arterial	40,000	17,530	0.44	B	0.20	No
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	15,200	1.90	**F**	2-Lane Collector	8,000	13,140	1.64	**F**	0.26	**Yes**

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,700	0.34	B	2-Lane Collector	8,000	2,080	0.26	A	0.08	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,400	0.43	B	2-Lane Collector	8,000	2,670	0.33	B	0.10	No
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,600	0.20	A	2-Lane Collector	8,000	1,520	0.19	A	0.01	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,300	0.41	B	2-Lane Collector	8,000	2,350	0.29	A	0.12	No
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	12,200	1.53	**F**	2-Lane Collector	8,000	11,750	1.47	**F**	0.06	**Yes**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,800	0.85	**E**	2-Lane Collector	8,000	6,120	0.77	D	0.08	**Yes**

Source: Chen Ryan Associates (May 2017)

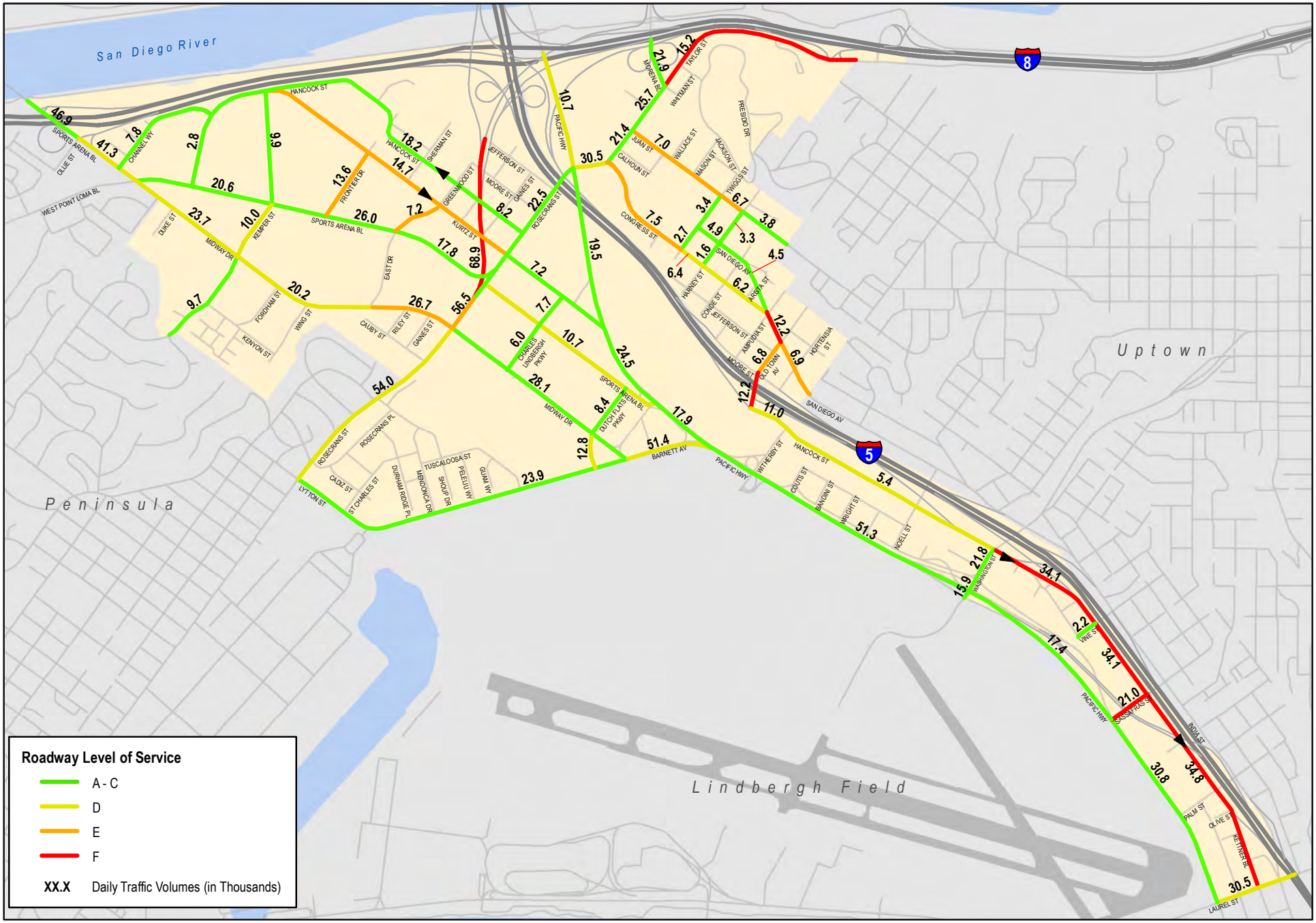
Note:
Bold letter indicates LOS E or F



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Figure 4-1
Roadway Classifications -
Preferred Plan Conditions



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Figure 4-2
Daily Roadway Segment Traffic Volumes and LOS - Preferred Plan Conditions

Based on the criteria documented in Chapter 2, the following roadway segments will have a significant impact under buildout of the Preferred Plan:

Midway-Pacific Highway Community

- Kettner Boulevard, between Washington Street and Vine Street (LOS F, ΔVC 0.38)
- Kettner Boulevard, between Vine Street and Sassafras Street (LOS F, ΔVC 0.40)
- Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F, ΔVC 0.54)
- Frontier Drive, between Sports Arena Boulevard and Kurtz Street (New Road)
- Greenwood Street, between Sports Arena Boulevard and Kurtz Street (New Road)
- Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F, ΔVC 0.30)
- Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F, ΔVC 1.11)

Old Town Community

- Congress Street between Taylor Street and Twiggs Street (LOS E, ΔVC 0.41)
- San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F, ΔVC 0.26)
- San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E, ΔVC 0.18)
- Juan Street, between Taylor Street and Twiggs Street (LOS E, ΔVC 0.20)
- Juan Street, between Twiggs Street and Harney Street (LOS E, ΔVC 0.24)
- Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F, ΔVC 0.26)
- Old Town Avenue, between Hancock Street and Moore Street (LOS F, ΔVC 0.06)
- Old Town Avenue, between Moore Street and San Diego Avenue (LOS E, ΔVC 0.08)

4.3 Intersection Analysis

AM and PM peak hour intersection LOS analyses were conducted under Preferred Plan and Existing Conditions. The following intersection improvements were assumed under buildout of the Preferred Plan:

Rosecrans Street / Sports Arena Boulevard / Camino Del Rio West:

- Remove the southbound free right-turn movement from Camino Del Rio West onto Sports Arena Boulevard and replace it with an exclusive right-turn lane.
- Allow southbound movements to continue on Sports Arena Boulevard through the intersection. It should be noted that you would still not be able to access the southern leg of Sports Arena Boulevard from westbound Rosecrans Street or southwest bound Camino del Rio West.

Sports Arena Boulevard / Pacific Highway:

- Move intersection approximately 500 feet to the north.
- Re-align Sports Arena Boulevard to create a right-angle with Pacific Highway.
- Signalize the intersection.
- Provide an exclusive eastbound left-turn lane from Sports Arena Boulevard onto Pacific Highway.
- Provide an exclusive northbound left-turn lane from Pacific Highway onto Sports Arena Boulevard.

Sports Arena Boulevard / West Point Loma Boulevard / Midway Drive

- Remove the westbound free right-turn movement from Sports Arena Boulevard onto Sports Arena Boulevard. The right-of-way will be used to extend the curb and create a curb bulb-out to reduce the pedestrian crossing distance. Right-turn movements will be permitted from the outside through lane.

- Square up and control the northbound free right-turn movement from Midway Drive onto Sports Arena Boulevard with the intersection.

West Washington Street / Pacific Highway

- Further analyze operations at this intersection to determine if additional improvements would be beneficial.

Congress Street / San Diego Avenue / Ampudia Street:

- Convert intersection to all-way stop control
- Implement bulb-outs on all legs of the intersection
- Widen the sidewalks along the north side of San Diego Avenue

Seven new intersections are recommended for the Midway-Pacific Highway community. Additionally, the roadway network was evaluated to identify intersection locations, both existing and new intersections, that would benefit from the implementation of a roundabout or signalization. A summary of recommended intersection improvements are displayed in Table 4-4. It is not known at this time if the implementation of roundabout will be feasible at any or all intersections. A roundabout feasibility analysis will need to be performed once the new intersections and roadways are designed. Therefore, to be conservative the analysis assumed that all new intersections would be signalized, unless otherwise noted. However, it is recommended that a roundabout be implemented in lieu of a signal at all new intersections, where feasible.

With the exception of the intersection of Congress Street / San Diego Avenue, / Ampudia Street, no other operational intersection improvements were identified for the Old Town community. Traffic signal warrants were conducted at the intersections where signalization is recommended. Figure 4C-103 (CA) of the California Manual on Uniform Traffic Control Devices (MUTCD) 2012 Edition was utilized for the signal warrant. All intersections where signalization is recommended met the warrants. Signal warrant worksheets are provided in Appendix H of the Mobility Report.

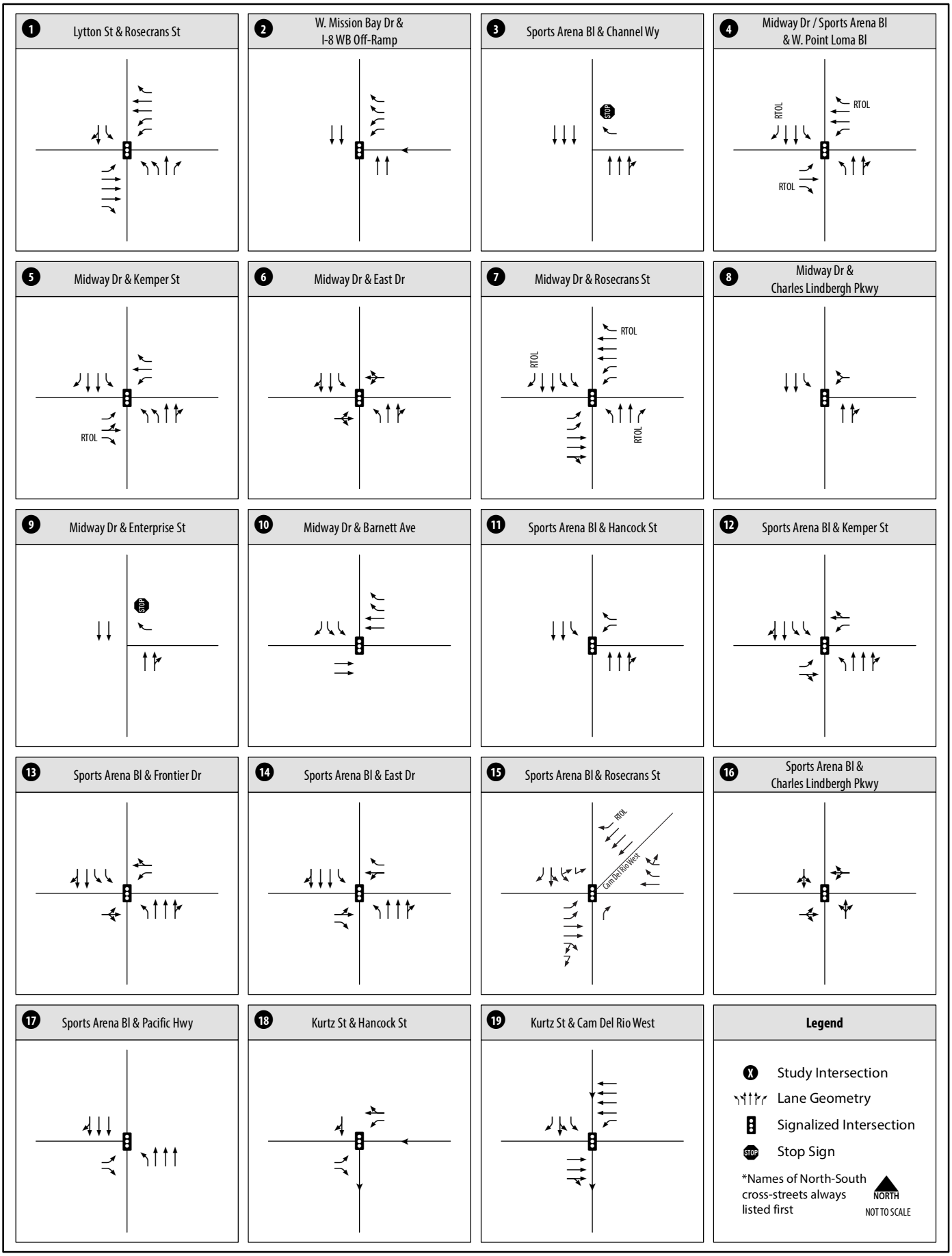
Table 4-4 Summary of Intersection Improvements

No.	Intersection	Improvement	Control
8	Midway Drive / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
12	Kemper Street / Sports Arena Boulevard	Add north leg	Signalized
13	Sports Arena Boulevard / Frontier Drive	Add north leg	Signalized
14	Sports Arena Boulevard / Greenwood Street	Add north leg	Signalized
16	Sports Arena Boulevard / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
17	Sports Arena Boulevard / Pacific Highway	Relocate intersection and signalize	Signalized
18	Kurtz Street / Hancock Street	Add south leg and signalize	Signalized
21	Kurtz Street / Pacific Highway	Signalize	Signalized
61	Kurtz Street / Frontier Drive	New intersection	Roundabout/SSSC
62	Kurtz Street / Greenwood Street	Add south leg and signalize	Signalized
63	Kurtz Street / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
64	Barnett Avenue / Dutch Flats Parkway	New intersection	Roundabout/Signalized
65	Midway Drive / Dutch Flats Parkway	New intersection	Roundabout/Signalized
66	Sports Arena Boulevard / Dutch Flats Parkway	New intersection	Roundabout/Signalized
N/A	Hancock Street / Greenwood Street	Signalize	Signalized

Source: Chen Ryan Associates (June 2016)

The proposed intersection geometrics and forecast AM/PM peak hour turning movement volumes under Preferred Plan buildout conditions are provided in Figure 4-3 and Figure 4-4, respectively.

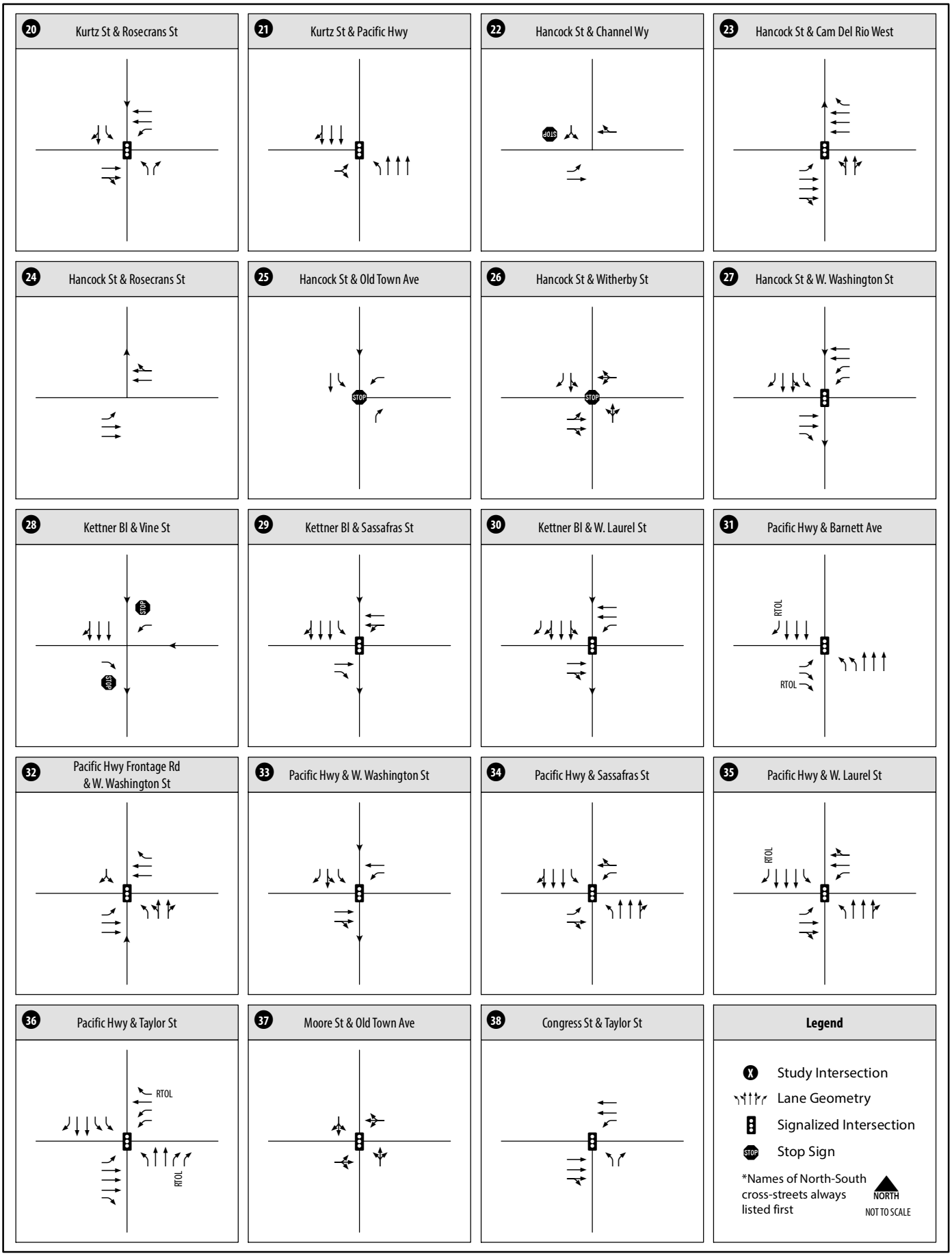
Table 4-5 displays intersection level of service and average vehicle delay results for study area intersections under Preferred Plan and Existing Conditions. Level of service calculation worksheets are provided in Appendix I.



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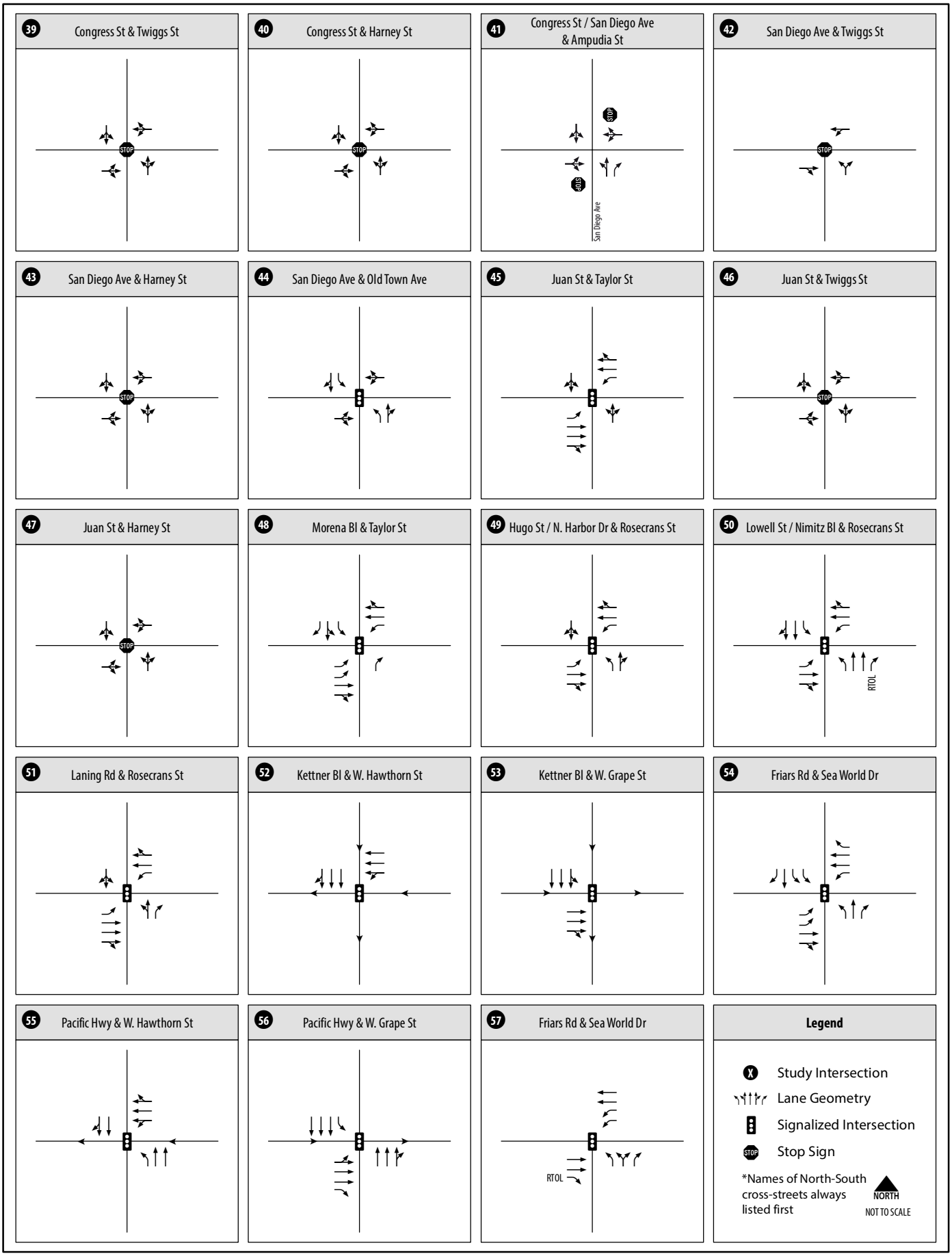
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 1-19)



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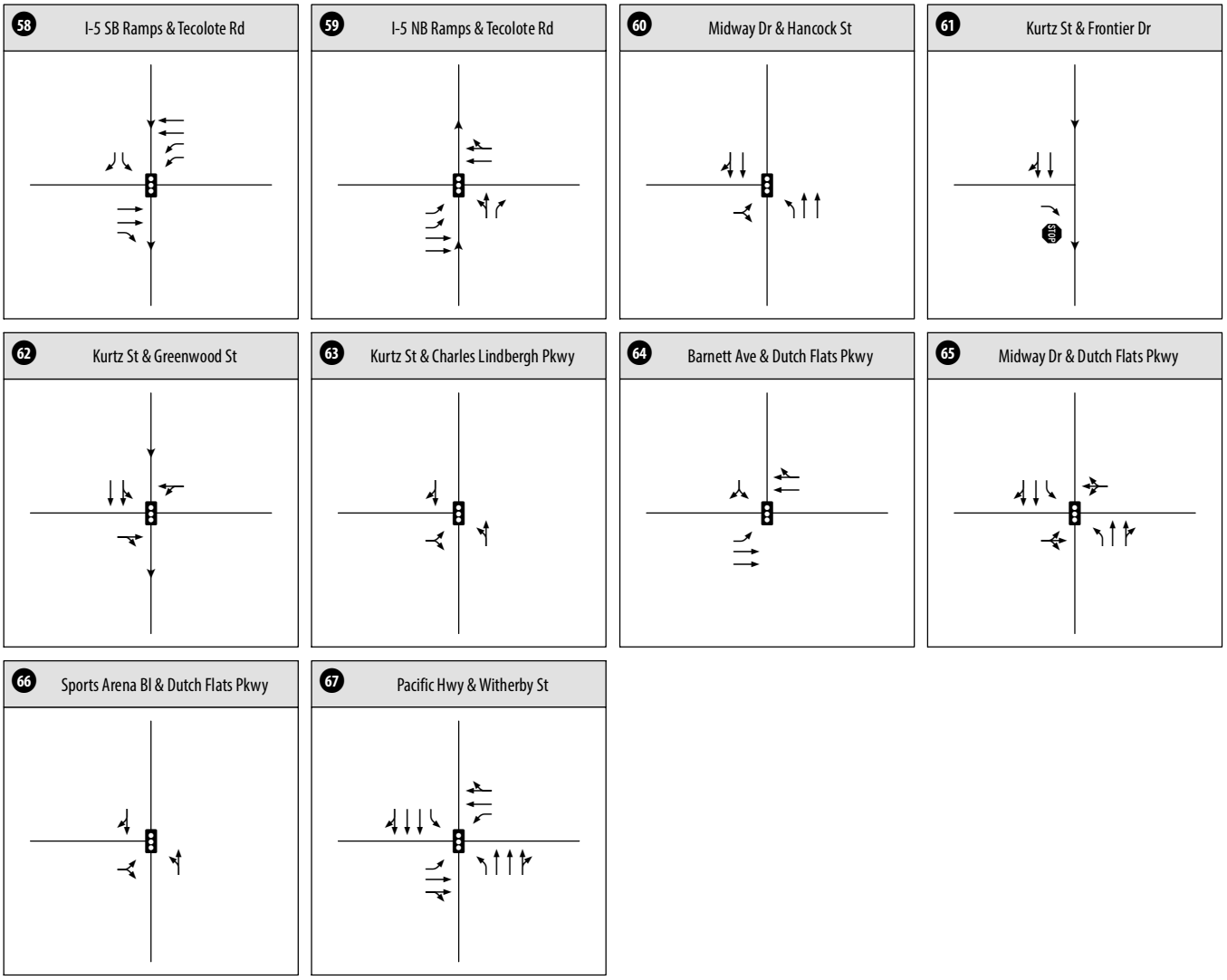
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 20-38)



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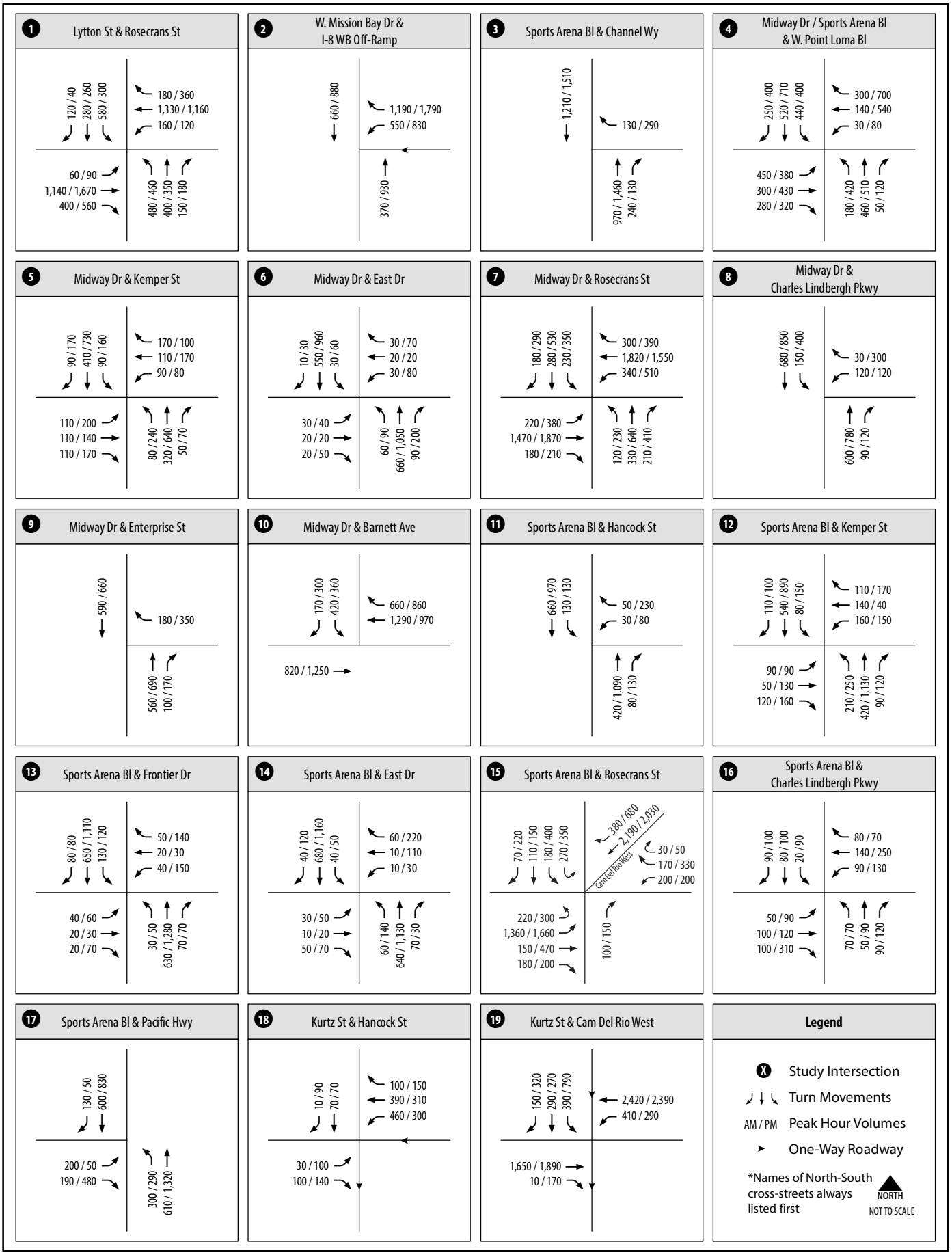
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 39-57)



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Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 58-67)

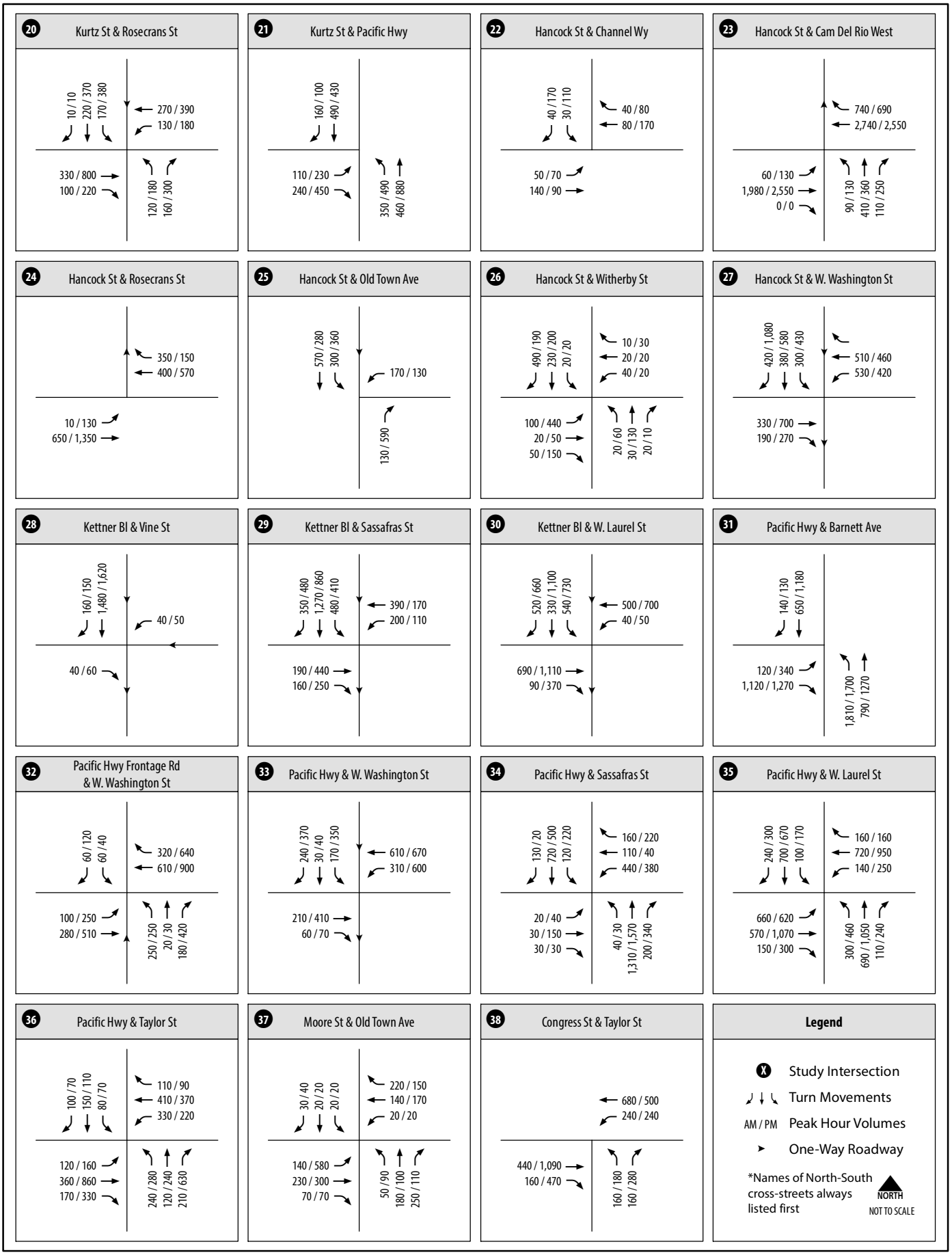


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 1-19)

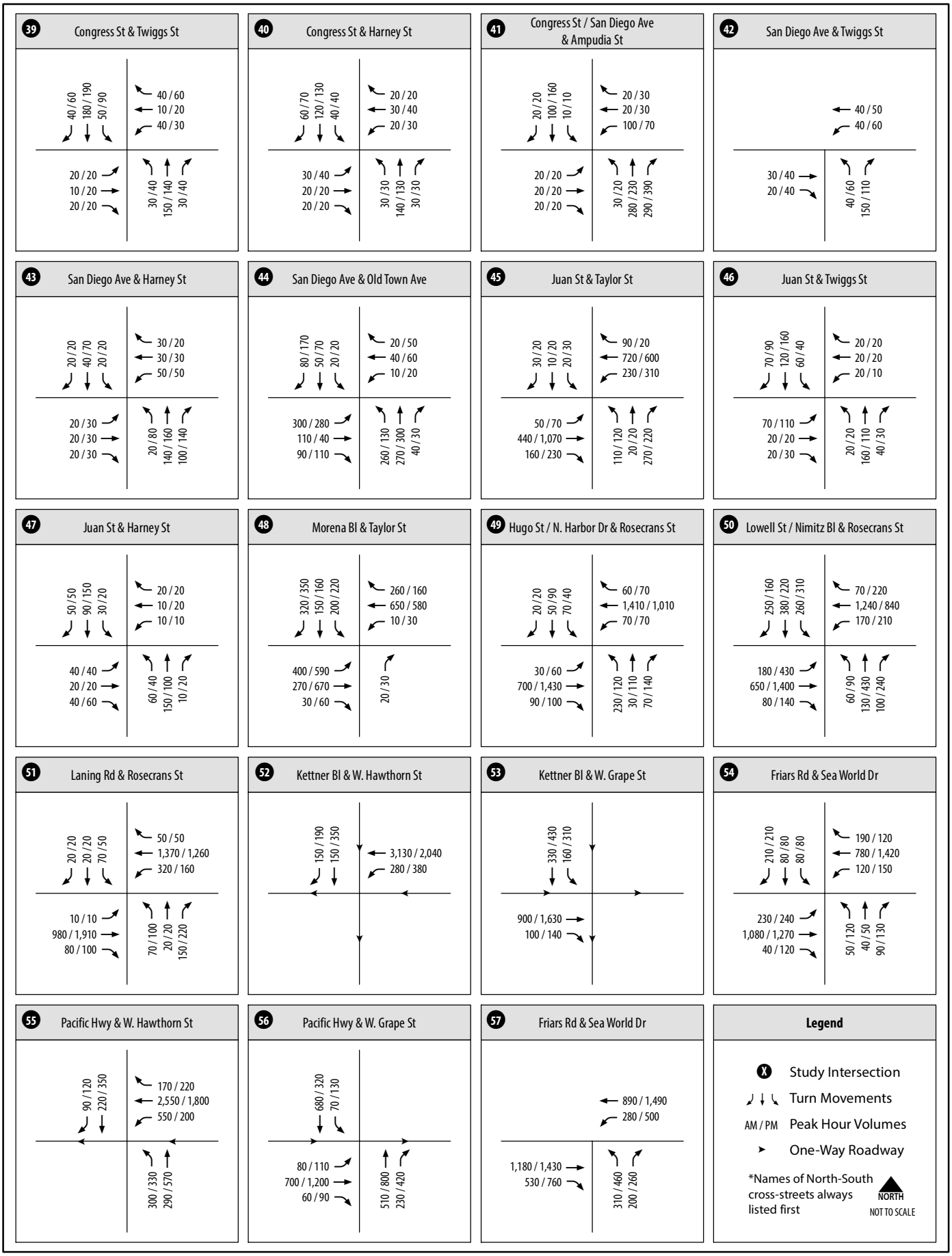


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 20-38)



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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 39-57)

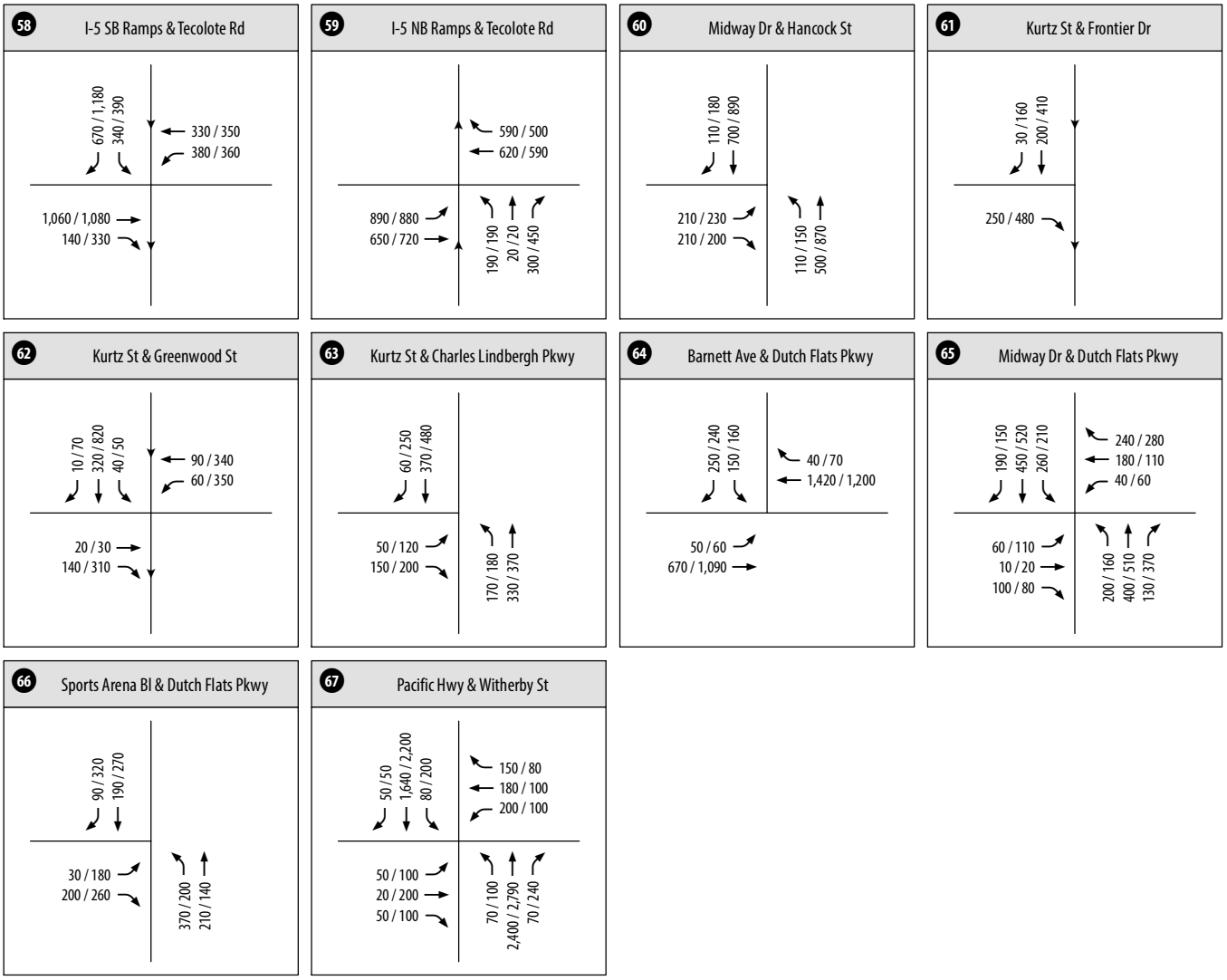


Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 58-67)

Table 4-5 Peak Hour Intersection Level of Service Results

			Preferred Plan				Existing Conditions						
			AM		PM		AM		PM				
No.	Intersection	Control (Preferred Plan)	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Midway-Pacific Highway													
1	Lytton St and Rosecrans St	Signal	97.7	**F**	55.2	**E**	65.4	**E**	44.5	D	32.3	10.7	**Yes**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	15.5	B	71.0	**E**	14.8	B	59.5	**E**	0.7	11.5	**Yes**
3	Sports Arena Blvd and Channel Way	SSSC[2]	12.4	B	31.0	D	11.2	B	14.7	B	1.2	16.3	No
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	54.0	D	73.4	**E**	36.6	D	47.2	D	17.4	26.2	**Yes**
5	Midway Dr and Kemper St	Signal	31.8	C	38.7	D	22.7	C	37.3	D	9.1	1.4	No
6	Midway Dr and East Dr	Signal	6.8	A	17.6	B	4.8	A	13.0	B	2.0	4.6	No
7	Midway Dr and Rosecrans St	Signal	40.7	D	76.0	**E**	34.9	C	49.1	D	5.8	26.9	**Yes**
8	Midway Dr and Charles Lindbergh Pkwy	Signal	11.2	B	28.7	C	*Intersection does not currently exist*						
9	Midway Dr and Enterprise St	SSSC[2]	13.3	B	26.5	D	11.0	B	18.1	C	2.3	8.4	No
10	Midway Dr and Barnett Ave	Signal	13.7	B	12.3	B	13.8	B	19.8	B	-0.1	-7.5	No
11	Sports Arena Blvd and Hancock St	Signal	15.0	B	19.2	B	10.0	A	13.1	B	5.0	6.1	No
12	Sports Arena Blvd and Kemper St	Signal	37.9	D	46.7	D	18.8	B	17.5	B	19.1	29.2	No
13	Sports Arena Blvd and Sports Arena Driveway	Signal	18.2	B	26.6	C	17.1	B	24.8	C	1.1	1.8	No
14	Sports Arena Blvd and East Dr	Signal	7.7	A	26.5	C	26.0	C	11.9	B	-18.3	14.6	No
15	Sports Arena Blvd and Rosecrans St	Signal	39.5	D	53.2	D	35.7	D	43.2	D	3.8	10.0	No
16	Sports Arena Blvd and Charles Lindbergh Pkwy	Signal	13.6	B	18.6	B	*Intersection does not currently exist*						
17	Sports Arena Blvd and Pacific Hwy	Signal	24.9	C	17.8	B	10.6	B	12.0	B	14.3	5.8	No
18	Kurtz St and Hancock St	Signal	12.6	B	12.5	B	*Intersection currently uncontrolled*						
19	Kurtz St and Camino Del Rio West	Signal	28.3	C	54.6	D	9.4	A	20.2	C	18.9	34.4	No
20	Kurtz St and Rosecrans St	Signal	29.6	C	40.9	D	20.0	B	31.7	C	9.6	9.2	No
21	Kurtz St and Pacific Hwy	Signal	33.3	C	50.3	D	11.2	B	13.7	B	22.1	36.6	No
22	Hancock St and Channel Wy	SSSC[2]	10.2	B	15.0	C	9.3	A	10.5	B	0.9	4.5	No
23	Hancock St and Camino Del Rio West	Signal	44.1	D	46.4	D	24.3	C	20.3	C	19.8	26.1	No
24	Hancock St and Rosecrans St	*No Conflicting Movements*											
25	Hancock St and Old Town Ave	AWSC[3]	24.8	C	20.9	C	16.9	C	14.6	B	7.9	6.3	No
26	Hancock St and Witherby St	AWSC[3]	13.9	B	34.9	D	16.0	C	23.5	C	-2.1	11.4	No

Table 4-5 Peak Hour Intersection Level of Service Results

			Preferred Plan				Existing Conditions						
			AM		PM		AM		PM				
No.	Intersection	Control (Preferred Plan)	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
27	Hancock St and Washington St	Signal	23.1	C	75.2	**E**	22.8	C	25.9	C	0.3	49.3	**Yes**
28	Kettner Blvd and Vine St	SSSC[2]	16.4	C	19.9	C	14.3	B	23.2	C	2.1	-3.3	No
29	Kettner Blvd and Sassafras St	Signal	15.1	B	15.3	B	12.0	B	11.9	B	3.1	3.4	No
30	Kettner Blvd and West Laurel St	Signal	19.6	B	96.2	**F**	20.0	B	29.7	C	-0.4	66.5	**Yes**
31	Pacific Hwy and Barnett Ave	*No Conflicting Movements*											
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	20.4	C	47.5	D	19.4	B	36.0	D	1.0	11.5	No
33	Pacific Hwy and Washington St	Signal	20.3	C	26.6	C	18.7	B	31.2	C	1.6	-4.6	No
34	Pacific Hwy and Sassafras St	Signal	30.7	C	68.4	**E**	14.4	B	27.3	C	16.3	41.1	**Yes**
35	Pacific Hwy and West Laurel St	Signal	89.8	**F**	139.9	**F**	48.4	D	42.9	D	41.4	97.0	**Yes**
Old Town													
36	Pacific Hwy and Taylor St	Signal	31.5	C	51.5	D	64.6	**E**	33.5	C	-33.1	18.0	No
37	Moore St and Old Town Ave	Signal	23.1	C	98.9	**F**	16.4	B	16.4	B	6.7	82.5	**Yes**
38	Congress St and Taylor St	Signal	14.4	B	19.6	B	19.9	B	21.7	C	-5.5	-2.1	No
39	Congress St and Twiggs St	AWSC[3]	9.7	A	10.8	B	8.1	A	8.6	A	1.6	2.2	No
40	Congress St and Harney St	AWSC[3]	9.1	A	9.4	A	8.1	A	8.3	A	1.0	1.1	No
41	Congress St and San Diego Ave/Ampudia St	AWSC[3]	10.8	B	11.3	B	12.3	B	11.5	B	-1.5	-0.2	No
42	San Diego Ave and Twiggs St	AWSC[3]	7.9	A	8.1	A	7.9	A	8.0	A	0.0	0.1	No
43	San Diego Ave and Harney St	AWSC[3]	9.0	A	10.8	B	8.2	A	8.2	A	0.8	2.6	No
44	San Diego Ave and Old Town Ave	Signal	18.5	B	14.2	B	18.4	B	11.6	B	0.1	2.6	No
45	Juan St and Taylor St	Signal	14.6	B	19.0	B	10.4	B	10.7	B	4.2	8.3	No
46	Juan St and Twiggs St	AWSC[3]	9.7	A	10.1	B	8.8	A	8.5	A	0.9	1.6	No
47	Juan St and Harney St	AWSC[3]	9.0	A	9.0	A	8.3	A	7.9	A	0.7	1.1	No
48	Morena Blvd and Taylor St	Signal	21.9	C	25.6	C	22.4	C	16.4	B	-0.5	9.2	No
Intersections Outside of Study Communities													
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	29.1	C	31.5	C	14.7	B	20.7	C	14.4	10.8	No
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	60.0	**E**	108.1	**F**	41.2	D	63.3	**E**	18.8	44.8	**Yes**
51	Laning Rd and Rosecrans St	Signal	25.6	C	23.3	C	15.5	B	12.9	B	10.1	10.4	No

Table 4-5 Peak Hour Intersection Level of Service Results

			Preferred Plan				Existing Conditions						
			AM		PM		AM		PM				
No.	Intersection	Control (Preferred Plan)	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
52	Kettner Blvd and West Hawthorn St	Signal	40.1	D	13.5	B	11.1	B	15.0	B	29.0	-1.5	No
53	Kettner Blvd and West Grape St	Signal	10.1	B	9.7	A	7.4	A	8.7	A	2.7	1.0	No
54	Pacific Hwy and Sea World Dr	Signal	23.9	C	34.2	C	19.9	B	25.6	C	4.0	8.6	No
55	Pacific Hwy and West Hawthorn St	Signal	36.8	D	32.1	C	35.4	D	20.2	C	1.4	11.9	No
56	Pacific Hwy and West Grape St	Signal	17.9	B	31.4	C	16.8	B	24.2	C	1.1	7.2	No
57	Friars Rd and Sea World Dr	Signal	15.4	B	26.4	C	11.5	B	13.8	B	3.9	12.6	No
58	I-5 SB Ramps and Sea World Dr	Signal	17.8	B	20.0	C	15.5	B	16.3	B	2.3	3.7	No
59	I-5 NB Ramps and Sea World Dr	Signal	29.3	C	44.0	D	21.4	C	28.4	C	7.9	15.6	No
New Intersections (Midway-Pacific Highway Community)													
60	Midway Dr & Duke Street / Hancock St	Signal	27.0	C	32.1	C	*Intersection does not currently exist*						
61	Kurtz St & Frontier Dr	SSSC[2]	10.7	B	25.0	C	*Intersection does not currently exist*						
62	Kurtz St & Greenwood St	Signal	12.5	B	20.9	C	*Intersection does not currently exist*						
63	Kurtz St & Charles Lindbergh Pkwy	Signal	8.3	A	25.6	C	*Intersection does not currently exist*						
64	Barnett Ave & Dutch Flats Pkwy	Signal	24.6	C	14.5	B	*Intersection does not currently exist*						
65	Midway Dr & Dutch Flats Pkwy	Signal	48.1	D	53.7	D	*Intersection does not currently exist*						
66	Dutch Flats Pkwy & Sports Arena Bl	Signal	11.8	B	22.4	C	*Intersection does not currently exist*						

Source: Chen Ryan Associates (May 2017)

Note:
Bold letter indicates LOS E or F.
[1] Significant Impact
[2] Single Side Stop Controlled
[3] All Way Stop Controlled

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following intersections:

Midway-Pacific Highway Community

1. Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)
2. Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)
4. Midway Drive / West Point Loma Drive and Sports Arena Boulevard (LOS E: PM Peak Hour)
7. Midway Drive and Rosecrans Street (LOS E: PM Peak Hour)
27. Hancock Street and Washington Street (LOS E: PM Peak Hour)
30. Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)
34. Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)
35. Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)

Old Town Community

37. Moore Street and Old Town Street (LOS F: PM Peak Hour)

Outside of the Community

50. Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)

It is important to note that three of the ten intersections listed above currently experience LOS E or F during the AM and/or PM peak period under existing conditions. Additionally, two intersections experiencing LOS E or F under existing conditions will be improved to a satisfactory LOS through implementation of the Preferred Plan.

4.4 Freeway Segment Analysis

Neither the Revenue Constrained Alternative of SANDAG's *San Diego Forward Plan* (October 2015) nor the Preferred Plan recommend freeway improvements within the project study area.

Table 4-6A and Table 4-6B display freeway segment analysis results within the project study area for the AM and PM peak hours, respectively.

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following freeway segments:

- I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour)
- I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours)
- I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour)
- I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour)
- I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)
- I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour)
- I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour)

Table 4-6A Freeway Segment Level of Service Comparison (AM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (AM)				Existing Conditions (AM)				Δ in V/C (AM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	6.30%	60%	61,400	2,600	0.55	B	46,500	1,900	0.40	A	0.15	No
			WB	2M + 0A	4,700		40%		1,700	0.36	A		1,300	0.28	A	0.08	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	6.40%	60%	123,000	5,500	0.65	C	102,000	4,400	0.52	B	0.13	No
			WB	3M + 1A	8,450		40%		3,500	0.41	B		2,900	0.34	A	0.07	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	6.40%	41%	184,000	5,600	0.52	B	132,000	3,900	0.36	A	0.16	No
			WB	5M + 0A	11,750		59%		7,700	0.66	C		5,500	0.47	B	0.19	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	6.50%	47%	217,300	7,600	0.70	C	191,000	6,500	0.60	B	0.10	No
			WB	5M + 0A	11,750		53%		8,400	0.71	C		7,400	0.63	C	0.08	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	6.40%	61%	240,800	11,000	0.94	**E**	220,000	10,000	0.85	D	0.09	**Yes**
			SB	5M + 0A	11,750		39%		6,800	0.58	B		6,200	0.53	B	0.05	No
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	6.40%	62%	230,700	10,500	0.97	**E**	199,000	9,000	0.83	D	0.14	**Yes**
			SB	4M + 2A	12,200		38%		6,300	0.52	B		5,400	0.44	B	0.08	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	6.90%	49%	241,300	9,400	0.87	D	199,000	7,700	0.71	C	0.16	No
			SB	5M + 0A	11,750		51%		9,700	0.83	D		7,900	0.67	C	0.16	No
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	6.90%	49%	225,700	8,800	0.94	**E**	192,000	7,500	0.80	D	0.14	**Yes**
			SB	5M + 0A	11,750		51%		9,300	0.79	D		7,700	0.66	C	0.13	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	6.90%	54%	171,200	7,100	0.76	C	142,000	6,000	0.64	C	0.12	No
			SB	4M + 0A	9,400		46%		6,300	0.67	C		5,200	0.55	B	0.12	No
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	6.70%	58%	216,600	9,600	0.89	D	147,000	6,600	0.61	B	0.28	No
			SB	4M + 1A	10,800		42%		7,100	0.66	C		4,700	0.44	B	0.22	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	6.70%	57%	224,200	9,900	0.92	D	183,000	8,100	0.75	C	0.17	No
			SB	4M + 1A	10,800		43%		7,500	0.69	C		6,000	0.56	B	0.13	No

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

Table 4-6B Freeway Segment Level of Service Comparison (PM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (PM)				Existing Conditions (PM)				Δ in V/C (PM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	8.50%	72%	61,400	3,100	0.66	C	46,500	3,200	0.68	C	-0.02	No
			WB	2M + 0A	4,700		28%		2,800	0.60	B		1,300	0.28	A	0.32	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	7.80%	63%	123,000	5,500	0.65	C	102,000	5,600	0.66	C	-0.01	No
			WB	3M + 1A	8,450		37%		5,300	0.63	C		3,400	0.4	A	0.23	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	7.20%	51%	184,000	6,600	0.61	B	132,000	5,500	0.51	B	0.10	No
			WB	5M + 0A	11,750		49%		8,400	0.71	C		5,200	0.44	B	0.27	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	8.20%	55%	217,300	11,000	1.02	**F**	191,000	9,700	0.9	D	0.12	**Yes**
			WB	5M + 0A	11,750		45%		9,000	0.77	C		8,000	0.68	C	0.09	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	8.30%	51%	240,800	11,700	1.00	**E**	220,000	10,700	0.91	D	0.09	**Yes**
			SB	5M + 0A	11,750		49%		11,200	0.95	**E**		10,300	0.88	D	0.07	**Yes**
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	8.40%	52%	230,700	11,600	1.07	**F**	199,000	10,000	0.93	**E**	0.14	**Yes**
			SB	4M + 2A	12,200		48%		10,700	0.88	D		9,200	0.75	C	0.13	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	8.20%	39%	241,300	8,800	0.81	D	199,000	7,300	0.68	C	0.13	No
			SB	5M + 0A	11,750		61%		13,800	1.17	**F**		11,400	0.97	**E**	0.20	**Yes**
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	8.00%	51%	225,700	10,600	1.13	**F**	192,000	9,000	0.96	**E**	0.17	**Yes**
			SB	5M + 0A	11,750		49%		10,100	0.86	D		8,600	0.73	C	0.13	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	8.10%	36%	171,200	5,700	0.61	B	142,000	4,800	0.51	B	0.10	No
			SB	4M + 0A	9,400		64%		10,100	1.07	**F**		8,400	0.89	D	0.18	**Yes**
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	7.00%	49%	216,600	8,400	0.78	C	147,000	5,800	0.54	B	0.24	No
			SB	4M + 1A	10,800		51%		9,200	0.85	D		6,100	0.56	B	0.29	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	7.30%	46%	224,200	8,200	0.76	C	183,000	7,100	0.66	C	0.10	No
			SB	4M + 1A	10,800		54%		10,400	0.96	**E**		8,200	0.76	C	0.20	**Yes**

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

4.5 Ramp Meter Analysis

Table 4-7 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 4-7 Freeway Ramp Meter Analysis Comparison

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Preferred Plan Volume	Preferred Plan Excess Demand	Preferred Plan Delay (Minutes)	Preferred Plan Queue (Feet)	Existing Delay (Minutes)	Δ In Delay
I-8 EB / Sports Arena Boulevard	PM	2	1	641	930	289	27.1	8,381	25.5	1.6
I-5 SB / Sea World Drive	AM	1	1	444	530	86	11.6	2,494	0.0	11.6
	PM	1	1	444	690	246	33.2	7,134	11.4	21.8
I-5 NB / Sea World Drive	AM	2	0	1,555	1,480	0	0.0	0	0.0	0.0
	PM	2	0	1,656	1,380	0	0.0	0	0.0	0.0
I-5 SB / Old Town Avenue	PM	1	0	461	410	0	0.0	0	0.0	0.0
I-5 NB / Old Town Avenue	AM	2	0	905	370	0	0.0	0	0.0	0.0
	PM	2	0	888	690	0	0.0	0	0.0	0.0

Source: Chen Ryan Associates, Inc. (May 2017)

Based on the significance criteria outlined in Section 2.2.5, implementation of the preferred Plan would result in a significant impact to the I-5 SB / Sea World Dive ramp during the PM peak hour.

4.6 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted through implementation of the Preferred Plan.

4.6.1 Roadway Mitigation Measures

Midway-Pacific Highway Community

Kettner Boulevard, between Washington Street and Vine Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Kettner Boulevard, between Vine Street and Sassafras Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing*

features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.

Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Greenwood Street, between Sports Arena Boulevard and Kurtz Street (LOS E) – Improving from a 2-Lane Collector to a 2-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *However, due to implementation of this improvement not being in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods and to right-of-way constraints, this improvement project is not identified in the Midway Pacific Highway IFS.*

Frontier Drive, between Sports Arena Boulevard and Kurtz Street (LOS E) – Improving from a 2-Lane Collector with a Center Left Turn-Lane to a 4-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Implementing Frontier Drive as a 4-Lane Collector with Continuous Left-Turn Lane will create longer crossing distances within a residential area and potentially could act as a barrier for pedestrians. Implementation of this improvement would not be in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F) – Improving this roadway from a 6-Lane Prime Arterial to a 6-Lane Expressway would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *This improvement would require grade separating all intersections along this segment of the roadway which is not consistent with the General Plan & Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F) - Widening the roadway from a 3-Lane Collector to a 4-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way available along this segment of Sassafras Street to accommodate a fourth travel lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

<u>Old Town Community</u>

Congress Street between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this*

roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Congress Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 26 regular parking spaces and 13 loading/taxi parking spaces would need to be removed in order to accommodate this mitigation measure. Finally, this mitigation measure would be in conflict with the Community Plan, which proposed balancing all travel modes through an enhanced active transportation environment. Therefore, this improvement project is not identified in the Old Town IFS.

San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 5 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 9 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 48 regular parking spaces and 4 loading parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Twiggs Street and Harney Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 11 regular parking spaces*

would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.

Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F) - Widening the roadway from a 2-Lane Collector to a 4-Lane Major Arterial would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Taylor Street to accommodate two additional through lanes and a center median while maintaining a Class II bicycle facility. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Hancock Street and Moore Street (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane while maintaining right-of-way for the proposed Class II bicycle lanes. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Moore Street and San Diego Avenue (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 18 regular parking spaces and 1 loading parking space would need to be removed in order to accommodate this mitigation measure. Finally, a Class II bicycle facility is proposed along this segment. Therefore, this improvement project is not identified in the Old Town IFS.*

4.6.2 Intersection Mitigation Measures

<u>Midway-Pacific Highway Community</u>

1. *Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)* – The westbound through movement, as well as the southbound left-turn and through movements are projected to be over capacity, under implementation of the Preferred Plan. Implementing the following improvements would allow the intersection to operate at LOS D or better during both peak hours.

    - Add a second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street
    - Add an additional westbound through movement lane on Rosecrans Street (three total)
    - Implement right-turn overlap (RTOL) phases at all legs of the intersection

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is currently not enough right-of-way on Rosecrans Street to accommodate a third westbound through lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: If the second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street and RTOL phases at all legs are implemented (feasible improvements) the overall intersection delay would be reduced to the following:

AM: LOS E
PM: LOS D

Implementation of this improvement will partially mitigate the traffic related impact at the intersection. *This improvement project is identified in the Midway Pacific Highway IFS.*

2. *Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)* – The westbound right-turn movement, from I-8 WB to northbound West Mission Bay Drive, is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Providing a third exclusive westbound right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The Preferred Plan is consistent with the CIP Project #S00871: W. Mission Bay Drive Bridge Over San Diego River, which was reviewed by City and Caltrans staff. Further mitigations, beyond what is recommended as part of this CIP project would be inconsistent with Community Plan Policies and Goals for multimodal facilities*. *Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

4. *Midway Drive / West Point Loma Boulevard and Sports Arena Boulevard (LOS E: PM Peak Hour)* – All four left-turn movements at this intersection are projected to be over capacity during the PM peak hour. Providing dual-left turn lanes on Midway Drive in the northbound direction, on Sports Arena Boulevard in the southbound direction, and on West Point Loma Boulevard in the eastbound direction would improve intersection operations to LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way within the intersection to accommodate any of the additional left-turn lanes considering the proposed multi-use urban trails along Midway Drive and Sports Arena Boulevard, and in-road bicycle facilities. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

7. *Midway Drive and Rosecrans Street* (LOS E: PM Peak Hour) – Rosecrans Street is projected to operate at LOS E during the PM peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches of Rosecrans Street to include a fourth through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen Rosecrans Street to eight lanes through the intersection*

considering the proposed multi-use urban path improvements. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.

Partial Mitigation: None recommended, limited to no right-of-way is anticipated to be available with proposed Multi-Use Urban Path improvements.

27. *Hancock Street and Washington Street (LOS E: PM Peak Hour)* – The southbound Hancock Street to westbound Washington Street right-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Restriping the southbound approach to include a second southbound right-turn lane would allow the intersection to operate at LOS C during the PM Peak Hour. This improvement is feasible but may require additional engineering study. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *This improvement would require the removal of on-street parking, which is heavily utilized by the businesses and restaurants in this area. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

30. *Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)* – The eastbound through movement on Laurel Street is projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Widening the eastbound Laurel Street approach of the intersection to include a third through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the eastbound Laurel Street approach to three lanes. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

34. *Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)* – The southbound Pacific Highway to eastbound Sassafras Street left-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Adding a second southbound left-turn lane would allow the intersection to operate at LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the southbound approach of Pacific Hwy to include a second left-turn lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

35. *Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)* – Laurel Street is projected to be over capacity during both peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches to include a second eastbound left-turn lane and a third through lane in each direction along Laurel Street, as well as widening the northbound approach of Pacific Highway to include a second northbound left-turn lane and exclusive right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Laurel Street to widen to three lanes in each direction. Also,*

there is not enough right-of-way on northbound Pacific Highway with the improvements of the cycle track, multi-use urban path. Therefore, *this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

Old Town Community

37. Moore Street and Old Town Avenue (LOS F: PM Peak Hour) – The eastbound and westbound approaches along Old Town Avenue are projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Implementation of the following improvements would allow the intersection to operate at LOS D during the PM peak hour.

- Implement exclusive eastbound and westbound left-turn lanes on the Old Town Avenue approaches of the intersection.
- Convert the eastbound/westbound signal phasing from permitted to protected phasing.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The eastbound approach on the Old Town Avenue bridge is not wide enough to accommodate an eastbound left-turn lane. Therefore, this improvement project is not identified in the Old Town IFS.*

Partial Mitigation: None recommended.

Outside of the Community

50. *Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour*) – Both the eastbound Rosecrans Street through movement, and the eastbound Rosecrans Street to northbound Nimitz Boulevard left-turn movement are anticipated to be over capacity for both peak hours, under implementation of Preferred Plan. Widening the Rosecrans Street eastbound and westbound approaches of the intersection to include a third through lane, and providing an additional eastbound left-turn lane from Rosecrans Street to Nimitz Boulevard would improve the intersection operations to LOS D or better during both the AM and PM peak hours.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Rosecrans Street to widen to six lanes. Therefore, this improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

Partial Mitigation: None recommended.

Table 4-8 provides a comparison of Preferred Plan operations at the impacted intersections, with and without mitigation measures.

Table 4-8 Impacted Intersection Level of Service with Mitigation Measures

No.	Intersection	Control (Preferred Plan)	Mitigated Conditions AM Avg. Delay (sec)	Mitigated Conditions AM LOS	Mitigated Conditions PM Avg. Delay (sec)	Mitigated Conditions PM LOS	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS
Midway-Pacific Highway										
1	Lytton St and Rosecrans St	Signal	44.6	D	40.1	D	97.7	**F**	55.2	**E**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	12.6	B	35.3	D	15.5	B	71.0	**E**
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	30.5	C	45.9	D	54.0	D	73.4	**E**
7	Midway Dr and Rosecrans St	Signal	33.0	C	55.0	D	40.7	D	76.0	**E**
27	Hancock St and Washington St	Signal	22.5	C	25.5	C	23.1	C	75.2	**E**
30	Kettner Blvd and West Laurel St	Signal	18.0	B	41.4	D	19.6	B	96.2	**F**
34	Pacific Hwy and Sassafras St	Signal	26.0	C	49.4	D	30.7	C	68.4	**E**
35	Pacific Hwy and West Laurel St	Signal	36.2	D	44.4	D	89.8	**F**	139.9	**F**
Old Town										
37	Moore St and Old Town Ave	Signal	28.6	C	40.3	D	23.1	C	98.9	**F**
Intersections Outside of Study Communities										
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	29.0	C	45.1	D	60.0	**E**	108.1	**F**

Source: Chen Ryan Associates (October 2017)

Notes:
Bold letter indicates LOS E or F.

4.6.3 Freeway Segment Mitigation Measures

I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies operational improvements along this segment. These improvements are anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvements and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

4.6.4 Ramp Meter Mitigation Measures

I-5 SB / Sea World Drive Ramp (PM Peak Hour) – Ramp meter delays would decrease to less than 15 minutes if the ramp flow rate is increased from 444 cars per hour to 555 cars per hour. Increased ramp meter flow rates can be achieved by either reducing the ramp meter cycle length or providing additional travel lanes on the ramp.

The identified significant traffic related impact to this ramp would be fully mitigated with the implementation of this improvement. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

5.0 Adopted Community Plan (No Project)

This chapter provides a comparison of the buildout of the currently Adopted Community plan or the No Project scenario analysis results to the Existing Conditions. As stated, the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan was adopted in 1991, and the Old Town San Diego Community Plan was adopted in 1987. Since the land uses and roadway network proposed by the Preferred Plan (or an alternative) would supersede the Adopted Community Plan, only a trip generation and VMT generation comparison was conducted for the Adopted Community Plan (No Project) scenario.

5.1 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Future Year 2035 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway Pacific Highway Corridor and communities, including trips to/from and within the community. Table 5-1A and Table 5-1B displays the total VMT generated within the Midway-Pacific Highway Corridor and Old Town communities, respectively, as well as the average trip length under Base Year, and Adopted Plan conditions. VMT calculations for the both communities are provided in Appendix J.

Table 5-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	832,025	101,904	14.0%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	294,796	311,502	16,706	5.7%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.8%	5.2	5.4	0.2	3.7%
Population	4,672	11,775	7,103	152.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	71	-86	-54.8%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Adopted Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.8%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-54.8%).

Table 5-1B Vehicle Miles Traveled Comparison – Old Town – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,581	20,281	13.4%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	57,989	58,192	203	0.4%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	13.0%	5.2	5.4	0.2	3.7%
Population	834	985	151	18.1%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	174	-7	-4.0%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region). With the implementation of the Adopted Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 13.0%. However, with the population increase anticipated within the community, the daily VMT by population is anticipated to decrease (-4.0%).

Appendix A
VMT Analysis Worksheets – Base Year

2008 Base Year - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	2,357	-	2,357	3,333,368
CHULA VISTA TOTAL	3,951,266	7,048	-	7,048	3,944,218
CORONADO TOTAL	431,361	1,275	-	1,275	430,086
DEL MAR TOTAL	96,012	45	-	45	95,967
EL CAJON TOTAL	2,176,865	3,091	-	3,091	2,173,774
ENCINITAS TOTAL	2,065,242	2,987	-	2,987	2,062,255
ESCONDIDO TOTAL	2,793,535	1,506	-	1,506	2,792,029
External TOTAL	347,454	352	-	352	347,102
IMPERIAL BEACH TOTAL	119,764	49	-	49	119,715
LA MESA TOTAL	1,822,392	4,950	-	4,950	1,817,442
LEMON GROVE TOTAL	831,075	1,644	-	1,644	829,431
NATIONAL CITY TOTAL	1,647,424	6,346	-	6,346	1,641,078
OCEANSIDE TOTAL	3,208,748	779	-	779	3,207,969
POWAY TOTAL	1,105,609	492	-	492	1,105,117
OLD TOWN	38,613,579	241,420	16,727	224,693	38,372,159
SAN MARCOS TOTAL	2,020,740	250	-	250	2,020,490
SANTEE TOTAL	860,205	606	-	606	859,599
SOLANA BEACH TOTAL	567,653	1,106	-	1,106	566,547
Unincorporated TOTAL	17,458,561	9,472	-	9,472	17,449,089
VISTA TOTAL	1,728,853	99	-	99	1,728,754
REGIONWIDE TOTAL	85,182,063	151,301 437,175	16,727	269,147	84,896,189

2008 Base Year - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	10,481	-	10,481	3,325,244
CHULA VISTA TOTAL	3,951,266	30,546	-	30,546	3,920,720
CORONADO TOTAL	431,361	6,218	-	6,218	425,143
DEL MAR TOTAL	96,012	206	-	206	95,806
EL CAJON TOTAL	2,176,865	12,696	-	12,696	2,164,169
ENCINITAS TOTAL	2,065,242	12,892	-	12,892	2,052,350
ESCONDIDO TOTAL	2,793,535	6,670	-	6,670	2,786,865
External TOTAL	347,454	1,979	-	1,979	345,475
IMPERIAL BEACH TOTAL	119,764	392	-	392	119,372
LA MESA TOTAL	1,822,392	19,612	-	19,612	1,802,780
LEMON GROVE TOTAL	831,075	7,624	-	7,624	823,451
NATIONAL CITY TOTAL	1,647,424	27,517	-	27,517	1,619,907
OCEANSIDE TOTAL	3,208,748	3,821	-	3,821	3,204,927
POWAY TOTAL	1,105,609	2,103	-	2,103	1,103,506
SAN DIEGO TOTAL	38,613,579	1,087,144	176,404	910,740	37,526,435
SAN MARCOS TOTAL	2,020,740	1,069	-	1,069	2,019,671
SANTEE TOTAL	860,205	2,581	-	2,581	857,624
SOLANA BEACH TOTAL	567,653	4,696	-	4,696	562,957
Unincorporated TOTAL	17,458,561	44,980	-	44,980	17,413,581
VISTA TOTAL	1,728,853	612	-	612	1,728,241
		730,121.50			
REGIONWIDE TOTAL	85,182,063	2,013,961	176,404	1,107,435	83,898,224
	66.7%	(670,292)			

Appendix B
Daily Roadway Traffic Counts

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-094

Location: Lytton St. btwn. Rosecrans St. & Midway Dr.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	11		8					12:00	222		148				
00:15	10		5					12:15	172		138				
00:30	12		5					12:30	163		160				
00:45	7	40	8	26			66	12:45	163	720	151	597			1317
01:00	3		4					13:00	149		147				
01:15	3		5					13:15	173		160				
01:30	3		6					13:30	170		151				
01:45	9	18	6	21			39	13:45	154	646	161	619			1265
02:00	5		4					14:00	154		171				
02:15	2		5					14:15	170		216				
02:30	4		4					14:30	191		219				
02:45	5	16	2	15			31	14:45	228	743	201	807			1550
03:00	4		2					15:00	223		185				
03:15	4		6					15:15	219		212				
03:30	3		2					15:30	236		226				
03:45	12	23	4	14			37	15:45	250	928	262	885			1813
04:00	14		6					16:00	243		275				
04:15	11		6					16:15	217		322				
04:30	14		13					16:30	268		247				
04:45	24	63	12	37			100	16:45	256	984	268	1112			2096
05:00	42		26					17:00	261		243				
05:15	60		24					17:15	235		219				
05:30	93		35					17:30	192		157				
05:45	104	299	47	132			431	17:45	209	897	154	773			1670
06:00	129		56					18:00	202		134				
06:15	179		82					18:15	185		167				
06:30	223		100					18:30	160		121				
06:45	213	744	124	362			1106	18:45	120	667	106	528			1195
07:00	316		159					19:00	135		103				
07:15	286		197					19:15	129		87				
07:30	194		218					19:30	78		79				
07:45	270	1066	201	775			1841	19:45	110	452	69	338			790
08:00	239		200					20:00	85		77				
08:15	247		235					20:15	97		77				
08:30	225		205					20:30	98		72				
08:45	191	902	177	817			1719	20:45	111	391	81	307			698
09:00	176		156					21:00	69		52				
09:15	127		128					21:15	67		63				
09:30	127		117					21:30	61		45				
09:45	134	564	120	521			1085	21:45	63	260	41	201			461
10:00	133		92					22:00	52		50				
10:15	145		127					22:15	54		46				
10:30	159		143					22:30	40		44				
10:45	147	584	120	482			1066	22:45	38	184	28	168			352
11:00	153		123					23:00	30		23				
11:15	148		155					23:15	20		19				
11:30	179		126					23:30	23		21				
11:45	180	660	116	520			1180	23:45	11	84	14	77			161
Total Vol.		4979		3722			**8701**			6956		6412			**13368**

Daily Totals

NB	SB	EB	WB	Combined
11935	10134			**22069**

	AM			PM		
Split %	57.2%	42.8%	**39.4%**	52.0%	48.0%	**60.6%**
Peak Hour	07:00	07:30	**07:00**	16:30	16:00	**16:00**
Volume	1066	854	**1841**	1020	1112	**2096**
P.H.F.	0.84	0.91	**0.95**	0.95	0.86	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-086

Location: Mission Bay Dr. btwn. I-8 WB Off Ramp & I-8 EB On Ramp

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		78					12:00	130		376				
00:15	16		56					12:15	154		409				
00:30	12		54					12:30	139		403				
00:45	8	49	54	242			291	12:45	145	568	475	1663			2231
01:00	9		43					13:00	133		392				
01:15	12		40					13:15	144		423				
01:30	11		45					13:30	142		428				
01:45	10	42	47	175			217	13:45	167	586	456	1699			2285
02:00	2		44					14:00	152		410				
02:15	7		26					14:15	133		431				
02:30	5		36					14:30	126		472				
02:45	5	19	21	127			146	14:45	111	522	441	1754			2276
03:00	3		24					15:00	134		460				
03:15	1		16					15:15	138		494				
03:30	1		18					15:30	129		520				
03:45	6	11	19	77			88	15:45	126	527	506	1980			2507
04:00	7		16					16:00	133		530				
04:15	4		20					16:15	159		552				
04:30	5		22					16:30	125		568				
04:45	6	22	39	97			119	16:45	130	547	574	2224			2771
05:00	9		42					17:00	164		580				
05:15	8		57					17:15	161		643				
05:30	13		64					17:30	140		591				
05:45	18	48	159	322			370	17:45	131	596	621	2435			3031
06:00	22		125					18:00	124		601				
06:15	36		162					18:15	114		578				
06:30	45		222					18:30	141		488				
06:45	51	154	270	779			933	18:45	109	488	412	2079			2567
07:00	67		329					19:00	120		388				
07:15	68		420					19:15	109		390				
07:30	86		469					19:30	109		333				
07:45	100	321	505	1723			2044	19:45	104	442	336	1447			1889
08:00	76		440					20:00	105		334				
08:15	70		451					20:15	95		315				
08:30	98		478					20:30	95		275				
08:45	111	355	424	1793			2148	20:45	70	365	267	1191			1556
09:00	118		398					21:00	63		248				
09:15	118		390					21:15	68		196				
09:30	134		366					21:30	73		192				
09:45	163	533	374	1528			2061	21:45	60	264	198	834			1098
10:00	138		230					22:00	64		159				
10:15	118		332					22:15	51		135				
10:30	102		330					22:30	59		146				
10:45	131	489	346	1238			1727	22:45	58	232	126	566			798
11:00	114		357					23:00	24		135				
11:15	140		359					23:15	22		126				
11:30	123		383					23:30	21		87				
11:45	143	520	380	1479			1999	23:45	19	86	82	430			516
Total Vol.		2563		9580			**12143**			5223		18302			**23525**

Daily Totals

NB	SB	EB	WB	**Combined**
7786	27882			**35668**

	AM			**PM**		
Split %	21.1%	78.9%	**34.0%**	22.2%	77.8%	**66.0%**
Peak Hour	11:45	07:45	**07:45**	13:15	17:15	**17:00**
Volume	566	1874	**2218**	605	2456	**3031**
P.H.F.	0.92	0.93	**0.92**	0.91	0.95	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-088

Location: Midway Dr. btwn. Sports Arena Blvd. & Kemper St.

AM Period	NB	SB	EB		WB		
00:00			15		25		
00:15			17		26		
00:30			14		19		
00:45			12	58	8	78	136
01:00			11		16		
01:15			15		11		
01:30			9		17		
01:45			8	43	14	58	101
02:00			5		13		
02:15			6		6		
02:30			7		8		
02:45			6	24	5	32	56
03:00			3		5		
03:15			5		7		
03:30			6		4		
03:45			1	15	6	22	37
04:00			12		7		
04:15			11		8		
04:30			13		5		
04:45			19	55	11	31	86
05:00			13		17		
05:15			14		17		
05:30			28		24		
05:45			43	98	31	89	187
06:00			34		27		
06:15			43		37		
06:30			58		59		
06:45			71	206	90	213	419
07:00			82		78		
07:15			102		81		
07:30			117		100		
07:45			159	460	91	350	810
08:00			125		94		
08:15			166		113		
08:30			134		112		
08:45			143	568	137	456	1024
09:00			128		143		
09:15			133		133		
09:30			154		130		
09:45			147	562	154	560	1122
10:00			141		174		
10:15			152		152		
10:30			163		163		
10:45			139	595	139	628	1223
11:00			133		133		
11:15			135		154		
11:30			154		178		
11:45			147	569	152	617	1186
Total Vol.				3253		3134	**6387**

PM Period	NB	SB	EB		WB		
12:00			171		174		
12:15			159		166		
12:30			152		196		
12:45			158	640	182	718	1358
13:00			133		187		
13:15			139		169		
13:30			163		170		
13:45			150	585	174	700	1285
14:00			145		154		
14:15			147		165		
14:30			154		199		
14:45			155	601	185	703	1304
15:00			160		187		
15:15			155		198		
15:30			144		178		
15:45			180	639	199	762	1401
16:00			182		219		
16:15			169		193		
16:30			160		221		
16:45			180	691	204	837	1528
17:00			215		223		
17:15			209		244		
17:30			195		230		
17:45			220	839	210	907	1746
18:00			197		189		
18:15			170		216		
18:30			156		202		
18:45			181	704	186	793	1497
19:00			151		186		
19:15			154		150		
19:30			113		184		
19:45			116	534	140	660	1194
20:00			102		158		
20:15			122		131		
20:30			93		134		
20:45			81	398	131	554	952
21:00			76		103		
21:15			86		102		
21:30			62		82		
21:45			61	285	76	363	648
22:00			40		95		
22:15			36		54		
22:30			43		49		
22:45			34	153	49	247	400
23:00			32		54		
23:15			27		30		
23:30			33		40		
23:45			20	112	26	150	262
				6181		7394	**13575**

Daily Totals

NB	SB	EB	WB	Combined
		9434	10528	**19962**

	AM			PM		
Split %	50.9%	49.1%	**32.0%**	45.5%	54.5%	**68.0%**
Peak Hour	11:30	11:45	**11:45**	17:00	17:00	**17:00**
Volume	631	688	**1317**	839	907	**1746**
P.H.F.	0.92	0.88	**0.95**	0.95	0.93	**0.96**

Volumes for: STATION# on Tuesday, March 16, 2010 City: San Diego Project #: 10-4068-018
Location: Midway Dr between Kemper St & Fordham St File No. MC0214-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	16	169			24	211				
12:15	18	185			26	221				
12:30	17	191			17	210				
12:45	10	215	61	760	14	215	81	857	142	1617
1:00	6	179			14	208				
1:15	8	187			10	206				
1:30	13	171			13	172				
1:45	8	145	35	682	22	191	59	777	94	1459
2:00	7	166			14	175				
2:15	7	169			12	205				
2:30	12	177			13	177				
2:45	4	175	30	687	7	165	46	722	76	1409
3:00	16	180			7	197				
3:15	8	148			5	213				
3:30	10	170			5	203				
3:45	4	189	38	687	15	230	32	843	70	1530
4:00	7	186			9	224				
4:15	11	144			9	193				
4:30	5	174			4	181				
4:45	10	174	33	678	14	202	36	800	69	1478
5:00	8	179			16	235				
5:15	28	214			18	209				
5:30	41	166			29	230				
5:45	44	184	121	743	43	166	106	840	227	1583
6:00	30	203			29	182				
6:15	42	185			31	164				
6:30	59	190			39	198				
6:45	71	155	202	733	56	175	155	719	357	1452
7:00	76	150			65	192				
7:15	90	160			58	183				
7:30	110	158			69	164				
7:45	119	105	395	573	91	140	283	679	678	1252
8:00	129	147			86	125				
8:15	111	112			108	138				
8:30	102	113			102	124				
8:45	118	88	460	460	109	135	405	522	865	982
9:00	110	86			108	123				
9:15	129	92			123	81				
9:30	120	72			113	92				
9:45	135	50	494	300	148	80	492	376	986	676
10:00	111	46			142	69				
10:15	135	46			142	52				
10:30	163	47			138	60				
10:45	152	51	561	190	150	50	572	231	1133	421
11:00	152	37			192	45				
11:15	143	18			177	51				
11:30	182	24			190	28				
11:45	169	21	646	100	219	35	778	159	1424	259
Total	3076	6593	3076	6593	3045	7525	3045	7525	6121	14118
Combined Total	9669		9669		10570		10570		20239	
AM Peak	11:45 AM				11:45 AM					
Vol.	714				861					
P.H.F.	0.935				0.974					
PM Peak		12:30 PM				4:45 PM				
Vol.		772				876				
P.H.F.		0.898				0.932				
Percentage	31.8%	68.2%			28.8%	71.2%				

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
MIDWAY DR	[GAINES ST - RILEY ST]	03100 - 03150	1190	EAST	:	14600	6/27/1990	0985-90
				WEST	:	17700	7/20/1990	0986-90
				EAST	:	13800	6/17/1991	0917-91
				WEST	:	16900	6/17/1991	0918-91
				*TOTAL	:	30700		
				EAST	:	14300	6/9/1992	0498-92
				WEST	:	16900	6/9/1992	0499-92
				*TOTAL	:	31200		
				EAST	:	12100	6/2/1995	0663-95
				WEST	:	15100	6/2/1995	0664-95
				*TOTAL	:	27200		
				EAST	:	12600	6/22/1999	0479-99
				WEST	:	14900	6/22/1999	0479-99
				*TOTAL	:	27500		
				EAST	:	10960	6/18/2002	0629-02
				WEST	:	14250	6/25/2002	0630-02
				EAST	:	18590	6/13/2006	0068-06
				WEST	:	14360	6/13/2006	0068-06
				*TOTAL	:	32950		
				EAST	:	12720	8/12/2008	0313-08
				WEST	:	14410	8/12/2008	0313-08
				*TOTAL	:	27130		
				EAST	:	12860	6/16/2009	MC0396-0
				WEST	:	14745	6/16/2009	MC0396-0
				*TOTAL	:	27605		
MIDWAY DR	[KEMPER ST - DUKE ST]	03600 - 03800	1771	EAST	:	12200	6/18/1991	0855-91
				WEST	:	12900	6/18/1991	0856-91
				*TOTAL	:	25100		
				EAST	:	13000	5/26/1993	0418-93
				WEST	:	13300	5/26/1993	0419-93
				*TOTAL	:	26300		
				EAST	:	10800	5/13/1996	0487-96

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Midway Dr (STATION#1860/FILE#MC0443-10)	Project:	10-4169-031	11,737	11,246	0	0	22,983

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	17		24					12:00	237		211				
00:15	27		40					12:15	236		200				
00:30	23		20					12:30	267		215				
00:45	18	85	17	101			186	12:45	215	955	277	903			1858
01:00	9		21					13:00	246		225				
01:15	13		15					13:15	221		182				
01:30	18		11					13:30	225		188				
01:45	14	54	27	74			128	13:45	223	915	234	829			1744
02:00	17		20					14:00	192		203				
02:15	14		13					14:15	209		201				
02:30	6		14					14:30	183		212				
02:45	6	43	9	56			99	14:45	218	802	209	825			1627
03:00	5		3					15:00	211		199				
03:15	11		11					15:15	208		205				
03:30	16		7					15:30	213		207				
03:45	16	48	10	31			79	15:45	212	844	226	837			1681
04:00	17		12					16:00	240		230				
04:15	13		12					16:15	233		193				
04:30	18		13					16:30	247		234				
04:45	19	67	19	56			123	16:45	249	969	204	861			1830
05:00	16		29					17:00	254		209				
05:15	34		28					17:15	294		225				
05:30	38		47					17:30	264		185				
05:45	72	160	38	142			302	17:45	185	997	220	839			1836
06:00	49		58					18:00	175		205				
06:15	57		61					18:15	172		158				
06:30	80		79					18:30	148		175				
06:45	104	290	98	296			586	18:45	144	639	144	682			1321
07:00	97		100					19:00	142		175				
07:15	115		139					19:15	143		147				
07:30	143		124					19:30	127		140				
07:45	136	491	117	480			971	19:45	151	563	169	631			1194
08:00	144		128					20:00	92		127				
08:15	161		113					20:15	102		133				
08:30	129		97					20:30	67		127				
08:45	148	582	106	444			1026	20:45	76	337	120	507			844
09:00	150		107					21:00	79		121				
09:15	182		142					21:15	84		87				
09:30	179		163					21:30	58		99				
09:45	176	687	131	543			1230	21:45	55	276	77	384			660
10:00	159		127					22:00	54		76				
10:15	180		139					22:15	41		53				
10:30	184		148					22:30	35		40				
10:45	189	712	167	581			1293	22:45	31	161	48	217			378
11:00	205		182					23:00	29		41				
11:15	236		178					23:15	20		26				
11:30	265		201					23:30	34		39				
11:45	248	954	228	789			1743	23:45	23	106	32	138			244
Total Vol.	4173		3593				**7766**		7564		7653				**15217**

	NB	SB	EB	WB	Total
Daily Totals :	**11,737**	**11,246**	**0**	**0**	**22,983**

	AM			PM			
Split %	53.7%	46.3%	**33.8%**		49.7%	50.3%	**66.2%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	12:15	**16:30**
Volume	988	854	**1842**	**Volume**	1061	917	**1916**
P.H.F.	0.925	0.936	**0.955**	**P.H.F.**	0.902	0.828	**0.923**
7 - 9 Vol.	1073	924	**1997**	**4 - 6 Vol.**	1966	1700	**3666**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	584	508	**1066**	**Volume**	1061	872	**1916**
P.H.F.	0.907	0.914	**0.973**	**P.H.F.**	0.902	0.932	**0.923**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-087

Location: Mission Bay Dr. btwn. I-8 EB On Ramp & Sports Arena Blvd.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	29		33					12:00	269		213				
00:15	37		32					12:15	297		241				
00:30	25		31					12:30	289		248				
00:45	27	118	14	110			228	12:45	298	1153	252	954			2107
01:00	23		31					13:00	273		249				
01:15	27		22					13:15	314		230				
01:30	21		27					13:30	298		230				
01:45	18	89	23	103			192	13:45	298	1183	253	962			2145
02:00	22		16					14:00	303		239				
02:15	19		12					14:15	295		219				
02:30	20		19					14:30	274		205				
02:45	13	74	8	55			129	14:45	284	1156	224	887			2043
03:00	9		18					15:00	252		235				
03:15	7		9					15:15	296		260				
03:30	18		8					15:30	270		240				
03:45	22	56	11	46			102	15:45	265	1083	262	997			2080
04:00	15		11					16:00	312		251				
04:15	18		12					16:15	306		285				
04:30	16		11					16:30	296		276				
04:45	23	72	25	59			131	16:45	279	1193	257	1069			2262
05:00	28		23					17:00	360		274				
05:15	31		33					17:15	292		320				
05:30	40		25					17:30	288		289				
05:45	64	163	79	160			323	17:45	282	1222	303	1186			2408
06:00	81		60					18:00	276		298				
06:15	95		77					18:15	257		274				
06:30	132		90					18:30	252		228				
06:45	136	444	121	348			792	18:45	263	1048	225	1025			2073
07:00	177		157					19:00	260		215				
07:15	202		183					19:15	212		192				
07:30	233		192					19:30	229		180				
07:45	250	862	246	778			1640	19:45	209	910	170	757			1667
08:00	204		209					20:00	217		153				
08:15	205		199					20:15	197		153				
08:30	208		209					20:30	187		144				
08:45	240	857	200	817			1674	20:45	158	759	136	586			1345
09:00	218		232					21:00	163		140				
09:15	225		213					21:15	136		110				
09:30	262		203					21:30	165		96				
09:45	249	954	235	883			1837	21:45	140	604	98	444			1048
10:00	219		228					22:00	129		71				
10:15	241		244					22:15	111		65				
10:30	222		214					22:30	104		71				
10:45	230	912	230	916			1828	22:45	99	443	64	271			714
11:00	217		233					23:00	67		69				
11:15	214		241					23:15	67		59				
11:30	215		225					23:30	55		42				
11:45	228	874	236	935			1809	23:45	30	219	44	214			433
Total Vol.		5475		5210			**10685**			10973		9352			**20325**

Daily Totals

NB	SB	EB	WB	Combined
16448	14562			**31010**

	AM			PM		
Split %	51.2%	48.8%	**34.5%**	54.0%	46.0%	**65.5%**
Peak Hour	11:45	11:45	**11:45**	16:15	17:15	**17:00**
Volume	1083	938	**2021**	1241	1210	**2408**
P.H.F.	0.91	0.95	**0.94**	0.86	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-090

Location: Sports Arena Blvd. btwn. Midway Dr. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		21			12:00			144		148		
00:15			14		21			12:15			135		137		
00:30			6		16			12:30			163		142		
00:45			5	33	14	72	105	12:45			141	583	141	568	1151
01:00			7		10			13:00			148		167		
01:15			4		7			13:15			137		161		
01:30			4		1			13:30			156		158		
01:45			3	18	9	27	45	13:45			152	593	155	641	1234
02:00			6		9			14:00			150		152		
02:15			5		7			14:15			139		140		
02:30			2		3			14:30			140		133		
02:45			2	15	3	22	37	14:45			147	576	139	564	1140
03:00			7		5			15:00			133		146		
03:15			6		7			15:15			139		180		
03:30			6		4			15:30			163		158		
03:45			6	25	5	21	46	15:45			152	587	166	650	1237
04:00			4		6			16:00			162		169		
04:15			4		4			16:15			142		171		
04:30			6		8			16:30			171		215		
04:45			8	22	8	26	48	16:45			143	618	166	721	1339
05:00			10		7			17:00			155		213		
05:15			12		5			17:15			164		220		
05:30			25		17			17:30			155		194		
05:45			32	79	12	41	120	17:45			173	647	168	795	1442
06:00			32		20			18:00			159		197		
06:15			42		22			18:15			156		175		
06:30			62		32			18:30			178		155		
06:45			71	207	51	125	332	18:45			140	633	150	677	1310
07:00			78		62			19:00			134		152		
07:15			109		61			19:15			153		152		
07:30			115		57			19:30			119		137		
07:45			135	437	57	237	674	19:45			116	522	156	597	1119
08:00			140		65			20:00			117		123		
08:15			139		80			20:15			105		133		
08:30			122		96			20:30			82		120		
08:45			145	546	91	332	878	20:45			74	378	115	491	869
09:00			124		79			21:00			78		103		
09:15			139		109			21:15			55		104		
09:30			133		122			21:30			36		90		
09:45			154	550	126	436	986	21:45			40	209	83	380	589
10:00			147		139			22:00			29		84		
10:15			141		133			22:15			27		59		
10:30			152		130			22:30			30		68		
10:45			133	573	128	530	1103	22:45			19	105	51	262	367
11:00			130		124			23:00			14		143		
11:15			128		147			23:15			20		55		
11:30			124		152			23:30			24		26		
11:45			147	529	163	586	1115	23:45			14	72	17	241	313
Total Vol.				3034		2455	**5489**					5523		6587	**12110**

Daily Totals

NB	SB	EB	WB	Combined
		8557	9042	**17599**

	AM			PM		
Split %	55.3%	44.7%	**31.2%**	45.6%	54.4%	**68.8%**
Peak Hour	09:45	11:15	**11:45**	17:45	16:30	**16:30**
Volume	594	610	**1179**	666	814	**1447**
P.H.F.	0.96	0.94	**0.95**	0.94	0.93	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-091

Location: Sports Arena Blvd. btwn. Kemper St. & East Dr.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			26		15			12:00			122		130		
00:15			14		15			12:15			131		133		
00:30			11		15			12:30			128		139		
00:45			10	61	13	58	119	12:45			133	514	143	545	1059
01:00			5		12			13:00			130		141		
01:15			5		5			13:15			163		147		
01:30			4		3			13:30			139		154		
01:45			8	22	8	28	50	13:45			155	587	166	608	1195
02:00			9		4			14:00			154		196		
02:15			5		3			14:15			174		185		
02:30			1		3			14:30			155		174		
02:45			1	16	0	10	26	14:45			156	639	187	742	1381
03:00			4		3			15:00			166		188		
03:15			0		9			15:15			198		174		
03:30			6		9			15:30			187		154		
03:45			10	20	8	29	49	15:45			174	725	165	681	1406
04:00			12		6			16:00			188		166		
04:15			5		3			16:15			204		158		
04:30			10		10			16:30			218		162		
04:45			9	36	12	31	67	16:45			213	823	165	651	1474
05:00			14		5			17:00			237		185		
05:15			14		6			17:15			246		200		
05:30			20		29			17:30			216		166		
05:45			31	79	39	79	158	17:45			231	930	179	730	1660
06:00			27		32			18:00			222		178		
06:15			30		37			18:15			244		188		
06:30			68		48			18:30			224		171		
06:45			62	187	67	184	371	18:45			206	896	166	703	1599
07:00			78		76			19:00			213		162		
07:15			101		53			19:15			194		129		
07:30			129		77			19:30			191		115		
07:45			117	425	72	278	703	19:45			185	783	101	507	1290
08:00			126		103			20:00			163		97		
08:15			124		83			20:15			159		110		
08:30			132		93			20:30			140		88		
08:45			135	517	98	377	894	20:45			148	610	70	365	975
09:00			148		86			21:00			121		73		
09:15			147		117			21:15			131		61		
09:30			127		122			21:30			135		62		
09:45			128	550	121	446	996	21:45			112	499	51	247	746
10:00			114		120			22:00			103		56		
10:15			128		122			22:15			73		44		
10:30			133		147			22:30			103		45		
10:45			130	505	124	513	1018	22:45			110	389	48	193	582
11:00			128		128			23:00			253		80		
11:15			124		133			23:15			102		36		
11:30			141		139			23:30			55		29		
11:45			143	536	163	563	1099	23:45			29	439	22	167	606
Total Vol.				2954		2596	**5550**					7834		6139	**13973**

Daily Totals

NB	SB	EB	WB	Combined
		10788	8735	**19523**

	AM			PM		
Split %	53.2%	46.8%	**28.4%**	56.1%	43.9%	**71.6%**
Peak Hour	08:30	11:15	**11:30**	17:00	14:00	**17:00**
Volume	562	565	**1102**	930	742	**1660**
P.H.F.	0.95	0.87	**0.90**	0.95	0.95	**0.93**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
SPORTS ARENA BL	[ROSECRANS ST - EAST DR]	03100 - 03300	1211	EAST	:	14780	6/15/2005	0296-05
				WEST	:	14640	6/15/2005	0296-05
				*TOTAL	:	29420		
				EAST	:	13620	7/29/2008	0315-08
				WEST	:	13160	7/29/2008	0315-08
				*TOTAL	:	26780		
SPORTS ARENA BL	[KEMPER ST - HANCOCK ST]	03600 - 03800	1210	EAST	:	11200	6/25/1990	0976-90
				WEST	:	10300	6/25/1990	0977-90
				*TOTAL	:	21500		
				EAST	:	9400	6/18/1991	0853-91
				WEST	:	7900	6/18/1991	0854-91
				*TOTAL	:	17300		
				EAST	:	8400	9/15/1994	0672-94
				WEST	:	8600	9/15/1994	0673-94
				*TOTAL	:	17000		
				EAST	:	9600	6/17/1997	0370-97
				WEST	:	9500	6/17/1997	0371-97
				*TOTAL	:	19100		
				EAST	:	9780	6/9/2005	0292-05
				WEST	:	9590	6/9/2005	0292-05
				*TOTAL	:	19370		
				EAST	:	8105	6/15/2010	MC0511-1
				WEST	:	8655	6/15/2010	MC0511-1
				*TOTAL	:	16760		
				EAST	:	7475	1/11/2011	MC1210-1
				WEST	:	8145	1/11/2011	MC1210-1
				*TOTAL	:	15620		
SPORTS ARENA BL	[HANCOCK ST - W PT LOMA BL]	03800 - 03900	1213	EAST	:	10000	6/25/1990	1001-90
				WEST	:	11200	6/25/1990	1002-90
				*TOTAL	:	21200		
				EAST	:	10600	6/26/1991	0952-91
				WEST	:	16300	6/26/1991	0953-91

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-092

Location: Sports Arena Blvd. btwn. Rosecrans St. & Enterprise St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			44		24		
00:15			2		2			12:15			33		28		
00:30			0		0			12:30			36		24		
00:45			0	2	4	7	9	12:45			37	150	21	97	247
01:00			0		3			13:00			31		28		
01:15			2		0			13:15			31		24		
01:30			0		0			13:30			30		26		
01:45			1	3	1	4	7	13:45			36	128	22	100	228
02:00			0		4			14:00			30		20		
02:15			0		0			14:15			29		24		
02:30			2		2			14:30			20		21		
02:45			0	2	8	14	16	14:45			30	109	14	79	188
03:00			2		1			15:00			17		19		
03:15			0		1			15:15			20		22		
03:30			1		3			15:30			18		20		
03:45			3	6	3	8	14	15:45			19	74	28	89	163
04:00			0		2			16:00			25		24		
04:15			0		4			16:15			33		32		
04:30			2		0			16:30			31		39		
04:45			0	2	2	8	10	16:45			18	107	35	130	237
05:00			2		2			17:00			14		54		
05:15			0		2			17:15			9		74		
05:30			1		8			17:30			15		45		
05:45			4	7	4	16	23	17:45			21	59	50	223	282
06:00			5		5			18:00			14		21		
06:15			2		3			18:15			26		28		
06:30			3		1			18:30			13		21		
06:45			6	16	1	10	26	18:45			16	69	14	84	153
07:00			10		11			19:00			9		16		
07:15			13		10			19:15			11		13		
07:30			15		14			19:30			15		11		
07:45			15	53	8	43	96	19:45			8	43	10	50	93
08:00			13		11			20:00			6		8		
08:15			12		10			20:15			7		7		
08:30			9		14			20:30			6		5		
08:45			18	52	19	54	106	20:45			10	29	3	23	52
09:00			30		13			21:00			2		2		
09:15			15		18			21:15			3		1		
09:30			19		11			21:30			9		4		
09:45			22	86	10	52	138	21:45			4	18	1	8	26
10:00			31		14			22:00			3		5		
10:15			22		42			22:15			3		2		
10:30			22		32			22:30			11		1		
10:45			31	106	28	116	222	22:45			0	17	4	12	29
11:00			28		24			23:00			7		1		
11:15			29		25			23:15			2		5		
11:30			32		24			23:30			3		2		
11:45			33	122	16	89	211	23:45			2	14	3	11	25
Total Vol.				457		421	**878**					817		906	**1723**

Daily Totals

NB	SB	EB	WB	Combined
		1274	1327	**2601**

	AM			PM		
Split %	52.1%	47.9%	**33.8%**	47.4%	52.6%	**66.2%**
Peak Hour	11:45	10:15	**11:45**	12:00	17:00	**17:00**
Volume	146	126	**238**	150	223	**282**
P.H.F.	0.83	0.75	**0.88**	0.85	0.75	**0.85**

Volumes for: Thursday, August 19, 2010 City: San Diego Project #: 10-4243-049

Location: Kurtz St (STATION#1873/FILE#MC0742-10) between Riley St & Greenwood St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		14				12:00		130			
00:15		8				12:15		127			
00:30		15				12:30		107			
00:45		11	48		48	12:45		105	469		469
01:00		9				13:00		110			
01:15		4				13:15		91			
01:30		4				13:30		104			
01:45		6	23		23	13:45		94	399		399
02:00		5				14:00		83			
02:15		6				14:15		100			
02:30		4				14:30		89			
02:45		2	17		17	14:45		90	362		362
03:00		5				15:00		109			
03:15		5				15:15		110			
03:30		8				15:30		117			
03:45		5	23		23	15:45		115	451		451
04:00		13				16:00		145			
04:15		22				16:15		116			
04:30		15				16:30		128			
04:45		12	62		62	16:45		121	510		510
05:00		12				17:00		154			
05:15		9				17:15		113			
05:30		14				17:30		105			
05:45		18	53		53	17:45		97	469		469
06:00		23				18:00		93			
06:15		21				18:15		71			
06:30		34				18:30		53			
06:45		28	106		106	18:45		47	264		264
07:00		39				19:00		43			
07:15		45				19:15		38			
07:30		66				19:30		45			
07:45		57	207		207	19:45		27	153		153
08:00		61				20:00		30			
08:15		68				20:15		42			
08:30		60				20:30		30			
08:45		69	258		258	20:45		21	123		123
09:00		57				21:00		21			
09:15		73				21:15		25			
09:30		86				21:30		27			
09:45		77	293		293	21:45		26	99		99
10:00		92				22:00		18			
10:15		89				22:15		19			
10:30		116				22:30		18			
10:45		98	395		395	22:45		15	70		70
11:00		105				23:00		18			
11:15		102				23:15		16			
11:30		103				23:30		12			
11:45		116	426		426	23:45		10	56		56
Total Vol.			1911		**1911**			3425			**3425**

Daily Totals

NB	SB	EB	WB	Combined
	5336			**5336**

	AM		PM	
Split %	100.0%	**35.8%**	100.0%	**64.2%**
Peak Hour	11:45	**11:45**	16:15	**16:15**
Volume	480	**480**	519	**519**
P.H.F.	0.92	**0.92**	0.84	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-084

Location: Kurtz St. btwn. Rosecrans St. & Pacific Highway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		8					12:00	82		48				
00:15	8		1					12:15	54		71				
00:30	6		2					12:30	68		59				
00:45	7	23	1	12			35	12:45	58	262	88	266			528
01:00	3		9					13:00	73		68				
01:15	3		1					13:15	38		88				
01:30	2		4					13:30	54		81				
01:45	5	13	5	19			32	13:45	50	215	91	328			543
02:00	2		4					14:00	53		73				
02:15	4		2					14:15	42		80				
02:30	5		1					14:30	49		67				
02:45	7	18	4	11			29	14:45	51	195	79	299			494
03:00	7		1					15:00	56		78				
03:15	10		6					15:15	49		63				
03:30	7		2					15:30	65		55				
03:45	6	30	2	11			41	15:45	65	235	50	246			481
04:00	2		5					16:00	60		54				
04:15	11		4					16:15	61		41				
04:30	3		7					16:30	53		45				
04:45	18	34	3	19			53	16:45	58	232	65	205			437
05:00	9		8					17:00	67		51				
05:15	18		4					17:15	66		38				
05:30	23		3					17:30	49		46				
05:45	36	86	5	20			106	17:45	52	234	46	181			415
06:00	41		3					18:00	44		35				
06:15	58		19					18:15	41		54				
06:30	52		22					18:30	47		34				
06:45	72	223	24	68			291	18:45	28	160	69	192			352
07:00	50		24					19:00	30		66				
07:15	62		29					19:15	16		37				
07:30	58		33					19:30	31		45				
07:45	71	241	30	116			357	19:45	27	104	44	192			296
08:00	59		54					20:00	25		42				
08:15	59		41					20:15	27		28				
08:30	59		45					20:30	23		48				
08:45	62	239	55	195			434	20:45	19	94	23	141			235
09:00	47		42					21:00	12		33				
09:15	57		24					21:15	9		25				
09:30	48		29					21:30	12		24				
09:45	49	201	33	128			329	21:45	16	49	22	104			153
10:00	54		47					22:00	11		24				
10:15	56		37					22:15	8		20				
10:30	54		60					22:30	7		22				
10:45	64	228	31	175			403	22:45	11	37	13	79			116
11:00	63		58					23:00	8		8				
11:15	65		45					23:15	8		5				
11:30	54		65					23:30	4		6				
11:45	72	254	65	233			487	23:45	5	25	3	22			47
Total Vol.		1590		1007			**2597**			1842		2255			**4097**

Daily Totals

NB	SB	EB	WB	Combined
3432	3262			**6694**

	AM			PM		
Split %	61.2%	38.8%	**38.8%**	45.0%	55.0%	**61.2%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:15	**12:45**
Volume	276	249	**519**	262	333	**548**
P.H.F.	0.84	0.88	**0.95**	0.80	0.91	**0.94**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-001

Location: Hancock St(STATION#1878/FILE#MC0592-10) between Channel Wy & Sports Arena Blvd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	60		36				
00:15	5		3					12:15	53		44				
00:30	3		2					12:30	66		41				
00:45	0	11	1	12			23	12:45	41	220	42	163			383
01:00	0		2					13:00	33		51				
01:15	1		1					13:15	43		42				
01:30	1		1					13:30	42		33				
01:45	1	3	1	5			8	13:45	46	164	30	156			320
02:00	3		1					14:00	49		42				
02:15	0		2					14:15	56		34				
02:30	1		0					14:30	42		40				
02:45	1	5	2	5			10	14:45	42	189	37	153			342
03:00	2		3					15:00	46		40				
03:15	2		0					15:15	54		32				
03:30	1		2					15:30	51		24				
03:45	3	8	1	6			14	15:45	41	192	26	122			314
04:00	1		1					16:00	56		29				
04:15	1		4					16:15	38		19				
04:30	2		2					16:30	47		23				
04:45	2	6	8	15			21	16:45	60	201	23	94			295
05:00	3		6					17:00	51		21				
05:15	2		2					17:15	48		17				
05:30	3		2					17:30	48		23				
05:45	4	12	16	26			38	17:45	28	175	21	82			257
06:00	6		10					18:00	30		18				
06:15	7		14					18:15	39		19				
06:30	6		21					18:30	25		18				
06:45	11	30	24	69			99	18:45	24	118	14	69			187
07:00	20		27					19:00	25		21				
07:15	17		23					19:15	16		15				
07:30	21		24					19:30	11		19				
07:45	18	76	37	111			187	19:45	17	69	14	69			138
08:00	20		50					20:00	14		10				
08:15	21		36					20:15	14		9				
08:30	18		28					20:30	12		13				
08:45	21	80	35	149			229	20:45	7	47	13	45			92
09:00	29		41					21:00	11		9				
09:15	29		29					21:15	9		4				
09:30	23		27					21:30	9		9				
09:45	30	111	24	121			232	21:45	6	35	12	34			69
10:00	43		35					22:00	8		13				
10:15	39		40					22:15	6		10				
10:30	30		25					22:30	6		7				
10:45	41	153	31	131			284	22:45	4	24	3	33			57
11:00	47		28					23:00	1		2				
11:15	40		33					23:15	8		2				
11:30	38		32					23:30	4		5				
11:45	51	176	31	124			300	23:45	2	15	2	11			26
Total Vol.		671		774			**1445**			1449		1031			**2480**

Daily Totals

NB	SB	EB	WB	Combined
2120	1805			**3925**

	AM			PM		
Split %	46.4%	53.6%	**36.8%**	58.4%	41.6%	**63.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:00**
Volume	230	152	**382**	220	178	**383**
P.H.F.	0.87	0.86	**0.89**	0.93	0.87	**0.89**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-076

Location: Hancock St. btwn. Greenwood St. & Riley St. (one way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	12					12:00	72				
00:15	12					12:15	105				
00:30	5					12:30	83				
00:45	9	38			38	12:45	106	366			366
01:00	7					13:00	93				
01:15	9					13:15	89				
01:30	11					13:30	80				
01:45	9	36			36	13:45	80	342			342
02:00	10					14:00	69				
02:15	19					14:15	75				
02:30	17					14:30	77				
02:45	11	57			57	14:45	67	288			288
03:00	9					15:00	82				
03:15	10					15:15	90				
03:30	8					15:30	76				
03:45	25	52			52	15:45	91	339			339
04:00	4					16:00	67				
04:15	16					16:15	72				
04:30	7					16:30	67				
04:45	22	49			49	16:45	42	248			248
05:00	20					17:00	58				
05:15	21					17:15	54				
05:30	31					17:30	52				
05:45	54	126			126	17:45	47	211			211
06:00	42					18:00	41				
06:15	55					18:15	44				
06:30	50					18:30	35				
06:45	79	226			226	18:45	52	172			172
07:00	89					19:00	24				
07:15	88					19:15	21				
07:30	69					19:30	21				
07:45	108	354			354	19:45	32	98			98
08:00	119					20:00	33				
08:15	101					20:15	32				
08:30	105					20:30	19				
08:45	97	422			422	20:45	26	110			110
09:00	96					21:00	28				
09:15	81					21:15	17				
09:30	62					21:30	18				
09:45	92	331			331	21:45	25	88			88
10:00	98					22:00	19				
10:15	81					22:15	13				
10:30	74					22:30	20				
10:45	78	331			331	22:45	17	69			69
11:00	70					23:00	18				
11:15	72					23:15	27				
11:30	85					23:30	9				
11:45	68	295			295	23:45	9	63			63
Total Vol.		2317			**2317**		2394				**2394**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
	4711				**4711**

	AM		PM	
Split %	100.0%	**49.2%**	100.0%	**50.8%**
Peak Hour	07:45	**07:45**	12:15	**12:15**
Volume	433	**433**	387	**387**
P.H.F.	0.91	**0.91**	0.91	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-077

Location: Hancock St. btwn. Gaines St. & Rosecrans St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	4					12:00	57				
00:15	8					12:15	69				
00:30	3					12:30	64				
00:45	6	21			21	12:45	69	259			259
01:00	3					13:00	49				
01:15	4					13:15	66				
01:30	5					13:30	42				
01:45	3	15			15	13:45	60	217			217
02:00	3					14:00	47				
02:15	6					14:15	52				
02:30	7					14:30	62				
02:45	5	21			21	14:45	67	228			228
03:00	5					15:00	73				
03:15	6					15:15	78				
03:30	1					15:30	63				
03:45	8	20			20	15:45	66	280			280
04:00	4					16:00	62				
04:15	9					16:15	76				
04:30	3					16:30	78				
04:45	12	28			28	16:45	71	287			287
05:00	6					17:00	70				
05:15	12					17:15	64				
05:30	17					17:30	41				
05:45	24	59			59	17:45	48	223			223
06:00	14					18:00	64				
06:15	22					18:15	38				
06:30	27					18:30	34				
06:45	33	96			96	18:45	33	169			169
07:00	32					19:00	25				
07:15	40					19:15	20				
07:30	45					19:30	24				
07:45	38	155			155	19:45	26	95			95
08:00	65					20:00	21				
08:15	42					20:15	15				
08:30	7					20:30	20				
08:45	0	114			114	20:45	16	72			72
09:00	0					21:00	20				
09:15	5					21:15	14				
09:30	30					21:30	19				
09:45	43	78			78	21:45	9	62			62
10:00	55					22:00	11				
10:15	54					22:15	13				
10:30	42					22:30	11				
10:45	53	204			204	22:45	6	41			41
11:00	39					23:00	5				
11:15	51					23:15	13				
11:30	64					23:30	5				
11:45	59	213			213	23:45	8	31			31
Total Vol.		1024			**1024**		1964				**1964**

Daily Totals

NB	SB	EB	WB	**Combined**
2988				**2988**

	AM		PM	
Split %	100.0%	**34.3%**	100.0%	**65.7%**
Peak Hour	11:30	**11:30**	16:15	**16:15**
Volume	249	**249**	295	**295**
P.H.F.	0.90	**0.90**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Hancock St (STATION#2603/FILE#MC0428-10)	Project:	10-4169-016	0	0	5,774	3,903	9,677

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			7	9		12:00			81	65	
00:15			5	9		12:15			88	68	
00:30			6	3		12:30			94	66	
00:45			3 21	7 28	49	12:45			90 353	54 253	606
01:00			5	6		13:00			66	68	
01:15			1	7		13:15			101	71	
01:30			3	2		13:30			85	67	
01:45			4 13	1 16	29	13:45			88 340	57 263	603
02:00			2	0		14:00			60	73	
02:15			0	6		14:15			65	92	
02:30			4	1		14:30			70	53	
02:45			3 9	0 7	16	14:45			75 270	73 291	561
03:00			4	2		15:00			65	72	
03:15			2	3		15:15			70	92	
03:30			6	2		15:30			74	94	
03:45			6 18	1 8	26	15:45			77 286	95 353	639
04:00			9	2		16:00			97	154	
04:15			14	2		16:15			92	114	
04:30			18	3		16:30			88	112	
04:45			26 67	3 10	77	16:45			88 365	92 472	837
05:00			36	4		17:00			97	106	
05:15			44	4		17:15			113	74	
05:30			71	6		17:30			111	80	
05:45			80 231	7 21	252	17:45			69 390	68 328	718
06:00			113	9		18:00			68	83	
06:15			148	12		18:15			58	70	
06:30			168	15		18:30			48	85	
06:45			198 627	15 51	678	18:45			60 234	58 296	530
07:00			151	25		19:00			48	46	
07:15			168	33		19:15			46	35	
07:30			165	37		19:30			43	48	
07:45			153 637	30 125	762	19:45			27 164	53 182	346
08:00			110	38		20:00			45	57	
08:15			86	36		20:15			30	53	
08:30			97	32		20:30			47	40	
08:45			90 383	39 145	528	20:45			30 152	67 217	369
09:00			90	39		21:00			32	39	
09:15			85	41		21:15			28	26	
09:30			80	45		21:30			19	27	
09:45			92 347	34 159	506	21:45			20 99	44 136	235
10:00			70	49		22:00			18	24	
10:15			71	45		22:15			14	12	
10:30			81	52		22:30			14	11	
10:45			81 303	63 209	512	22:45			9 55	7 54	109
11:00			100	68		23:00			11	7	
11:15			89	62		23:15			13	6	
11:30			99	57		23:30			9	2	
11:45			80 368	71 258	626	23:45			9 42	6 21	63
Total Vol.			3024	1037	**4061**				2750	2866	**5616**

	NB	SB	EB	WB	Total
Daily Totals :	0	0	5,774	3,903	9,677

	AM			PM		
Split %	74.5%	25.5%	**42.0%**	49.0%	51.0%	**58.0%**
AM				**PM**		
Peak Hr.	06:30	11:45	**06:45**	**Peak Hr.**	16:45	15:45	**16:00**
Volume	685	270	**792**	**Volume**	409	475	**837**
P.H.F.	0.865	0.951	**0.930**	**P.H.F.**	0.905	0.771	**0.834**
7 - 9 Vol.	1020	270	**1290**	**4 - 6 Vol.**	755	800	**1555**
Peak Hr.	07:00	08:00	**07:00**	**Peak Hr.**	16:45	16:00	**16:00**
Volume	637	145	**762**	**Volume**	409	472	**837**
P.H.F.	0.948	0.929	**0.943**	**P.H.F.**	0.905	0.766	**0.834**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-078

Location: Hancock St. btwn. Witherby St. & Noell St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		2					12:00	19		31				
00:15	1		2					12:15	17		42				
00:30	0		2					12:30	20		34				
00:45	0	3	1	7			10	12:45	16	72	26	133			205
01:00	1		1					13:00	22		29				
01:15	0		0					13:15	18		38				
01:30	2		0					13:30	12		42				
01:45	0	3	4	5			8	13:45	20	72	38	147			219
02:00	1		1					14:00	19		33				
02:15	0		0					14:15	17		32				
02:30	0		1					14:30	10		36				
02:45	0	1	1	3			4	14:45	11	57	29	130			187
03:00	0		1					15:00	19		47				
03:15	2		1					15:15	18		22				
03:30	2		1					15:30	8		42				
03:45	1	5	7	10			15	15:45	16	61	44	155			216
04:00	1		6					16:00	29		28				
04:15	2		1					16:15	25		20				
04:30	2		0					16:30	19		27				
04:45	0	5	3	10			15	16:45	14	87	39	114			201
05:00	1		6					17:00	18		54				
05:15	2		1					17:15	15		34				
05:30	5		6					17:30	19		24				
05:45	4	12	15	28			40	17:45	12	64	29	141			205
06:00	4		21					18:00	21		21				
06:15	1		18					18:15	45		23				
06:30	4		20					18:30	11		23				
06:45	5	14	25	84			98	18:45	11	88	18	85			173
07:00	11		23					19:00	7		21				
07:15	12		23					19:15	10		22				
07:30	5		46					19:30	11		18				
07:45	14	42	23	115			157	19:45	6	34	17	78			112
08:00	18		17					20:00	17		6				
08:15	7		31					20:15	9		9				
08:30	7		45					20:30	3		10				
08:45	11	43	20	113			156	20:45	7	36	4	29			65
09:00	9		49					21:00	6		6				
09:15	13		23					21:15	4		4				
09:30	10		38					21:30	13		10				
09:45	19	51	33	143			194	21:45	7	30	4	24			54
10:00	18		27					22:00	4		8				
10:15	17		33					22:15	4		5				
10:30	27		20					22:30	7		1				
10:45	21	83	19	99			182	22:45	1	16	1	15			31
11:00	18		28					23:00	1		2				
11:15	18		23					23:15	2		1				
11:30	20		34					23:30	0		4				
11:45	11	67	31	116			183	23:45	0	3	2	9			12
Total Vol.		329		733			**1062**			620		1060			**1680**

Daily Totals

NB	SB	EB	WB	Combined
949	1793			**2742**

	AM			PM		
Split %	31.0%	69.0%	**38.7%**	36.9%	63.1%	**61.3%**
Peak Hour	10:30	08:15	**11:30**	17:30	15:00	**13:15**
Volume	84	145	**205**	97	155	**220**
P.H.F.	0.78	0.74	**0.87**	0.54	0.82	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-079

Location: Kettner Blvd. btwn. Washington St. & Vine St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		55				12:00		380			
00:15		43				12:15		381			
00:30		28				12:30		400			
00:45		37	163		163	12:45		316	1477		1477
01:00		20				13:00		342			
01:15		19				13:15		341			
01:30		10				13:30		306			
01:45		14	63		63	13:45		303	1292		1292
02:00		18				14:00		326			
02:15		9				14:15		319			
02:30		6				14:30		304			
02:45		8	41		41	14:45		316	1265		1265
03:00		10				15:00		310			
03:15		10				15:15		281			
03:30		32				15:30		325			
03:45		22	74		74	15:45		306	1222		1222
04:00		63				16:00		333			
04:15		75				16:15		470			
04:30		141				16:30		470			
04:45		232	511		511	16:45		409	1682		1682
05:00		238				17:00		460			
05:15		298				17:15		439			
05:30		239				17:30		356			
05:45		279	1054		1054	17:45		356	1611		1611
06:00		233				18:00		348			
06:15		231				18:15		335			
06:30		255				18:30		299			
06:45		265	984		984	18:45		331	1313		1313
07:00		251				19:00		280			
07:15		284				19:15		271			
07:30		309				19:30		268			
07:45		360	1204		1204	19:45		279	1098		1098
08:00		367				20:00		253			
08:15		355				20:15		267			
08:30		378				20:30		244			
08:45		382	1482		1482	20:45		239	1003		1003
09:00		356				21:00		216			
09:15		381				21:15		221			
09:30		360				21:30		180			
09:45		407	1504		1504	21:45		179	796		796
10:00		344				22:00		148			
10:15		350				22:15		156			
10:30		353				22:30		147			
10:45		375	1422		1422	22:45		119	570		570
11:00		370				23:00		119			
11:15		396				23:15		77			
11:30		400				23:30		69			
11:45		379	1545		1545	23:45		81	346		346
Total Vol.			10047		**10047**				13675		**13675**

Daily Totals

NB	SB	EB	WB	Combined
	23722			**23722**

	AM		PM	
Split %	100.0%	**42.4%**	100.0%	**57.6%**
Peak Hour	11:15	**11:15**	16:15	**16:15**
Volume	1555	**1555**	1809	**1809**
P.H.F.	0.97	**0.97**	0.96	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-080

Location: Kettner Blvd. btwn. Vine St. & Sassafras St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		53				12:00		373			
00:15		47				12:15		377			
00:30		27				12:30		403			
00:45		36	163		163	12:45		382	1535		1535
01:00		23				13:00		349			
01:15		20				13:15		341			
01:30		11				13:30		305			
01:45		15	69		69	13:45		305	1300		1300
02:00		20				14:00		343			
02:15		10				14:15		324			
02:30		6				14:30		312			
02:45		9	45		45	14:45		317	1296		1296
03:00		10				15:00		300			
03:15		9				15:15		283			
03:30		28				15:30		318			
03:45		17	64		64	15:45		297	1198		1198
04:00		54				16:00		328			
04:15		68				16:15		463			
04:30		126				16:30		469			
04:45		216	464		464	16:45		399	1659		1659
05:00		213				17:00		450			
05:15		273				17:15		428			
05:30		207				17:30		353			
05:45		242	935		935	17:45		376	1607		1607
06:00		212				18:00		342			
06:15		215				18:15		329			
06:30		234				18:30		280			
06:45		239	900		900	18:45		320	1271		1271
07:00		238				19:00		266			
07:15		249				19:15		254			
07:30		292				19:30		250			
07:45		343	1122		1122	19:45		270	1040		1040
08:00		351				20:00		249			
08:15		333				20:15		273			
08:30		342				20:30		238			
08:45		364	1390		1390	20:45		231	991		991
09:00		342				21:00		211			
09:15		362				21:15		200			
09:30		357				21:30		192			
09:45		381	1442		1442	21:45		191	794		794
10:00		349				22:00		147			
10:15		339				22:15		154			
10:30		349				22:30		138			
10:45		369	1406		1406	22:45		124	563		563
11:00		366				23:00		114			
11:15		371				23:15		75			
11:30		402				23:30		64			
11:45		348	1487		1487	23:45		81	334		334
Total Vol.			9487		**9487**				13588		**13588**

Daily Totals

NB	SB	EB	WB	Combined
	23075			**23075**

	AM		PM	
Split %	100.0%	**41.1%**	100.0%	**58.9%**
Peak Hour	10:45	**10:45**	16:15	**16:15**
Volume	1508	**1508**	1781	**1781**
P.H.F.	0.94	**0.94**	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-081

Location: Kettner Blvd. btwn. Redwood St. & Palm St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		42				12:00		280			
00:15		32				12:15		337			
00:30		30				12:30		275			
00:45		23	127		127	12:45		310	1202		1202
01:00		17				13:00		291			
01:15		12				13:15		269			
01:30		11				13:30		276			
01:45		16	56		56	13:45		280	1116		1116
02:00		9				14:00		264			
02:15		8				14:15		276			
02:30		7				14:30		267			
02:45		9	33		33	14:45		264	1071		1071
03:00		9				15:00		247			
03:15		27				15:15		275			
03:30		20				15:30		272			
03:45		53	109		109	15:45		294	1088		1088
04:00		72				16:00		414			
04:15		100				16:15		397			
04:30		168				16:30		354			
04:45		177	517		517	16:45		410	1575		1575
05:00		222				17:00		383			
05:15		190				17:15		326			
05:30		214				17:30		290			
05:45		195	821		821	17:45		304	1303		1303
06:00		182				18:00		302			
06:15		230				18:15		240			
06:30		232				18:30		272			
06:45		209	853		853	18:45		235	1049		1049
07:00		232				19:00		239			
07:15		257				19:15		214			
07:30		317				19:30		222			
07:45		317	1123		1123	19:45		200	875		875
08:00		335				20:00		212			
08:15		304				20:15		208			
08:30		326				20:30		194			
08:45		316	1281		1281	20:45		187	801		801
09:00		297				21:00		177			
09:15		314				21:15		164			
09:30		357				21:30		144			
09:45		306	1274		1274	21:45		132	617		617
10:00		302				22:00		155			
10:15		281				22:15		133			
10:30		329				22:30		122			
10:45		317	1229		1229	22:45		106	516		516
11:00		331				23:00		57			
11:15		320				23:15		57			
11:30		311				23:30		69			
11:45		318	1280		1280	23:45		47	230		230
Total Vol.			8703		**8703**				11443		**11443**

Daily Totals

NB	SB	EB	WB	Combined
	20146			**20146**

	AM		PM	
Split %	100.0%	**43.2%**	100.0%	**56.8%**
Peak Hour	10:30	**10:30**	16:00	**16:00**
Volume	1297	**1297**	1575	**1575**
P.H.F.	0.98	**0.98**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just N/o Taylor St	Project:	10-4143-036	4,318	3,139	0	0	7,457

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		6					12:00	88		58				
00:15	11		3					12:15	58		67				
00:30	7		3					12:30	68		69				
00:45	5	32	1	13			45	12:45	84	298	57	251			549
01:00	5		3					13:00	50		43				
01:15	1		2					13:15	70		52				
01:30	2		3					13:30	69		32				
01:45	4	12	1	9			21	13:45	74	263	65	192			455
02:00	3		1					14:00	75		41				
02:15	6		3					14:15	62		55				
02:30	4		0					14:30	61		44				
02:45	1	14	1	5			19	14:45	69	267	50	190			457
03:00	3		0					15:00	75		43				
03:15	2		1					15:15	66		71				
03:30	3		3					15:30	70		59				
03:45	8	16	5	9			25	15:45	96	307	61	234			541
04:00	2		7					16:00	136		52				
04:15	3		4					16:15	154		60				
04:30	10		5					16:30	129		49				
04:45	7	22	11	27			49	16:45	139	558	42	203			761
05:00	10		5					17:00	103		66				
05:15	9		12					17:15	110		69				
05:30	15		20					17:30	120		65				
05:45	24	58	19	56			114	17:45	87	420	64	264			684
06:00	28		19					18:00	63		67				
06:15	22		32					18:15	46		40				
06:30	31		47					18:30	45		43				
06:45	46	127	53	151			278	18:45	30	184	30	180			364
07:00	41		53					19:00	33		28				
07:15	31		47					19:15	33		23				
07:30	51		64					19:30	44		21				
07:45	50	173	63	227			400	19:45	32	142	17	89			231
08:00	38		61					20:00	31		18				
08:15	48		44					20:15	23		12				
08:30	44		50					20:30	33		16				
08:45	44	174	52	207			381	20:45	26	113	8	54			167
09:00	46		61					21:00	34		15				
09:15	60		53					21:15	33		8				
09:30	64		62					21:30	31		8				
09:45	56	226	59	235			461	21:45	33	131	8	39			170
10:00	59		59					22:00	38		8				
10:15	59		58					22:15	40		11				
10:30	79		52					22:30	20		9				
10:45	81	278	40	209			487	22:45	25	123	11	39			162
11:00	58		54					23:00	30		8				
11:15	79		55					23:15	13		6				
11:30	86		77					23:30	14		4				
11:45	73	296	49	235			531	23:45	27	84	3	21			105
Total Vol.		1428		1383			**2811**			2890		1756			**4646**

	NB	SB	EB	WB	Total
Daily Totals :	**4,318**	**3,139**	**0**	**0**	**7,457**

	AM			PM			
Split %	50.8%	49.2%	**37.7%**	62.2%	37.8%		**62.3%**
AM				**PM**			
Peak Hr.	11:15	11:30	**11:15**	**Peak Hr.**	16:00	17:15	**16:00**
Volume	326	251	**565**	**Volume**	558	265	**761**
P.H.F.	0.926	0.815	**0.867**	**P.H.F.**	0.906	0.960	**0.889**
7 - 9 Vol.	347	434	**781**	**4 - 6 Vol.**	978	467	**1445**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:00	17:00	**16:00**
Volume	187	235	**419**	**Volume**	558	264	**761**
P.H.F.	0.917	0.918	**0.911**	**P.H.F.**	0.906	0.957	**0.889**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just S/o Taylor St	Project: 10-4143-037	8,122	5,199	0	0	13,321

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		3					12:00	120		82				
00:15	11		2					12:15	111		80				
00:30	11		5					12:30	103		82				
00:45	10	38	8	18			56	12:45	105	439	93	337			776
01:00	4		5					13:00	101		91				
01:15	3		5					13:15	96		86				
01:30	4		2					13:30	108		84				
01:45	2	13	2	14			27	13:45	121	426	85	346			772
02:00	4		4					14:00	108		84				
02:15	7		0					14:15	133		73				
02:30	3		1					14:30	150		84				
02:45	0	14	5	10			24	14:45	170	561	82	323			884
03:00	4		2					15:00	188		85				
03:15	4		2					15:15	194		81				
03:30	6		4					15:30	251		112				
03:45	12	26	6	14			40	15:45	224	857	90	368			1225
04:00	4		8					16:00	284		90				
04:15	1		6					16:15	263		88				
04:30	7		13					16:30	288		97				
04:45	9	21	26	53			74	16:45	289	1124	83	358			1482
05:00	23		19					17:00	283		82				
05:15	20		26					17:15	322		83				
05:30	34		34					17:30	242		75				
05:45	44	121	86	165			286	17:45	175	1022	82	322			1344
06:00	33		66					18:00	151		72				
06:15	53		109					18:15	113		58				
06:30	77		111					18:30	94		53				
06:45	70	233	115	401			634	18:45	80	438	57	240			678
07:00	91		121					19:00	83		44				
07:15	89		133					19:15	62		40				
07:30	86		120					19:30	54		42				
07:45	85	351	115	489			840	19:45	52	251	33	159			410
08:00	87		95					20:00	61		31				
08:15	95		82					20:15	50		38				
08:30	93		83					20:30	40		28				
08:45	96	371	95	355			726	20:45	39	190	28	125			315
09:00	92		77					21:00	28		26				
09:15	89		72					21:15	39		16				
09:30	104		82					21:30	33		17				
09:45	91	376	57	288			664	21:45	31	131	18	77			208
10:00	94		59					22:00	30		11				
10:15	101		68					22:15	37		16				
10:30	99		80					22:30	23		19				
10:45	110	404	91	298			702	22:45	24	114	16	62			176
11:00	113		71					23:00	25		14				
11:15	148		82					23:15	19		8				
11:30	138		84					23:30	11		13				
11:45	132	531	100	337			868	23:45	15	70	5	40			110
Total Vol.		2499		2442			**4941**			5623		2757			**8380**

	NB	SB	EB	WB	Total
Daily Totals :	8,122	5,199	0	0	13,321

	AM			PM			
Split %	50.6%	49.4%	**37.1%**		67.1%	32.9%	**62.9%**
AM				**PM**			
Peak Hr.	11:15	06:45	**11:15**	**Peak Hr.**	16:30	15:30	**16:30**
Volume	538	489	**886**	**Volume**	1182	380	**1527**
P.H.F.	0.909	0.919	**0.955**	**P.H.F.**	0.918	0.848	**0.943**
7 - 9 Vol.	722	844	**1566**	**4 - 6 Vol.**	2146	680	**2826**
Peak Hr.	08:00	07:00	**07:00**	**Peak Hr.**	16:30	16:00	**16:30**
Volume	371	489	**840**	**Volume**	1182	358	**1527**
P.H.F.	0.966	0.919	**0.946**	**P.H.F.**	0.918	0.923	**0.943**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-045

Location: Pacific Hy (STATION#2653/FILE#MC1190-10) between Sports Arena Blvd & Kurtz St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	12		12					12:00	164		209				
00:15	7		9					12:15	168		221				
00:30	10		9					12:30	157		269				
00:45	7	36	13	43			79	12:45	157	646	247	946			1592
01:00	12		22					13:00	181		246				
01:15	14		10					13:15	168		233				
01:30	4		10					13:30	173		215				
01:45	6	36	10	52			88	13:45	146	668	211	905			1573
02:00	5		7					14:00	154		209				
02:15	13		4					14:15	155		209				
02:30	6		0					14:30	159		215				
02:45	10	34	6	17			51	14:45	165	633	224	857			1490
03:00	6		9					15:00	174		204				
03:15	13		2					15:15	194		231				
03:30	9		16					15:30	224		256				
03:45	11	39	7	34			73	15:45	196	788	243	934			1722
04:00	9		12					16:00	218		253				
04:15	20		27					16:15	194		252				
04:30	15		28					16:30	227		296				
04:45	33	77	27	94			171	16:45	232	871	287	1088			1959
05:00	17		36					17:00	223		268				
05:15	35		41					17:15	274		233				
05:30	51		64					17:30	256		204				
05:45	86	189	91	232			421	17:45	195	948	195	900			1848
06:00	56		90					18:00	139		191				
06:15	77		98					18:15	112		153				
06:30	90		126					18:30	91		156				
06:45	145	368	151	465			833	18:45	91	433	146	646			1079
07:00	130		128					19:00	77		127				
07:15	141		146					19:15	62		99				
07:30	150		178					19:30	57		98				
07:45	162	583	193	645			1228	19:45	55	251	92	416			667
08:00	183		188					20:00	62		83				
08:15	180		192					20:15	43		69				
08:30	163		144					20:30	52		74				
08:45	148	674	156	680			1354	20:45	47	204	68	294			498
09:00	145		127					21:00	50		77				
09:15	149		145					21:15	33		71				
09:30	138		143					21:30	50		72				
09:45	165	597	156	571			1168	21:45	39	172	60	280			452
10:00	141		150					22:00	28		43				
10:15	135		169					22:15	40		60				
10:30	158		133					22:30	30		44				
10:45	137	571	169	621			1192	22:45	24	122	38	185			307
11:00	173		166					23:00	28		28				
11:15	190		175					23:15	23		22				
11:30	152		204					23:30	17		47				
11:45	149	664	212	757			1421	23:45	18	86	20	117			203
Total Vol.		3868		4211			**8079**			5822		7568			**13390**

Daily Totals

NB	SB	EB	WB	Combined
9690	11779			**21469**

	AM			PM		
Split %	47.9%	52.1%	**37.6%**	43.5%	56.5%	**62.4%**
Peak Hour	07:45	11:45	**11:45**	16:45	16:15	**16:30**
Volume	688	911	**1549**	985	1103	**2040**
P.H.F.	0.94	0.85	**0.91**	0.92	0.93	**0.98**

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-001
Location: Pacific Hwy between Barnett Ave & Enterprise St File No. MC0305-10

Start	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	0			16	195				
12:15	0	0			12	204				
12:30	0	0			15	196				
12:45	0	0			16	189	59	784		
1:00	0	0			9	198				
1:15	0	0			7	175				
1:30	0	0			8	195				
1:45	0	0			6	177	30	745		
2:00	0	0			12	212				
2:15	0	0			5	200				
2:30	0	0			3	282				
2:45	0	0			5	219	25	913		
3:00	0	0			8	260				
3:15	0	0			6	206				
3:30	0	0			4	278				
3:45	0	0			8	253	26	997		
4:00	0	0			13	300				
4:15	0	0			19	259				
4:30	0	0			28	343				
4:45	0	0			15	308	75	1210		
5:00	0	0			20	290				
5:15	0	0			27	236				
5:30	0	0			38	207				
5:45	0	0			33	196	118	929		
6:00	0	0			45	209				
6:15	0	0			35	173				
6:30	0	0			53	176				
6:45	0	0			66	190	199	748		
7:00	0	0			85	167				
7:15	0	0			92	167				
7:30	0	0			97	149				
7:45	0	0			102	165	376	648		
8:00	0	0			98	136				
8:15	0	0			108	152				
8:30	0	0			105	135				
8:45	0	0			101	122	412	545		
9:00	0	0			107	160				
9:15	0	0			110	124				
9:30	0	0			124	132	0			
9:45	0	0			132	114	473	530		
10:00	0	0			139	95				
10:15	0	0			146	89				
10:30	0	0			139	79				
10:45	0	0			160	74	584	337		
11:00	0	0			167	49				
11:15	0	0			165	34				
11:30	0	0			191	58				
11:45	0	0			147	28	670	169		
Total	0	0	0	0	3047	8555	3047	8555	0	0
Combined Total	0		0		11602		11602		0	
AM Peak					11:45 AM					
Vol.					742					
P.H.F.					0.909					
PM Peak						4:00 PM				
Vol.						1210				
P.H.F.						0.882				
Percentage					26.3%	73.7%				

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-073

Location: Pacific Highway btwn. Barnett Ave. & Washington St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	40		69					12:00	471		401				
00:15	35		43					12:15	456		459				
00:30	44		31					12:30	424		443				
00:45	22	141	36	179			320	12:45	417	1768	470	1773			3541
01:00	19		33					13:00	382		438				
01:15	21		33					13:15	391		482				
01:30	15		20					13:30	431		426				
01:45	17	72	18	104			176	13:45	378	1582	478	1824			3406
02:00	22		22					14:00	369		459				
02:15	16		17					14:15	379		493				
02:30	14		19					14:30	398		524				
02:45	30	82	15	73			155	14:45	439	1585	525	2001			3586
03:00	22		19					15:00	445		582				
03:15	31		14					15:15	440		555				
03:30	30		25					15:30	449		709				
03:45	56	139	25	83			222	15:45	482	1816	721	2567			4383
04:00	46		30					16:00	459		775				
04:15	100		87					16:15	431		699				
04:30	108		104					16:30	434		748				
04:45	158	412	133	354			766	16:45	464	1788	649	2871			4659
05:00	208		139					17:00	443		697				
05:15	322		166					17:15	479		583				
05:30	289		185					17:30	425		560				
05:45	355	1174	210	700			1874	17:45	407	1754	534	2374			4128
06:00	347		228					18:00	335		488				
06:15	420		221					18:15	310		404				
06:30	494		185					18:30	301		387				
06:45	543	1804	215	849			2653	18:45	282	1228	339	1618			2846
07:00	607		242					19:00	221		353				
07:15	573		260					19:15	201		308				
07:30	546		319					19:30	205		288				
07:45	613	2339	302	1123			3462	19:45	190	817	262	1211			2028
08:00	592		308					20:00	160		249				
08:15	550		353					20:15	169		244				
08:30	496		411					20:30	165		243				
08:45	476	2114	304	1376			3490	20:45	126	620	224	960			1580
09:00	404		322					21:00	121		204				
09:15	375		296					21:15	112		198				
09:30	335		312					21:30	124		186				
09:45	417	1531	304	1234			2765	21:45	126	483	154	742			1225
10:00	355		304					22:00	109		146				
10:15	380		358					22:15	104		142				
10:30	346		343					22:30	113		112				
10:45	380	1461	326	1331			2792	22:45	101	427	87	487			914
11:00	360		354					23:00	62		80				
11:15	398		369					23:15	79		66				
11:30	412		400					23:30	53		94				
11:45	454	1624	408	1531			3155	23:45	63	257	62	302			559
Total Vol.		12893		8937			**21830**			14125		18730			**32855**

Daily Totals

NB	SB	EB	WB	Combined
27018	27667			**54685**

	AM			PM		
Split %	59.1%	40.9%	**39.9%**	43.0%	57.0%	**60.1%**
Peak Hour	07:00	11:45	**07:45**	15:15	15:45	**15:45**
Volume	2339	1711	**3625**	1830	2943	**4749**
P.H.F.	0.95	0.93	**0.99**	0.95	0.95	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-074

Location: Pacific Highway btwn. Washington St. & Sassafras St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	14		6					12:00	145		67				
00:15	12		6					12:15	148		92				
00:30	15		2					12:30	147		88				
00:45	10	51	5	19			70	12:45	139	579	75	322			901
01:00	7		7					13:00	130		90				
01:15	9		2					13:15	120		92				
01:30	6		5					13:30	115		80				
01:45	8	30	2	16			46	13:45	133	498	91	353			851
02:00	5		2					14:00	124		77				
02:15	3		1					14:15	116		72				
02:30	4		6					14:30	130		102				
02:45	2	14	3	12			26	14:45	143	513	94	345			858
03:00	6		5					15:00	117		83				
03:15	7		2					15:15	114		98				
03:30	1		2					15:30	109		65				
03:45	7	21	5	14			35	15:45	146	486	95	341			827
04:00	6		2					16:00	117		102				
04:15	11		8					16:15	131		87				
04:30	10		13					16:30	130		96				
04:45	14	41	16	39			80	16:45	116	494	81	366			860
05:00	18		14					17:00	128		118				
05:15	22		21					17:15	175		94				
05:30	20		28					17:30	134		95				
05:45	24	84	16	79			163	17:45	125	562	80	387			949
06:00	27		16					18:00	110		97				
06:15	33		15					18:15	87		73				
06:30	59		31					18:30	97		64				
06:45	58	177	37	99			276	18:45	73	367	54	288			655
07:00	56		32					19:00	81		50				
07:15	55		36					19:15	88		55				
07:30	89		67					19:30	82		61				
07:45	91	291	56	191			482	19:45	66	317	67	233			550
08:00	82		40					20:00	59		50				
08:15	84		66					20:15	62		43				
08:30	89		66					20:30	79		47				
08:45	100	355	49	221			576	20:45	46	246	47	187			433
09:00	112		71					21:00	41		50				
09:15	79		60					21:15	52		29				
09:30	103		75					21:30	54		29				
09:45	119	413	73	279			692	21:45	45	192	28	136			328
10:00	108		53					22:00	49		29				
10:15	120		81					22:15	53		21				
10:30	100		62					22:30	45		12				
10:45	126	454	74	270			724	22:45	46	193	12	74			267
11:00	117		73					23:00	32		13				
11:15	136		83					23:15	25		9				
11:30	137		79					23:30	24		12				
11:45	150	540	83	318			858	23:45	13	94	10	44			138
Total Vol.		2471		1557			**4028**			4541		3076			**7617**

Daily Totals

NB	SB	EB	WB	Combined
7012	4633			**11645**

	AM			PM		
Split %	61.3%	38.7%	**34.6%**	59.6%	40.4%	**65.4%**
Peak Hour	11:45	11:45	**11:45**	12:00	16:30	**17:00**
Volume	590	330	**920**	579	389	**949**
P.H.F.	0.98	0.90	**0.96**	0.98	0.82	**0.88**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-044

Location: Pacific Hy (STATION#2657/FILE#MC1189-10) between Palm St & Sassafras St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	38		24					12:00	169		184				
00:15	17		20					12:15	154		151				
00:30	31		22					12:30	168		189				
00:45	26	112	31	97			209	12:45	150	641	178	702			1343
01:00	38		22					13:00	157		165				
01:15	26		20					13:15	170		172				
01:30	17		9					13:30	182		181				
01:45	8	89	8	59			148	13:45	149	658	178	696			1354
02:00	11		8					14:00	171		133				
02:15	6		3					14:15	154		140				
02:30	7		5					14:30	168		165				
02:45	4	28	3	19			47	14:45	165	658	152	590			1248
03:00	2		7					15:00	151		123				
03:15	1		1					15:15	170		153				
03:30	3		8					15:30	149		137				
03:45	7	13	16	32			45	15:45	192	662	142	555			1217
04:00	14		18					16:00	154		173				
04:15	15		33					16:15	156		172				
04:30	19		49					16:30	168		174				
04:45	30	78	71	171			249	16:45	159	637	222	741			1378
05:00	28		79					17:00	167		235				
05:15	30		83					17:15	199		199				
05:30	51		76					17:30	178		194				
05:45	51	160	75	313			473	17:45	141	685	191	819			1504
06:00	55		79					18:00	139		172				
06:15	50		91					18:15	115		147				
06:30	63		105					18:30	92		139				
06:45	63	231	121	396			627	18:45	110	456	121	579			1035
07:00	67		117					19:00	107		129				
07:15	80		131					19:15	92		104				
07:30	93		146					19:30	63		94				
07:45	112	352	151	545			897	19:45	78	340	85	412			752
08:00	116		143					20:00	84		102				
08:15	121		168					20:15	77		73				
08:30	105		144					20:30	73		96				
08:45	124	466	138	593			1059	20:45	91	325	74	345			670
09:00	102		114					21:00	84		76				
09:15	157		158					21:15	90		75				
09:30	119		149					21:30	93		76				
09:45	142	520	131	552			1072	21:45	85	352	64	291			643
10:00	117		134					22:00	94		62				
10:15	155		156					22:15	84		62				
10:30	161		133					22:30	53		51				
10:45	144	577	139	562			1139	22:45	53	284	28	203			487
11:00	164		153					23:00	52		26				
11:15	148		166					23:15	46		23				
11:30	149		196					23:30	37		16				
11:45	155	616	189	704			1320	23:45	31	166	9	74			240
Total Vol.		3242		4043			**7285**			5864		6007			**11871**

Daily Totals

	NB	SB	EB	WB	Combined
	9106	10050			**19156**

	AM			PM		
Split %	44.5%	55.5%	**38.0%**	49.4%	50.6%	**62.0%**
Peak Hour	11:45	11:15	**11:45**	16:45	16:45	**16:45**
Volume	646	735	**1359**	703	850	**1553**
P.H.F.	0.96	0.94	**0.95**	0.91	0.90	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-069

Location: Congress St. btwn. Taylor St. & Twiggs St.

AM Period	NB		SB		EB	WB	PM Period	NB		SB		EB	WB	
00:00	6		4				12:00	45		34				
00:15	4		5				12:15	32		23				
00:30	2		3				12:30	28		24				
00:45	5	17	2	14		31	12:45	37	142	31	112			254
01:00	2		6				13:00	37		38				
01:15	1		2				13:15	32		37				
01:30	2		0				13:30	40		27				
01:45	1	6	1	9		15	13:45	37	146	47	149			295
02:00	2		1				14:00	32		38				
02:15	0		0				14:15	38		40				
02:30	1		4				14:30	33		42				
02:45	1	4	1	6		10	14:45	44	147	44	164			311
03:00	2		0				15:00	37		43				
03:15	0		1				15:15	41		47				
03:30	1		2				15:30	34		40				
03:45	1	4	1	4		8	15:45	34	146	37	167			313
04:00	3		2				16:00	44		40				
04:15	2		1				16:15	35		26				
04:30	3		5				16:30	41		32				
04:45	2	10	1	9		19	16:45	32	152	36	134			286
05:00	3		0				17:00	57		27				
05:15	6		4				17:15	52		34				
05:30	4		4				17:30	47		40				
05:45	11	24	3	11		35	17:45	40	196	40	141			337
06:00	11		4				18:00	36		39				
06:15	5		12				18:15	34		55				
06:30	7		6				18:30	50		46				
06:45	11	34	14	36		70	18:45	37	157	63	203			360
07:00	16		20				19:00	28		58				
07:15	16		14				19:15	31		36				
07:30	27		20				19:30	35		27				
07:45	19	78	29	83		161	19:45	24	118	26	147			265
08:00	26		15				20:00	41		24				
08:15	17		20				20:15	39		19				
08:30	21		13				20:30	49		28				
08:45	25	89	43	91		180	20:45	38	167	16	87			254
09:00	26		31				21:00	39		18				
09:15	30		17				21:15	49		20				
09:30	27		37				21:30	39		11				
09:45	18	101	34	119		220	21:45	21	148	13	62			210
10:00	21		36				22:00	15		17				
10:15	24		25				22:15	16		11				
10:30	23		33				22:30	18		7				
10:45	19	87	29	123		210	22:45	11	60	6	41			101
11:00	25		32				23:00	10		7				
11:15	29		28				23:15	9		4				
11:30	20		37				23:30	11		6				
11:45	28	102	25	122		224	23:45	7	37	6	23			60
Total Vol.		556		627		**1183**			1616		1430			**3046**

Daily Totals

NB	SB	EB	WB	Combined
2172	2057			**4229**

	AM			PM		
Split %	47.0%	53.0%	**28.0%**	53.1%	46.9%	**72.0%**
Peak Hour	11:45	09:30	**11:15**	17:00	18:15	**18:15**
Volume	133	132	**246**	196	222	**371**
P.H.F.	0.74	0.89	**0.78**	0.86	0.88	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-070

Location: Congress St. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	8		6					12:00	49		47				
00:15	1		6					12:15	34		25				
00:30	1		5					12:30	36		25				
00:45	4	14	3	20			34	12:45	30	149	43	140			289
01:00	2		3					13:00	42		51				
01:15	0		2					13:15	24		42				
01:30	1		0					13:30	38		42				
01:45	1	4	1	6			10	13:45	30	134	36	171			305
02:00	1		0					14:00	22		43				
02:15	0		1					14:15	26		30				
02:30	1		3					14:30	31		33				
02:45	2	4	1	5			9	14:45	38	117	39	145			262
03:00	0		1					15:00	32		33				
03:15	4		3					15:15	30		40				
03:30	1		1					15:30	30		48				
03:45	1	6	0	5			11	15:45	32	124	51	172			296
04:00	0		1					16:00	42		46				
04:15	2		1					16:15	27		34				
04:30	1		4					16:30	30		32				
04:45	2	5	2	8			13	16:45	36	135	40	152			287
05:00	4		3					17:00	56		35				
05:15	5		2					17:15	54		35				
05:30	5		4					17:30	41		38				
05:45	10	24	3	12			36	17:45	35	186	45	153			339
06:00	12		5					18:00	29		42				
06:15	5		12					18:15	39		55				
06:30	9		7					18:30	44		55				
06:45	11	37	14	38			75	18:45	37	149	57	209			358
07:00	16		13					19:00	30		65				
07:15	17		16					19:15	31		48				
07:30	26		21					19:30	31		36				
07:45	19	78	24	74			152	19:45	39	131	15	164			295
08:00	19		17					20:00	59		14				
08:15	13		21					20:15	64		12				
08:30	22		17					20:30	67		19				
08:45	23	77	36	91			168	20:45	46	236	16	61			297
09:00	27		31					21:00	52		20				
09:15	34		24					21:15	54		21				
09:30	29		32					21:30	49		14				
09:45	33	123	28	115			238	21:45	36	191	18	73			264
10:00	32		29					22:00	31		13				
10:15	27		31					22:15	21		4				
10:30	24		36					22:30	14		12				
10:45	13	96	13	109			205	22:45	9	75	8	37			112
11:00	54		18					23:00	11		8				
11:15	35		29					23:15	5		3				
11:30	28		43					23:30	9		6				
11:45	38	155	26	116			271	23:45	6	31	6	23			54
Total Vol.		623		599			**1222**			1658		1500			**3158**

Daily Totals

	NB	SB	EB	WB	Combined
	2281	2099			**4380**

	AM			PM		
Split %	51.0%	49.0%	**27.9%**	52.5%	47.5%	**72.1%**
Peak Hour	11:45	11:15	**11:15**	20:00	18:15	**18:15**
Volume	157	145	**295**	236	232	**382**
P.H.F.	0.80	0.77	**0.77**	0.88	0.89	**0.96**

Prepared by NDS/ATD

Volumes for: Thursday, October 28, 2010 | **City: San Diego**

Location: Congress St (STATION#2466/FILE#MC0940-10) | **Project: 10-4300-021**

Daily Totals	NB	SB	EB	WB	Total
	1,891	2,392	0	0	4,283

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		3					12:00	42		38				
00:15	2		4					12:15	37		35				
00:30	3		1					12:30	36		45				
00:45	2	7	0	8	15			12:45	39	154	58	176			330
01:00	0		5					13:00	30		39				
01:15	1		1					13:15	29		47				
01:30	4		3					13:30	37		39				
01:45	0	5	1	10	15			13:45	28	124	54	179			303
02:00	2		0					14:00	19		37				
02:15	0		2					14:15	23		40				
02:30	0		1					14:30	27		46				
02:45	0	2	0	3	5			14:45	34	103	41	164			267
03:00	1		3					15:00	19		36				
03:15	2		5					15:15	36		32				
03:30	5		2					15:30	30		44				
03:45	3	11	4	14	25			15:45	30	115	56	168			283
04:00	0		2					16:00	33		47				
04:15	1		0					16:15	34		38				
04:30	1		0					16:30	46		65				
04:45	2	4	3	5	9			16:45	58	171	58	208			379
05:00	2		0					17:00	48		55				
05:15	2		3					17:15	45		46				
05:30	7		3					17:30	48		54				
05:45	6	17	5	11	28			17:45	40	181	39	194			375
06:00	3		13					18:00	37		44				
06:15	14		12					18:15	52		36				
06:30	10		13					18:30	23		53				
06:45	22	49	17	55	104			18:45	31	143	41	174			317
07:00	11		13					19:00	18		39				
07:15	17		25					19:15	23		42				
07:30	23		35					19:30	16		31				
07:45	17	68	38	111	179			19:45	25	82	40	152			234
08:00	34		18					20:00	16		32				
08:15	23		17					20:15	17		24				
08:30	31		36					20:30	23		26				
08:45	41	129	32	103	232			20:45	15	71	36	118			189
09:00	24		28					21:00	13		30				
09:15	39		28					21:15	9		12				
09:30	30		31					21:30	14		29				
09:45	22	115	31	118	233			21:45	15	51	30	101			152
10:00	30		30					22:00	14		18				
10:15	33		38					22:15	6		16				
10:30	23		19					22:30	7		14				
10:45	36	122	28	115	237			22:45	3	30	10	58			88
11:00	27		33					23:00	3		17				
11:15	26		28					23:15	0		7				
11:30	29		29					23:30	2		3				
11:45	49	131	27	117	248			23:45	1	6	3	30			36
Total Vol.		660		670	**1330**					1231		1722			**2953**

	NB	SB	EB	WB	Total
Daily Totals :	**1,891**	**2,392**	**0**	**0**	**4,283**

	AM			PM			
Split %	49.6%	50.4%	**31.1%**	41.7%	58.3%		**68.9%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	164	145	**309**	**Volume**	199	224	**421**
P.H.F.	0.837	0.806	**0.954**	**P.H.F.**	0.858	0.862	**0.907**
7 - 9 Vol.	197	214	**411**	**4 - 6 Vol.**	352	402	**754**
Peak Hr.	08:00	07:15	**08:00**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	129	116	**232**	**Volume**	199	224	**421**
P.H.F.	0.787	0.763	**0.795**	**P.H.F.**	0.858	0.862	**0.907**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-067

Location: San Diego Ave. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		0					12:00	22		32				
00:15	2		2					12:15	20		39				
00:30	2		1					12:30	17		38				
00:45	3	11	6	9			20	12:45	19	78	37	146			224
01:00	1		4					13:00	13		38				
01:15	1		3					13:15	18		38				
01:30	2		0					13:30	18		34				
01:45	1	5	0	7			12	13:45	17	66	36	146			212
02:00	6		3					14:00	19		33				
02:15	1		0					14:15	33		39				
02:30	1		1					14:30	30		34				
02:45	0	8	0	4			12	14:45	35	117	31	137			254
03:00	0		0					15:00	28		34				
03:15	0		1					15:15	24		38				
03:30	2		1					15:30	29		42				
03:45	0	2	0	2			4	15:45	33	114	40	154			268
04:00	1		0					16:00	30		43				
04:15	1		3					16:15	32		39				
04:30	0		1					16:30	22		34				
04:45	0	2	2	6			8	16:45	36	120	25	141			261
05:00	2		3					17:00	51		27				
05:15	2		1					17:15	60		26				
05:30	6		0					17:30	55		30				
05:45	3	13	1	5			18	17:45	41	207	31	114			321
06:00	2		0					18:00	46		43				
06:15	5		5					18:15	27		36				
06:30	7		1					18:30	38		43				
06:45	5	19	7	13			32	18:45	47	158	40	162			320
07:00	12		5					19:00	29		23				
07:15	10		5					19:15	36		34				
07:30	19		13					19:30	28		21				
07:45	12	53	17	40			93	19:45	31	124	13	91			215
08:00	24		16					20:00	39		15				
08:15	11		18					20:15	34		15				
08:30	22		18					20:30	23		17				
08:45	37	94	23	75			169	20:45	25	121	14	61			182
09:00	31		23					21:00	29		24				
09:15	22		20					21:15	26		13				
09:30	26		20					21:30	19		14				
09:45	35	114	23	86			200	21:45	29	103	7	58			161
10:00	37		28					22:00	23		10				
10:15	28		28					22:15	14		8				
10:30	22		26					22:30	18		7				
10:45	20	107	26	108			215	22:45	19	74	15	40			114
11:00	24		24					23:00	6		7				
11:15	29		20					23:15	9		7				
11:30	22		22					23:30	4		4				
11:45	20	95	19	85			180	23:45	3	22	3	21			43
Total Vol.		523		440			**963**			1304		1271			**2575**

Daily Totals

NB	SB	EB	WB	Combined
1827	1711			**3538**

	AM			PM		
Split %	54.3%	45.7%	**27.2%**	50.6%	49.4%	**72.8%**
Peak Hour	09:30	11:45	**09:45**	17:00	15:30	**17:15**
Volume	126	128	**227**	207	164	**332**
P.H.F.	0.85	0.82	**0.87**	0.86	0.95	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-068

Location: San Diego Ave. btwn. Conde St. & Arista St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		2					12:00	25		29				
00:15	3		3					12:15	21		33				
00:30	1		1					12:30	28		30				
00:45	2	11	6	12			23	12:45	32	106	28	120			226
01:00	3		7					13:00	30		24				
01:15	2		3					13:15	33		21				
01:30	3		4					13:30	29		14				
01:45	3	11	2	16			27	13:45	28	120	19	78			198
02:00	2		2					14:00	32		22				
02:15	1		1					14:15	30		20				
02:30	2		0					14:30	33		24				
02:45	0	5	1	4			9	14:45	39	134	41	107			241
03:00	0		0					15:00	31		52				
03:15	0		1					15:15	44		49				
03:30	1		1					15:30	40		43				
03:45	1	2	0	2			4	15:45	35	150	40	184			334
04:00	2		1					16:00	30		45				
04:15	2		1					16:15	34		47				
04:30	1		2					16:30	32		51				
04:45	6	11	1	5			16	16:45	44	140	55	198			338
05:00	1		5					17:00	54		58				
05:15	3		2					17:15	72		60				
05:30	7		3					17:30	69		52				
05:45	7	18	5	15			33	17:45	61	256	28	198			454
06:00	6		3					18:00	45		48				
06:15	11		1					18:15	33		49				
06:30	14		4					18:30	37		38				
06:45	13	44	19	27			71	18:45	46	161	53	188			349
07:00	24		14					19:00	45		39				
07:15	27		12					19:15	35		42				
07:30	21		18					19:30	38		47				
07:45	35	107	21	65			172	19:45	30	148	46	174			322
08:00	34		15					20:00	36		39				
08:15	23		22					20:15	33		33				
08:30	26		13					20:30	28		38				
08:45	43	126	19	69			195	20:45	28	125	36	146			271
09:00	33		22					21:00	25		45				
09:15	24		30					21:15	24		45				
09:30	38		26					21:30	21		28				
09:45	47	142	13	91			233	21:45	15	85	32	150			235
10:00	35		29					22:00	25		30				
10:15	30		21					22:15	13		13				
10:30	28		19					22:30	16		19				
10:45	29	122	22	91			213	22:45	14	68	23	85			153
11:00	22		16					23:00	9		15				
11:15	20		19					23:15	10		9				
11:30	24		14					23:30	5		11				
11:45	29	95	21	70			165	23:45	3	27	8	43			70
Total Vol.		694		467			**1161**			1520		1671			**3191**

Daily Totals

NB	SB	EB	WB	Combined
2214	2138			**4352**

	AM			PM		
Split %	59.8%	40.2%	**26.7%**	47.6%	52.4%	**73.3%**
Peak Hour	09:30	11:45	**09:15**	17:00	16:45	**16:45**
Volume	150	113	**242**	256	225	**464**
P.H.F.	0.80	0.86	**0.95**	0.89	0.94	**0.88**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: San Diego Ave (STATION#2460/FILE#MC0424-10)	Project:	10-4169-012	5,458	4,702	0	0	10,160

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		16					12:00	106		60				
00:15	7		16					12:15	82		76				
00:30	7		8					12:30	87		72				
00:45	1	20	10	50			70	12:45	92	367	70	278			645
01:00	6		5					13:00	83		69				
01:15	4		4					13:15	86		82				
01:30	3		2					13:30	73		66				
01:45	1	14	1	12			26	13:45	84	326	71	288			614
02:00	2		5					14:00	90		70				
02:15	2		3					14:15	92		83				
02:30	8		5					14:30	111		82				
02:45	0	12	2	15			27	14:45	105	398	87	322			720
03:00	1		2					15:00	99		83				
03:15	4		0					15:15	92		93				
03:30	2		5					15:30	103		87				
03:45	3	10	3	10			20	15:45	113	407	86	349			756
04:00	2		9					16:00	108		86				
04:15	1		2					16:15	123		82				
04:30	4		1					16:30	135		94				
04:45	5	12	3	15			27	16:45	131	497	82	344			841
05:00	3		9					17:00	146		97				
05:15	5		11					17:15	162		100				
05:30	10		9					17:30	119		98				
05:45	11	29	7	36			65	17:45	123	550	100	395			945
06:00	11		9					18:00	122		77				
06:15	16		16					18:15	122		63				
06:30	33		14					18:30	115		77				
06:45	29	89	22	61			150	18:45	96	455	67	284			739
07:00	48		25					19:00	121		90				
07:15	34		28					19:15	82		78				
07:30	50		31					19:30	85		80				
07:45	52	184	32	116			300	19:45	68	356	69	317			673
08:00	58		27					20:00	68		82				
08:15	52		28					20:15	71		65				
08:30	45		32					20:30	65		77				
08:45	78	233	50	137			370	20:45	47	251	105	329			580
09:00	62		39					21:00	31		86				
09:15	59		36					21:15	29		74				
09:30	73		39					21:30	38		101				
09:45	80	274	43	157			431	21:45	27	125	93	354			479
10:00	69		33					22:00	33		106				
10:15	90		49					22:15	27		100				
10:30	81		57					22:30	23		61				
10:45	85	325	57	196			521	22:45	19	102	56	323			425
11:00	79		55					23:00	11		35				
11:15	109		56					23:15	12		19				
11:30	90		59					23:30	5		24				
11:45	110	388	48	218			606	23:45	6	34	18	96			130
Total Vol.		1590		1023			**2613**			3868		3679			**7547**

	NB	SB	EB	WB	Total
Daily Totals :	**5,458**	**4,702**	**0**	**0**	**10,160**

	AM			PM			
Split %	60.8%	39.2%	**25.7%**	51.3%	48.7%		**74.3%**
AM				**PM**			
Peak Hr.	11:15	11:45	**11:45**	**Peak Hr.**	16:30	21:30	**16:30**
Volume	415	256	**641**	**Volume**	574	400	**947**
P.H.F.	0.943	0.842	**0.965**	**P.H.F.**	0.886	0.943	**0.904**
7 - 9 Vol.	417	253	**670**	**4 - 6 Vol.**	1047	739	**1786**
Peak Hr.	08:00	08:00	**08:00**	**Peak Hr.**	16:30	17:00	**16:30**
Volume	233	137	**370**	**Volume**	574	395	**947**
P.H.F.	0.747	0.685	**0.723**	**P.H.F.**	0.886	0.988	**0.904**

Prepared by NDS/ATD

VOLUME

San Diego Ave from Old Town Ave to Witherby St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_004

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	8		2				10		12:00	56		35				91	
00:15	8		7				15		12:15	97		35				132	
00:30	5		3				8		12:30	63		45				108	
00:45	3	24	3	15			6	39	12:45	60	276	54	169			114	445
01:00	2		1				3		13:00	60		44				104	
01:15	4		1				5		13:15	69		39				108	
01:30	1		2				3		13:30	53		30				83	
01:45	2	9	3	7			5	16	13:45	61	243	34	147			95	390
02:00	1		2				3		14:00	39		36				75	
02:15	2		2				4		14:15	48		45				93	
02:30	1		0				1		14:30	53		29				82	
02:45	0	4	2	6			2	10	14:45	58	198	34	144			92	342
03:00	3		0				3		15:00	49		31				80	
03:15	1		0				1		15:15	52		37				89	
03:30	0		1				1		15:30	46		40				86	
03:45	1	5	0	1			1	6	15:45	50	197	32	140			82	337
04:00	1		2				3		16:00	53		29				82	
04:15	2		2				4		16:15	44		33				77	
04:30	4		1				5		16:30	49		38				87	
04:45	3	10	4	9			7	19	16:45	53	199	41	141			94	340
05:00	5		5				10		17:00	59		52				111	
05:15	7		2				9		17:15	60		48				108	
05:30	10		3				13		17:30	53		51				104	
05:45	10	32	3	13			13	45	17:45	47	219	40	191			87	410
06:00	23		4				27		18:00	57		42				99	
06:15	20		8				28		18:15	71		38				109	
06:30	28		9				37		18:30	61		42				103	
06:45	26	97	10	31			36	128	18:45	47	236	44	166			91	402
07:00	26		15				41		19:00	65		45				110	
07:15	39		12				51		19:15	48		36				84	
07:30	52		16				68		19:30	33		42				75	
07:45	77	194	26	69			103	263	19:45	37	183	19	142			56	325
08:00	41		30				71		20:00	34		21				55	
08:15	63		15				78		20:15	44		23				67	
08:30	64		24				88		20:30	29		30				59	
08:45	41	209	28	97			69	306	20:45	22	129	18	92			40	221
09:00	46		33				79		21:00	30		23				53	
09:15	52		26				78		21:15	30		34				64	
09:30	33		35				68		21:30	32		23				55	
09:45	61	192	28	122			89	314	21:45	17	109	17	97			34	206
10:00	45		32				77		22:00	14		16				30	
10:15	45		22				67		22:15	16		13				29	
10:30	47		31				78		22:30	17		12				29	
10:45	44	181	34	119			78	300	22:45	9	56	10	51			19	107
11:00	51		29				80		23:00	14		7				21	
11:15	76		33				109		23:15	15		8				23	
11:30	49		35				84		23:30	7		7				14	
11:45	54	230	32	129			86	359	23:45	4	40	6	28			10	68
TOTALS		1187		618				1805	TOTALS		2085		1508				3593
SPLIT %		65.8%		34.2%				33.4%	SPLIT %		58.0%		42.0%				66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Peak Hour	11:45	11:45	11:45	PM Peak Hour	12:15	16:45	12:15
AM Pk Volume	270	147	417	PM Pk Volume	280	192	458
Pk Hr Factor	0.696	0.817	0.790	Pk Hr Factor	0.722	0.923	0.867
7 - 9 Volume	403	166	569	4 - 6 Volume	418	332	750
7 - 9 Peak Hour	07:45	08:00	07:45	4 - 6 Peak Hour	16:45	16:45	16:45
7 - 9 Pk Volume	245	97	340	4 - 6 Pk Volume	225	192	417
Pk Hr Factor	0.795	0.808	0.825	Pk Hr Factor	0.938	0.923	0.939

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-064

Location: Juan St. btwn. Taylor St. & Mason St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		1			12:00			32		28		
00:15			1		2			12:15			30		24		
00:30			0		1			12:30			29		41		
00:45			1	5	3	7	12	12:45			28	119	45	138	257
01:00			0		0			13:00			32		50		
01:15			3		2			13:15			30		39		
01:30			0		0			13:30			33		35		
01:45			4	7	3	5	12	13:45			41	136	44	168	304
02:00			0		5			14:00			45		46		
02:15			0		2			14:15			48		58		
02:30			1		0			14:30			48		57		
02:45			0	1	0	7	8	14:45			45	186	62	223	409
03:00			2		0			15:00			47		59		
03:15			3		1			15:15			46		70		
03:30			1		0			15:30			38		56		
03:45			0	6	0	1	7	15:45			54	185	73	258	443
04:00			0		4			16:00			47		66		
04:15			1		1			16:15			63		75		
04:30			2		1			16:30			63		52		
04:45			3	6	1	7	13	16:45			66	239	61	254	493
05:00			6		4			17:00			54		69		
05:15			2		7			17:15			50		57		
05:30			3		5			17:30			65		62		
05:45			8	19	14	30	49	17:45			59	228	48	236	464
06:00			6		14			18:00			69		50		
06:15			12		9			18:15			50		50		
06:30			22		18			18:30			44		48		
06:45			20	60	25	66	126	18:45			44	207	46	194	401
07:00			22		31			19:00			44		50		
07:15			21		36			19:15			44		29		
07:30			27		32			19:30			45		34		
07:45			34	104	44	143	247	19:45			34	167	48	161	328
08:00			30		39			20:00			36		28		
08:15			30		52			20:15			22		54		
08:30			26		48			20:30			26		31		
08:45			23	109	46	185	294	20:45			25	109	57	170	279
09:00			34		27			21:00			22		49		
09:15			37		40			21:15			15		25		
09:30			51		31			21:30			16		31		
09:45			33	155	38	136	291	21:45			10	63	25	130	193
10:00			53		49			22:00			11		27		
10:15			48		43			22:15			3		20		
10:30			36		33			22:30			8		19		
10:45			43	180	29	154	334	22:45			8	30	7	73	103
11:00			33		49			23:00			5		13		
11:15			55		38			23:15			3		5		
11:30			49		34			23:30			3		6		
11:45			36	173	20	141	314	23:45			4	15	7	31	46
Total Vol.				825		882	**1707**					1684		2036	**3720**

Daily Totals

NB	SB	EB	W8	**Combined**
		2509	2918	**5427**

	AM			**PM**		
Split %	48.3%	51.7%	**31.5%**	45.3%	54.7%	**68.5%**
Peak Hour	09:30	08:00	**09:30**	16:15	15:30	**16:15**
Volume	185	185	**346**	246	270	**503**
P.H.F.	0.87	0.89	**0.85**	0.93	0.90	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-065

Location: Juan St. btwn. Twiggs St. & Harney St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		4			12:00			39		19		
00:15			0		1			12:15			34		23		
00:30			1		2			12:30			38		20		
00:45			0	3	1	8	11	12:45			42	153	22	84	237
01:00			0		0			13:00			40		18		
01:15			1		4			13:15			43		30		
01:30			0		0			13:30			46		32		
01:45			1	2	2	6	8	13:45			35	164	16	96	260
02:00			1		3			14:00			40		26		
02:15			0		1			14:15			35		27		
02:30			0		0			14:30			44		17		
02:45			0	1	0	4	5	14:45			49	168	27	97	265
03:00			1		1			15:00			49		26		
03:15			1		2			15:15			47		27		
03:30			1		1			15:30			39		22		
03:45			0	3	0	4	7	15:45			40	175	32	107	282
04:00			0		2			16:00			54		32		
04:15			1		2			16:15			58		36		
04:30			1		2			16:30			64		30		
04:45			2	4	2	8	12	16:45			65	241	22	120	361
05:00			3		8			17:00			69		50		
05:15			0		5			17:15			59		52		
05:30			1		2			17:30			63		63		
05:45			7	11	13	28	39	17:45			50	241	41	206	447
06:00			5		7			18:00			70		68		
06:15			10		16			18:15			46		35		
06:30			9		19			18:30			49		57		
06:45			19	43	31	73	116	18:45			38	203	37	197	400
07:00			28		41			19:00			33		53		
07:15			30		41			19:15			41		37		
07:30			38		54			19:30			25		36		
07:45			29	125	53	189	314	19:45			20	119	30	156	275
08:00			33		46			20:00			28		37		
08:15			29		42			20:15			26		35		
08:30			25		52			20:30			27		40		
08:45			23	110	45	185	295	20:45			15	96	20	132	228
09:00			38		43			21:00			16		27		
09:15			30		47			21:15			10		19		
09:30			29		48			21:30			11		25		
09:45			30	127	55	193	320	21:45			8	45	15	86	131
10:00			33		51			22:00			9		14		
10:15			32		56			22:15			7		13		
10:30			44		53			22:30			3		15		
10:45			38	147	71	231	378	22:45			4	23	6	48	71
11:00			39		43			23:00			0		5		
11:15			33		49			23:15			4		7		
11:30			40		41			23:30			2		5		
11:45			34	146	36	169	315	23:45			3	9	7	24	33
Total Vol.				722		1098	**1820**					1637		1353	**2990**

Daily Totals

NB	SB	EB	WB	Combined
		2359	2451	**4810**

	AM			PM		
Split %	39.7%	60.3%	**37.8%**	54.7%	45.3%	**62.2%**
Peak Hour	10:30	10:00	**10:00**	16:30	17:15	**17:15**
Volume	154	231	**378**	257	224	**466**
P.H.F.	0.88	0.81	**0.87**	0.93	0.82	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-066

Location: Juan St. btwn. Harney St. & San Juan Rd.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			1	0		12:00			28	21	
00:15			0	1		12:15			32	24	
00:30			0	2		12:30			30	29	
00:45			0 1	0 3	4	12:45			33 123	30 104	227
01:00			0	3		13:00			29	32	
01:15			1	0		13:15			30	28	
01:30			0	0		13:30			32	21	
01:45			0 1	1 4	5	13:45			24 115	20 101	216
02:00			1	2		14:00			28	26	
02:15			0	1		14:15			27	37	
02:30			0	0		14:30			31	20	
02:45			0 1	0 3	4	14:45			28 114	30 113	227
03:00			0	0		15:00			28	26	
03:15			2	1		15:15			29	33	
03:30			1	0		15:30			22	26	
03:45			0 3	0 1	4	15:45			20 99	24 109	208
04:00			0	2		16:00			19	28	
04:15			1	1		16:15			21	28	
04:30			2	1		16:30			17	24	
04:45			2 5	2 6	11	16:45			15 72	32 112	184
05:00			2	3		17:00			11	31	
05:15			0	3		17:15			15	21	
05:30			0	2		17:30			19	22	
05:45			2 4	7 15	19	17:45			20 65	23 97	162
06:00			2	8		18:00			15	19	
06:15			9	11		18:15			25	22	
06:30			6	11		18:30			24	20	
06:45			12 29	13 43	72	18:45			29 93	17 78	171
07:00			13	27		19:00			22	19	
07:15			18	24		19:15			20	13	
07:30			20	32		19:30			21	11	
07:45			24 75	39 122	197	19:45			14 77	10 53	130
08:00			29	28		20:00			19	14	
08:15			22	25		20:15			13	18	
08:30			20	43		20:30			11	13	
08:45			24 95	29 125	220	20:45			10 53	11 56	109
09:00			26	21		21:00			14	10	
09:15			26	22		21:15			9	8	
09:30			32	25		21:30			7	6	
09:45			28 112	39 107	219	21:45			7 37	6 30	67
10:00			24	29		22:00			5	9	
10:15			29	31		22:15			5	6	
10:30			28	18		22:30			6	5	
10:45			24 105	27 105	210	22:45			2 18	2 22	40
11:00			29	25		23:00			0	2	
11:15			33	19		23:15			3	3	
11:30			30	24		23:30			1	0	
11:45			32 124	18 86	210	23:45			1 5	0 5	10
Total Vol.			555	620	**1175**				871	880	**1751**

Daily Totals

NB	SB	EB	WB	Combined
		1426	1500	**2926**

	AM			PM		
Split %	47.2%	52.8%	**40.2%**	49.7%	50.3%	**59.8%**
Peak Hour	11:00	07:45	**09:30**	12:15	12:30	**12:30**
Volume	124	135	**237**	124	119	**241**
P.H.F.	0.94	0.78	**0.88**	0.94	0.93	**0.96**

Prepared by NDS/ATD

VOLUME

Channel Way between W Mission Bay Dr & Hancock St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Period	NB		SB		EB		WB		TOTAL	
00:00					1		7		8	
00:15					0		1		1	
00:30					0		3		3	
00:45					0	1	2	13	2	14
01:00					1		0		1	
01:15					0		1		1	
01:30					1		2		3	
01:45					0	2	0	3	0	5
02:00					1		0		1	
02:15					0		0		0	
02:30					0		0		0	
02:45					0	1	0		0	1
03:00					1		1		2	
03:15					1		2		3	
03:30					0		0		0	
03:45					0	2	0	3	0	5
04:00					1		0		1	
04:15					1		1		2	
04:30					0		1		1	
04:45					0	2	2	4	2	6
05:00					0		1		1	
05:15					0		1		1	
05:30					1		3		4	
05:45					2	3	5	10	7	13
06:00					3		4		7	
06:15					1		6		7	
06:30					2		2		4	
06:45					3	9	7	19	10	28
07:00					3		5		8	
07:15					4		3		7	
07:30					5		10		15	
07:45					6	18	10	28	16	46
08:00					5		7		12	
08:15					6		12		18	
08:30					7		10		17	
08:45					4	22	10	39	14	61
09:00					6		10		16	
09:15					4		7		11	
09:30					8		12		20	
09:45					9	27	11	40	20	67
10:00					8		12		20	
10:15					10		13		23	
10:30					7		12		19	
10:45					5	30	8	45	13	75
11:00					4		14		18	
11:15					9		12		21	
11:30					7		17		24	
11:45					7	27	20	63	27	90
TOTALS						144		267		411
SPLIT %						35.0%		65.0%		32.1%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					4		9		13	
12:15					7		23		30	
12:30					14		11		25	
12:45					10	35	4	47	14	82
13:00					9		15		24	
13:15					6		22		28	
13:30					12		7		19	
13:45					8	35	13	57	21	92
14:00					4		24		28	
14:15					9		16		25	
14:30					10		22		32	
14:45					7	30	14	76	21	106
15:00					7		22		29	
15:15					5		17		22	
15:30					4		29		33	
15:45					9	25	27	95	36	120
16:00					8		30		38	
16:15					6		26		32	
16:30					11		28		39	
16:45					7	32	23	107	30	139
17:00					9		28		37	
17:15					7		29		36	
17:30					4		18		22	
17:45					8	28	18	93	26	121
18:00					6		14		20	
18:15					5		13		18	
18:30					3		12		15	
18:45					2	16	9	48	11	64
19:00					2		9		11	
19:15					3		11		14	
19:30					2		11		13	
19:45					0	7	7	38	7	45
20:00					1		6		7	
20:15					3		6		9	
20:30					2		6		8	
20:45					1	7	4	22	5	29
21:00					6		6		12	
21:15					2		7		9	
21:30					1		5		6	
21:45					2	11	7	25	9	36
22:00					2		3		5	
22:15					1		6		7	
22:30					4		2		6	
22:45					1	8	4	15	5	23
23:00					3		0		3	
23:15					2		2		4	
23:30					3		1		4	
23:45					0	8	1	4	1	12
TOTALS						242		627		869
SPLIT %						27.8%		72.2%		67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Peak Hour	09:30	11:30	11:45	PM Peak Hour	12:15	15:30	15:45
AM Pk Volume	35	69	95	PM Pk Volume	40	112	145
Pk Hr Factor	0.875	0.750	0.792	Pk Hr Factor	0.714	0.933	0.929
7 - 9 Volume	40	67	107	4 - 6 Volume	60	200	260
7 - 9 Peak Hour	07:45	07:30	07:45	4 - 6 Peak Hour	16:30	16:30	16:30
7 - 9 Pk Volume	24	39	63	4 - 6 Pk Volume	34	108	142
Pk Hr Factor	0.857	0.813	0.875	Pk Hr Factor	0.773	0.931	0.910

Prepared by NDS/ATD

VOLUME

Kemper St from Kenyon St to Midway Dr

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		10				13		12:00	91		101				192	
00:15	4		3				7		12:15	104		110				214	
00:30	3		8				11		12:30	75		93				168	
00:45	3	13	7	28			10	41	12:45	79	349	119	423			198	772
01:00	2		4				6		13:00	85		101				186	
01:15	5		5				10		13:15	85		118				203	
01:30	3		8				11		13:30	82		106				188	
01:45	1	11	2	19			3	30	13:45	72	324	92	417			164	741
02:00	2		2				4		14:00	57		105				162	
02:15	1		4				5		14:15	102		96				198	
02:30	1		5				6		14:30	79		114				193	
02:45	2	6	3	14			5	20	14:45	62	300	87	402			149	702
03:00	7		1				8		15:00	59		83				142	
03:15	1		4				5		15:15	82		86				168	
03:30	4		4				8		15:30	73		79				152	
03:45	1	13	3	12			4	25	15:45	70	284	80	328			150	612
04:00	0		4				4		16:00	68		83				151	
04:15	3		0				3		16:15	66		112				178	
04:30	1		3				4		16:30	70		106				176	
04:45	9	13	2	9			11	22	16:45	68	272	107	408			175	680
05:00	2		0				2		17:00	72		102				174	
05:15	11		3				14		17:15	75		117				192	
05:30	10		4				14		17:30	75		111				186	
05:45	14	37	5	12			19	49	17:45	73	295	93	423			166	718
06:00	19		3				22		18:00	64		98				162	
06:15	26		7				33		18:15	62		93				155	
06:30	50		14				64		18:30	67		92				159	
06:45	44	139	24	48			68	187	18:45	73	266	76	359			149	625
07:00	58		42				100		19:00	45		67				112	
07:15	64		22				86		19:15	44		52				96	
07:30	61		35				96		19:30	49		56				105	
07:45	57	240	40	139			97	379	19:45	40	178	51	226			91	404
08:00	57		42				99		20:00	50		49				99	
08:15	58		39				97		20:15	39		47				86	
08:30	61		46				107		20:30	29		53				82	
08:45	72	248	42	169			114	417	20:45	25	143	45	194			70	337
09:00	66		57				123		21:00	32		36				68	
09:15	84		63				147		21:15	25		35				60	
09:30	81		72				153		21:30	21		25				46	
09:45	61	292	60	252			121	544	21:45	10	88	40	136			50	224
10:00	91		77				168		22:00	16		28				44	
10:15	89		91				180		22:15	17		24				41	
10:30	64		68				132		22:30	10		27				37	
10:45	69	313	77	313			146	626	22:45	10	53	12	91			22	144
11:00	76		68				144		23:00	12		18				30	
11:15	75		71				146		23:15	9		12				21	
11:30	77		92				169		23:30	5		15				20	
11:45	89	317	79	310			168	627	23:45	5	31	7	52			12	83
TOTALS		1642		1325				2967	TOTALS		2583		3459				6042
SPLIT %		55.3%		44.7%				32.9%	SPLIT %		42.8%		57.2%				67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Peak Hour	11:30	11:45	11:30	PM Peak Hour	12:00	12:45	12:45
AM Pk Volume	361	383	743	PM Pk Volume	349	444	775
Pk Hr Factor	0.868	0.870	0.868	Pk Hr Factor	0.839	0.933	0.954
7 - 9 Volume	488	308	796	4 - 6 Volume	567	831	1398
7 - 9 Peak Hour	08:00	08:00	08:00	4 - 6 Peak Hour	17:00	16:45	16:45
7 - 9 Pk Volume	248	169	417	4 - 6 Pk Volume	295	437	727
Pk Hr Factor	0.861	0.918	0.914	Pk Hr Factor	0.983	0.934	0.947

Prepared by NDS/ATD

VOLUME

Kemper St from Midway Dr to Sports Arena Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_002

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		5						8		12:00	87		116						203	
00:15	1		3						4		12:15	93		107						200	
00:30	4		4						8		12:30	86		119						205	
00:45	1	9	3	15					4	24	12:45	72	338	110	452					182	790
01:00	1		2						3		13:00	74		66						140	
01:15	1		3						4		13:15	80		114						194	
01:30	0		2						2		13:30	84		103						187	
01:45	0	2	3	10					3	12	13:45	67	305	70	353					137	658
02:00	1		2						3		14:00	76		78						154	
02:15	0		1						1		14:15	72		96						168	
02:30	1		0						1		14:30	69		82						151	
02:45	1	3	4	7					5	10	14:45	61	278	73	329					134	607
03:00	1		0						1		15:00	62		68						130	
03:15	1		0						1		15:15	65		73						138	
03:30	1		3						4		15:30	61		72						133	
03:45	2	5	0	3					2	8	15:45	61	249	93	306					154	555
04:00	2		4						6		16:00	51		108						159	
04:15	3		1						4		16:15	66		92						158	
04:30	2		4						6		16:30	65		87						152	
04:45	3	10	3	12					6	22	16:45	69	251	77	364					146	615
05:00	5		2						7		17:00	66		90						156	
05:15	3		1						4		17:15	54		82						136	
05:30	12		5						17		17:30	59		73						132	
05:45	10	30	7	15					17	45	17:45	47	226	107	352					154	578
06:00	16		8						24		18:00	44		90						134	
06:15	20		11						31		18:15	59		92						151	
06:30	26		15						41		18:30	47		73						120	
06:45	21	83	33	67					54	150	18:45	42	192	52	307					94	499
07:00	38		27						65		19:00	47		51						98	
07:15	26		29						55		19:15	41		34						75	
07:30	45		43						88		19:30	52		48						100	
07:45	53	162	44	143					97	305	19:45	41	181	49	182					90	363
08:00	46		51						97		20:00	46		41						87	
08:15	43		64						107		20:15	18		32						50	
08:30	56		59						115		20:30	31		44						75	
08:45	61	206	62	236					123	442	20:45	21	116	18	135					39	251
09:00	63		76						139		21:00	23		22						45	
09:15	61		75						136		21:15	12		24						36	
09:30	70		56						126		21:30	11		26						37	
09:45	47	241	68	275					115	516	21:45	7	53	25	97					32	150
10:00	74		74						148		22:00	11		22						33	
10:15	77		108						185		22:15	11		23						34	
10:30	74		75						149		22:30	10		20						30	
10:45	80	305	99	356					179	661	22:45	8	40	14	79					22	119
11:00	75		86						161		23:00	3		9						12	
11:15	92		97						189		23:15	3		7						10	
11:30	80		102						182		23:30	3		6						9	
11:45	81	328	86	371					167	699	23:45	1	10	4	26					5	36
TOTALS		1384		1510						2894	TOTALS		2239		2982						5221
SPLIT %		47.8%		52.2%						35.7%	SPLIT %		42.9%		57.1%						64.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Peak Hour	11:45	11:45	11:45		PM Peak Hour	12:00	12:00	12:00
AM Pk Volume	347	428	775		PM Pk Volume	338	452	790
Pk Hr Factor	0.933	0.899	0.945		Pk Hr Factor	0.909	0.950	0.963
7 - 9 Volume	368	379	747		4 - 6 Volume	477	716	1193
7 - 9 Peak Hour	08:00	08:00	08:00		4 - 6 Peak Hour	16:15	16:00	16:00
7 - 9 Pk Volume	206	236	442		4 - 6 Pk Volume	266	364	615
Pk Hr Factor	0.844	0.922	0.898		Pk Hr Factor	0.964	0.843	0.967

Table 3-2. Roadway Segment Level of Service
Existing Conditions

Roadway	Segment	Class	Lanes	LOS E Capacity	Existing		
					ADT	V/C	LOS
Rosecrans Street	From Pacific Highway to Sports Arena Blvd.	Major	4	40,000	15,503	0.39	B
	From Sports Arena Blvd. to Midway Dr.	Major	6	50,000	59,120	1.18	F
	From Midway Dr. to Lytton St.	Major	6	50,000	46,384	0.93	E
	From Lytton St. to Roosevelt Rd.	Major	5	45,000	42,513	0.94	E
	From Laning Rd. to Nimitz Blvd.	Major	4	40,000	34,259	0.86	D
	From Nimitz Blvd. to N. Harbor Dr.	Major	4	40,000	36,450	0.91	E
	From N. Harbor Dr. to Canon St.	Major	4	40,000	34,390	0.86	D
	From Canon St. to Talbot St.	Major (1)	2	27,000	17,850	0.66	C
	From Talbot St. to Kellogg St.	Major (1)	2	27,000	15,200	0.56	B
Camino Del Rio	North of Sports Arena Blvd.	Prime	7	70,000	50,700	0.72	C
Pacific Highway	North of Rosecrans St.	Major (2)	2	20,000	5,818	0.29	A
	South of Rosecrans St.	Prime	6	60,000	13,070	0.22	A
Sports Arena Blvd.	Northwest of Rosecrans St.	Major	5	45,000	26,780	0.60	C
Midway Drive	Northwest of Rosecrans St.	Major	4	40,000	27,130	0.68	C
	Southeast of Rosecrans St.	Major	4	40,000	29,440	0.74	C
Lytton Street	Northwest of Rosecrans St.	Major (2)	2	20,000	11,797	0.59	C
	Southeast of Rosecrans St.	Major	4	40,000	19,650	0.49	B
Nimitz Boulevard	Northwest of Rosecrans St.	Major	4	40,000	17,264	0.43	B
	Southeast of Rosecrans St.	Major	4	40,000	12,020	0.30	A
North Harbor Drive	Rosecrans St. to Scott Rd.	Major	4	40,000	6,321	0.16	A
Canon Street	Northwest of Rosecrans St.	Collector	2	15,000	12,870	0.86	D
Talbot Street	Northwest of Rosecrans St.	Collector	2	8,000	5,950	0.74	D

(1) LOS E Capacity has been estimated based on results of the Highway Capacity Manual Urban Street Methodology.
(2) Since a published standard capacity for a 2-Lane Major does not exist, capacity is assumed to be half of a 4-Lane Major.

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
CAM RIO	[HANCOCK ST - MOORE ST]	03800W - 03700W	1032	SOUTH	:	35800	6/10/1992	0493-92
				*TOTAL	:	64900		
				NORTH	:	27610	7/27/2005	0408-05
				SOUTH	:	32160	7/27/2005	0408-05
				*TOTAL	:	59770		
				EAST	:	27290	9/16/2008	0346-08
				WEST	:	28560	9/16/2008	0346-08
				*TOTAL	:	55852		
CAM RIO	[SPORTS ARENA BL - KURTZ ST]	03899W - 03850W	9369	NORTH	:	24400	6/4/1987	1019-87
				SOUTH	:	28700	6/4/1987	1020-87
				*TOTAL	:	53100		
				NORTH	:	23900	6/25/1990	1005-90
				SOUTH	:	29100	6/25/1990	1006-90
				*TOTAL	:	53000		
				NORTH	:	24200	6/20/1991	0934-91
				SOUTH	:	30200	6/20/1991	0935-91
				*TOTAL	:	54400		
				NORTH	:	25780	7/25/2002	0814-02
				SOUTH	:	27180	7/25/2002	0815-02
				*TOTAL	:	52960		
				NORTH	:	23720	9/10/2008	0405-08
				SOUTH	:	26980	9/10/2008	0405-08
				*TOTAL	:	50700		
CAM RIO N	[CAM ARR - MSS CTR RD]	00750 - 01200	6721	EAST	:	4400	9/27/1990	1924-90
				WEST	:	5300	9/27/1990	1925-90
				*TOTAL	:	9700		
				EAST	:	3400	10/14/1993	0900-93
				WEST	:	4400	10/25/1993	0901-93
				EAST	:	3700	10/17/1996	1006-96
				WEST	:	4200	10/17/1996	1007-96
				*TOTAL	:	7900		

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION	WK-DAY VOLUME	STARTING DATE	FILE NUMBER
ROSECRANS ST	[MALAGA ST - MADRID ST]	03050 - 03200	9371	SOUTH	20220	7/21/2005	0668-05
				*TOTAL	39770		
				NORTH	21650	9/9/2008	0407-08
				SOUTH	21120	9/9/2008	0407-08
				*TOTAL	42770		
ROSECRANS ST	[MIDWAY DR - SPORTS ARENA BL]	03500 - 03650	9370	NORTH	26900	6/2/1987	0986-87
				SOUTH	27300	6/2/1987	0987-87
				*TOTAL	54200		
				NORTH	28100	6/6/1988	1008-88
				SOUTH	28200	6/6/1988	1009-88
				*TOTAL	56300		
				NORTH	26700	6/25/1990	1009-90
				SOUTH	26700	6/25/1990	1010-90
				*TOTAL	53400		
				NORTH	27400	6/20/1991	0936-91
				SOUTH	28200	6/20/1991	0937-91
				*TOTAL	55600		
				NORTH	31110	7/16/2002	0674-02
				SOUTH	27000	7/16/2002	0675-02
				*TOTAL	58110		
				NORTH	28720	9/9/2008	0406-08
				SOUTH	30400	9/9/2008	0406-08
				*TOTAL	59120		
ROSECRANS ST	[SPORTS ARENA BL - KURTZ ST]	03650 - 03750	1882	NORTH	12000	6/2/1987	0992-87
				SOUTH	9500	6/2/1987	0993-87
				*TOTAL	21500		
				NORTH	14300	6/28/1988	1133-88
				SOUTH	10800	6/28/1988	1134-88
				*TOTAL	25100		
				NORTH	12700	6/9/1989	0693-89
				SOUTH	8300	6/9/1989	0694-89
				*TOTAL	21000		

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-002
Location: Barnett Ave between Midway St & Pacific Hwy File No. MC0306-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	52	359			34	402				
12:15	31	417			34	411				
12:30	30	405			28	417				
12:45	27	395	140	1576	26	388	122	1618	262	3194
1:00	34	408			23	374				
1:15	17	433			19	370				
1:30	30	493			24	400				
1:45	22	479	103	1813	29	364	95	1508	198	3321
2:00	27	414			20	374				
2:15	18	421			15	358				
2:30	19	460			23	397				
2:45	9	475	73	1770	11	443	69	1572	142	3342
3:00	20	477			19	398				
3:15	19	538			14	486				
3:30	23	597			31	495				
3:45	12	701	74	2313	30	501	94	1880	168	4193
4:00	16	663			22	505				
4:15	25	661			26	485				
4:30	54	576			33	518				
4:45	46	572	141	2472	77	513	158	2021	299	4493
5:00	58	583			76	502				
5:15	76	575			113	592				
5:30	88	597			166	575				
5:45	140	567	362	2322	228	515	583	2184	945	4506
6:00	118	565			198	479				
6:15	169	443			345	473				
6:30	208	422			376	463				
6:45	207	451	702	1881	474	454	1393	1869	2095	3750
7:00	275	459			485	441				
7:15	342	422			481	397				
7:30	361	411			493	400				
7:45	339	412	1317	1704	525	362	1984	1600	3301	3304
8:00	331	407			515	322				
8:15	344	362			536	312				
8:30	419	374			473	311				
8:45	351	357	1445	1500	448	266	1972	1211	3417	2711
9:00	355	382			341	314				
9:15	297	365			337	289				
9:30	264	345			342	257				
9:45	246	302	1162	1394	348	265	1368	1125	2530	2519
10:00	289	320			286	260				
10:15	264	310			288	233				
10:30	296	272			304	233				
10:45	292	263	1141	1165	341	262	1219	988	2360	2153
11:00	302	284			348	229				
11:15	356	286			384	241				
11:30	331	263			412	226				
11:45	338	194	1327	1027	383	174	1527	870	2854	1897
Total	7987	20937	7987	20937	10584	18446	10584	18446	18571	39383
Combined Total	28924		28924		29030		29030		57954	
AM Peak	11:45 AM				7:30 AM					
Vol.	1519				2069					
P.H.F.	0.911				0.965					
PM Peak		3:30 PM				5:00 PM				
Vol.		2622				2184				
P.H.F.		0.935				0.922				
Percentage	27.6%	72.4%			36.5%	63.5%				

Day: TUESDAY
Date: 5/11/10

Classification Report / Prepared by: National Data & Surveying Services
Location: Washington St from Pacific Hwy & Frontage Rd

City: San Diego
Project #: 10-4143-030

SUMMARY

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	30	4	2	1	1	0	0	1	0	0	0	0	39
01:00	0	46	8	0	3	0	0	2	1	0	0	0	0	60
02:00	0	43	7	0	1	2	0	2	5	0	0	0	0	60
03:00	2	67	14	2	7	0	0	5	9	0	0	0	0	106
04:00	2	116	37	0	18	1	0	6	5	0	0	0	0	185
05:00	6	271	56	8	24	6	0	15	15	0	3	0	0	404
06:00	9	350	55	21	32	6	0	16	6	0	2	0	0	497
07:00	10	425	49	20	24	5	0	14	8	0	1	0	0	556
08:00	11	475	81	25	35	9	0	18	7	0	3	0	0	664
09:00	4	474	78	15	36	5	0	17	9	0	2	0	0	640
10:00	5	510	65	29	28	2	0	21	7	0	1	0	0	668
11:00	6	526	83	27	31	5	0	20	8	0	3	0	0	709
12:00 PM	6	503	81	29	34	8	0	22	2	0	3	0	0	688
13:00	12	536	68	19	25	1	0	21	4	0	1	0	0	687
14:00	5	563	78	17	30	5	0	14	4	0	2	0	0	718
15:00	7	603	86	22	14	1	0	12	1	0	0	0	0	746
16:00	7	702	82	33	22	7	0	22	1	0	0	0	0	876
17:00	9	636	62	23	23	4	0	16	3	0	0	0	0	776
18:00	4	433	48	8	23	4	0	11	4	0	0	0	0	535
19:00	5	325	34	6	18	2	0	8	3	0	0	0	0	401
20:00	1	250	23	3	5	2	0	0	3	0	0	0	0	287
21:00	1	179	24	1	2	0	0	2	2	0	0	0	0	211
22:00	3	75	14	2	2	0	0	0	1	0	0	0	0	97
23:00	0	59	4	1	2	0	0	0	0	0	0	0	0	66
Totals	**115**	**8197**	**1141**	**313**	**440**	**76**		**264**	**109**		**21**			**10676**
% of Totals	1%	77%	11%	3%	4%	1%		2%	1%		0%			100%
	55	3333	537	149	240	42	0	136	81	0	15	0	0	4588
% AM	1%	31%	5%	1%	2%	0%		1%	1%		0%			43%
AM Peak Hour	08:00	11:00	11:00	10:00	09:00	08:00		10:00	05:00		05:00			11:00
Volume	11	526	83	29	36	9		21	15		3			709
	60	4864	604	164	200	34	0	128	28	0	6	0	0	6088
% PM	1%	46%	6%	2%	2%	0%		1%	0%		0%			57%
PM Peak Hour	13:00	16:00	15:00	16:00	12:00	12:00		12:00	13:00		12:00			16:00
Volume	12	702	86	33	34	8		22	4		3			876

Peak Period Totals	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1220 ⟷	11%	1375 ⟷	13%	1652 ⟷	15%	6429 ⟷	60%

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-106

Location: Washington St. btwn. Frontage St. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		6			12:00			133		132		
00:15			13		8			12:15			133		119		
00:30			12		4			12:30			117		128		
00:45			10	47	2	20	67	12:45			128	511	121	500	1011
01:00			11		6			13:00			143		139		
01:15			7		4			13:15			148		114		
01:30			4		1			13:30			128		109		
01:45			2	24	3	14	38	13:45			129	548	115	477	1025
02:00			4		4			14:00			126		106		
02:15			1		2			14:15			110		110		
02:30			1		1			14:30			158		126		
02:45			6	12	4	11	23	14:45			156	550	117	459	1009
03:00			3		2			15:00			142		121		
03:15			2		7			15:15			141		143		
03:30			3		11			15:30			129		124		
03:45			1	9	7	27	36	15:45			159	571	97	485	1056
04:00			3		6			16:00			134		128		
04:15			4		9			16:15			133		97		
04:30			4		9			16:30			180		108		
04:45			12	23	19	43	66	16:45			136	583	118	451	1034
05:00			19		19			17:00			144		121		
05:15			13		33			17:15			123		108		
05:30			20		47			17:30			119		96		
05:45			24	76	63	162	238	17:45			80	466	55	380	846
06:00			28		70			18:00			68		49		
06:15			20		62			18:15			68		59		
06:30			31		111			18:30			67		53		
06:45			35	114	104	347	461	18:45			68	271	50	211	482
07:00			48		107			19:00			72		44		
07:15			68		112			19:15			65		43		
07:30			75		106			19:30			64		37		
07:45			71	262	138	463	725	19:45			65	266	42	166	432
08:00			87		117			20:00			59		42		
08:15			89		135			20:15			45		31		
08:30			96		123			20:30			50		37		
08:45			103	375	119	494	869	20:45			33	187	28	138	325
09:00			89		125			21:00			55		22		
09:15			89		116			21:15			39		31		
09:30			106		112			21:30			36		25		
09:45			80	364	98	451	815	21:45			37	167	23	101	268
10:00			101		95			22:00			34		15		
10:15			97		80			22:15			29		20		
10:30			89		98			22:30			36		14		
10:45			114	401	111	384	785	22:45			26	125	14	63	188
11:00			112		113			23:00			17		7		
11:15			135		113			23:15			29		10		
11:30			124		121			23:30			21		13		
11:45			113	484	120	467	951	23:45			17	84	7	37	121
Total Vol.				2191		2883	**5074**					4329		3468	**7797**

Daily Totals

NB	SB	EB	WB	Combined
		6520	6351	**12871**

	AM			PM		
Split %	43.2%	56.8%	**39.4%**	55.5%	44.5%	**60.6%**
Peak Hour	11:15	07:45	**11:30**	15:45	12:15	**14:30**
Volume	505	513	**995**	606	507	**1104**
P.H.F.	0.94	0.93	**0.94**	0.84	0.91	**0.97**

Prepared by NDS/ATO

VOLUME

Vine St from California St to Kettner Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0		0		0	12:00	6		0		6
00:15	0		0		0	12:15	7		1		8
00:30	0		0		0	12:30	1		1		2
00:45	0		0		0	12:45	0	14	0	2	0 16
01:00	0		0		0	13:00	2		1		3
01:15	0		0		0	13:15	1		3		4
01:30	0		0		0	13:30	2		1		3
01:45	0		0		0	13:45	4	9	0	5	4 14
02:00	0		0		0	14:00	5		2		7
02:15	0		0		0	14:15	9		2		11
02:30	0		0		0	14:30	8		3		11
02:45	0		0		0	14:45	4	26	2	9	6 35
03:00	0		0		0	15:00	2		2		4
03:15	0		0		0	15:15	0		4		4
03:30	0		0		0	15:30	1		2		3
03:45	0		0		0	15:45	2	5	1	9	3 14
04:00	1		0		1	16:00	1		3		4
04:15	0		0		0	16:15	2		5		7
04:30	0		0		0	16:30	4		6		10
04:45	0	1	0		0 1	16:45	5	12	3	17	8 29
05:00	0		0		0	17:00	3		2		5
05:15	0		1		1	17:15	1		2		3
05:30	0		0		0	17:30	2		1		3
05:45	4	4	0	1	4 5	17:45	1	7	0	5	1 12
06:00	1		0		1	18:00	2		1		3
06:15	3		1		4	18:15	1		0		1
06:30	0		1		1	18:30	0		1		1
06:45	2	6	0	2	2 8	18:45	0	3	0	2	0 5
07:00	0		1		1	19:00	1		1		2
07:15	0		2		2	19:15	1		1		2
07:30	4		2		6	19:30	0		0		0
07:45	1	5	2	7	3 12	19:45	1	3	1	3	2 6
08:00	5		1		6	20:00	1		1		2
08:15	4		1		5	20:15	1		5		6
08:30	2		0		2	20:30	2		0		2
08:45	2	13	0	2	2 15	20:45	0	4	0	6	0 10
09:00	3		1		4	21:00	0		0		0
09:15	3		3		6	21:15	0		0		0
09:30	5		0		5	21:30	0		0		0
09:45	1	12	2	6	3 18	21:45	1	1	0		1 1
10:00	5		3		8	22:00	1		0		1
10:15	2		0		2	22:15	2		1		3
10:30	5		2		7	22:30	0		0		0
10:45	2	14	1	6	3 20	22:45	0	3	0	1	0 4
11:00	3		1		4	23:00	0		0		0
11:15	2		0		2	23:15	2		0		2
11:30	5		2		7	23:30	0		0		0
11:45	4	14	2	5	6 19	23:45	1	3	0		1 3
TOTALS		69		29	98	TOTALS		90		59	149
SPLIT %		70.4%		29.6%	39.7%	SPLIT %		60.4%		39.6%	60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Peak Hour	11:30	09:15	11:30	PM Peak Hour	13:45	16:00	14:00
AM Pk Volume	22	8	27	PM Pk Volume	26	17	35
Pk Hr Factor	0.786	0.667	0.844	Pk Hr Factor	0.722	0.708	0.795
7 - 9 Volume	18	9	27	4 - 6 Volume	19	22	41
7 - 9 Peak Hour	07:30	07:00	07:30	4 - 6 Peak Hour	16:15	16:00	16:15
7 - 9 Pk Volume	14	7	20	4 - 6 Pk Volume	14	17	30
Pk Hr Factor	0.700	0.875	0.833	Pk Hr Factor	0.700	0.708	0.750

Prepared by NDS/ATD

Volumes for: Thursday, May 26, 2011	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Sassafras St between Kettner Blvd & Pacific Hy	Project: 11-4109-048	0	0	3,496	5,220	8,716

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			19		2			12:00			82		94		
00:15			15		1			12:15			77		75		
00:30			15		2			12:30			67		83		
00:45			17	66	1	6	72	12:45			73	299	74	326	625
01:00			13		2			13:00			53		91		
01:15			10		4			13:15			59		65		
01:30			2		5			13:30			66		54		
01:45			4	29	3	14	43	13:45			53	231	68	278	509
02:00			2		1			14:00			48		65		
02:15			3		1			14:15			59		72		
02:30			4		3			14:30			47		58		
02:45			1	10	1	6	16	14:45			78	232	70	265	497
03:00			1		0			15:00			57		54		
03:15			1		3			15:15			49		85		
03:30			1		4			15:30			44		63		
03:45			0	3	2	9	12	15:45			46	196	66	268	464
04:00			6		6			16:00			52		73		
04:15			6		9			16:15			55		57		
04:30			11		31			16:30			54		68		
04:45			10	33	42	88	121	16:45			56	217	65	263	480
05:00			8		59			17:00			60		54		
05:15			15		84			17:15			69		52		
05:30			11		92			17:30			67		67		
05:45			15	49	74	309	358	17:45			58	254	52	225	479
06:00			17		81			18:00			55		62		
06:15			20		84			18:15			40		50		
06:30			19		118			18:30			38		58		
06:45			28	84	100	383	467	18:45			32	165	55	225	390
07:00			23		104			19:00			53		44		
07:15			32		109			19:15			45		35		
07:30			24		125			19:30			67		51		
07:45			33	112	114	452	564	19:45			42	207	67	197	404
08:00			31		106			20:00			50		43		
08:15			47		127			20:15			33		40		
08:30			35		104			20:30			45		35		
08:45			42	155	121	458	613	20:45			40	168	53	171	339
09:00			34		94			21:00			49		33		
09:15			33		85			21:15			38		44		
09:30			36		101			21:30			30		41		
09:45			32	135	99	379	514	21:45			38	155	30	148	303
10:00			35		78			22:00			35		36		
10:15			49		82			22:15			35		29		
10:30			53		80			22:30			35		16		
10:45			53	190	79	319	509	22:45			49	154	14	95	249
11:00			72		83			23:00			39		22		
11:15			51		60			23:15			27		13		
11:30			62		67			23:30			19		8		
11:45			63	248	78	288	536	23:45			19	104	5	48	152

Total Vol.			1114		2711	3825					2382		2991	5373
									NB	SB	EB		WB	Total
								Daily Totals :	0	0	3,496		5,220	8,716
			AM								PM			
Split %			29.1%		70.9%	43.9%					44.3%		55.7%	56.1%
ADT								PHF						
Peak Hr.			11:00		07:00	11:00		Peak Hr.			12:00		12:00	12:00
Volume			268		472	613		Volume			299		326	625
P.H.F.			0.953		0.929	0.879		P.H.F.			0.913		0.837	0.888
7 - 9 Vol.			267		518	1177		4 - 6 Vol.			471		488	959
Peak Hr.			10:00		07:30	08:00		Peak Hr.			17:00		16:30	16:45
Volume			155		472	613		Volume			254		263	480
P.H.F.			0.774		0.929	0.879		P.H.F.			0.913		0.911	0.914

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-109

Location: Laurel St. btwn. Pacific Highway & Kettner Blvd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			36		20			12:00			181		168		
00:15			37		14			12:15			240		195		
00:30			33		17			12:30			239		194		
00:45			18	124	12	63	187	12:45			201	861	200	757	1618
01:00			14		2			13:00			217		210		
01:15			11		8			13:15			173		183		
01:30			13		2			13:30			185		183		
01:45			9	47	5	17	64	13:45			204	779	139	715	1494
02:00			11		2			14:00			280		171		
02:15			4		2			14:15			185		163		
02:30			5		5			14:30			228		163		
02:45			3	23	6	15	38	14:45			175	868	136	633	1501
03:00			4		3			15:00			219		151		
03:15			6		6			15:15			205		145		
03:30			3		20			15:30			186		148		
03:45			4	17	14	43	60	15:45			219	829	158	602	1431
04:00			8		24			16:00			185		163		
04:15			2		45			16:15			203		139		
04:30			23		81			16:30			269		164		
04:45			47	80	147	297	377	16:45			212	869	155	621	1490
05:00			89		195			17:00			219		140		
05:15			130		199			17:15			206		154		
05:30			155		189			17:30			175		116		
05:45			139	513	191	774	1287	17:45			154	754	133	543	1297
06:00			126		151			18:00			157		167		
06:15			105		172			18:15			155		149		
06:30			120		137			18:30			187		214		
06:45			87	438	131	591	1029	18:45			177	676	159	689	1365
07:00			96		147			19:00			170		169		
07:15			100		143			19:15			186		154		
07:30			118		142			19:30			179		180		
07:45			133	447	183	615	1062	19:45			167	702	181	684	1386
08:00			136		188			20:00			207		157		
08:15			161		205			20:15			217		160		
08:30			149		172			20:30			212		147		
08:45			167	613	173	738	1351	20:45			212	848	138	602	1450
09:00			160		191			21:00			186		145		
09:15			173		186			21:15			157		146		
09:30			162		227			21:30			155		145		
09:45			165	660	221	825	1485	21:45			195	693	102	538	1231
10:00			187		221			22:00			135		99		
10:15			210		212			22:15			138		118		
10:30			246		228			22:30			124		109		
10:45			216	859	207	868	1727	22:45			162	559	94	420	979
11:00			218		223			23:00			120		84		
11:15			210		183			23:15			171		72		
11:30			195		216			23:30			124		47		
11:45			192	815	216	838	1653	23:45			74	489	36	239	728
Total Vol.				4636		5684	**10320**					8927		7043	**15970**

Daily Totals

NB	SB	EB	WB	Combined
		13563	12727	**26290**

	AM			PM		
Split %	44.9%	55.1%	**39.3%**	55.9%	44.1%	**60.7%**
Peak Hour	10:15	09:45	**10:15**	16:30	12:15	**12:15**
Volume	890	882	**1760**	906	799	**1696**
P.H.F.	0.90	0.97	**0.93**	0.84	0.95	**0.97**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
TAYLOR ST	[HOTEL CR S - SD 008 R-A, E]	-	2631	EAST	:	7170	6/30/2010	MC0522-1
				WEST	:	7425	6/30/2010	MC0522-1
				*TOTAL	:	14595		
TAYLOR ST	[PACIFIC HY - CONGRESS ST]	04000 - 04010	2493	EAST	:	10500	7/22/1997	0524-97
				WEST	:	11900	7/22/1997	0525-97
				*TOTAL	:	22400		
				EAST	:	9300	6/2/1999	0330-99
				WEST	:	8000	6/2/1999	0330-99
				*TOTAL	:	17300		
				EAST	:	12230	6/20/2002	0648-02
				WEST	:	14880	6/20/2002	0649-02
				*TOTAL	:	27110		
				EAST	:	11780	6/15/2005	0315-05
				WEST	:	10230	6/15/2005	0315-05
				*TOTAL	:	22010		
				EAST	:	11990	8/20/2008	0336-08
				WEST	:	10060	8/20/2008	0336-08
				*TOTAL	:	22050		
TAYLOR ST	[PACIFIC HY - SN DIEGO AV]	04000 - 04010	2625	EAST	:	11700	3/8/1990	0341-90
				WEST	:	9700	3/8/1990	0342-90
				*TOTAL	:	21400		
				EAST	:	11000	3/15/1991	0420-91
				WEST	:	8400	3/15/1991	0421-91
				*TOTAL	:	19400		
				EAST	:	10100	11/3/1994	0810-94
				WEST	:	7500	11/3/1994	0811-94
				*TOTAL	:	17600		
				EAST	:	12500	6/18/1996	0666-96
				WEST	:	7000	6/18/1996	0667-96
				*TOTAL	:	19500		
TAYLOR ST	[CALHOUN ST - JUAN ST]	04030 - 04100	2491	NORTH	:	11300	9/21/1994	0700-94
				SOUTH	:	7700	9/21/1994	0701-94

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-099

Location: Taylor St. btwn. Congress St. & Juan St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		6					12:00	129		107				
00:15	9		9					12:15	140		116				
00:30	10		3					12:30	142		130				
00:45	3	40	7	25			65	12:45	149	560	93	446			1006
01:00	4		0					13:00	135		110				
01:15	3		1					13:15	149		99				
01:30	3		0					13:30	155		129				
01:45	4	14	0	1			15	13:45	140	579	96	434			1013
02:00	6		5					14:00	144		104				
02:15	3		3					14:15	141		95				
02:30	8		3					14:30	152		90				
02:45	1	18	1	12			30	14:45	164	601	87	376			977
03:00	3		1					15:00	185		92				
03:15	2		3					15:15	145		84				
03:30	2		9					15:30	193		119				
03:45	1	8	5	18			26	15:45	229	752	91	386			1138
04:00	5		3					16:00	214		117				
04:15	3		9					16:15	107		111				
04:30	7		12					16:30	117		123				
04:45	6	21	8	32			53	16:45	111	549	113	464			1013
05:00	7		14					17:00	134		122				
05:15	10		24					17:15	102		71				
05:30	13		27					17:30	119		105				
05:45	18	48	51	116			164	17:45	101	456	99	397			853
06:00	22		55					18:00	81		98				
06:15	28		69					18:15	87		66				
06:30	45		73					18:30	110		57				
06:45	49	144	99	296			440	18:45	76	354	69	290			644
07:00	53		125					19:00	82		49				
07:15	75		130					19:15	80		48				
07:30	85		111					19:30	80		46				
07:45	62	275	124	490			765	19:45	70	312	47	190			502
08:00	102		144					20:00	89		54				
08:15	124		110					20:15	75		40				
08:30	112		170					20:30	56		42				
08:45	91	429	224	648			1077	20:45	58	278	31	167			445
09:00	87		184					21:00	61		33				
09:15	115		207					21:15	49		37				
09:30	92		108					21:30	50		23				
09:45	92	386	103	602			988	21:45	41	201	32	125			326
10:00	85		75					22:00	39		22				
10:15	99		92					22:15	38		22				
10:30	101		101					22:30	33		18				
10:45	104	389	95	363			752	22:45	19	129	11	73			202
11:00	118		95					23:00	24		16				
11:15	142		101					23:15	16		12				
11:30	151		103					23:30	16		4				
11:45	121	532	112	411			943	23:45	20	76	11	43			119
Total Vol.		2304		3014			**5318**			4847		3391			**8238**

Daily Totals

NB	SB	EB	WB	Combined
7151	6405			**13556**

	AM			PM		
Split %	43.3%	56.7%	**39.2%**	58.8%	41.2%	**60.8%**
Peak Hour	11:15	08:30	**08:30**	15:15	16:15	**15:15**
Volume	543	785	**1190**	781	469	**1192**
P.H.F.	0.90	0.88	**0.92**	0.85	0.95	**0.90**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-003

Location: Taylor St (STATION#2490/FILE#MC0594-10) between Juan St & Sunset St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	20		8					12:00	203		143				
00:15	23		6					12:15	172		164				
00:30	10		9					12:30	153		132				
00:45	5	58	6	29			87	12:45	172	700	139	578			1278
01:00	15		2					13:00	205		130				
01:15	3		7					13:15	187		139				
01:30	7		4					13:30	179		136				
01:45	2	27	5	18			45	13:45	164	735	134	539			1274
02:00	4		0					14:00	163		125				
02:15	1		1					14:15	175		113				
02:30	3		3					14:30	199		131				
02:45	4	12	6	10			22	14:45	191	728	116	485			1213
03:00	2		2					15:00	196		110				
03:15	4		5					15:15	223		136				
03:30	1		6					15:30	231		132				
03:45	1	8	6	19			27	15:45	213	863	128	506			1369
04:00	4		4					16:00	238		143				
04:15	3		8					16:15	263		116				
04:30	7		6					16:30	257		152				
04:45	7	21	13	31			52	16:45	284	1042	129	540			1582
05:00	12		24					17:00	249		143				
05:15	15		40					17:15	300		135				
05:30	18		30					17:30	231		145				
05:45	21	66	59	153			219	17:45	186	966	133	556			1522
06:00	16		52					18:00	189		138				
06:15	32		83					18:15	179		117				
06:30	40		85					18:30	159		113				
06:45	51	139	107	327			466	18:45	100	627	85	453			1080
07:00	59		112					19:00	142		93				
07:15	59		132					19:15	131		85				
07:30	69		121					19:30	93		88				
07:45	103	290	148	513			803	19:45	125	491	70	336			827
08:00	79		123					20:00	97		67				
08:15	124		132					20:15	99		73				
08:30	99		127					20:30	117		53				
08:45	92	394	149	531			925	20:45	94	407	44	237			644
09:00	87		173					21:00	94		50				
09:15	103		141					21:15	106		29				
09:30	88		136					21:30	86		43				
09:45	101	379	120	570			949	21:45	98	384	33	155			539
10:00	118		116					22:00	76		26				
10:15	112		120					22:15	78		26				
10:30	113		126					22:30	49		29				
10:45	123	466	130	492			958	22:45	36	239	21	102			341
11:00	120		123					23:00	39		12				
11:15	162		132					23:15	24		16				
11:30	148		149					23:30	32		8				
11:45	155	585	164	568			1153	23:45	12	107	11	47			154
Total Vol.		2445		3261			**5706**			7289		4534			**11823**

Daily Totals

NB	SB	EB	WB	Combined
9734	7795			**17529**

	AM			PM		
Split %	42.8%	57.2%	**32.6%**	61.7%	38.3%	**67.4%**
Peak Hour	11:45	11:30	**11:30**	16:30	12:00	**16:30**
Volume	683	620	**1298**	1090	578	**1649**
P.H.F.	0.84	0.95	**0.94**	0.91	0.88	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-100

Location: Taylor St. btwn. Morena Blvd. & I-8 EB Ramps - Hotel Circle

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		7					12:00	118		114				
00:15	7		8					12:15	94		128				
00:30	7		4					12:30	89		124				
00:45	4	27	8	27			54	12:45	98	399	119	485			884
01:00	5		1					13:00	93		105				
01:15	4		1					13:15	102		93				
01:30	0		2					13:30	125		108				
01:45	6	15	0	4			19	13:45	109	429	110	416			845
02:00	4		1					14:00	115		91				
02:15	1		4					14:15	125		99				
02:30	0		1					14:30	121		85				
02:45	3	8	1	7			15	14:45	133	494	84	359			853
03:00	1		2					15:00	147		96				
03:15	1		1					15:15	148		94				
03:30	2		5					15:30	188		100				
03:45	0	4	0	8			12	15:45	189	672	99	389			1061
04:00	5		3					16:00	191		116				
04:15	0		8					16:15	201		113				
04:30	4		10					16:30	196		105				
04:45	1	10	12	33			43	16:45	211	799	113	447			1246
05:00	4		10					17:00	212		100				
05:15	3		21					17:15	205		96				
05:30	8		29					17:30	183		122				
05:45	15	30	41	101			131	17:45	138	738	98	416			1154
06:00	13		61					18:00	112		100				
06:15	17		73					18:15	86		104				
06:30	16		83					18:30	102		108				
06:45	28	74	113	330			404	18:45	79	379	74	386			765
07:00	28		124					19:00	90		51				
07:15	33		132					19:15	78		40				
07:30	43		129					19:30	72		43				
07:45	43	147	132	517			664	19:45	70	310	46	180			490
08:00	56		152					20:00	73		42				
08:15	74		129					20:15	59		51				
08:30	53		252					20:30	48		34				
08:45	74	257	261	794			1051	20:45	56	236	32	159			395
09:00	62		243					21:00	53		27				
09:15	54		249					21:15	62		24				
09:30	73		144					21:30	50		19				
09:45	62	251	128	764			1015	21:45	33	198	21	91			289
10:00	66		113					22:00	27		18				
10:15	63		96					22:15	28		13				
10:30	82		98					22:30	31		11				
10:45	64	275	96	403			678	22:45	23	109	19	61			170
11:00	84		89					23:00	16		10				
11:15	81		122					23:15	17		18				
11:30	127		113					23:30	10		5				
11:45	86	378	98	422			800	23:45	11	54	12	45			99
Total Vol.		1476		3410			**4886**			4817		3434			**8251**

Daily Totals

NB	SB	EB	WB	Combined
6293	6844			**13137**

	AM			PM		
Split %	30.2%	69.8%	**37.2%**	58.4%	41.6%	**62.8%**
Peak Hour	11:30	08:30	**08:30**	16:30	12:00	**16:15**
Volume	425	1005	**1248**	824	485	**1251**
P.H.F.	0.84	0.96	**0.93**	0.97	0.95	**0.97**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Twiggs St (STATION#1589/FILE#MC05334-10)	Project:	10-4169-122	0	0	840	1,240	2,080

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB		
00:00			2	2		12:00			21	19		
00:15			1	3		12:15			16	28		
00:30			2	2		12:30			11	20		
00:45			2	7	0	7	14	12:45			13	61	26	93	154
01:00			3	1		13:00			10	19		
01:15			1	1		13:15			15	23		
01:30			1	1		13:30			12	18		
01:45			0	5	1	4	9	13:45			16	53	14	74	127
02:00			1	1		14:00			13	19		
02:15			0	1		14:15			11	21		
02:30			0	1		14:30			8	22		
02:45			0	1	0	3	4	14:45			14	46	21	83	129
03:00			0	0		15:00			9	26		
03:15			0	0		15:15			12	25		
03:30			1	0		15:30			10	20		
03:45			0	1	1	1	2	15:45			19	50	15	86	136
04:00			1	0		16:00			21	17		
04:15			0	0		16:15			15	23		
04:30			1	0		16:30			23	16		
04:45			0	2	1	1	3	16:45			16	75	22	78	153
05:00			0	0		17:00			17	21		
05:15			0	1		17:15			17	27		
05:30			0	0		17:30			25	27		
05:45			1	1	1	2	3	17:45			24	83	32	107	190
06:00			0	2		18:00			17	36		
06:15			3	1		18:15			23	29		
06:30			3	4		18:30			25	31		
06:45			6	12	1	8	20	18:45			18	83	30	126	209
07:00			3	3		19:00			17	32		
07:15			4	1		19:15			24	30		
07:30			5	5		19:30			12	25		
07:45			10	22	3	12	34	19:45			13	66	21	108	174
08:00			9	7		20:00			9	17		
08:15			6	4		20:15			12	14		
08:30			8	15		20:30			7	18		
08:45			9	32	7	33	65	20:45			15	43	16	65	108
09:00			8	13		21:00			8	13		
09:15			11	9		21:15			7	21		
09:30			7	13		21:30			10	19		
09:45			9	35	13	48	83	21:45			8	33	17	70	103
10:00			10	17		22:00			8	24		
10:15			8	21		22:15			9	16		
10:30			11	17		22:30			6	15		
10:45			10	39	20	75	114	22:45			2	25	6	61	86
11:00			12	13		23:00			6	2		
11:15			13	29		23:15			4	4		
11:30			10	18		23:30			3	2		
11:45			15	50	24	84	134	23:45			2	15	3	11	26
Total Vol.			207		278	**485**					633		962	**1595**

	NB	SB	EB	WB	Total
Daily Totals :	**0**	**0**	**840**	**1,240**	**2,080**

	AM			PM		
Split %	42.7%	57.3%	**23.3%**	39.7%	60.3%	**76.7%**
AM				**PM**		
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	17:30	17:45	**17:45**
Volume	63	91	**154**	**Volume**	89	128	**217**
P.H.F.	0.750	0.813	**0.875**	**P.H.F.**	0.890	0.889	**0.969**
7 - 9 Vol.	54	45	**99**	**4 - 6 Vol.**	158	185	**343**
Peak Hr.	07:45	08:00	**08:00**	**Peak Hr.**	17:00	17:00	**17:00**
Volume	33	33	**65**	**Volume**	83	107	**190**
P.H.F.	0.825	0.550	**0.707**	**P.H.F.**	0.830	0.836	**0.848**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-101

Location: Twiggs St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			4	2		12:00			22	25	
00:15			1	2		12:15			21	32	
00:30			2	1		12:30			21	39	
00:45			2	1		12:45			23	38	
			9	6	15				87	134	221
01:00			1	0		13:00			19	33	
01:15			1	0		13:15			23	28	
01:30			4	0		13:30			15	42	
01:45			1	0		13:45			27	41	
			7	0	7				84	144	228
02:00			0	0		14:00			23	26	
02:15			0	0		14:15			11	28	
02:30			1	0		14:30			16	26	
02:45			0	1		14:45			16	33	
			1	1	2				66	113	179
03:00			0	1		15:00			20	31	
03:15			1	1		15:15			22	29	
03:30			3	0		15:30			29	28	
03:45			2	0		15:45			26	36	
			6	2	8				97	124	221
04:00			1	1		16:00			12	24	
04:15			0	0		16:15			19	24	
04:30			1	1		16:30			22	30	
04:45			1	0		16:45			26	28	
			3	2	5				79	106	185
05:00			2	4		17:00			38	23	
05:15			1	0		17:15			33	19	
05:30			1	1		17:30			37	12	
05:45			5	4		17:45			22	21	
			9	9	18				130	75	205
06:00			4	1		18:00			37	19	
06:15			6	1		18:15			22	25	
06:30			7	3		18:30			31	21	
06:45			6	4		18:45			36	16	
			23	9	32				126	81	207
07:00			8	4		19:00			26	18	
07:15			6	8		19:15			24	16	
07:30			7	11		19:30			18	17	
07:45			16	7		19:45			27	16	
			37	30	67				95	67	162
08:00			12	9		20:00			25	14	
08:15			11	11		20:15			22	16	
08:30			27	12		20:30			19	14	
08:45			20	13		20:45			22	13	
			70	45	115				88	57	145
09:00			15	11		21:00			23	26	
09:15			23	10		21:15			10	10	
09:30			11	10		21:30			13	2	
09:45			22	15		21:45			15	7	
			71	46	117				61	45	106
10:00			12	11		22:00			7	14	
10:15			18	18		22:15			15	5	
10:30			17	15		22:30			13	7	
10:45			34	13		22:45			7	2	
			81	57	138				42	28	70
11:00			22	18		23:00			6	3	
11:15			35	14		23:15			9	2	
11:30			31	15		23:30			5	6	
11:45			31	9		23:45			4	4	
			119	56	175				24	15	39
Total Vol.			436	263	**699**				979	989	**1968**

Daily Totals

NB	SB	EB	WB	Combined
		1415	1252	**2667**

	AM			PM		
Split %	62.4%	37.6%	**26.2%**	49.7%	50.3%	**73.8%**
Peak Hour	10:45	11:45	**11:45**	16:45	13:00	**13:00**
Volume	122	105	**200**	134	144	**228**
P.H.F.	0.87	0.67	**0.83**	0.88	0.86	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-102

Location: Harney St. btwn. Congress St. & San Diego Ave.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			1		2			12:00			7		10		
00:15			1		2			12:15			23		17		
00:30			8		2			12:30			17		8		
00:45			1	11	2	8	19	12:45			16	63	10	45	108
01:00			0		2			13:00			13		14		
01:15			3		0			13:15			5		6		
01:30			0		0			13:30			8		13		
01:45			0	3	0	2	5	13:45			14	40	9	42	82
02:00			0		0			14:00			11		8		
02:15			0		0			14:15			8		11		
02:30			0		0			14:30			13		11		
02:45			0	0	0	0		14:45			18	50	13	43	93
03:00			1		2			15:00			7		13		
03:15			0		2			15:15			10		13		
03:30			0		0			15:30			17		15		
03:45			0	1	0	4	5	15:45			21	55	13	54	109
04:00			0		0			16:00			16		16		
04:15			0		0			16:15			12		14		
04:30			0		1			16:30			13		11		
04:45			1	1	1	2	3	16:45			7	48	3	44	92
05:00			1		0			17:00			19		19		
05:15			2		2			17:15			22		19		
05:30			0		1			17:30			18		16		
05:45			1	4	4	7	11	17:45			5	64	14	68	132
06:00			2		3			18:00			21		14		
06:15			0		4			18:15			10		11		
06:30			1		8			18:30			28		21		
06:45			2	5	7	22	27	18:45			17	76	15	61	137
07:00			1		3			19:00			23		17		
07:15			3		11			19:15			16		15		
07:30			4		6			19:30			18		16		
07:45			4	12	11	31	43	19:45			22	79	15	63	142
08:00			4		11			20:00			12		13		
08:15			3		6			20:15			7		5		
08:30			4		11			20:30			9		3		
08:45			8	19	16	44	63	20:45			8	36	7	28	64
09:00			4		6			21:00			8		7		
09:15			3		3			21:15			13		12		
09:30			9		7			21:30			12		12		
09:45			6	22	2	18	40	21:45			13	46	9	40	86
10:00			10		6			22:00			5		10		
10:15			19		13			22:15			9		7		
10:30			7		3			22:30			8		7		
10:45			5	41	10	32	73	22:45			7	29	2	26	55
11:00			14		11			23:00			10		7		
11:15			7		9			23:15			7		4		
11:30			13		10			23:30			4		0		
11:45			16	50	14	44	94	23:45			3	24	2	13	37
Total Vol.				169		214	**383**					610		527	**1137**

Daily Totals

NB	SB	EB	WB	Combined
		779	741	**1520**

	AM			PM		
Split %	44.1%	55.9%	**25.2%**	53.6%	46.4%	**74.8%**
Peak Hour	11:45	11:30	**11:45**	18:30	17:00	**18:30**
Volume	63	51	**112**	84	68	**152**
P.H.F.	0.68	0.75	**0.70**	0.75	0.89	**0.78**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-103

Location: Harney St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		3			12:00			18		15		
00:15			1		3			12:15			34		13		
00:30			0		3			12:30			21		26		
00:45			2	6	1	10	16	12:45			23	96	14	68	164
01:00			1		1			13:00			15		27		
01:15			0		2			13:15			20		21		
01:30			0		0			13:30			15		32		
01:45			0	1	0	3	4	13:45			13	63	33	113	176
02:00			1		1			14:00			32		18		
02:15			0		1			14:15			27		18		
02:30			0		1			14:30			8		29		
02:45			0	1	0	3	4	14:45			19	86	44	109	195
03:00			0		2			15:00			18		27		
03:15			1		0			15:15			12		37		
03:30			0		1			15:30			12		30		
03:45			0	1	1	4	5	15:45			22	64	35	129	193
04:00			0		0			16:00			18		28		
04:15			0		1			16:15			24		22		
04:30			1		1			16:30			22		21		
04:45			2	3	5	7	10	16:45			30	94	25	96	190
05:00			0		0			17:00			19		23		
05:15			0		3			17:15			24		21		
05:30			1		4			17:30			29		18		
05:45			0	1	7	14	15	17:45			20	92	22	84	176
06:00			0		8			18:00			29		11		
06:15			1		10			18:15			24		12		
06:30			3		11			18:30			24		14		
06:45			1	5	17	46	51	18:45			25	102	11	48	150
07:00			4		7			19:00			17		28		
07:15			6		18			19:15			18		17		
07:30			6		19			19:30			18		19		
07:45			6	22	30	74	96	19:45			11	64	24	88	152
08:00			7		24			20:00			10		22		
08:15			13		19			20:15			7		18		
08:30			8		19			20:30			2		17		
08:45			8	36	28	90	126	20:45			10	29	11	68	97
09:00			5		22			21:00			9		18		
09:15			4		24			21:15			8		11		
09:30			5		20			21:30			7		2		
09:45			9	23	12	78	101	21:45			3	27	7	38	65
10:00			6		19			22:00			6		11		
10:15			16		22			22:15			3		10		
10:30			1		37			22:30			5		9		
10:45			12	35	23	101	136	22:45			2	16	4	34	50
11:00			25		18			23:00			2		6		
11:15			12		22			23:15			0		3		
11:30			21		18			23:30			3		2		
11:45			24	82	22	80	162	23:45			2	7	2	13	20
Total Vol.				216		510	**726**					740		888	**1628**

Daily Totals

NB	SB	EB	WB	Combined
		956	1398	**2354**

	AM			PM		
Split %	29.8%	70.2%	**30.8%**	45.5%	54.5%	**69.2%**
Peak Hour	11:30	10:00	**11:45**	16:45	14:45	**14:45**
Volume	97	101	**173**	102	138	**199**
P.H.F.	0.71	0.68	**0.92**	0.85	0.78	**0.79**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-104

Location: Old Town Ave. btwn. I-5 SB Ramps & I-5 NB Ramps

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		14			12:00			147		97		
00:15			4		4			12:15			109		64		
00:30			9		9			12:30			131		102		
00:45			10	35	16	43	78	12:45			133	520	112	375	895
01:00			7		4			13:00			129		113		
01:15			6		4			13:15			135		102		
01:30			6		1			13:30			118		105		
01:45			4	23	1	10	33	13:45			117	499	71	391	890
02:00			9		5			14:00			120		97		
02:15			8		4			14:15			142		98		
02:30			1		2			14:30			119		99		
02:45			4	22	2	13	35	14:45			123	504	91	385	889
03:00			8		4			15:00			162		95		
03:15			3		8			15:15			140		111		
03:30			4		4			15:30			153		122		
03:45			3	18	4	20	38	15:45			162	617	107	435	1052
04:00			7		7			16:00			168		144		
04:15			2		6			16:15			149		101		
04:30			7		7			16:30			179		106		
04:45			8	24	12	32	56	16:45			169	665	102	453	1118
05:00			10		10			17:00			158		121		
05:15			10		14			17:15			180		74		
05:30			9		6			17:30			145		92		
05:45			27	56	8	38	94	17:45			153	636	78	365	1001
06:00			25		22			18:00			132		84		
06:15			20		24			18:15			122		71		
06:30			34		10			18:30			106		50		
06:45			44	123	38	94	217	18:45			104	464	56	261	725
07:00			51		30			19:00			100		49		
07:15			71		26			19:15			83		59		
07:30			83		50			19:30			85		54		
07:45			91	296	33	139	435	19:45			66	334	58	220	554
08:00			88		44			20:00			69		54		
08:15			90		40			20:15			53		39		
08:30			76		48			20:30			53		41		
08:45			91	345	52	184	529	20:45			48	223	51	185	408
09:00			84		58			21:00			44		50		
09:15			91		63			21:15			47		52		
09:30			105		47			21:30			39		38		
09:45			99	379	63	231	610	21:45			33	163	35	175	338
10:00			89		67			22:00			37		39		
10:15			83		56			22:15			30		27		
10:30			120		60			22:30			24		35		
10:45			118	410	53	236	646	22:45			27	118	21	122	240
11:00			115		53			23:00			25		15		
11:15			123		56			23:15			18		25		
11:30			113		69			23:30			18		30		
11:45			113	464	75	253	717	23:45			9	70	8	78	148
Total Vol.				2195		1293	**3488**					4813		3445	**8258**

Daily Totals

NB	SB	EB	WB	Combined
		7008	4738	**11746**

	AM			PM		
Split %	62.9%	37.1%	**29.7%**	58.3%	41.7%	**70.3%**
Peak Hour	11:45	11:45	**11:45**	16:30	15:15	**16:00**
Volume	500	338	**838**	686	484	**1118**
P.H.F.	0.85	0.83	**0.86**	0.95	0.84	**0.90**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-105

Location: Old Town Ave. btwn. I-5 NB Ramps & Jefferson St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		18			12:00			56		37		
00:15			4		11			12:15			36		61		
00:30			8		14			12:30			56		29		
00:45			4	24	9	52	76	12:45			44	192	51	178	370
01:00			7		8			13:00			60		35		
01:15			5		9			13:15			58		34		
01:30			1		3			13:30			32		43		
01:45			1	14	4	24	38	13:45			58	208	33	145	353
02:00			2		4			14:00			47		36		
02:15			0		2			14:15			38		41		
02:30			1		1			14:30			46		42		
02:45			1	4	0	7	11	14:45			48	179	46	165	344
03:00			3		1			15:00			80		34		
03:15			0		0			15:15			84		37		
03:30			1		3			15:30			56		55		
03:45			1	5	0	4	9	15:45			52	272	53	179	451
04:00			2		3			16:00			55		53		
04:15			3		2			16:15			62		47		
04:30			2		5			16:30			47		58		
04:45			1	8	5	15	23	16:45			63	227	61	219	446
05:00			0		9			17:00			49		57		
05:15			2		7			17:15			39		61		
05:30			1		11			17:30			54		41		
05:45			1	4	16	43	47	17:45			65	207	50	209	416
06:00			6		12			18:00			41		67		
06:15			16		23			18:15			31		72		
06:30			16		27			18:30			39		42		
06:45			17	55	27	89	144	18:45			60	171	38	219	390
07:00			19		32			19:00			33		56		
07:15			33		42			19:15			30		58		
07:30			27		63			19:30			32		55		
07:45			42	121	63	200	321	19:45			28	123	63	232	355
08:00			51		47			20:00			24		49		
08:15			45		38			20:15			21		48		
08:30			45		40			20:30			24		58		
08:45			54	195	43	168	363	20:45			21	90	55	210	300
09:00			45		28			21:00			14		64		
09:15			41		33			21:15			19		58		
09:30			43		46			21:30			22		58		
09:45			75	204	42	149	353	21:45			20	75	43	223	298
10:00			43		38			22:00			21		36		
10:15			61		31			22:15			14		28		
10:30			43		38			22:30			8		27		
10:45			66	213	34	141	354	22:45			11	54	21	112	166
11:00			52		40			23:00			10		28		
11:15			58		38			23:15			8		12		
11:30			56		41			23:30			5		19		
11:45			70	236	45	164	400	23:45			3	26	11	70	96
Total Vol.				1083		1056	**2139**					1824		2161	**3985**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			2907	3217	**6124**

	AM			**PM**		
Split %	50.6%	49.4%	**34.9%**	45.8%	54.2%	**65.1%**
Peak Hour	11:15	07:15	**11:30**	15:00	16:30	**15:00**
Volume	240	215	**402**	272	237	**451**
P.H.F.	0.86	0.85	**0.87**	0.81	0.97	**0.93**

Appendix C
Peak Hour Arterial Analysis Worksheets – Existing Conditions

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	11.6	84.3	0.81	34.5	B
Total	II		72.7	11.6	84.3	0.81	34.5	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.1	34.5	0.17	17.6	D
Rosecrans St.	II	40	72.7	51.1	123.8	0.81	23.5	C
Total	II		92.1	66.2	158.3	0.98	22.2	C

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	31.3	97.6	0.55	20.4	C
Total	III		66.3	31.3	97.6	0.55	20.4	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	57.1	88.7	0.25	10.1	E
Total	III		31.6	57.1	88.7	0.25	10.1	E

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	46.2	106.0	0.50	16.9	D
East Dr	III	35	22.9	5.0	27.9	0.19	24.6	B
Kemper Street	III	35	39.9	21.5	61.4	0.33	19.5	C
Sports Arena	III	35	34.5	47.0	81.5	0.29	12.7	E
Total	III		157.1	119.7	276.8	1.31	17.0	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	21.7	56.2	0.29	18.4	C
East Drive	III	35	39.9	4.7	44.6	0.33	26.8	B
Rosecrans St.	III	35	22.9	43.2	66.1	0.19	10.4	E
Barnett Ave	III	35	59.8	25.2	85.0	0.50	21.1	C
Total	III		157.1	94.8	251.9	1.31	18.7	C

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	13.0	30.6	0.08	9.4	D
San Diego Ave	IV	25	25.0	24.3	49.3	0.11	8.3	E
Total	IV		42.6	37.3	79.9	0.19	8.7	E

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.6	26.3	0.07	9.7	D
Moore St	IV	25	25.0	5.9	30.9	0.11	13.2	C
Total	IV		43.7	13.5	57.2	0.18	11.6	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	12.4	29.5	0.13	16.3	D
Nimitz Blvd	III	35	22.4	42.3	64.7	0.19	10.4	E
Laning Rd	III	35	34.5	8.8	43.3	0.29	23.9	C
Barnett Ave	III	35	97.9	42.2	140.1	0.95	24.5	B
Midway Dr	III	35	58.8	23.7	82.5	0.49	21.4	C
Rosecrans St	III	35	16.7	17.3	34.0	0.13	13.8	E
Total	III		247.4	146.7	394.1	2.18	19.9	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	32.4	49.1	0.13	9.5	F
Lytton St	III	35	58.8	48.2	107.0	0.49	16.5	D
Laning Rd	III	35	97.9	7.9	105.8	0.95	32.4	A
Lowell St	III	35	34.5	35.2	69.7	0.29	14.8	D
Hugo St	III	35	22.4	5.5	27.9	0.19	24.1	B
Total	III		230.3	129.2	359.5	2.05	20.5	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	11.1	25.3	0.05	7.6	E
Total	IV		14.2	11.1	25.3	0.05	7.6	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	5.7	21.8	0.06	10.0	D
Total	IV		16.1	5.7	21.8	0.06	10.0	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	9.8	25.5	0.10	13.4	C
Juan St	IV	35	11.2	11.0	22.2	0.07	11.0	D
	IV	35	18.3	6.1	24.4	0.13	19.3	B
Total	IV		45.2	26.9	72.1	0.29	14.7	C

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	14.6	32.3	0.11	11.9	D
	IV	35	18.3	9.0	27.3	0.13	17.2	C
Congress St	IV	35	11.2	7.1	18.3	0.07	13.4	C
Pacific Highway	IV	35	15.7	20.1	35.8	0.10	9.6	D
Total	IV		62.9	50.8	113.7	0.40	12.7	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	9.8	45.9	0.30	23.6	C
Total	III		36.1	9.8	45.9	0.30	23.6	C

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	13.9	56.1	0.35	22.6	C
Sports Arena	III	35	36.1	46.0	82.1	0.30	13.2	E
Total	III		78.3	59.9	138.2	0.65	17.0	D

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	21.7	94.4	0.81	30.8	B
Total	II		72.7	21.7	94.4	0.81	30.8	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.9	35.3	0.17	17.2	D
Rosecrans St.	II	40	72.7	71.5	144.2	0.81	20.2	D
Total	II		92.1	87.4	179.5	0.98	19.6	D

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	16.7	83.0	0.55	24.0	C
Total	III		66.3	16.7	83.0	0.55	24.0	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	69.2	100.8	0.25	8.9	F
Total	III		31.6	69.2	100.8	0.25	8.9	F

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	71.5	131.3	0.50	13.7	E
East Dr	III	35	22.9	12.7	35.6	0.19	19.3	C
Kemper Street	III	35	39.9	28.0	67.9	0.33	17.6	D
Sport Arena Blvd	III	35	34.5	42.8	77.3	0.29	13.4	E
Total	III		157.1	155.0	312.1	1.31	15.1	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	16.0	50.5	0.29	20.5	C
East Drive	III	35	39.9	14.3	54.2	0.33	22.1	C
Rosecrans St.	III	35	22.9	62.4	85.3	0.19	8.0	F
Barnett Ave	III	35	59.8	32.4	92.2	0.50	19.5	C
Total	III		157.1	125.1	282.2	1.31	16.7	D

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	81.1	98.7	0.08	2.9	F
San Diego Ave	IV	25	25.0	13.9	38.9	0.11	10.5	D
Total	IV		42.6	95.0	137.6	0.19	5.1	F

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.9	26.6	0.07	9.6	D
Moore St	IV	25	25.0	5.3	30.3	0.11	13.5	C
Total	IV		43.7	13.2	56.9	0.18	11.7	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	15.4	32.5	0.13	14.8	D
Nimitz Blvd	III	35	22.4	46.5	68.9	0.19	9.8	F
Laning Rd	III	35	34.5	6.1	40.6	0.29	25.5	B
Barnett Ave	III	35	97.9	37.7	135.6	0.95	25.3	B
Midway Dr	III	35	58.8	20.1	78.9	0.49	22.3	C
Rosecrans St	III	35	16.7	30.8	47.5	0.13	9.9	F
Total	III		247.4	156.6	404.0	2.18	19.4	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	45.1	61.8	0.13	7.6	F
Lytton St	III	35	58.8	27.4	86.2	0.49	20.5	C
Laning Rd	III	35	97.9	5.7	103.6	0.95	33.1	A
Lowell St	III	35	34.5	62.9	97.4	0.29	10.6	E
Hugo St	III	35	22.4	4.1	26.5	0.19	25.4	B
Total	III		230.3	145.2	375.5	2.05	19.6	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	8.6	22.8	0.05	8.5	E
Total	IV		14.2	8.6	22.8	0.05	8.5	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	4.0	20.1	0.06	10.9	D
Total	IV		16.1	4.0	20.1	0.06	10.9	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	12.1	27.8	0.10	12.3	D
Juan St	IV	35	11.2	17.5	28.7	0.07	8.5	E
	IV	35	18.3	7.9	26.2	0.13	17.9	C
Total	IV		45.2	37.5	82.7	0.29	12.8	D

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	15.7	33.4	0.11	11.6	D
	IV	35	18.3	8.7	27.0	0.13	17.4	C
Congress St	IV	35	11.2	6.8	18.0	0.07	13.6	C
Pacific Highway	IV	35	15.7	24.8	40.5	0.10	8.5	E
Total	IV		62.9	56.0	118.9	0.40	12.1	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	34.0	70.1	0.30	15.5	D
Total	III		36.1	34.0	70.1	0.30	15.5	D

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	70.4	112.6	0.35	11.3	E
W Point Loma Blvd	III	35	36.1	65.8	101.9	0.30	10.6	E
Total	III		78.3	136.2	214.5	0.65	11.0	E

Appendix D
Peak Hour Intersection Counts

Vehicle Intersection Counts

(1)

10

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

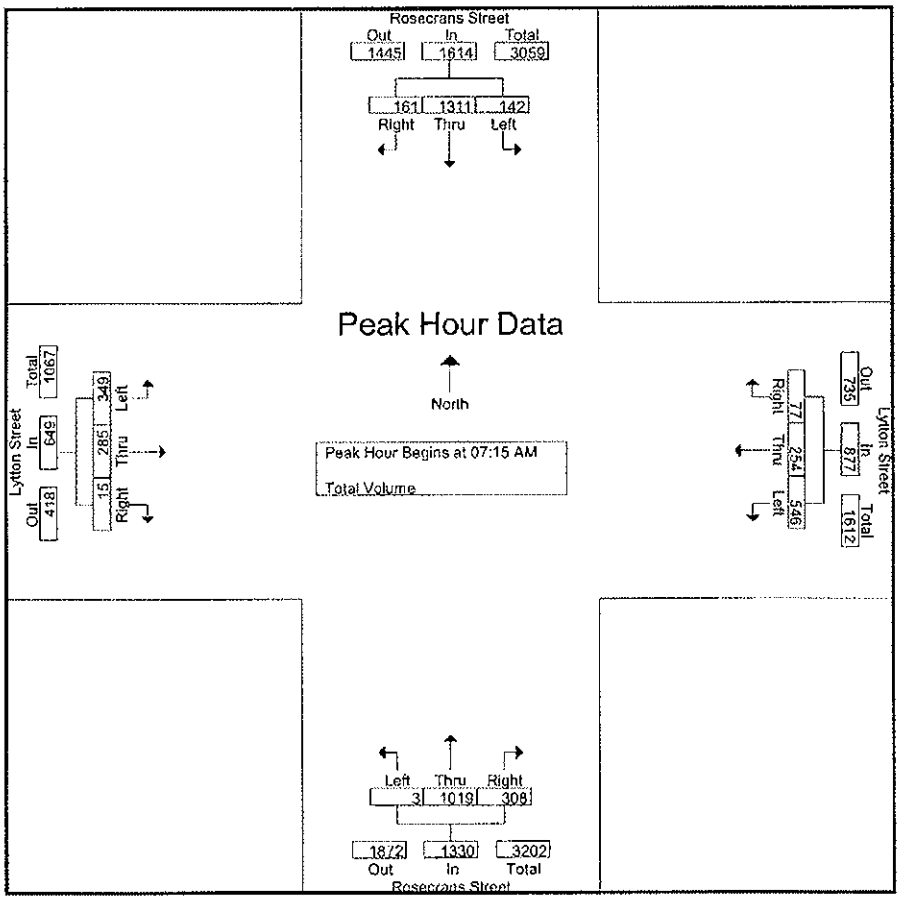
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
Total	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
07:00 AM	25	334	78	437	151	94	4	249	2	160	38	200	51	55	12	118	1004
07:15 AM	35	363	54	452	145	71	9	225	0	263	62	325	100	80	3	183	1185
07:30 AM	36	262	32	330	147	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	38	327	37	402	135	70	27	232	1	247	85	333	101	88	6	195	1162
Total	134	1286	201	1621	578	295	60	933	3	901	259	1163	336	284	23	643	4360
08:00 AM	33	359	38	430	119	53	21	193	2	278	87	367	64	56	4	124	1114
08:15 AM	35	349	60	444	103	72	25	200	3	285	77	365	55	59	1	115	1124
08:30 AM	20	269	46	335	96	52	20	168	1	321	88	410	69	49	1	119	1032
Grand Total	244	2561	409	3214	1059	533	131	1723	10	1976	532	2518	586	502	32	1120	8575
Apprch %	7.6	79.7	12.7		61.5	30.9	7.6		0.4	78.5	21.1		52.3	44.8	2.9		
Total %	2.8	29.9	4.8	37.5	12.3	6.2	1.5	20.1	0.1	23	6.2	29.4	6.8	5.9	0.4	13.1	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	**363**	**54**	**452**	145	71	9	225	0	263	62	325	100	80	3	183	**1185**
07:30 AM	36	262	32	330	**147**	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	**38**	327	37	402	135	70	**27**	**232**	1	247	85	333	**101**	**88**	**6**	**195**	1162
08:00 AM	33	359	38	430	119	53	21	193	**2**	**278**	**87**	**367**	64	56	4	124	1114
Total Volume	142	1311	161	1614	546	254	77	877	3	1019	308	1330	349	285	15	649	4470
% App. Total	8.8	81.2	10		62.3	29	8.8		0.2	76.6	23.2		53.8	43.9	2.3		
PHF	.934	.903	.745	.893	.929	.894	.713	.945	.375	.916	.885	.906	.864	.810	.625	.832	.943

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	25	334	78	437	151	94	4	249	1	247	85	333	100	80	3	183
+15 mins.	35	363	54	452	145	71	9	225	2	278	87	367	84	61	2	147
+30 mins.	36	262	32	330	147	60	20	227	3	285	77	365	101	88	6	195
+45 mins.	38	327	37	402	135	70	27	232	1	321	88	410	64	56	4	124
Total Volume	134	1286	201	1621	578	295	60	933	7	1131	337	1475	349	285	15	649
% App. Total	8.3	79.3	12.4		62	31.6	6.4		0.5	76.7	22.8		53.8	43.9	2.3	
PHF	.882	.886	.644	.897	.957	.785	.556	.937	.583	.881	.957	.899	.864	.810	.625	.832

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

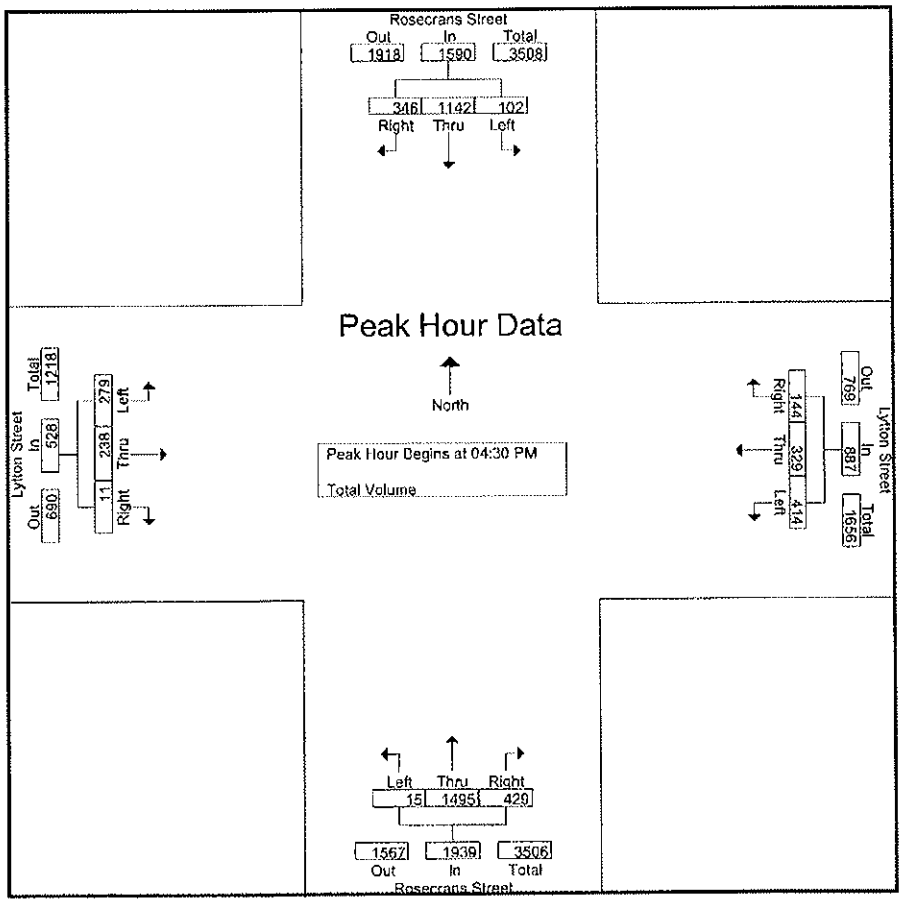
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	250	40	312	108	107	17	232	3	405	98	506	60	81	2	143	1193
04:15 PM	14	255	52	321	116	71	24	211	5	376	107	488	54	43	3	100	1120
04:30 PM	29	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	313	73	409	107	77	42	226	3	347	98	448	70	61	1	132	1215
Total	88	1088	240	1416	424	335	122	881	15	1470	411	1896	249	238	8	495	4688
05:00 PM	22	273	71	366	103	81	37	221	1	433	119	553	76	62	3	141	1281
05:15 PM	28	286	127	441	111	91	26	228	7	373	104	484	68	62	5	135	1288
05:30 PM	14	314	84	412	71	76	28	175	3	362	69	434	55	60	2	117	1138
05:45 PM	11	307	42	360	85	82	25	192	2	307	69	378	50	42	6	98	1028
Total	75	1180	324	1579	370	330	116	816	13	1475	361	1849	249	226	16	491	4735
Grand Total	163	2268	564	2995	794	665	238	1697	28	2945	772	3745	498	464	24	986	9423
Apprch %	5.4	75.7	18.8		46.8	39.2	14		0.7	78.6	20.6		50.5	47.1	2.4		
Total %	1.7	24.1	6	31.8	8.4	7.1	2.5	18	0.3	31.3	8.2	39.7	5.3	4.9	0.3	10.5	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**29**	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	**313**	73	409	107	77	**42**	226	3	347	98	448	70	61	1	132	1215
05:00 PM	22	273	71	366	103	81	37	221	1	**433**	**119**	**553**	**76**	**62**	3	**141**	1281
05:15 PM	28	286	**127**	**441**	**111**	**91**	26	**228**	7	373	104	484	68	62	**5**	135	**1288**
Total Volume	102	1142	346	1590	414	329	144	887	15	1495	429	1939	279	238	11	528	4944
% App. Total	6.4	71.8	21.8		46.7	37.1	16.2		0.8	77.1	22.1		52.8	45.1	2.1		
PHF	.879	.912	.681	.901	.932	.904	.857	.973	.536	.863	.901	.877	.918	.960	.550	.936	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	23	313	73	409	93	80	39	212	5	376	107	488	65	53	2	120
+15 mins.	22	273	71	366	107	77	42	226	4	342	108	454	70	61	1	132
+30 mins.	28	286	127	441	103	81	37	221	3	347	98	448	76	62	3	141
+45 mins.	14	314	84	412	111	91	26	228	1	433	119	553	68	62	5	135
Total Volume	87	1186	355	1628	414	329	144	887	13	1498	432	1943	279	238	11	528
% App. Total	5.3	72.9	21.8		46.7	37.1	16.2		0.7	77.1	22.2		52.8	45.1	2.1	
PHF	.777	.944	.699	.923	.932	.904	.857	.973	.650	.865	.908	.878	.918	.960	.550	.936

(2A)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		66								108		182	356
7:15 AM		59								91		196	346
7:30 AM		70								97		242	409
7:45 AM		73								124		289	486
8:00 AM		83								109		256	448
8:15 AM		80								122		267	469
8:30 AM		108								83		205	396
8:45 AM		97								86		215	398

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	636	0	0	0	0	0	0	0	820	0	1852	3308
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	30.69%	0.00%	69.31%	

[illegible]													
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

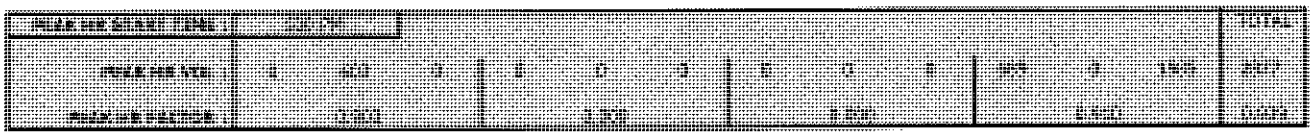
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SDUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		149								167		252	568
4:15 PM		150								176		297	623
4:30 PM		149								168		301	618
4:45 PM		144								157		363	664
5:00 PM		155								161		336	652
5:15 PM		141								180		445	766
5:30 PM		167								167		430	764
5:45 PM		140								181		374	695
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1195	0	0	0	0	0	0	0	1357	0	2798	5350
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	32.66%	0.00%	67.34%	



CONTROL :

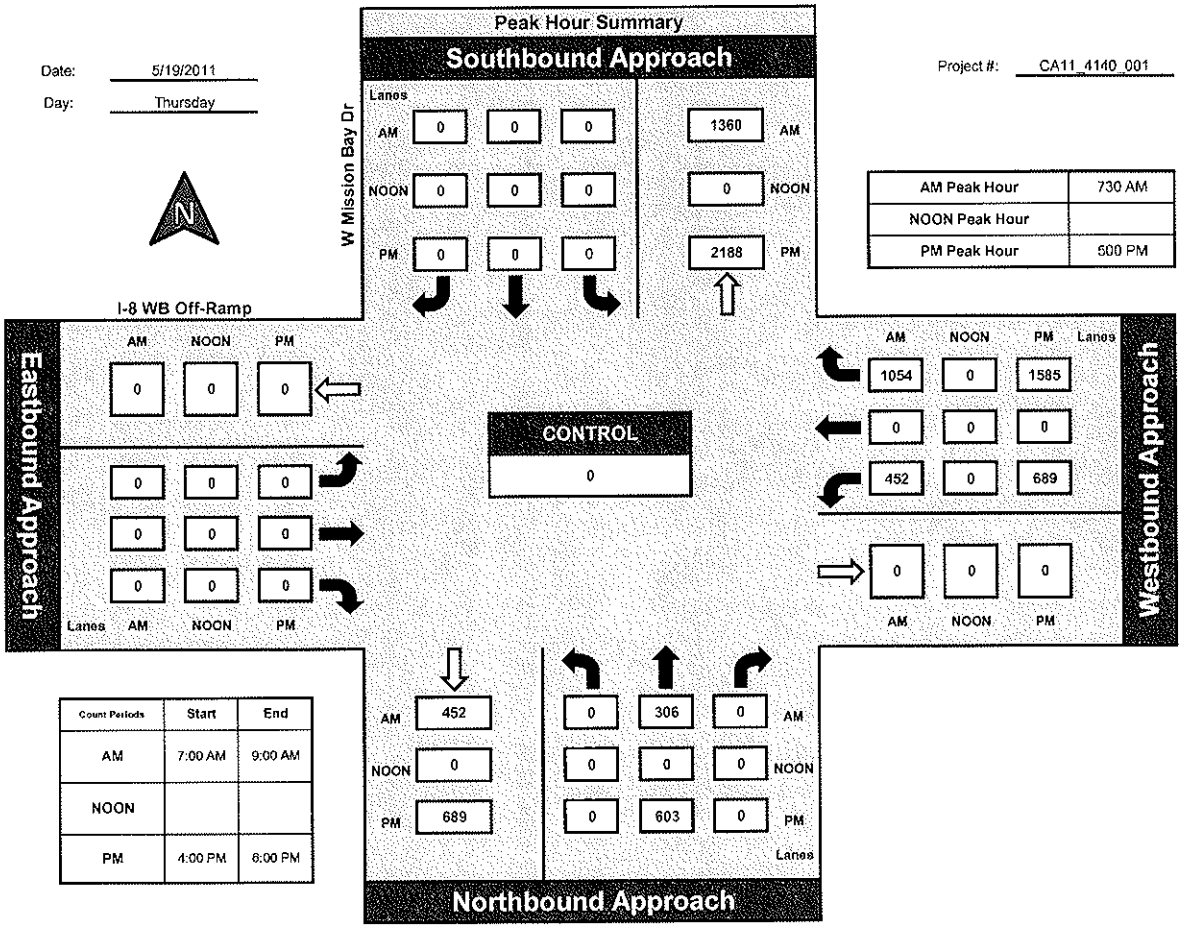
ITM Peak Hour Summary

Prepared by:

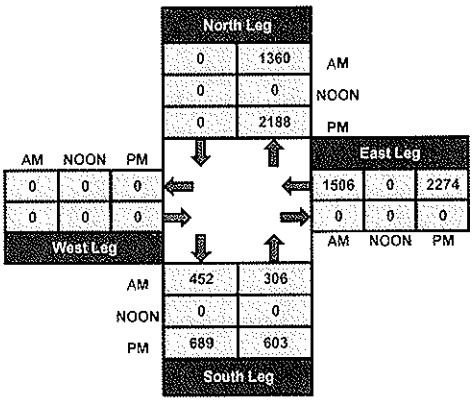
NDS

National Data & Surveying Services

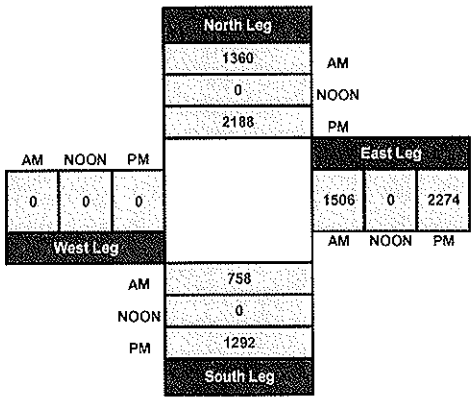
W Mission Bay Dr and I-8 WB Off-Ramp , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(2B)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	57	130		154	6			2				349
7:15 AM	0	67	130		163	2			3				365
7:30 AM	2	63	167		199	3			2				436
7:45 AM	2	80	166		211	9			3				471
8:00 AM	7	76	131		218	4			4				440
8:15 AM	1	86	163		225	1			4				480
8:30 AM	6	103	158		205	7			4				483
8:45 AM	3	101	145		220	0			4				473
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	633	1190	0	1595	32	0	0	26	0	0	0	3497
APPROACH %'s :	1.14%	34.33%	64.53%	0.00%	98.03%	1.97%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	6	152	187		252	9			6				612
4:15 PM	1	146	184		274	10			5				620
4:30 PM	7	154	174		280	16			4				635
4:45 PM	3	152	147		277	13			3				595
5:00 PM	5	147	174		310	15			5				656
5:15 PM	5	145	126		278	16			8				578
5:30 PM	3	164	154		314	10			0				645
5:45 PM	4	141	161		306	13			7				632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	1201	1307	0	2291	102	0	0	38	0	0	0	4973
APPROACH %'s :	1.34%	47.25%	51.42%	0.00%	95.74%	4.26%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sport Arena Blvd and I-8 EB On-Ramp , City of San Diego

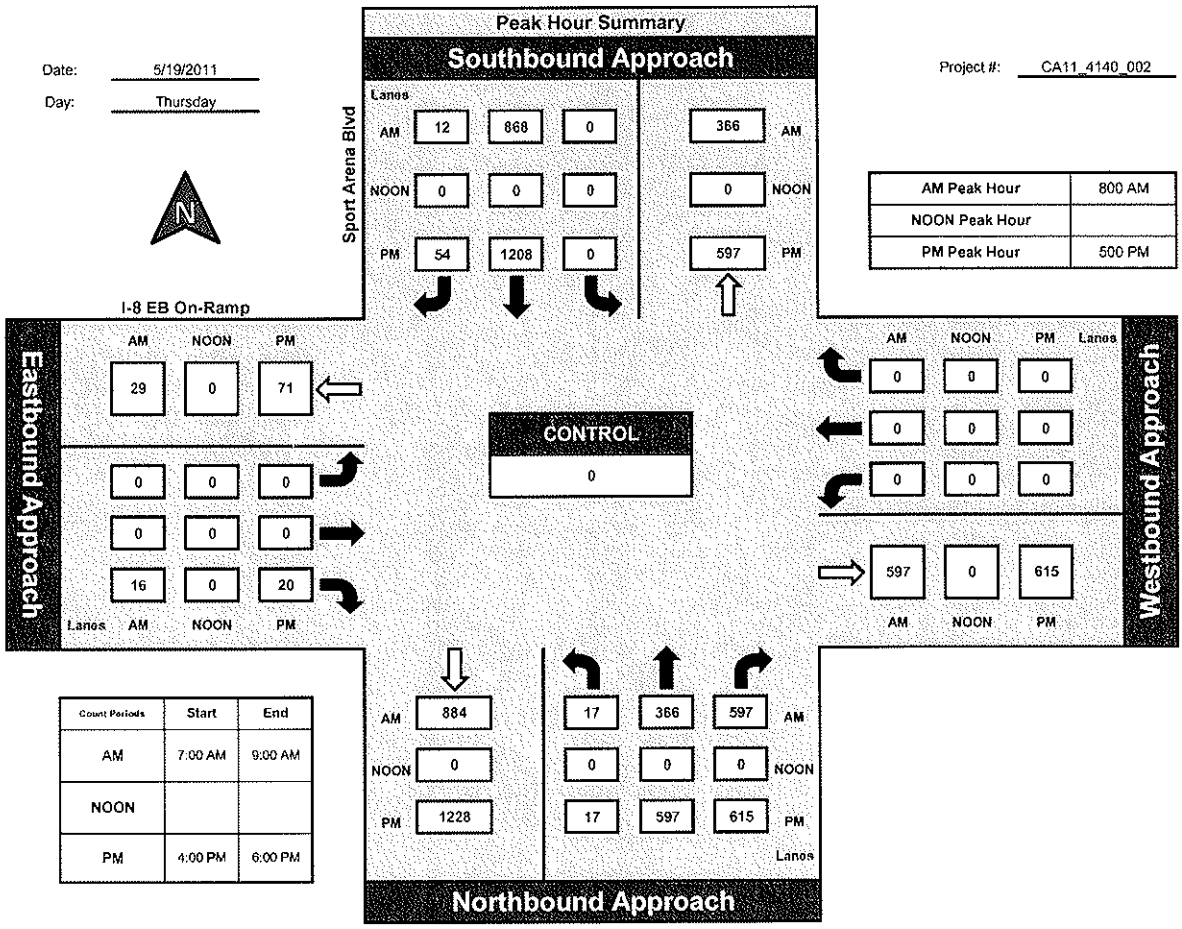
Date: 5/19/2011

Day: Thursday

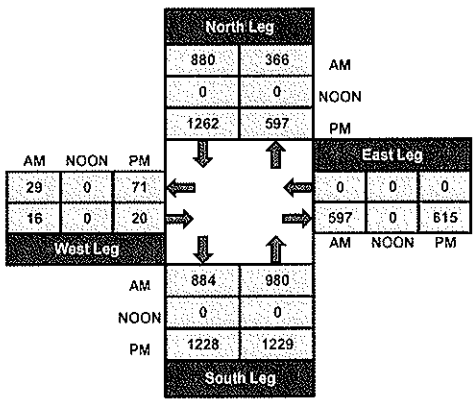
Project #: CA11_4140_002

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

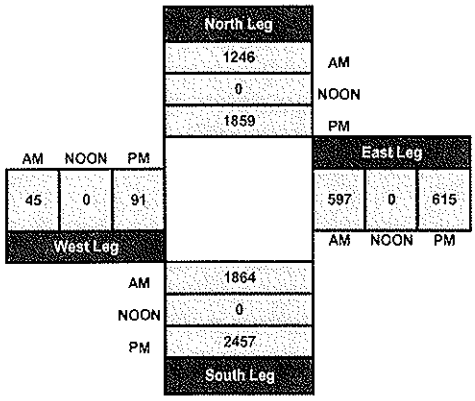
Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Total Ins & Outs



Total Volume Per Leg



③

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001

Day: THURSDAY

City: City of San Diego

Date: 6/9/2011

AM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
7:00 AM						3		137			157	2	299
7:15 AM						6		178			220	0	404
7:30 AM						4		164			250	3	421
7:45 AM						5		217			216	3	441
8:00 AM						8		204			214	1	427
8:15 AM						8		231			245	3	487
8:30 AM						13		190			226	3	432
8:45 AM						7		200			184	5	396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	54	0	1521	0	0	1712	20	3307
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	98.85%	1.15%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001 **Day:** THURSDAY

City: City of San Diego **Date:** 6/9/2011

PM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
4:00 PM						29		266			334	6	635
4:15 PM						21		321			283	10	635
4:30 PM						35		287			319	5	646
4:45 PM						26		291			308	4	629
5:00 PM						36		324			306	9	675
5:15 PM						39		348			308	7	702
5:30 PM						17		334			246	3	600
5:45 PM						16		306			300	10	632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	219	0	2477	0	0	2404	54	5154
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	97.80%	2.20%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

ITM Peak Hour Summary

Prepared by:

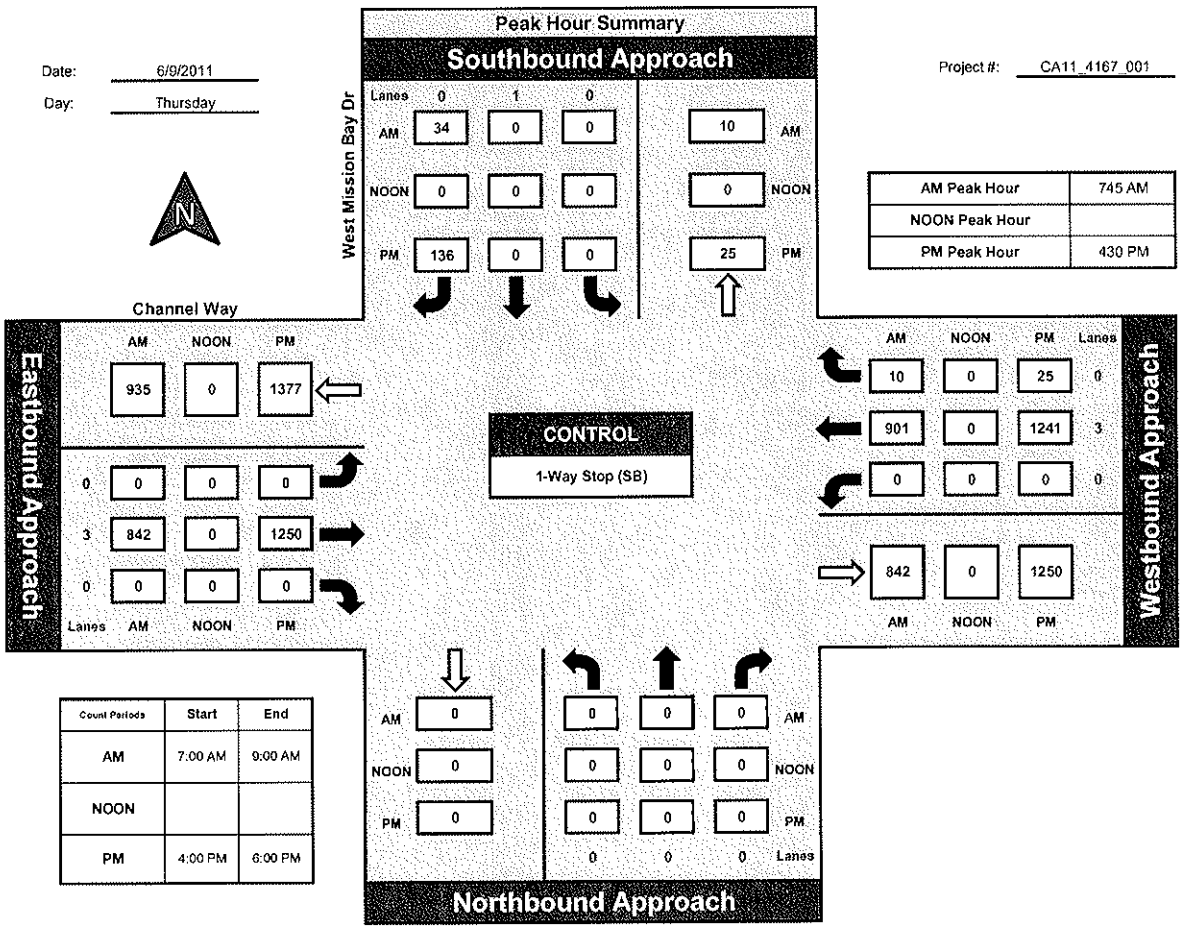
National Data & Surveying Services

West Mission Bay Dr and Channel Way , City of San Diego

Date: 6/9/2011

Day: Thursday

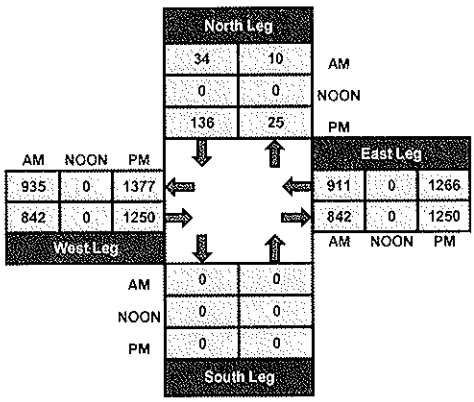
Project #: CA11_4167_001



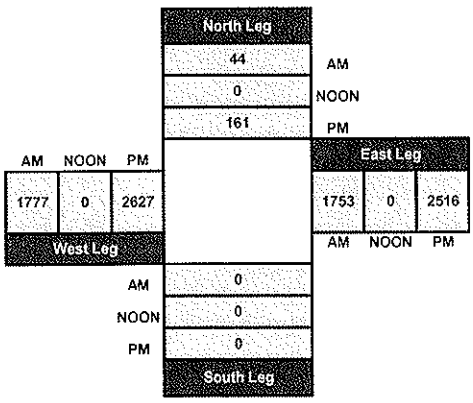
AM Peak Hour	7:45 AM
NOON Peak Hour	
PM Peak Hour	4:30 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(4)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	22	53	0	55	61	34	88	34	48	3	20	38	456
7:15 AM	29	62	1	61	81	49	135	50	57	2	20	45	592
7:30 AM	29	99	1	71	81	68	146	50	62	2	12	47	668
7:45 AM	29	67	2	79	97	54	121	73	62	3	23	47	657
8:00 AM	36	82	4	68	92	44	103	45	66	5	21	46	612
8:15 AM	25	70	8	79	118	36	98	42	51	3	36	52	618
8:30 AM	36	73	4	72	99	51	121	41	60	3	35	56	651
8:45 AM	52	102	3	79	119	40	90	49	67	5	33	69	708
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	258	608	23	564	748	376	902	384	473	26	200	400	4962
APPROACH %'s :	29.02%	68.39%	2.59%	33.41%	44.31%	22.27%	51.28%	21.83%	26.89%	4.15%	31.95%	63.90%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	76	141	4	45	135	46	84	56	86	8	47	103	831
4:15 PM	90	140	2	61	142	54	73	54	76	10	62	97	861
4:30 PM	79	110	6	67	126	62	84	52	66	6	79	133	870
4:45 PM	73	107	4	65	136	52	85	60	59	7	74	98	820
5:00 PM	77	118	7	77	184	74	85	56	70	9	81	134	972
5:15 PM	94	114	3	62	113	65	92	46	75	11	88	104	867
5:30 PM	102	123	10	87	161	79	92	54	68	7	51	82	916
5:45 PM	86	81	10	86	136	76	81	50	74	12	83	90	865
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	677	934	46	550	1133	508	676	428	574	70	565	841	7002
APPROACH %'s :	40.86%	56.37%	2.78%	25.10%	51.71%	23.19%	40.29%	25.51%	34.21%	4.74%	38.28%	56.98%	
[illegible]													

CONTROL :

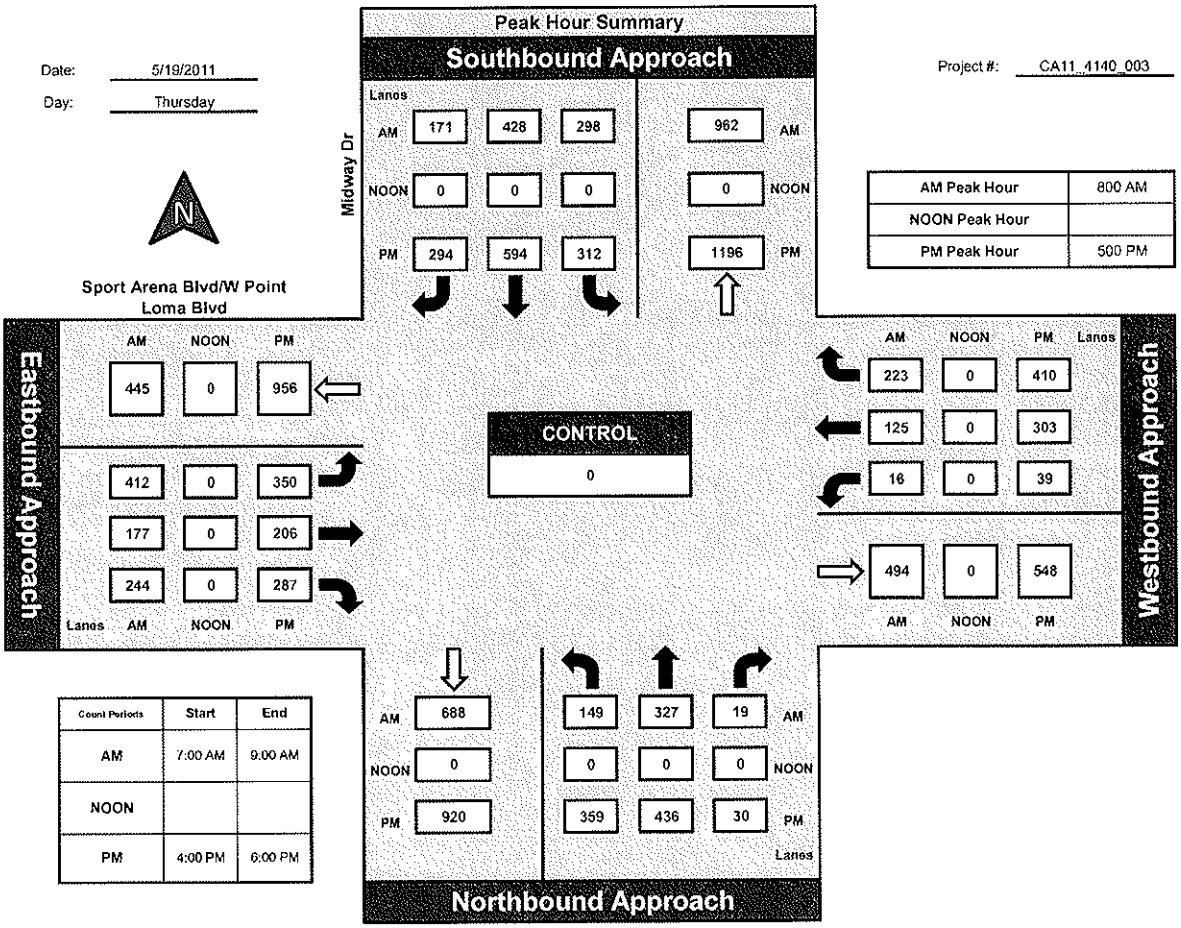
ITM Peak Hour Summary

Prepared by:

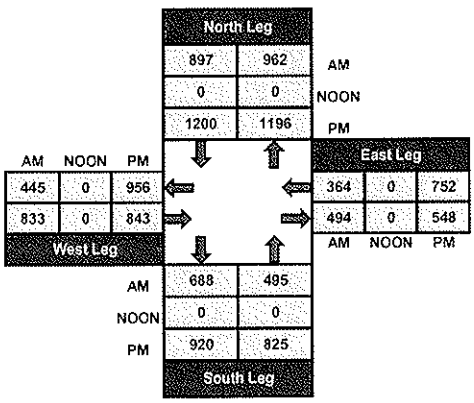
NDS

National Data & Surveying Services

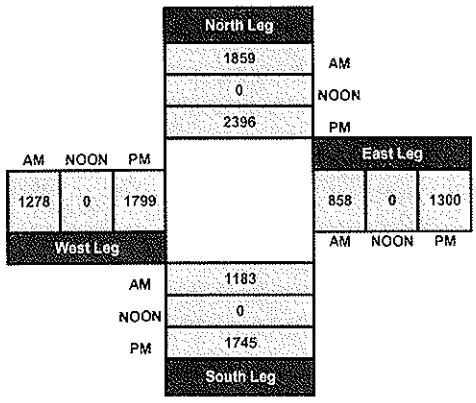
Midway Dr and Sport Arena Blvd/W Point Loma Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(5)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	18	23	3	9	3	3	57	13	9	56	10	224
7:15 AM	28	16	20	4	6	6	12	69	17	6	33	6	223
7:30 AM	26	20	28	5	9	5	18	86	16	11	56	9	289
7:45 AM	29	30	23	8	7	13	14	87	13	10	53	11	298
8:00 AM	19	22	14	6	11	12	16	91	21	21	68	7	308
8:15 AM	29	21	21	5	17	13	14	105	15	9	68	11	328
8:30 AM	24	30	34	8	10	11	18	103	20	18	84	6	366
8:45 AM	25	22	22	6	11	17	14	91	14	16	89	11	338
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	200	179	185	45	80	80	109	689	129	100	507	71	2374
APPROACH %'s :	35.46%	31.74%	32.80%	21.95%	39.02%	39.02%	11.76%	74.33%	13.92%	14.75%	74.78%	10.47%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	47	28	38	12	31	12	34	140	26	62	158	15	603
4:15 PM	26	38	35	9	34	19	32	118	24	70	140	16	561
4:30 PM	26	32	39	9	28	26	37	130	25	55	175	16	598
4:45 PM	41	29	47	15	42	10	23	91	53	49	138	11	549
5:00 PM	56	33	41	19	26	22	33	130	29	59	142	14	604
5:15 PM	47	31	31	9	35	28	34	151	27	59	174	17	643
5:30 PM	42	29	38	10	38	14	32	128	31	58	167	17	604
5:45 PM	49	15	28	9	39	18	29	122	29	47	146	9	540
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	334	235	297	92	273	149	254	1010	244	459	1240	115	4702
APPROACH %'s :	38.57%	27.14%	34.30%	17.90%	53.11%	28.99%	16.84%	66.98%	16.18%	25.30%	68.36%	6.34%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

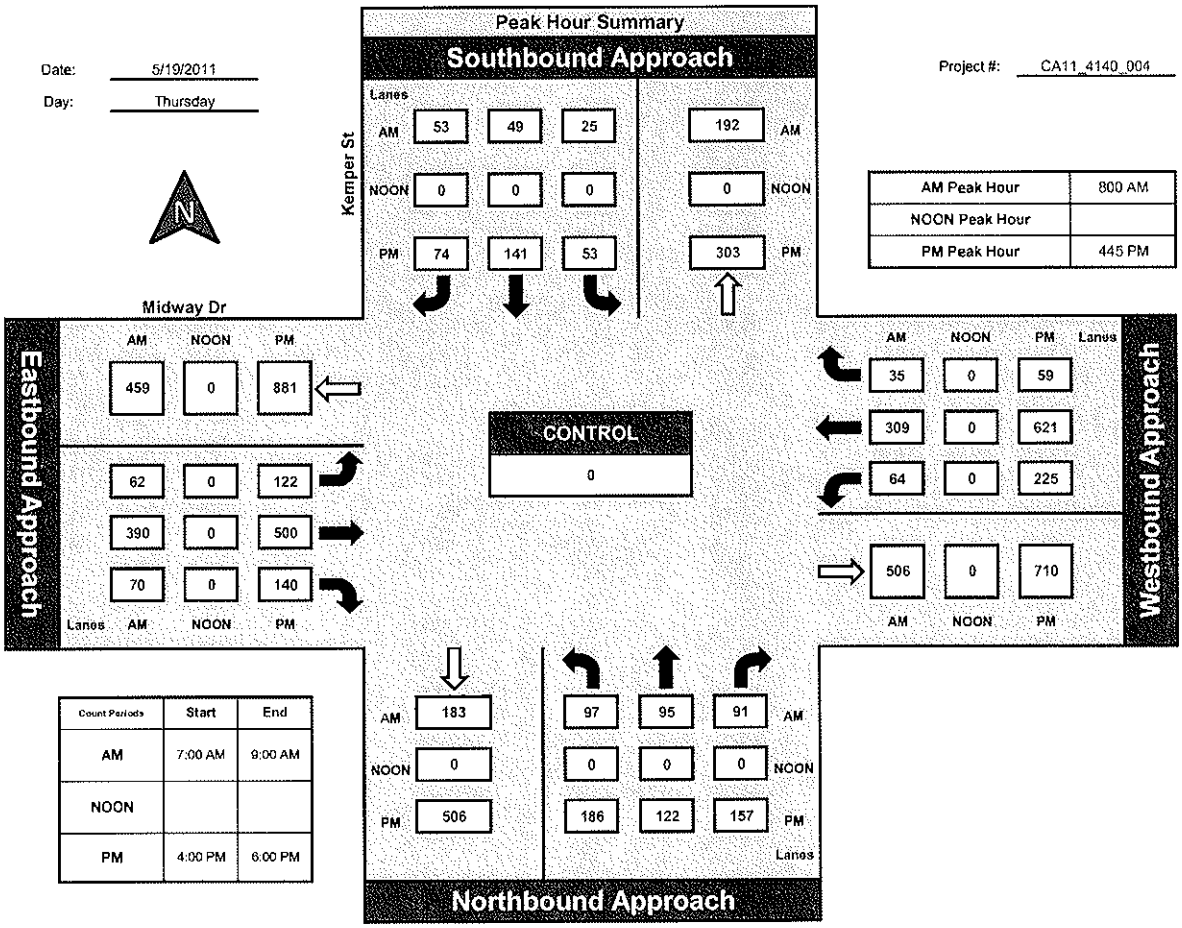
National Data & Surveying Services

Kemper St and Midway Dr , City of San Diego

Date: 5/19/2011

Day: Thursday

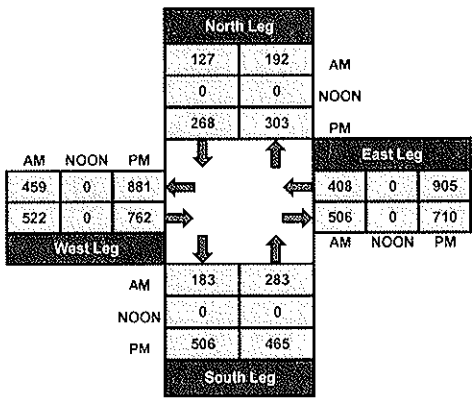
Project #: CA11_4140_004



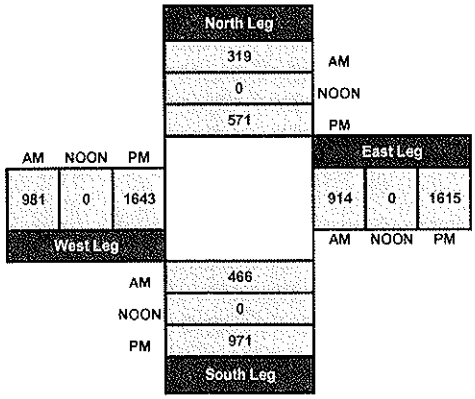
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(6)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	4	0	3	4	0	1	4	106	3	4	81	2	212
7:15 AM	1	2	1	1	0	2	3	102	2	2	90	4	210
7:30 AM	4	0	1	1	0	4	1	132	1	5	126	7	282
7:45 AM	3	0	1	1	1	4	1	114	2	7	132	11	277
8:00 AM	6	1	0	2	0	3	1	131	3	7	148	13	315
8:15 AM	7	1	3	4	1	3	4	139	5	6	158	12	343
8:30 AM	3	0	1	7	0	4	5	148	2	6	183	23	382
8:45 AM	3	1	1	3	1	5	6	119	0	6	140	20	305
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	5	11	23	3	26	25	991	18	43	1058	92	2326
APPROACH %'s :	65.96%	10.64%	23.40%	44.23%	5.77%	50.00%	2.42%	95.84%	1.74%	3.60%	88.68%	7.71%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	3	4	1	12	1	10	19	203	1	8	273	39	574
4:15 PM	4	2	1	12	4	13	11	205	4	6	242	34	538
4:30 PM	7	4	2	20	2	20	14	221	4	8	267	35	604
4:45 PM	3	1	3	16	2	16	11	170	5	6	240	34	507
5:00 PM	6	0	4	11	0	10	7	217	2	7	284	44	592
5:15 PM	8	1	5	22	0	6	14	197	5	6	246	51	561
5:30 PM	1	3	2	14	3	19	23	219	4	5	278	27	598
5:45 PM	4	0	5	14	1	7	9	186	9	1	242	27	505
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	36	15	23	121	13	101	108	1618	34	47	2072	291	4479
APPROACH %'s :	48.65%	20.27%	31.08%	51.49%	5.53%	42.98%	6.14%	91.93%	1.93%	1.95%	85.98%	12.07%	



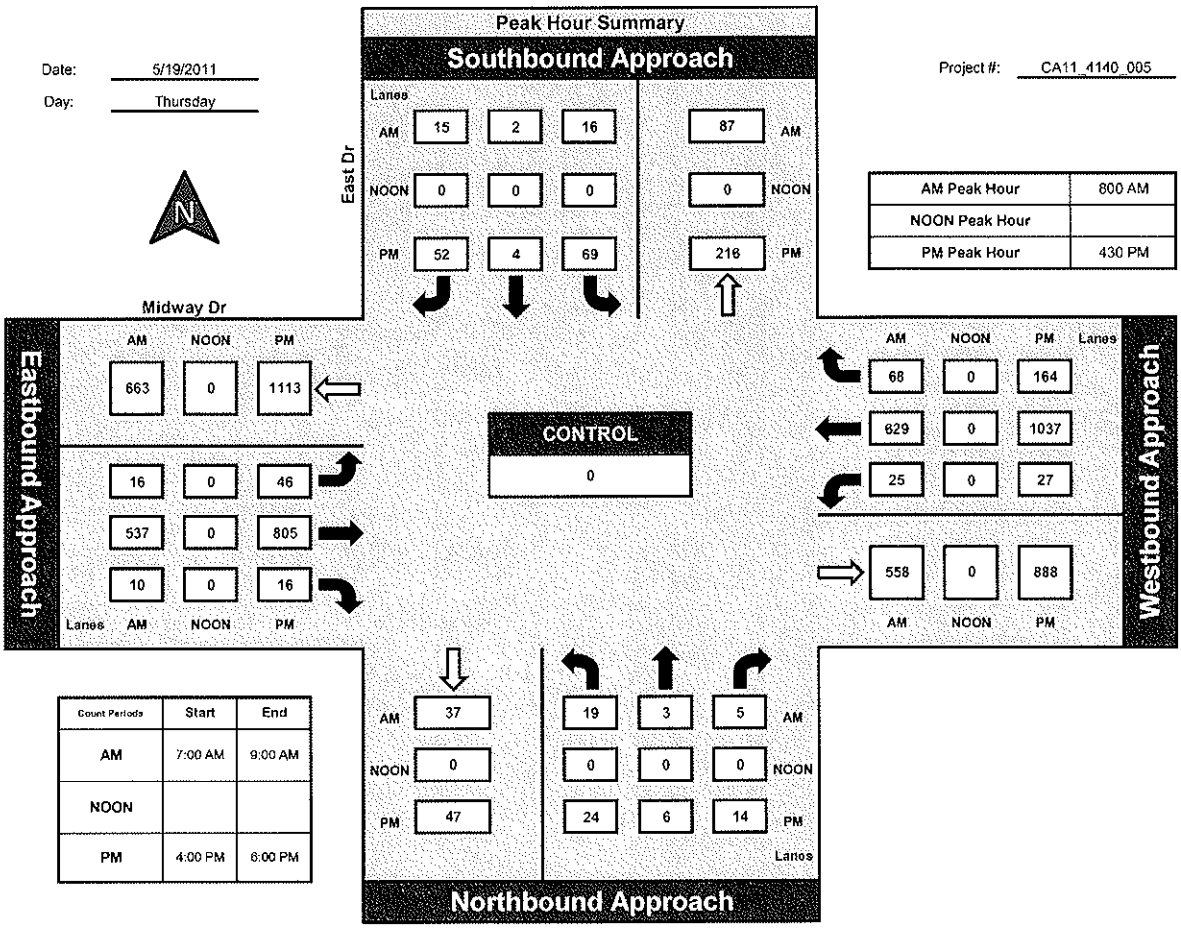
CONTROL :

ITM Peak Hour Summary

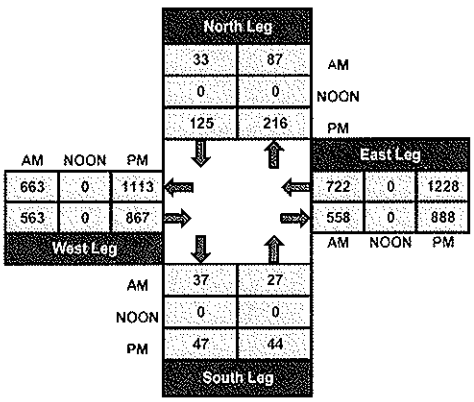
Prepared by:

National Data & Surveying Services

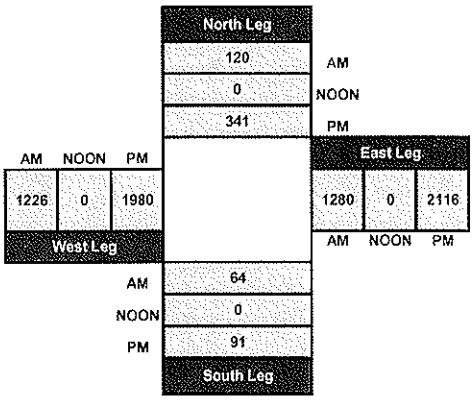
East Dr and Midway Dr , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(7)

8

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

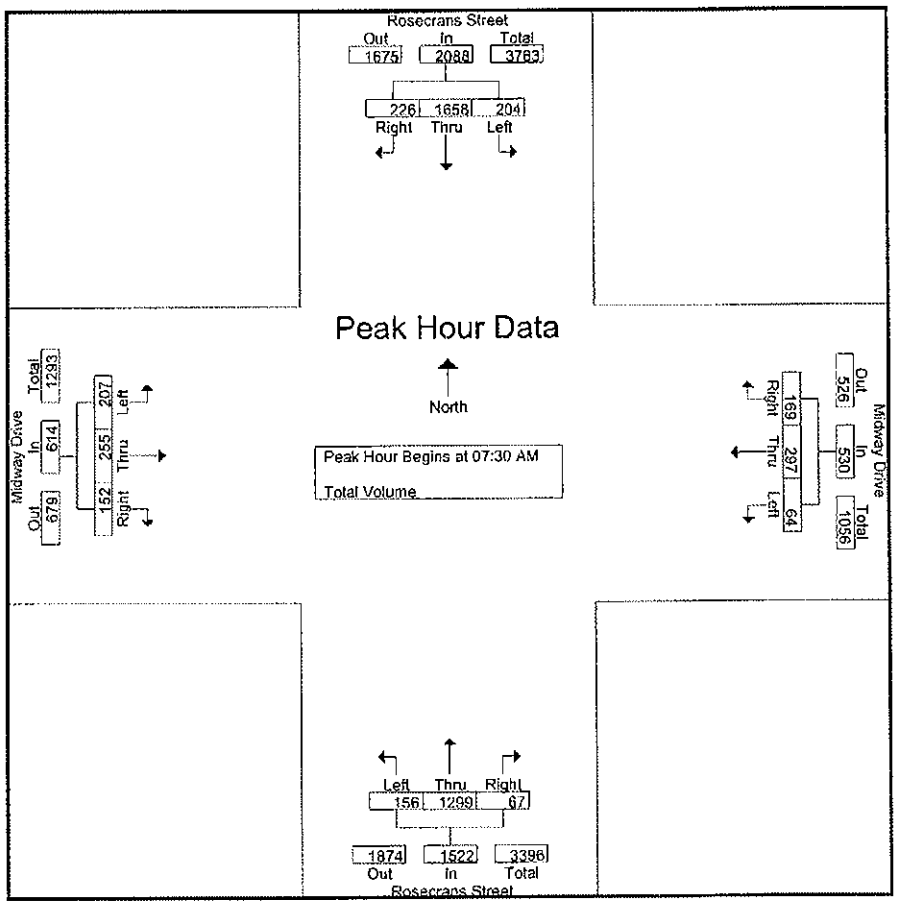
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
Total	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
07:00 AM	78	384	31	493	14	44	32	90	24	246	17	287	27	46	28	101	971
07:15 AM	67	472	45	584	18	54	25	97	17	283	13	313	45	59	16	120	1114
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
Total	259	1695	192	2146	62	240	127	429	104	1196	51	1351	165	238	115	518	4444
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
08:30 AM	58	310	55	423	15	88	45	148	33	332	20	385	55	77	35	167	1123
Grand Total	467	3165	378	4010	121	525	296	942	245	2328	131	2704	376	483	253	1112	8768
Apprch %	11.6	78.9	9.4		12.8	55.7	31.4		9.1	86.1	4.8		33.8	43.4	22.8		
Total %	5.3	36.1	4.3	45.7	1.4	6	3.4	10.7	2.8	26.6	1.5	30.8	4.3	5.5	2.9	12.7	

	Rosecrans Street Southbound				Midwny Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
Total Volume	204	1658	226	2088	64	297	169	530	156	1299	67	1522	207	255	152	614	4754
% App. Total	9.8	79.4	10.8		12.1	56	31.9		10.2	85.3	4.4		33.7	41.5	24.8		
PHF	.718	.856	.831	.877	.762	.773	.716	.844	.780	.931	.698	.926	.772	.951	.905	.914	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	67	472	45	584	20	72	36	128	34	**349**	11	394	44	67	33	144
+15 mins.	**71**	355	48	474	13	59	**59**	131	29	318	10	357	**67**	62	39	**168**
+30 mins.	43	**484**	**68**	**595**	**21**	**96**	40	**157**	**50**	286	**24**	360	47	60	**42**	149
+45 mins.	48	417	57	522	15	88	45	148	43	346	22	**411**	55	77	35	167
Total Volume	229	1728	218	2175	69	315	180	564	156	1299	67	1522	213	266	149	628
% App. Total	10.5	79.4	10		12.2	55.9	31.9		10.2	85.3	4.4		33.9	42.4	23.7	
PHF	.806	.893	.801	.914	.821	.820	.763	.898	.780	.931	.698	.926	.795	.864	.887	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

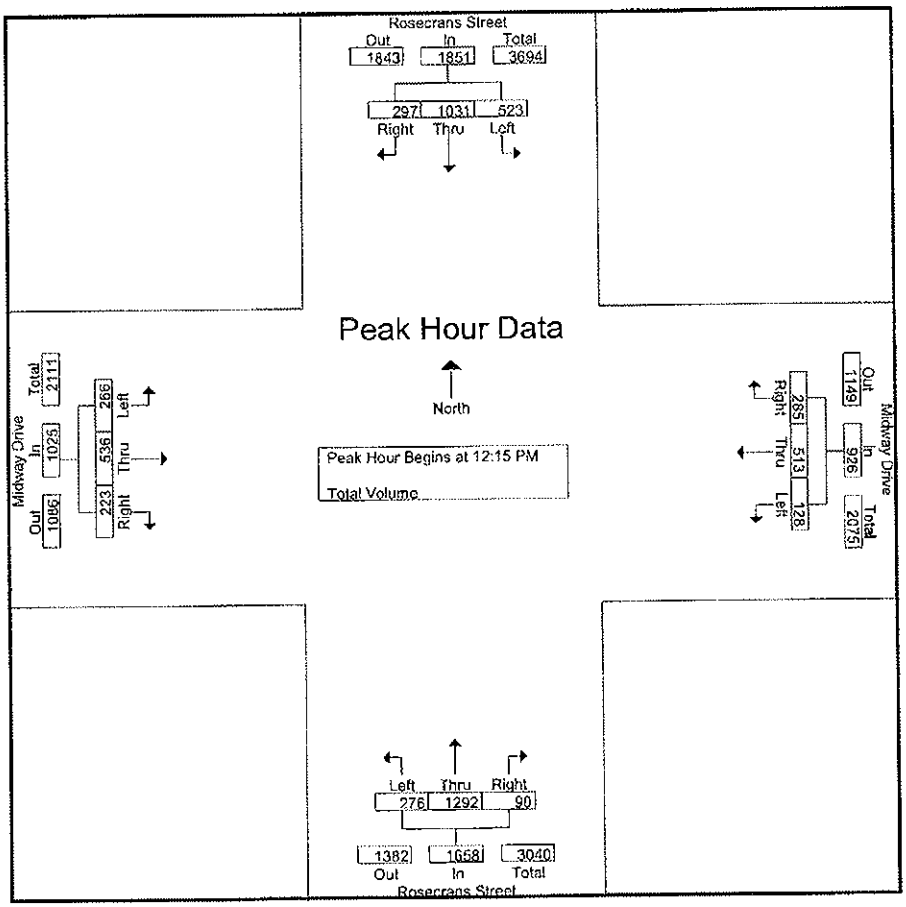
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	123	255	86	464	28	107	62	197	76	270	16	362	90	110	46	246	1269
11:45 AM	131	222	49	402	34	145	55	234	89	319	20	428	50	108	43	201	1265
Total	254	477	135	866	62	252	117	431	165	589	36	790	140	218	89	447	2534
12:00 PM	152	299	69	520	46	120	68	234	49	287	22	358	56	102	42	200	1312
12:15 PM	120	237	76	433	34	143	77	254	73	282	24	379	72	144	68	284	1350
12:30 PM	120	288	84	492	37	120	77	234	76	377	22	475	56	126	55	237	1438
12:45 PM	131	233	68	432	27	144	76	247	63	308	19	390	69	130	58	257	1326
Total	523	1057	297	1877	144	527	298	969	261	1254	87	1602	253	502	223	978	5426
01:00 PM	152	273	69	494	30	106	55	191	64	325	25	414	69	136	42	247	1346
01:15 PM	135	211	73	419	35	102	43	180	72	288	24	384	51	107	36	194	1177
Grand Total	1064	2018	574	3656	271	987	513	1771	562	2456	172	3190	513	963	390	1866	10483
Apprch %	29.1	55.2	15.7		15.3	55.7	29		17.6	77	5.4		27.5	51.6	20.9		
Total %	10.1	19.3	5.5	34.9	2.6	9.4	4.9	16.9	5.4	23.4	1.6	30.4	4.9	9.2	3.7	17.8	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	120	237	76	433	34	143	77	**254**	73	282	24	379	**72**	**144**	**68**	**284**	1350
12:30 PM	120	**288**	**84**	492	**37**	120	77	234	**76**	**377**	**22**	**475**	56	126	55	237	**1438**
12:45 PM	131	233	68	432	27	**144**	76	247	63	308	19	390	69	130	58	257	1326
01:00 PM	**152**	273	69	**494**	30	106	55	191	64	325	**25**	414	69	136	42	247	1346
Total Volume	523	1031	297	1851	128	513	285	926	276	1292	90	1658	266	536	223	1025	5460
% App. Total	28.3	55.7	16		13.8	55.4	30.8		16.6	77.9	5.4		26	52.3	21.8		
PHF	.860	.895	.884	.937	.865	.891	.925	.911	.908	.857	.900	.873	.924	.931	.820	.902	.949

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

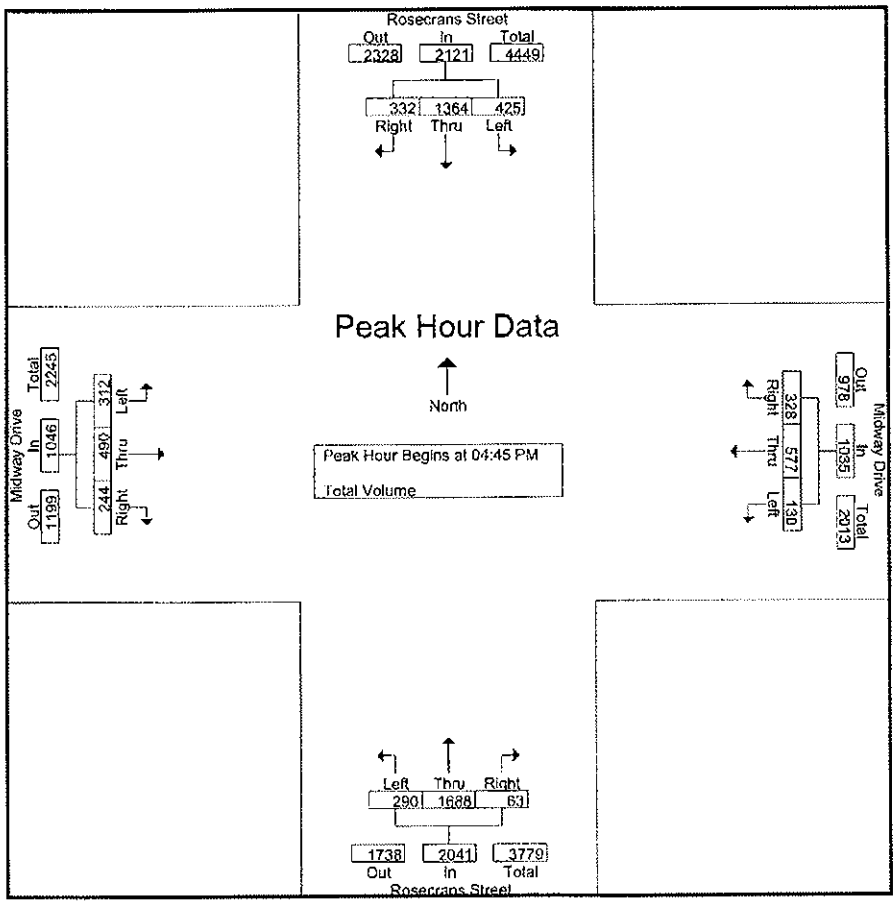
Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				12:30 PM				12:15 PM			
+0 mins.	**152**	**299**	69	**520**	**46**	120	68	234	**76**	**377**	22	**475**	**72**	**144**	**68**	**284**
+15 mins.	120	237	76	433	34	143	77	**254**	63	308	19	390	56	126	55	237
+30 mins.	120	288	**84**	492	37	120	77	234	64	325	**25**	414	69	130	58	257
+45 mins.	131	233	68	432	27	**144**	76	247	72	288	24	384	69	136	42	247
Total Volume	523	1057	297	1877	144	527	298	969	275	1298	90	1663	266	536	223	1025
% App. Total	27.9	56.3	15.8		14.9	54.4	30.8		16.5	78.1	5.4		26	52.3	21.8	
PHF	.860	.884	.884	.902	.783	.915	.968	.954	.905	.861	.900	.875	.924	.931	.820	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	116	330	90	536	40	133	95	268	62	427	17	506	60	109	80	249
+15 mins.	120	332	81	533	23	129	90	242	69	455	14	538	84	108	52	244
+30 mins.	99	344	89	532	38	154	84	276	67	424	13	504	86	129	46	261
+45 mins.	90	358	72	520	39	152	83	274	75	434	14	523	82	144	66	292
Total Volume	425	1364	332	2121	140	568	352	1060	273	1740	58	2071	312	490	244	1046
% App. Total	20	64.3	15.7		13.2	53.6	33.2		13.2	84	2.8		29.8	46.8	23.3	
PHF	.885	.953	.922	.989	.875	.922	.926	.960	.910	.956	.853	.962	.907	.851	.763	.896

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	106	301	72	479	34	138	80	252	62	427	17	506	75	117	42	234	1471
04:15 PM	107	324	78	509	33	128	96	257	69	455	14	538	77	111	52	240	1544
04:30 PM	103	285	80	468	40	133	95	268	67	424	13	504	72	131	56	259	1499
04:45 PM	116	330	90	536	23	129	90	242	75	434	14	523	60	109	80	249	1550
Total	432	1240	320	1992	130	528	361	1019	273	1740	58	2071	284	468	230	982	6064
05:00 PM	120	332	81	533	38	154	84	276	69	398	20	487	84	108	52	244	1540
05:15 PM	99	344	89	532	39	152	83	274	71	432	14	517	86	129	46	261	1584
05:30 PM	90	358	72	520	30	142	71	243	75	424	15	514	82	144	66	292	1569
05:45 PM	121	327	67	515	37	119	62	218	71	350	20	441	64	119	52	235	1409
Total	430	1361	309	2100	144	567	300	1011	286	1604	69	1959	316	500	216	1032	6102
Grand Total	862	2601	629	4092	274	1095	661	2030	559	3344	127	4030	600	968	446	2014	12166
Apprch %	21.1	63.6	15.4		13.5	53.9	32.6		13.9	83	3.2		29.8	48.1	22.1		
Total %	7.1	21.4	5.2	33.6	2.3	9	5.4	16.7	4.6	27.5	1	33.1	4.9	8	3.7	16.6	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	116	330	**90**	**536**	23	129	**90**	242	**75**	**434**	14	**523**	60	109	**80**	249	1550
05:00 PM	**120**	332	81	533	38	**154**	84	**276**	69	398	**20**	487	84	108	52	244	1540
05:15 PM	99	344	89	532	**39**	152	83	274	71	432	14	517	**86**	129	46	261	**1584**
05:30 PM	90	**358**	72	520	30	142	71	243	75	424	15	514	82	**144**	66	**292**	1569
Total Volume	425	1364	332	2121	130	577	328	1035	290	1688	63	2041	312	490	244	1046	6243
% App. Total	20	64.3	15.7		12.6	55.7	31.7		14.2	82.7	3.1		29.8	46.8	23.3		
PHF	.885	.953	.922	.989	.833	.937	.911	.938	.967	.972	.788	.976	.907	.851	.763	.896	.985

(9)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		85	4		87							17	193
7:15 AM		92	8		75							14	189
7:30 AM		118	2		117							10	247
7:45 AM		118	6		99							20	243
8:00 AM		114	8		112							21	255
8:15 AM		129	4		118							20	271
8:30 AM		149	7		150							24	330
8:45 AM		141	6		130							17	294

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	946	45	0	888	0	0	0	0	0	0	143	2022
APPROACH %'s :	0.00%	95.46%	4.54%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		172	4		203							63	442
4:15 PM		185	4		182							44	415
4:30 PM		169	1		228							71	469
4:45 PM		186	2		222							52	462
5:00 PM		220	1		232							53	506
5:15 PM		190	2		183							52	427
5:30 PM		164	1		206							43	414
5:45 PM		151	1		170							30	352
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1437	16	0	1626	0	0	0	0	0	0	408	3487
APPROACH %'s :	0.00%	98.90%	1.10%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
[illegible]													
[illegible]													

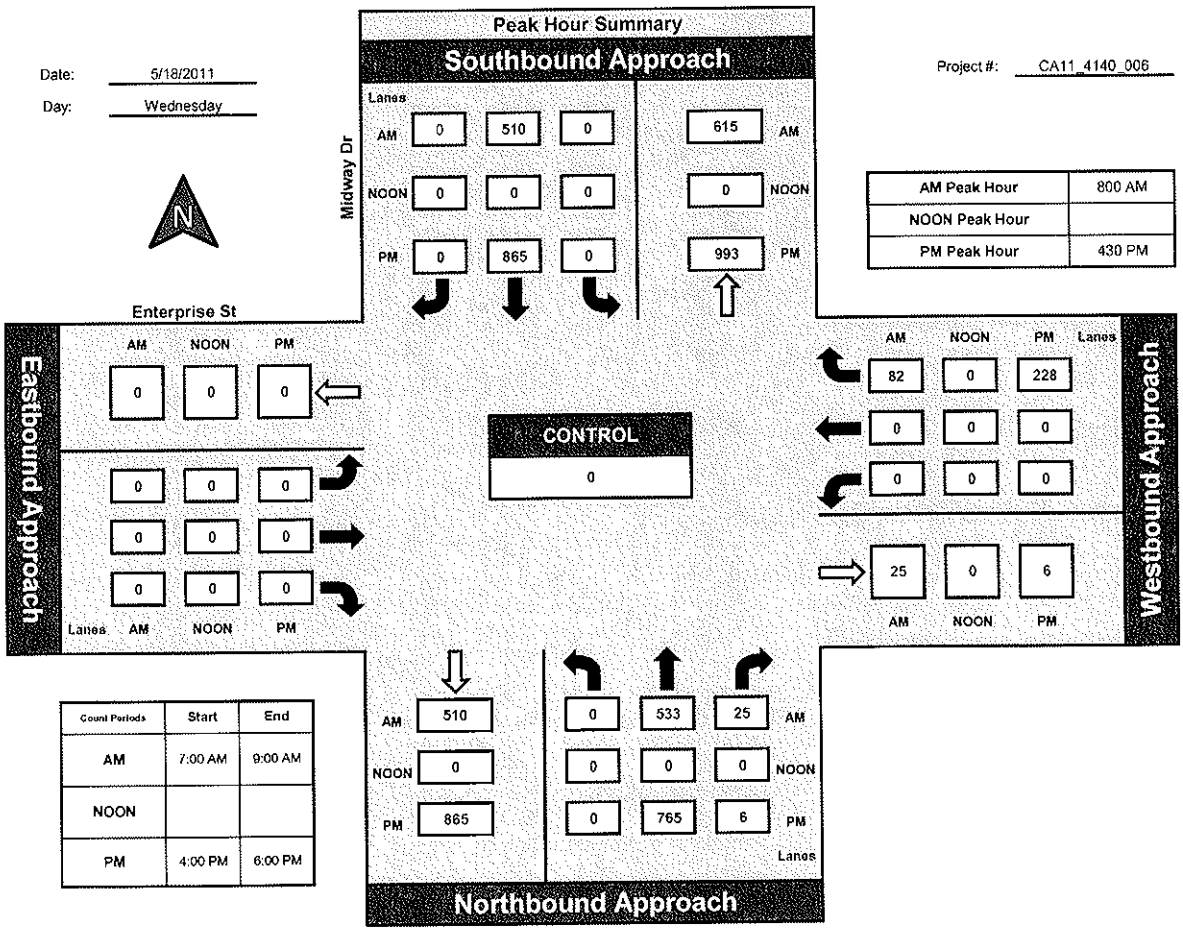
CONTROL :

ITM Peak Hour Summary

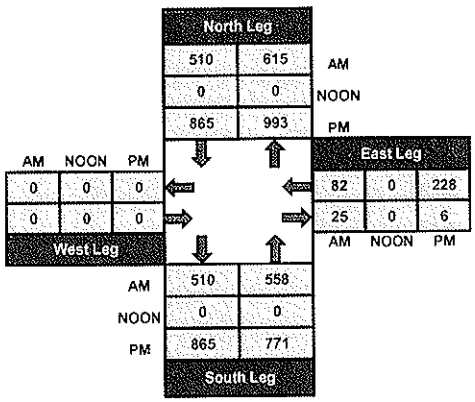
Prepared by:

National Data & Surveying Services

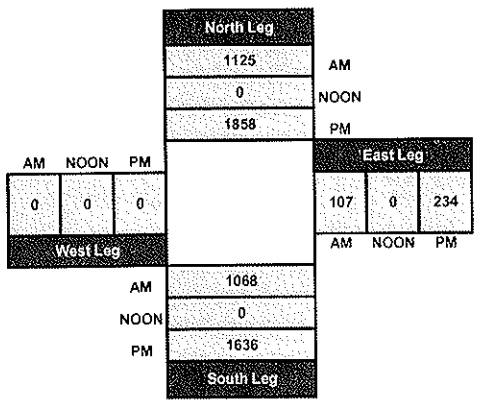
Midway Dr and Enterprise St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(10)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				65		21		160			380	84	710
7:15 AM				55		21		210			329	105	720
7:30 AM				95		21		186			248	115	665
7:45 AM				87		13		189			338	129	756
8:00 AM				89		19		210			314	119	751
8:15 AM				102		19		227			306	132	786
8:30 AM				119		28		210			253	152	762
8:45 AM				108		25		170			204	151	658

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	720	0	167	0	1562	0	0	2372	987	5808
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	81.17%	0.00%	18.83%	0.00%	100.00%	0.00%	0.00%	70.62%	29.38%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

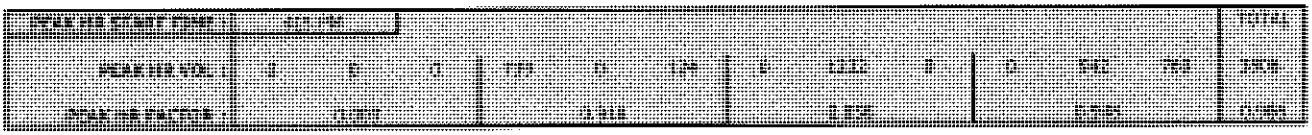
City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				172		27		333			223	175	930
4:15 PM				159		27		359			230	190	965
4:30 PM				192		32		310			227	170	931
4:45 PM				187		31		293			255	188	954
5:00 PM				201		34		270			230	221	956
5:15 PM				157		25		278			211	189	860
5:30 PM				175		31		216			206	169	797
5:45 PM				148		17		180			193	149	687

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	1391	0	224	0	2239	0	0	1775	1451	7080
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	86.13%	0.00%	13.87%	0.00%	100.00%	0.00%	0.00%	55.02%	44.98%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

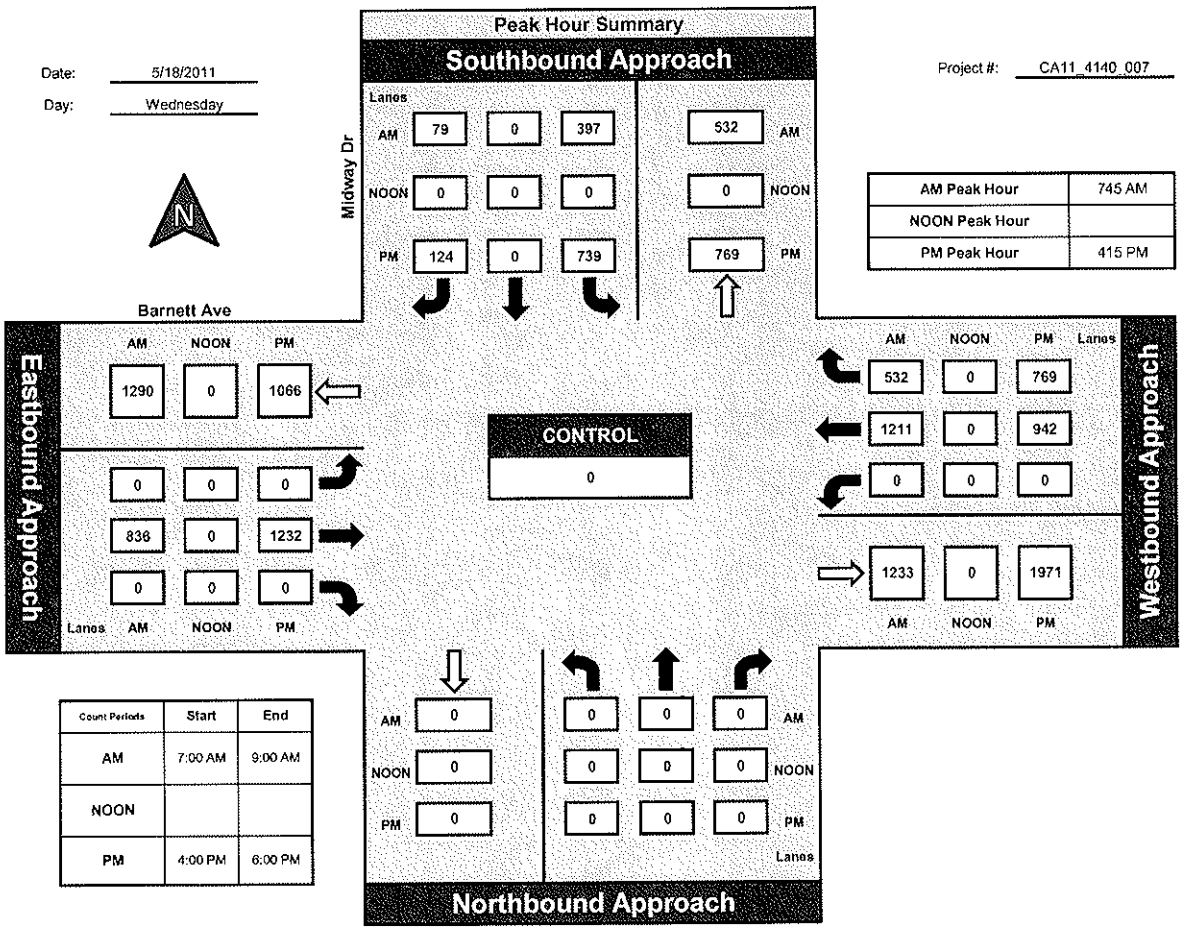
National Data & Surveying Services

Midway Dr and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

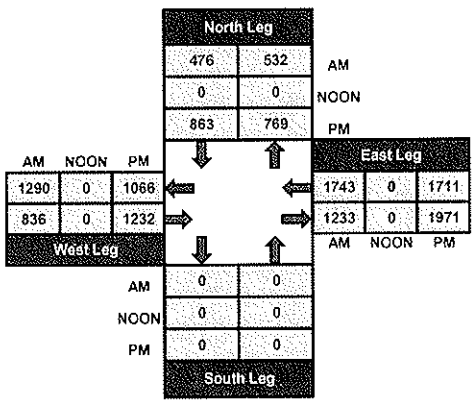
Project #: CA11_4140_007



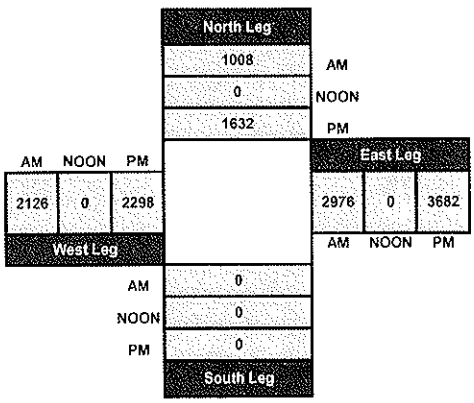
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

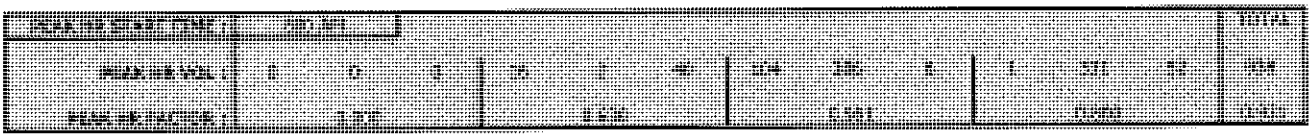
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				7	0	11	24	66	1	0	47	9	165
7:15 AM				7	1	18	30	83	0	0	36	6	181
7:30 AM				8	0	8	36	74	1	0	54	18	199
7:45 AM				3	0	16	32	99	2	0	68	15	235
8:00 AM				1	0	13	33	95	1	1	69	12	225
8:15 AM				8	1	14	25	99	0	0	78	14	239
8:30 AM				3	0	8	25	93	3	0	80	10	222
8:45 AM				4	1	5	21	99	2	0	104	16	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	41	3	93	226	708	10	1	536	100	1718
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	29.93%	2.19%	67.88%	23.94%	75.00%	1.06%	0.16%	84.14%	15.70%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

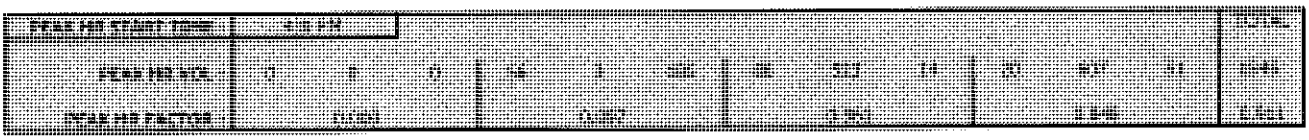
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				9	0	24	13	83	0	1	109	9	248
4:15 PM				12	0	36	13	105	2	4	121	11	304
4:30 PM				15	1	43	21	131	4	7	150	16	388
4:45 PM				14	0	48	25	130	7	5	177	18	424
5:00 PM				13	2	53	22	127	3	2	128	8	358
5:15 PM				14	0	41	18	135	0	6	152	9	375
5:30 PM				11	0	27	23	123	2	2	137	9	334
5:45 PM				12	2	35	28	136	5	3	149	8	378
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	100	5	307	163	970	23	30	1123	88	2809
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	24.27%	1.21%	74.51%	14.10%	83.91%	1.99%	2.42%	90.49%	7.09%	



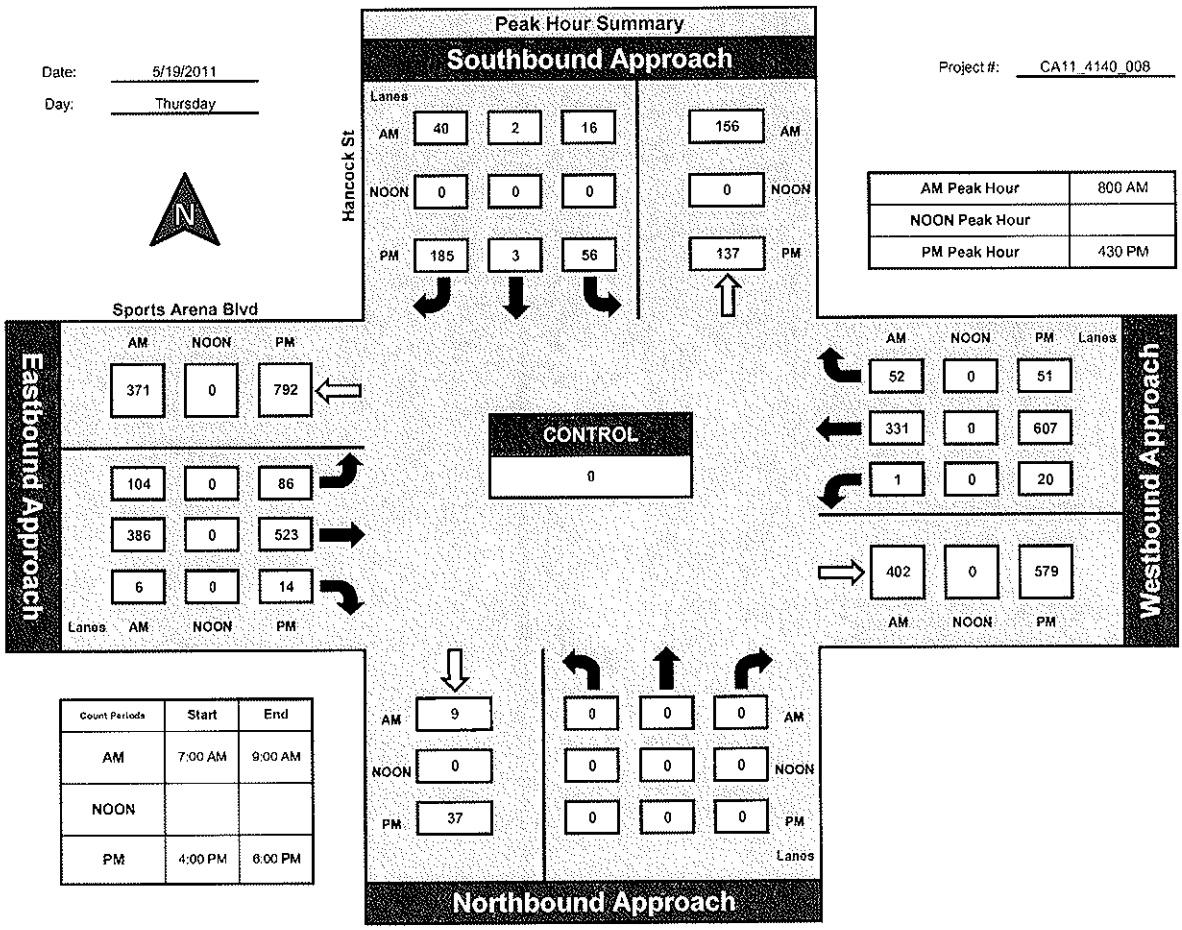
CONTROL :

ITM Peak Hour Summary

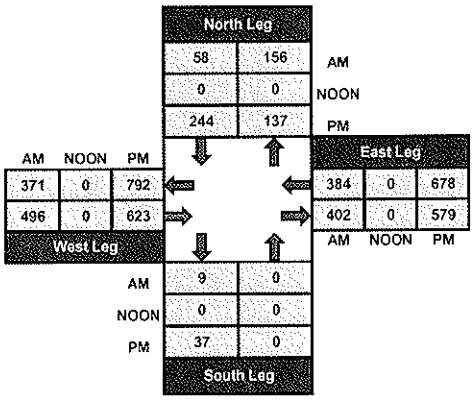
Prepared by:

National Data & Surveying Services

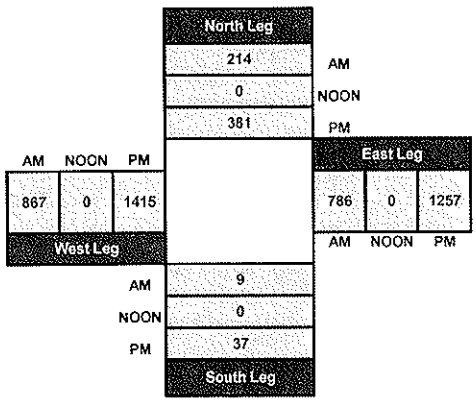
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		1		0				0	0			1
7:15 AM	0		1		0				0	0			1
7:30 AM	1		2		1				0	0			4
7:45 AM	0		1		0				0	0			1
8:00 AM	0		0		1				0	1			2
8:15 AM	0		2		1				1	0			4
8:30 AM	2		0		1				1	1			5
8:45 AM	0		0		0				0	0			

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	7	0	4	0	0	0	2	2	0	0	18
APPROACH %'s :	30.00%	0.00%	70.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

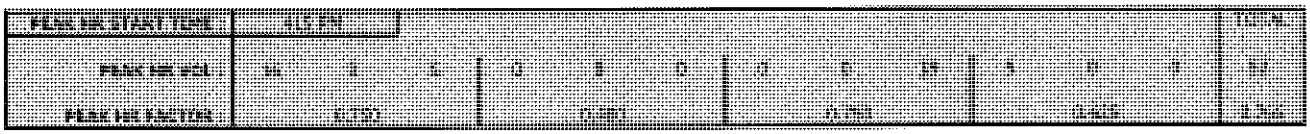
Project ID: CA11_4140_008 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		1		1				2	0			4
4:15 PM	5		2		0				2	2			11
4:30 PM	4		1		5				6	1			17
4:45 PM	4		2		0				5	2			13
5:00 PM	3		0		3				5	0			11
5:15 PM	2		0		0				1	1			4
5:30 PM	1		2		1				2	1			7
5:45 PM	3		2		2				3	2			12

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	0	10	0	12	0	0	0	26	9	0	0	79
APPROACH %'s :	68.75%	0.00%	31.25%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



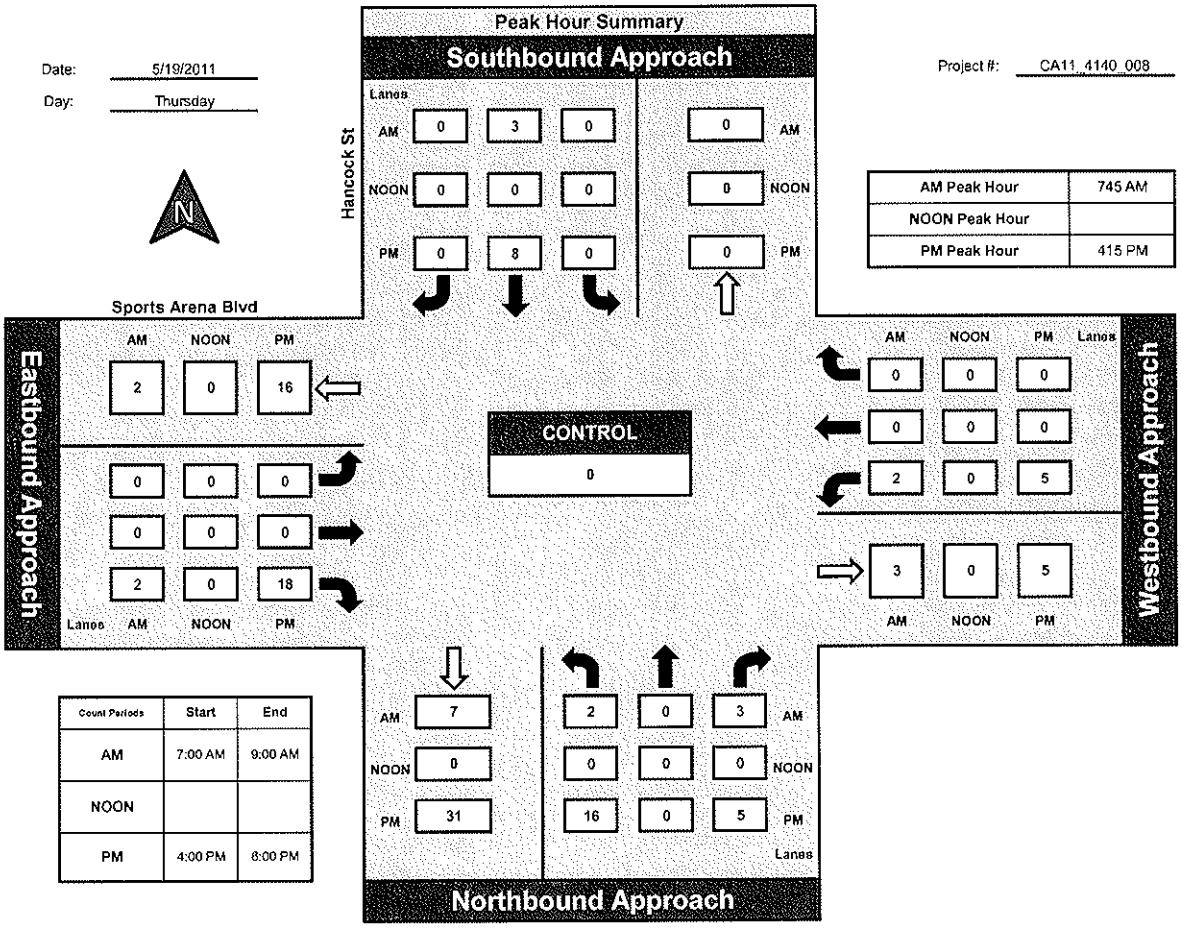
CONTROL :

ITM Peak Hour Summary

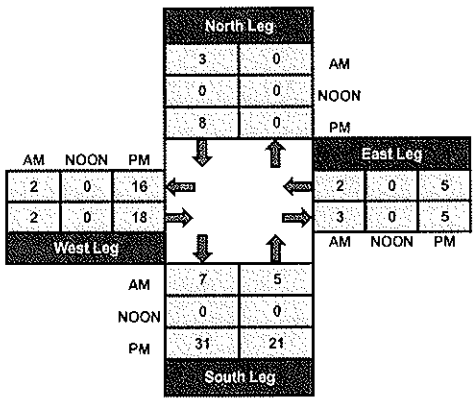
Prepared by:

National Data & Surveying Services

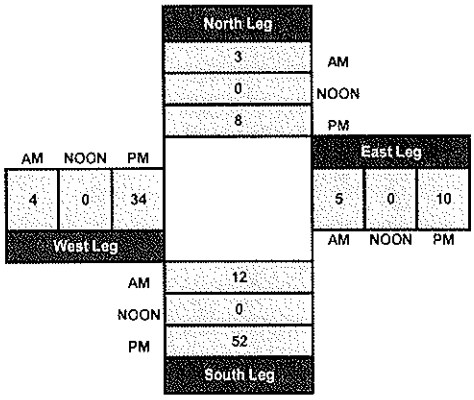
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(12)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	1	30	1	2	5	7	79	6	20	57	6	229
7:15 AM	13	2	20	3	5	3	4	90	15	14	49	9	227
7:30 AM	17	6	39	4	3	6	9	74	7	29	74	11	279
7:45 AM	12	10	22	7	4	13	9	68	16	27	57	10	255
8:00 AM	12	6	15	11	4	15	19	64	17	28	50	22	263
8:15 AM	23	8	19	10	6	23	20	71	11	24	44	20	279
8:30 AM	16	15	34	8	6	32	17	65	28	34	51	23	329
8:45 AM	23	11	27	17	7	30	12	81	20	30	82	15	355
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	131	59	206	61	37	127	97	592	120	206	464	116	2216
APPROACH %'s :	33.08%	14.90%	52.02%	27.11%	16.44%	56.44%	11.99%	73.18%	14.83%	26.21%	59.03%	14.76%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	74	40	110	36	20	83	65	290	72	116	279	76	1261
PEAK HR FACTOR :	0.803			0.782			0.906			0.906			0.907

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

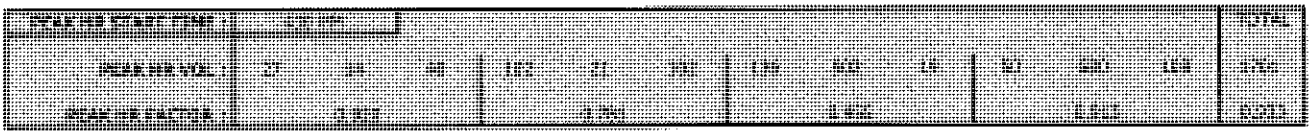
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	2	10	33	2	23	27	95	2	18	135	29	377
4:15 PM	6	3	8	28	5	23	35	106	10	8	139	29	400
4:30 PM	10	3	9	33	6	33	44	112	4	19	150	33	456
4:45 PM	6	5	10	22	5	19	25	125	6	9	158	18	408
5:00 PM	8	3	11	24	4	23	34	130	8	11	137	25	418
5:15 PM	3	3	10	23	6	27	33	135	1	11	135	32	419
5:30 PM	8	0	9	22	3	22	27	123	5	13	140	21	393
5:45 PM	5	5	8	28	6	21	21	136	5	10	119	35	399
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	47	24	75	213	37	191	246	962	41	99	1113	222	3270
APPROACH %'s :	32.19%	16.44%	51.37%	48.30%	8.39%	43.31%	19.70%	77.02%	3.28%	6.90%	77.62%	15.48%	



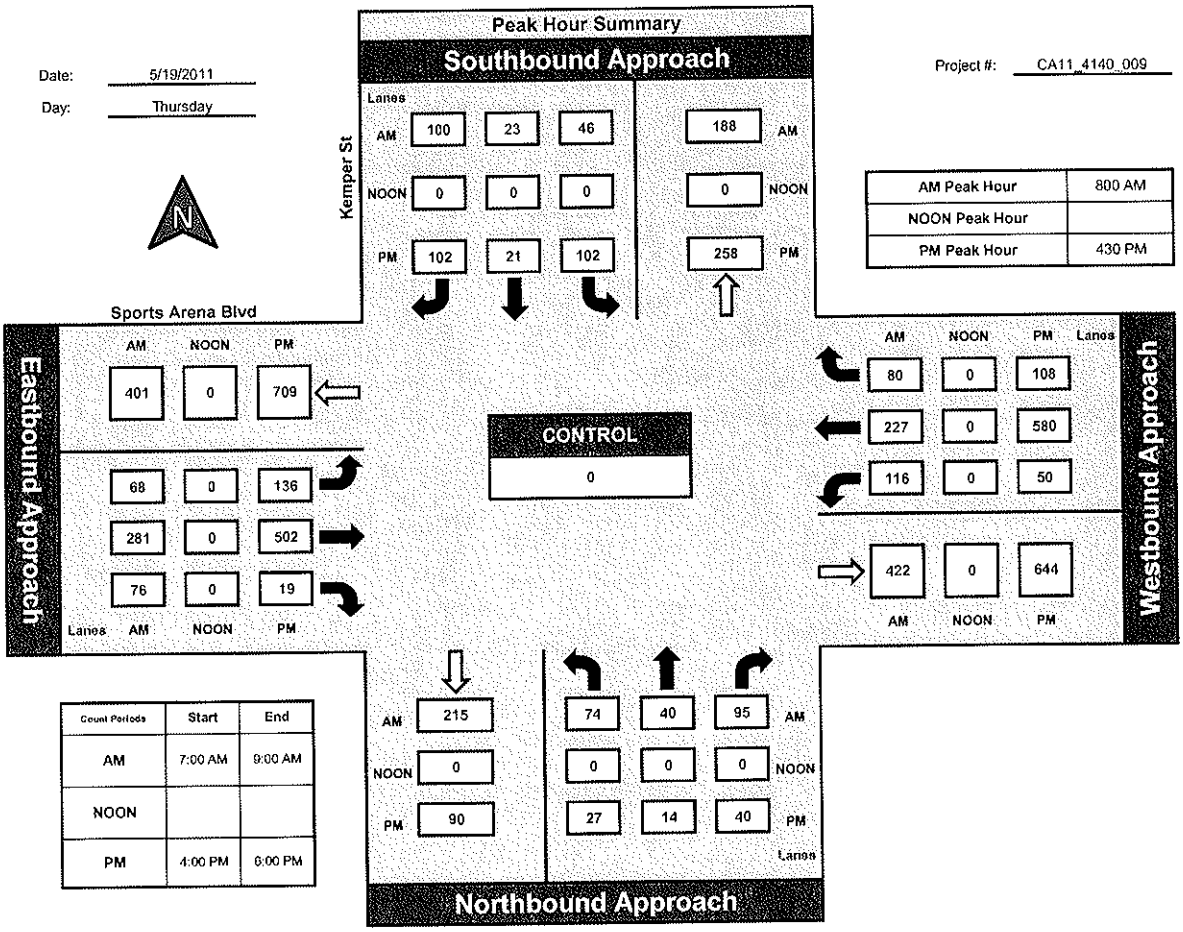
CONTROL :

ITM Peak Hour Summary

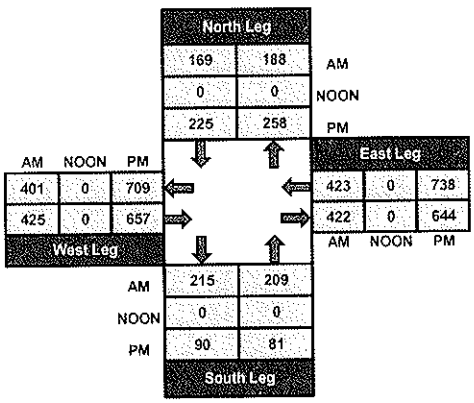
Prepared by:

National Data & Surveying Services

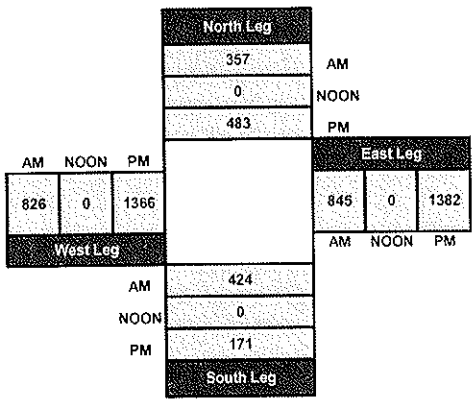
Kemper St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(13)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_010

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	0	1	2	0	4	11	69	12	1	63	1	171
7:15 AM	4	0	4	2	2	4	16	74	11	2	73	5	197
7:30 AM	5	0	1	7	0	5	14	87	15	1	96	2	233
7:45 AM	7	0	3	1	0	8	12	81	10	2	87	3	214
8:00 AM	7	1	0	5	0	7	20	65	11	4	78	2	200
8:15 AM	4	0	3	4	1	10	23	75	7	2	82	5	216
8:30 AM	6	3	2	5	1	11	16	66	9	2	92	11	224
8:45 AM	9	1	3	11	1	12	13	76	12	2	106	7	253
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	49	5	17	37	5	61	125	593	87	16	677	36	1708
APPROACH %'s :	69.01%	7.04%	23.94%	35.92%	4.85%	59.22%	15.53%	73.66%	10.81%	2.19%	92.87%	4.94%	
PEAK HR START TIME	[illegible]												
PEAK HR VOL	[illegible]												
PEAK HR FACTOR	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

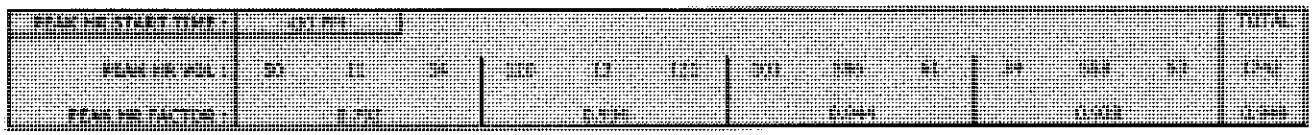
National Data & Surveying Services

Project ID: CA11_4140_010 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	12	3	7	18	3	37	35	146	10	4	136	13	424
4:15 PM	8	9	8	22	3	40	25	139	17	9	131	14	425
4:30 PM	17	4	9	25	2	36	25	152	17	8	146	18	459
4:45 PM	7	2	4	33	3	32	24	129	15	7	138	8	402
5:00 PM	15	3	9	33	5	24	24	162	12	6	143	11	447
5:15 PM	11	2	12	29	3	29	28	143	17	13	131	16	434
5:30 PM	11	2	9	20	0	24	13	149	19	10	130	13	400
5:45 PM	13	0	10	33	3	23	25	131	21	9	131	17	416
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	94	25	68	213	22	245	199	1151	128	66	1086	110	3407
APPROACH %'s :	50.27%	13.37%	36.36%	44.38%	4.58%	51.04%	13.46%	77.88%	8.66%	5.23%	86.05%	8.72%	



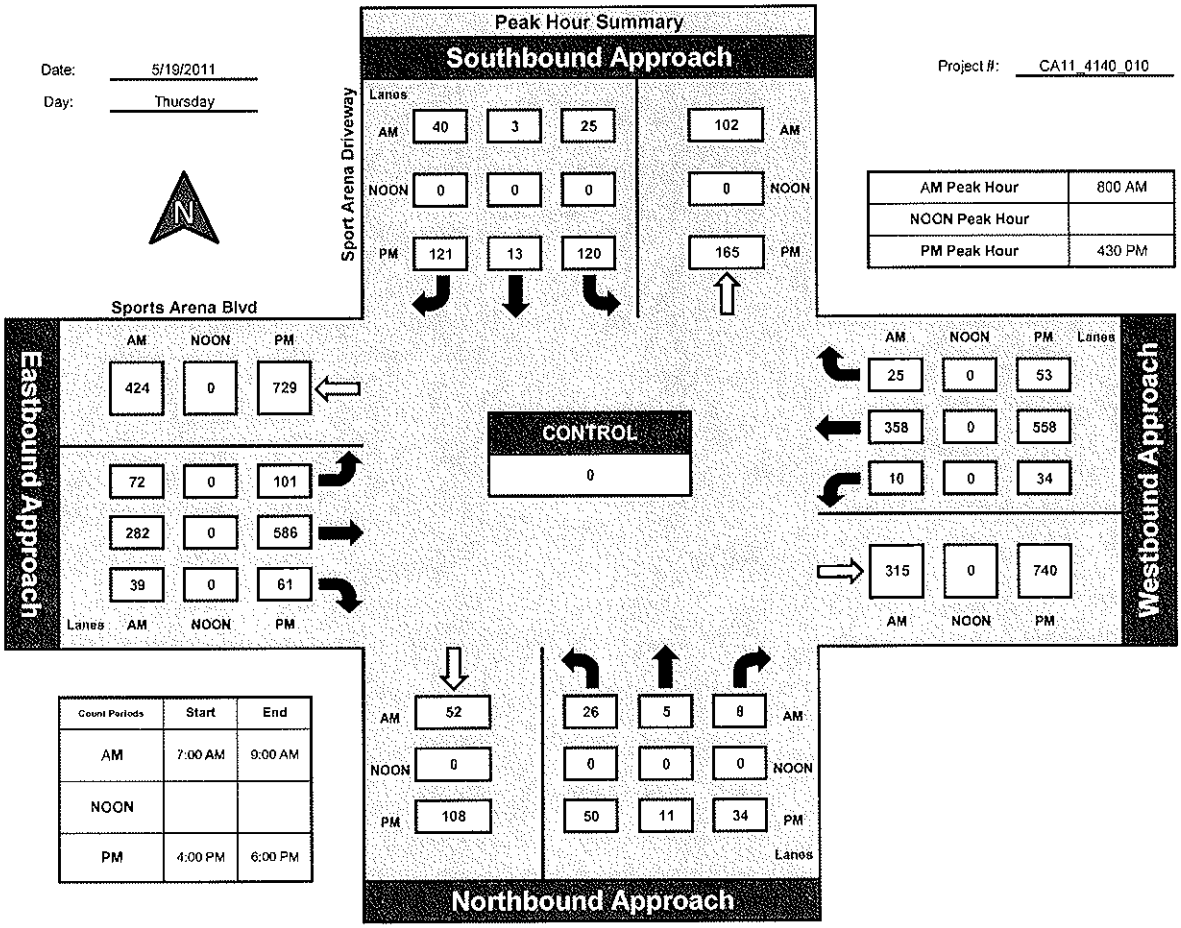
CONTROL :

ITM Peak Hour Summary

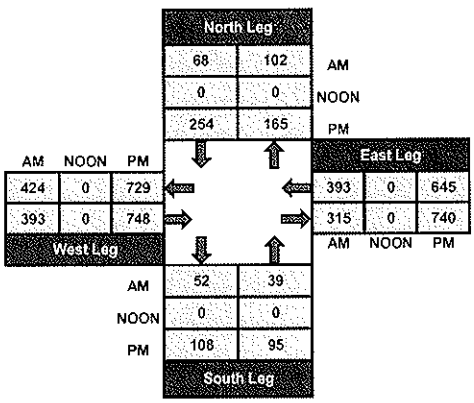
Prepared by:

National Data & Surveying Services

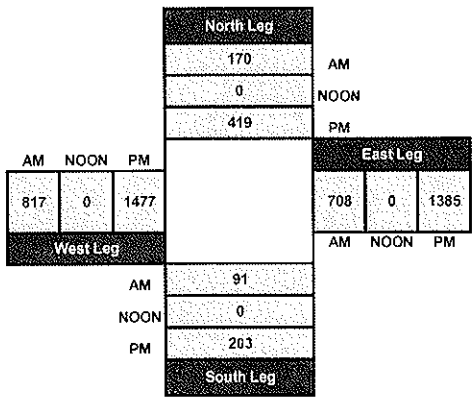
Sport Arena Driveway and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(14)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	0	5			0	3	77	1	7	98	10	203
7:15 AM	2	0	6			0	7	83	5	5	117	8	233
7:30 AM	1	0	2			0	7	122	9	8	121	9	279
7:45 AM	1	1	9			0	6	105	9	11	139	5	286
8:00 AM	3	0	10			1	5	108	6	6	135	10	284
8:15 AM	3	0	8			0	8	146	5	9	144	8	331
8:30 AM	3	0	5			0	11	131	6	8	161	9	334
8:45 AM	4	0	11			1	6	139	9	18	149	9	346
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	1	56	0	0	2	53	911	50	72	1064	68	2296
APPROACH %'s :	25.00%	1.32%	73.68%	0.00%	0.00%	100.00%	5.23%	89.84%	4.93%	5.98%	88.37%	5.65%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]			[illegible]			[illegible]			[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	5	1	21			1	11	196	23	26	179	5	468
4:15 PM	8	1	14			4	5	183	25	26	198	3	467
4:30 PM	3	1	11			0	5	202	33	30	217	2	504
4:45 PM	8	2	10			0	1	193	29	41	177	1	462
5:00 PM	6	1	20			1	0	189	24	18	190	0	449
5:15 PM	7	0	19			0	1	175	22	25	221	0	470
5:30 PM	8	1	24			1	3	181	20	30	194	0	462
5:45 PM	12	1	20			3	0	193	15	24	194	1	463
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	57	8	139	0	0	10	26	1512	191	220	1570	12	3745
APPROACH %'s :	27.94%	3.92%	68.14%	0.00%	0.00%	100.00%	1.50%	87.45%	11.05%	12.21%	87.13%	0.67%	
PEAK HR START TIME :	4:0 PM												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

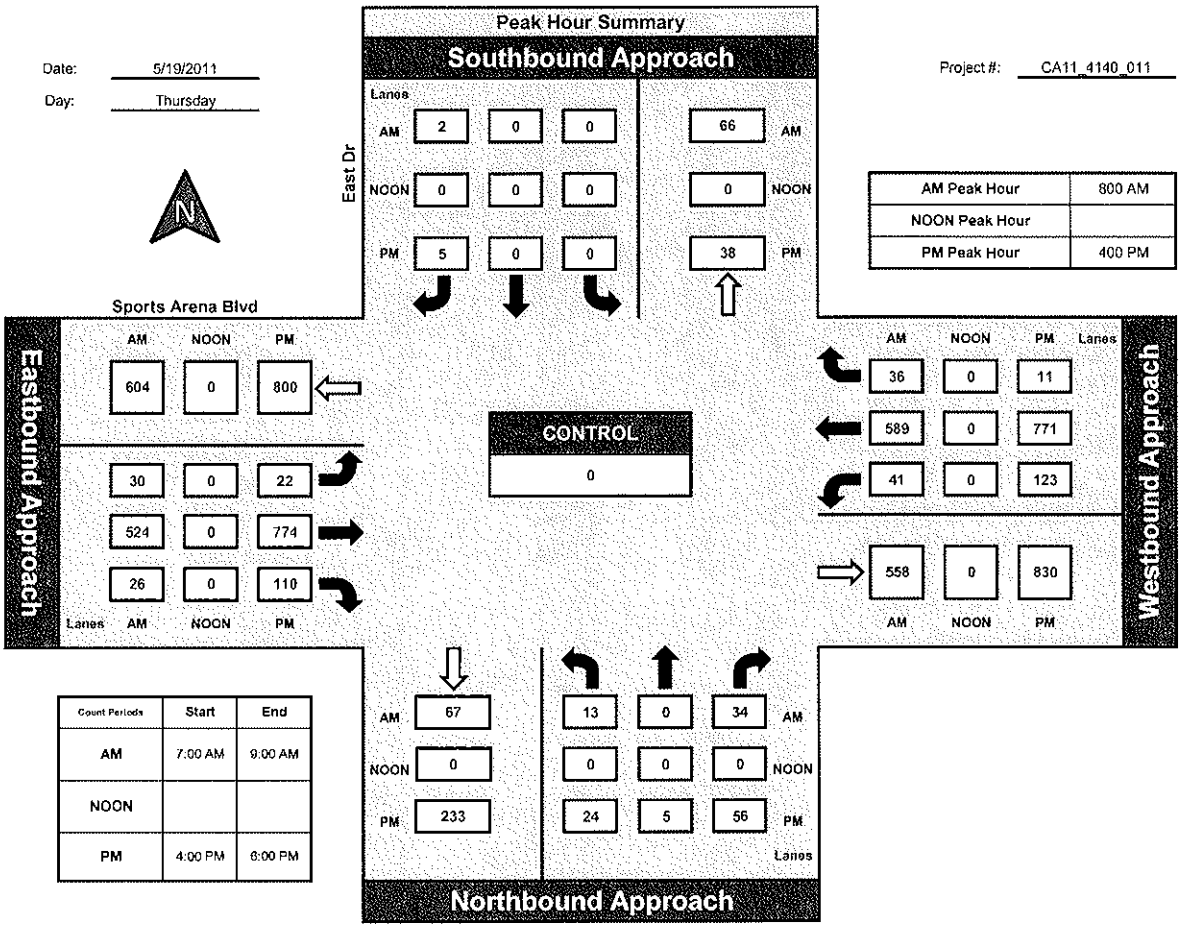
National Data & Surveying Services

East Dr and Sports Arena Blvd , City of San Diego

Date: 5/19/2011

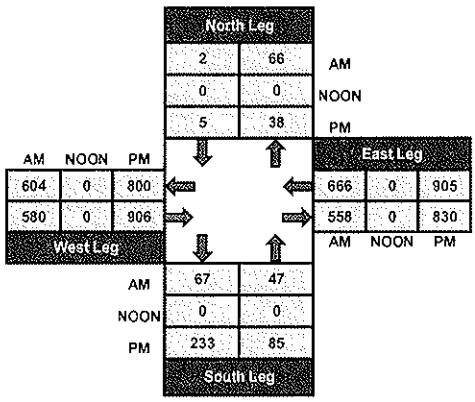
Day: Thursday

Project #: CA11_4140_011

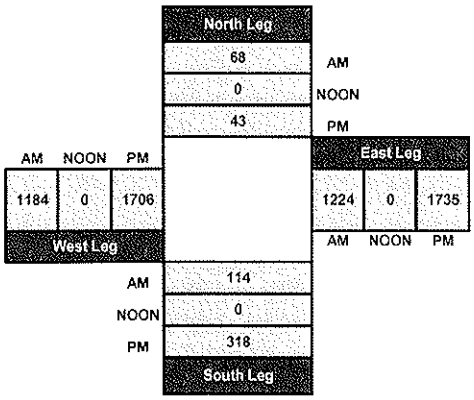


AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Total Ins & Outs



Total Volume Per Leg



(15)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

(15)

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

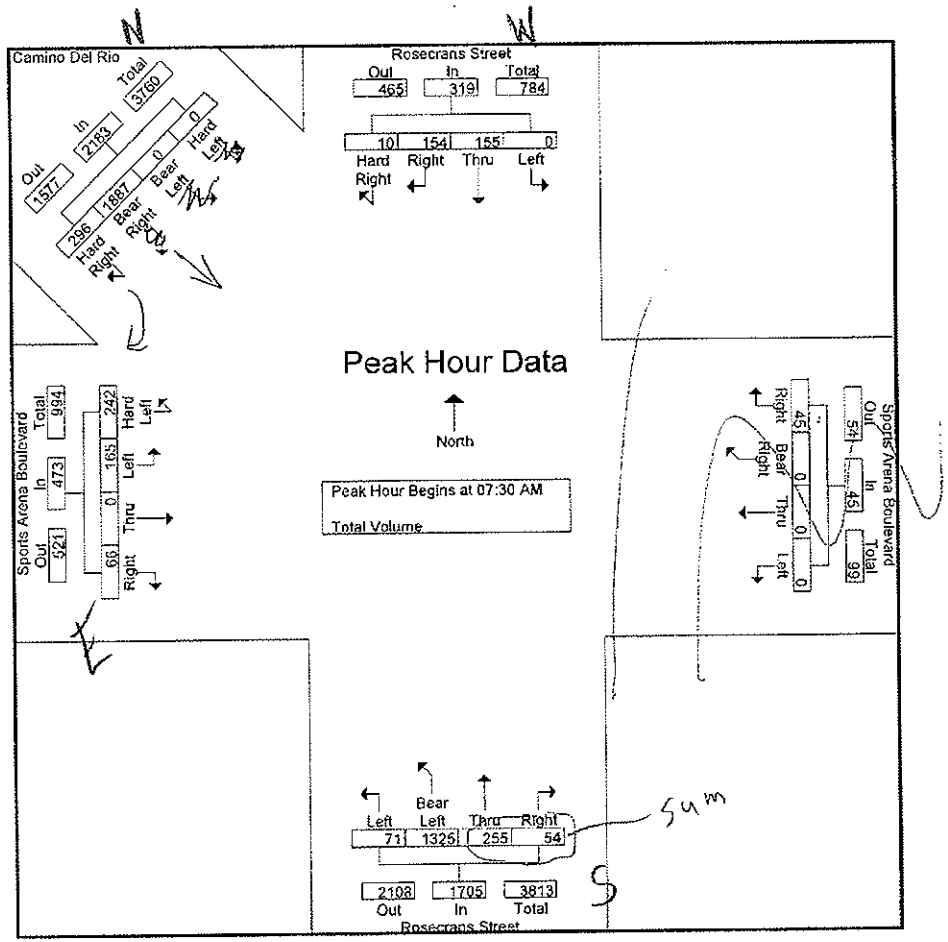
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
06:45 AM	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
Total	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
07:00 AM	0	25	23	1	49	0	0	0	8	8	20	227	39	4	290	42	30	0	15	87	0	0	504	54	558	992
07:15 AM	0	31	36	1	68	0	0	0	13	13	15	292	57	8	372	53	33	0	9	95	0	0	495	65	560	1108
07:30 AM	0	36	28	2	66	0	0	0	10	10	25	343	56	9	433	80	51	0	17	148	0	0	419	54	473	1130
07:45 AM	0	47	48	3	98	0	0	0	9	9	14	310	67	21	412	54	41	0	18	113	0	0	525	80	605	1237
Total	0	139	135	7	281	0	0	0	40	40	74	1172	219	42	1507	229	155	0	59	443	0	0	1943	253	2196	4467
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	74	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	15	15	23	351	58	13	445	50	43	0	18	111	0	0	454	88	542	1202
08:30 AM	0	45	44	4	93	0	0	0	18	18	27	322	64	9	422	62	37	0	16	115	0	0	352	67	419	1067
Grand Total	0	278	283	16	577	0	0	0	88	88	151	2378	457	85	3071	432	295	0	118	845	0	0	3653	542	4195	8776
Apprch %	0	48.2	49	2.8		0	0	0	100		4.9	77.4	14.9	2.8		51.1	34.9	0	14		0	0	87.1	12.9		
Total %	0	3.2	3.2	0.2	6.6	0	0	0	1	1	1.7	27.1	5.2	1	35	4.9	3.4	0	1.3	9.6	0	0	41.6	6.2	47.8	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:30 AM																										
07:30 AM	0	36	28	2	66	0	0	0	10	10	**25**	343	56	9	433	**80**	**51**	0	17	**148**	0	0	419	54	473	1130
07:45 AM	0	**47**	**48**	3	**98**	0	0	0	9	9	14	310	67	**21**	412	54	41	0	**18**	113	0	0	**525**	80	**605**	**1237**
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	**74**	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	**15**	**15**	23	**351**	58	13	445	50	43	0	18	111	0	0	454	**88**	542	1202
Total Volume	0	155	154	10	319	0	0	0	45	45	71	1325	255	54	1705	242	165	0	66	473	0	0	1887	296	2183	4725
% App. Total	0	48.6	48.3	3.1		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	86.4	13.6		
PHF	.000	.824	.802	.625	.814	.000	.000	.000	.750	.750	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.899	.841	.902	.955

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					07:45 AM					07:30 AM					07:30 AM					07:15 AM				
+0 mins.	0	47	48	3	98	0	0	0	9	9	25	343	56	9	433	80	51	0	17	148	0	0	495	65	560
+15 mins.	0	34	31	1	66	0	0	0	11	11	14	310	67	21	412	54	41	0	18	113	0	0	419	54	473
+30 mins.	0	38	47	4	89	0	0	0	15	15	9	321	74	11	415	58	30	0	13	101	0	0	525	80	605
+45 mins.	0	45	44	4	93	0	0	0	18	18	23	351	58	13	445	50	43	0	18	111	0	0	489	74	563
Total Volume	0	164	170	12	346	0	0	0	53	53	71	1325	255	54	1705	242	165	0	66	473	0	0	1928	273	2201
% App. Total	0	47.4	49.1	3.5		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	87.6	12.4	
PHF	.000	.872	.885	.750	.883	.000	.000	.000	.736	.736	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.918	.853	.910

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

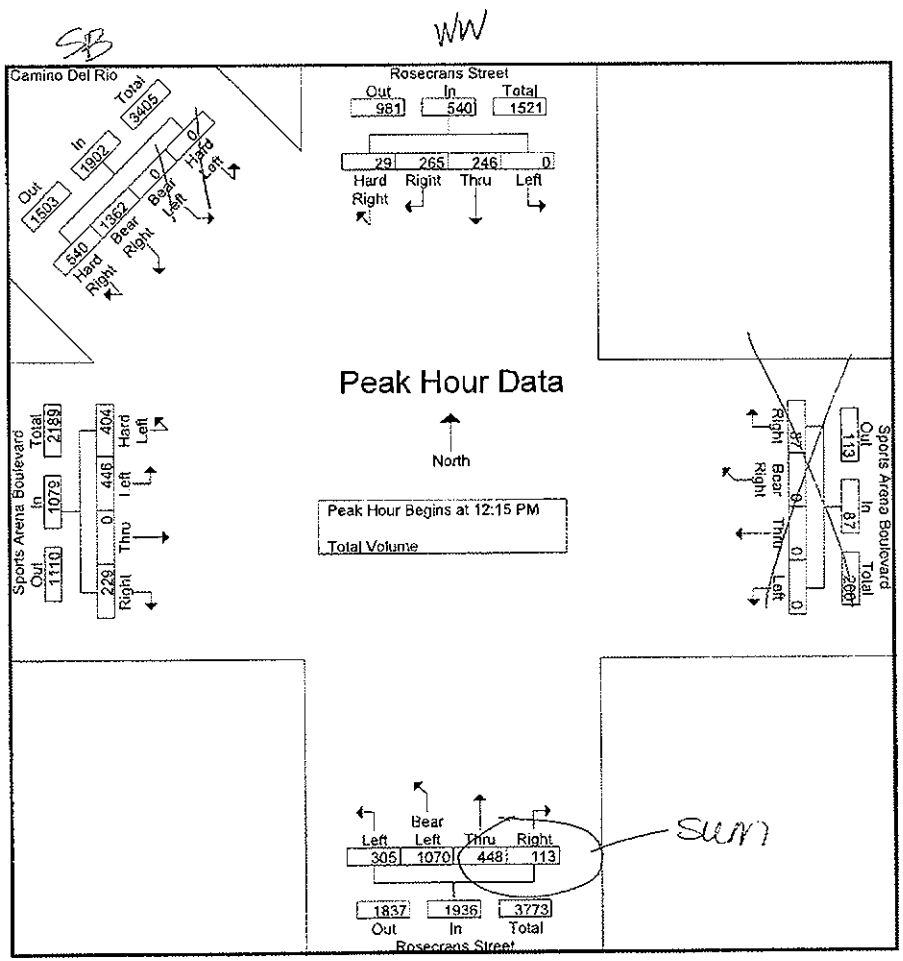
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
11:30 AM	0	55	87	6	148	0	0	0	25	25	81	228	100	26	435	86	79	0	48	213	0	0	328	132	460	1281
11:45 AM	0	47	93	7	147	0	0	0	23	23	79	246	104	18	447	84	86	0	53	223	0	0	377	161	538	1378
Total	0	102	180	13	295	0	0	0	48	48	160	474	204	44	882	170	165	0	101	436	0	0	705	293	998	2659
12:00 PM	0	73	90	2	165	0	0	0	19	19	71	252	99	9	431	93	105	0	59	257	0	0	328	146	474	1346
12:15 PM	0	66	70	7	143	0	0	0	17	17	93	231	105	23	452	78	93	0	68	239	0	0	353	159	512	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	299	122	27	525	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	10	118	0	0	0	23	23	75	241	116	38	470	95	105	0	43	243	0	0	339	119	458	1312
Total	0	245	284	21	550	0	0	0	81	81	316	1023	442	97	1878	376	418	0	224	1018	0	0	1364	556	1920	5447
01:00 PM	0	74	71	10	155	0	0	0	25	25	60	299	105	25	489	121	133	0	64	318	0	0	326	130	456	1443
01:15 PM	0	51	61	5	117	0	0	0	21	21	48	221	94	18	381	87	122	0	41	250	0	0	330	119	449	1218
Grand Total	0	472	596	49	1117	0	0	0	175	175	584	2017	845	184	3630	754	838	0	430	2022	0	0	2725	1098	3823	10767
Apprch %	0	42.3	53.4	4.4		0	0	0	100		16.1	55.6	23.3	5.1		37.3	41.4	0	21.3		0	0	71.3	28.7		
Total %	0	4.4	5.5	0.5	10.4	0	0	0	1.6	1.6	5.4	18.7	7.8	1.7	33.7	7	7.8	0	4	18.8	0	0	25.3	10.2	35.5	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 12:15 PM																										
12:15 PM	0	66	70	7	143	0	0	0	17	17	**93**	231	105	23	452	78	93	0	**68**	239	0	0	**353**	**159**	**512**	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	**299**	**122**	27	**525**	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	**10**	118	0	0	0	23	23	75	241	116	**38**	470	95	105	0	43	243	0	0	339	119	458	1312
01:00 PM	0	**74**	**71**	10	**155**	0	0	0	**25**	**25**	60	299	105	25	489	**121**	**133**	0	64	**318**	0	0	326	130	456	**1443**
Total Volume	0	246	265	29	540	0	0	0	87	87	305	1070	448	113	1936	404	446	0	229	1079	0	0	1362	540	1902	5544
% App. Total	0	45.6	49.1	5.4		0	0	0	100		15.8	55.3	23.1	5.8		37.4	41.3	0	21.2		0	0	71.6	28.4		
PHF	.000	.831	.933	.725	.871	.000	.000	.000	.870	.870	.820	.895	.918	.743	.922	.835	.838	.000	.842	.848	.000	.000	.965	.849	.929	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:30 AM					12:30 PM					12:15 PM					12:30 PM					11:45 AM				
+0 mins.	0	55	87	6	148	0	0	0	22	22	**93**	231	105	23	452	110	115	0	54	279	0	0	377	**161**	**538**
+15 mins.	0	47	**93**	7	147	0	0	0	23	23	77	**299**	**122**	27	**525**	95	105	0	43	243	0	0	328	146	474
+30 mins.	0	**73**	90	2	**165**	0	0	0	**25**	**25**	75	241	116	38	470	**121**	**133**	0	**64**	**318**	0	0	353	159	512
+45 mins.	0	66	70	7	143	0	0	0	21	21	60	299	105	25	489	87	122	0	41	250	0	0	344	132	476
Total Volume	0	241	340	22	603	0	0	0	91	91	305	1070	448	113	1936	413	475	0	202	1090	0	0	1402	598	2000
% App. Total	0	40	56.4	3.6		0	0	0	100		15.8	55.3	23.1	5.8		37.9	43.6	0	18.5		0	0	70.1	29.9	
PHF	.000	.825	.914	.786	.914	.000	.000	.000	.910	.910	.820	.895	.918	.743	.922	.853	.893	.000	.789	.857	.000	.000	.930	.929	.929

Counts Unlimited Inc.
25286 Jadyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

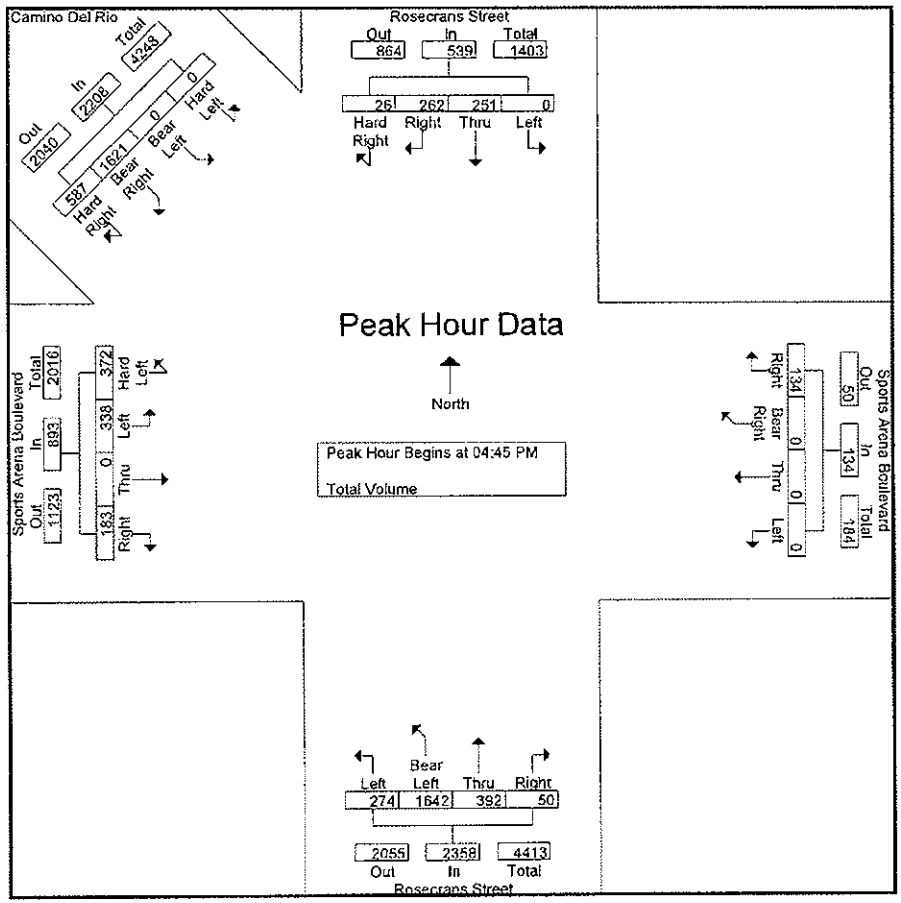
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
04:00 PM	0	47	67	9	123	0	0	0	29	29	50	417	101	17	585	117	81	0	46	244	0	0	384	134	518	1499
04:15 PM	0	60	83	5	148	0	0	0	45	45	60	488	90	21	659	82	84	0	34	200	0	0	403	104	507	1559
04:30 PM	0	51	87	7	145	0	0	0	47	47	54	407	106	18	585	85	78	0	30	193	0	0	368	129	497	1467
04:45 PM	0	55	53	8	116	0	0	0	35	35	58	430	98	19	605	100	90	0	48	238	0	0	425	136	561	1555
Total	0	213	290	29	532	0	0	0	156	156	222	1742	395	75	2434	384	333	0	158	875	0	0	1580	503	2083	6080
05:00 PM	0	61	62	7	130	0	0	0	38	38	62	387	109	12	570	92	78	0	49	219	0	0	397	165	562	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	74	433	92	12	611	87	81	0	40	208	0	0	407	148	555	1557
05:30 PM	0	61	80	6	147	0	0	0	24	24	80	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
05:45 PM	0	62	74	9	145	0	0	0	24	24	63	338	83	16	500	87	85	0	51	223	0	0	381	134	515	1407
Total	0	258	283	27	568	0	0	0	123	123	279	1550	377	47	2253	359	333	0	186	878	0	0	1577	585	2162	5984
Grand Total	0	471	573	56	1100	0	0	0	279	279	501	3292	772	122	4687	743	666	0	344	1753	0	0	3157	1088	4245	12064
Apprch %	0	42.8	52.1	5.1		0	0	0	100		10.7	70.2	16.5	2.6		42.4	38	0	19.6		0	0	74.4	25.6		
Total %	0	3.9	4.7	0.5	9.1	0	0	0	2.3	2.3	4.2	27.3	6.4	1	38.9	6.2	5.5	0	2.9	14.5	0	0	26.2	9	35.2	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 04:45 PM																										
04:45 PM	0	55	53	**8**	116	0	0	0	35	35	58	430	98	**19**	605	**100**	**90**	0	48	**238**	0	0	**425**	136	561	1555
05:00 PM	0	61	62	7	130	0	0	0	**38**	**38**	62	387	**109**	12	570	92	78	0	**49**	219	0	0	397	**165**	**562**	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	**74**	**433**	92	12	**611**	87	81	0	40	208	0	0	407	148	555	**1557**
05:30 PM	0	61	**80**	6	**147**	0	0	0	24	24	**80**	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
Total Volume	0	251	262	26	539	0	0	0	134	134	274	1642	392	50	2358	372	338	0	183	893	0	0	1621	587	2208	6132
% App. Total	0	46.6	48.6	4.8		0	0	0	100		11.6	69.6	16.6	2.1		41.7	37.8	0	20.5		0	0	73.4	26.6		
PHF	.000	.848	.819	.813	.917	.000	.000	.000	.882	.882	.856	.948	.899	.658	.965	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982	.985

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					04:15 PM					04:00 PM					04:45 PM					04:45 PM				
+0 mins.	0	61	62	7	130	0	0	0	45	45	50	417	101	17	585	**100**	**90**	0	48	**238**	0	0	425	136	561
+15 mins.	0	**74**	67	5	146	0	0	0	**47**	**47**	**60**	**488**	90	**21**	**659**	92	78	0	**49**	219	0	0	397	**165**	**562**
+30 mins.	0	61	**80**	6	**147**	0	0	0	35	35	54	407	**106**	18	585	87	81	0	40	208	0	0	407	148	555
+45 mins.	0	62	74	9	145	0	0	0	38	38	58	430	98	19	605	93	89	0	46	228	0	0	392	138	530
Total Volume	0	258	283	27	568	0	0	0	165	165	222	1742	395	75	2434	372	338	0	183	893	0	0	1621	587	2208
% App. Total	0	45.4	49.8	4.8		0	0	0	100		9.1	71.6	16.2	3.1		41.7	37.8	0	20.5		0	0	73.4	26.6	
PHF	.000	.872	.884	.750	.966	.000	.000	.000	.878	.878	.925	.892	.932	.893	.923	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982

(17)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		134			120	3			2				259
7:15 AM		137			103	5			7				252
7:30 AM		130			110	3			3				246
7:45 AM		182			135	5			10				332
8:00 AM		183			156	4			10				353
8:15 AM		175			134	6			7				322
8:30 AM		138			143	9			10				300
8:45 AM		147			130	6			14				297

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1226	0	0	1031	41	0	0	63	0	0	0	2361
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	96.18%	3.82%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		228			224	4			32				488
4:15 PM		210			202	6			26				444
4:30 PM		211			222	3			30				466
4:45 PM		203			196	6			29				434
5:00 PM		206			234	7			33				480
5:15 PM		190			181	1			32				404
5:30 PM		142			171	3			22				338
5:45 PM		125			180	2			13				320

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1515	0	0	1610	32	0	0	217	0	0	0	3374
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	98.05%	1.95%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

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[illegible]	[illegible]												
[illegible]													

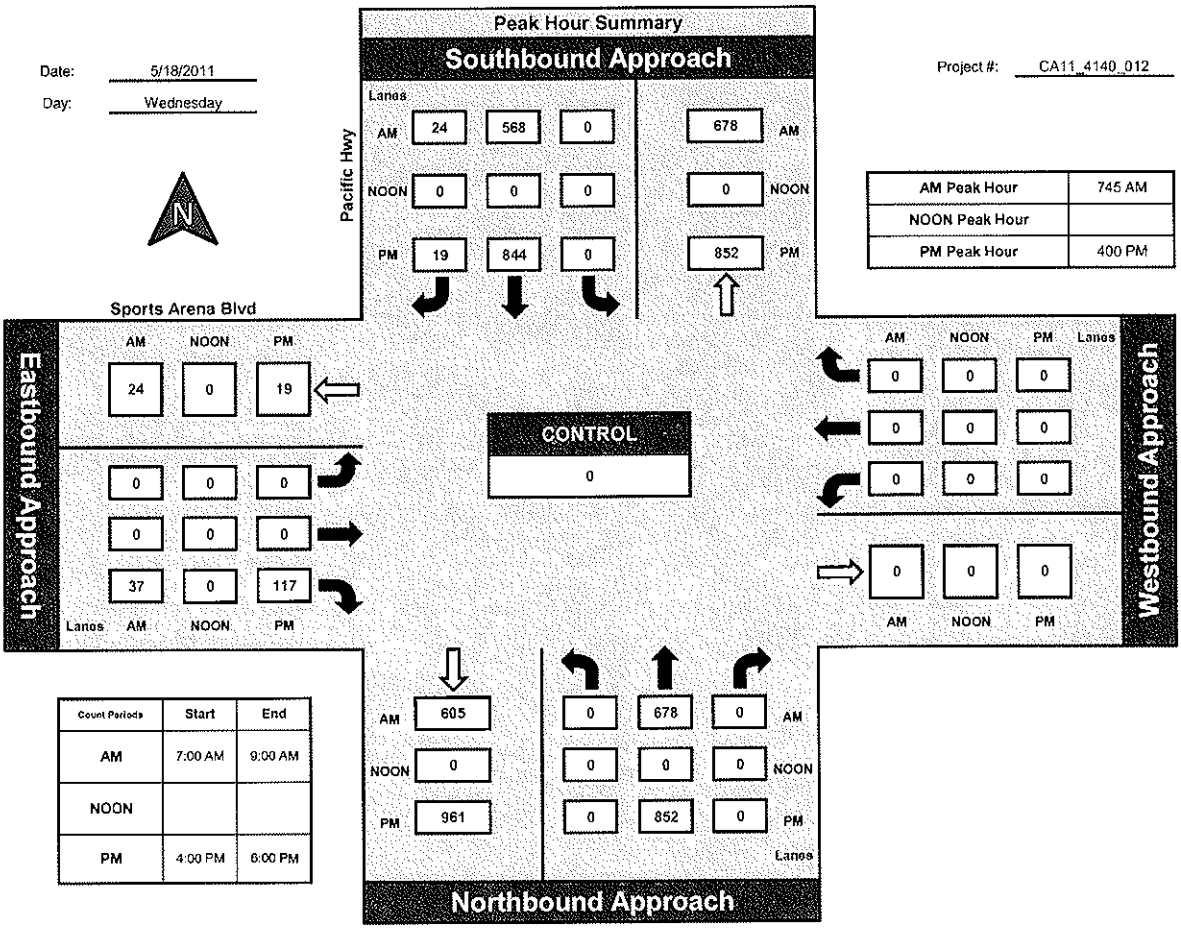
CONTROL :

ITM Peak Hour Summary

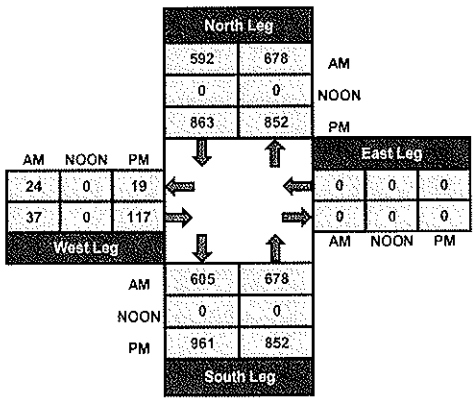
Prepared by:

National Data & Surveying Services

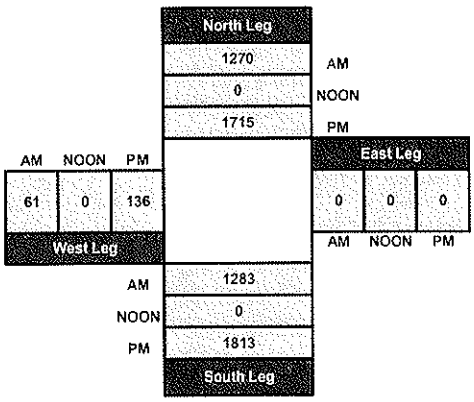
Pacific Hwy and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(18)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

Day: THURSDAY

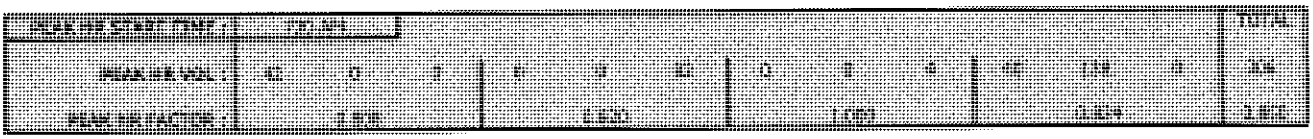
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0					5	0		0	0	6		11
7:15 AM	1					18	0		1	10	28		58
7:30 AM	13					18	0		1	13	32		77
7:45 AM	10					19	0		1	5	32		67
8:00 AM	10					25	0		1	16	38		90
8:15 AM	9					20	0		1	6	36		72
8:30 AM	17					14	1		2	12	30		76
8:45 AM	9					18	0		0	13	26		66

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	69	0	0	0	0	137	1	0	7	75	228	0	517
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	12.50%	0.00%	87.50%	24.75%	75.25%	0.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

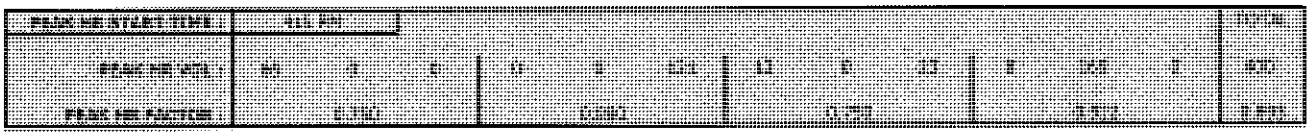
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	8					13	1		0	0	21		43
4:15 PM	22					32	5		7	3	42		111
4:30 PM	22					34	2		6	2	46		112
4:45 PM	9					23	3		3	3	41		82
5:00 PM	13					32	3		7	0	40		95
5:15 PM	11					22	1		10	0	43		87
5:30 PM	10					16	2		8	1	26		63
5:45 PM	11					13	2		12	0	32		70
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	106	0	0	0	0	185	19	0	53	9	291	0	663
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	26.39%	0.00%	73.61%	3.00%	97.00%	0.00%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

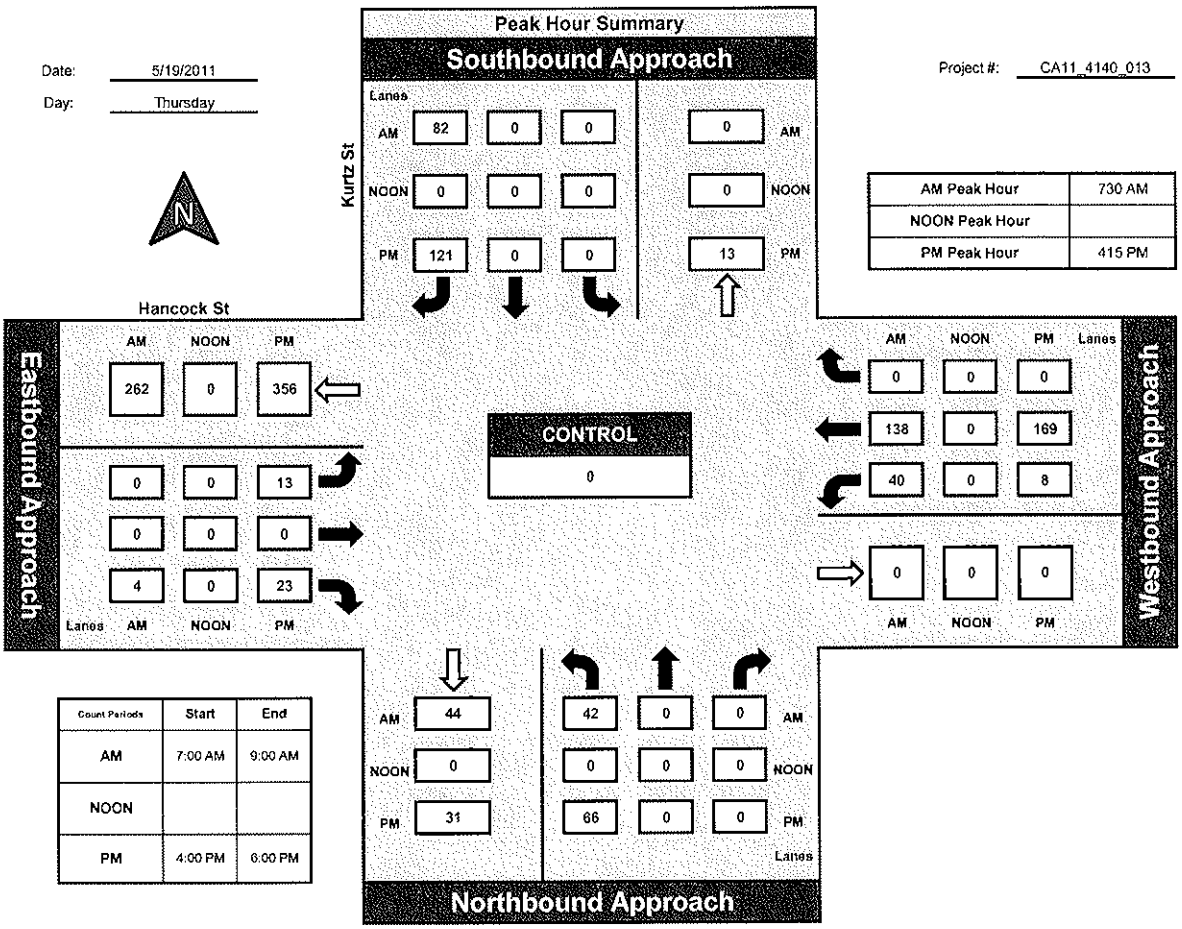
National Data & Surveying Services

Kurtz St and Hancock St , City of San Diego

Date: 5/19/2011

Day: Thursday

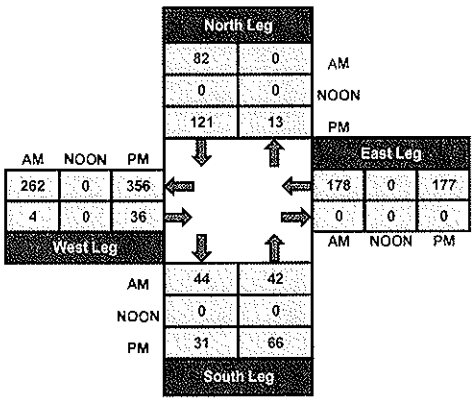
Project #: CA11_4140_013



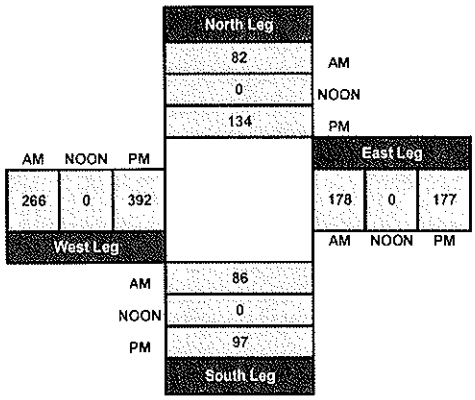
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

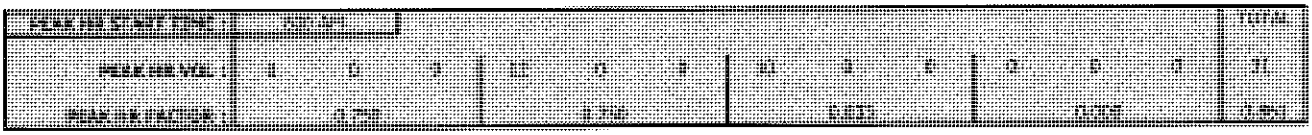
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM			3	0			1						4
7:15 AM			2	3			0						5
7:30 AM			1	1			3						5
7:45 AM			2	1			3						6
8:00 AM			1	4			1						6
8:15 AM			2	3			3						8
8:30 AM			3	3			3						9
8:45 AM			3	2			3						8

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	17	17	0	0	17	0	0	0	0	0	51
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM			4	2			3						9
4:15 PM			0	3			2						5
4:30 PM			2	1			1						4
4:45 PM			3	0			3						6
5:00 PM			2	1			2						5
5:15 PM			2	0			0						2
5:30 PM			2	1			0						3
5:45 PM			1	0			1						2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	16	8	0	0	12	0	0	0	0	0	36
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

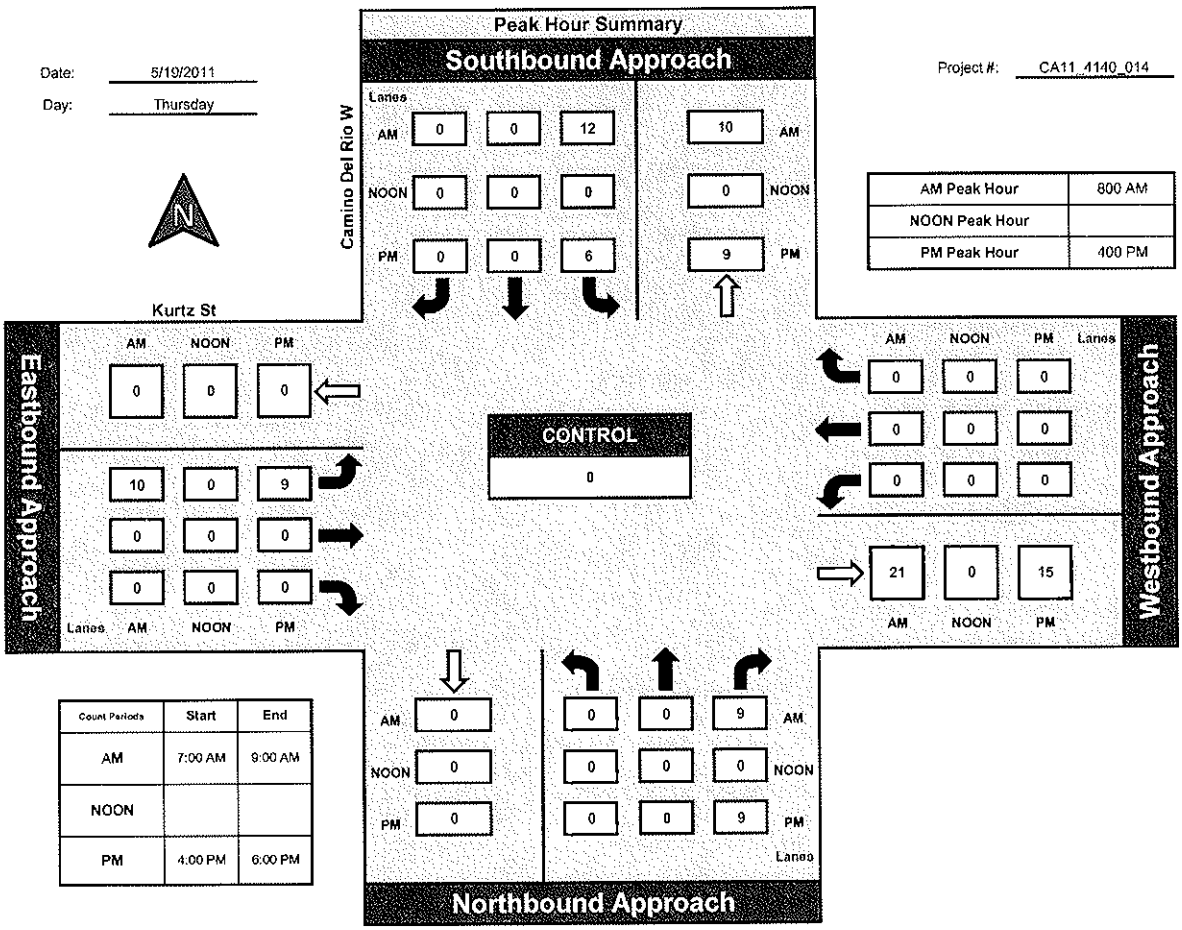
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

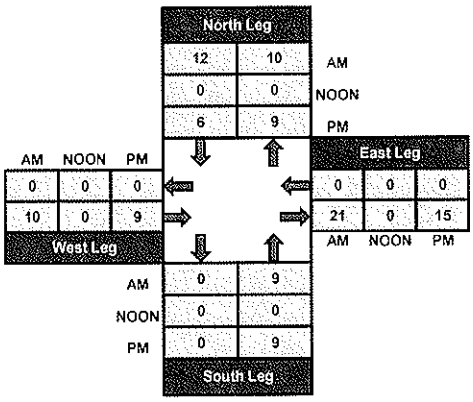
Project #: CA11_4140_014



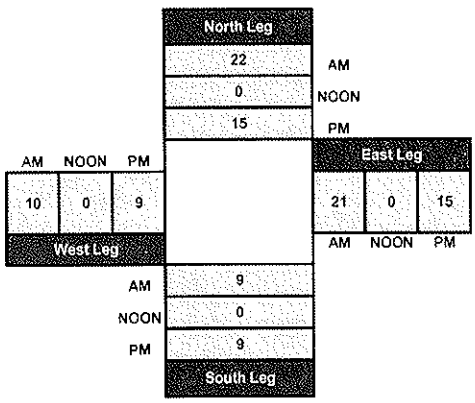
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				2									2
7:15 AM				1									1
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				2									2
8:15 AM				4									4
8:30 AM				2									2
8:45 AM				3									3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	17	0	0	0	0	0	0	0	0	17
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				5									5
4:15 PM				2									2
4:30 PM				3									3
4:45 PM				6									6
5:00 PM				0									
5:15 PM				3									3
5:30 PM				5									5
5:45 PM				4									4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	28	0	0	0	0	0	0	0	0	28
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

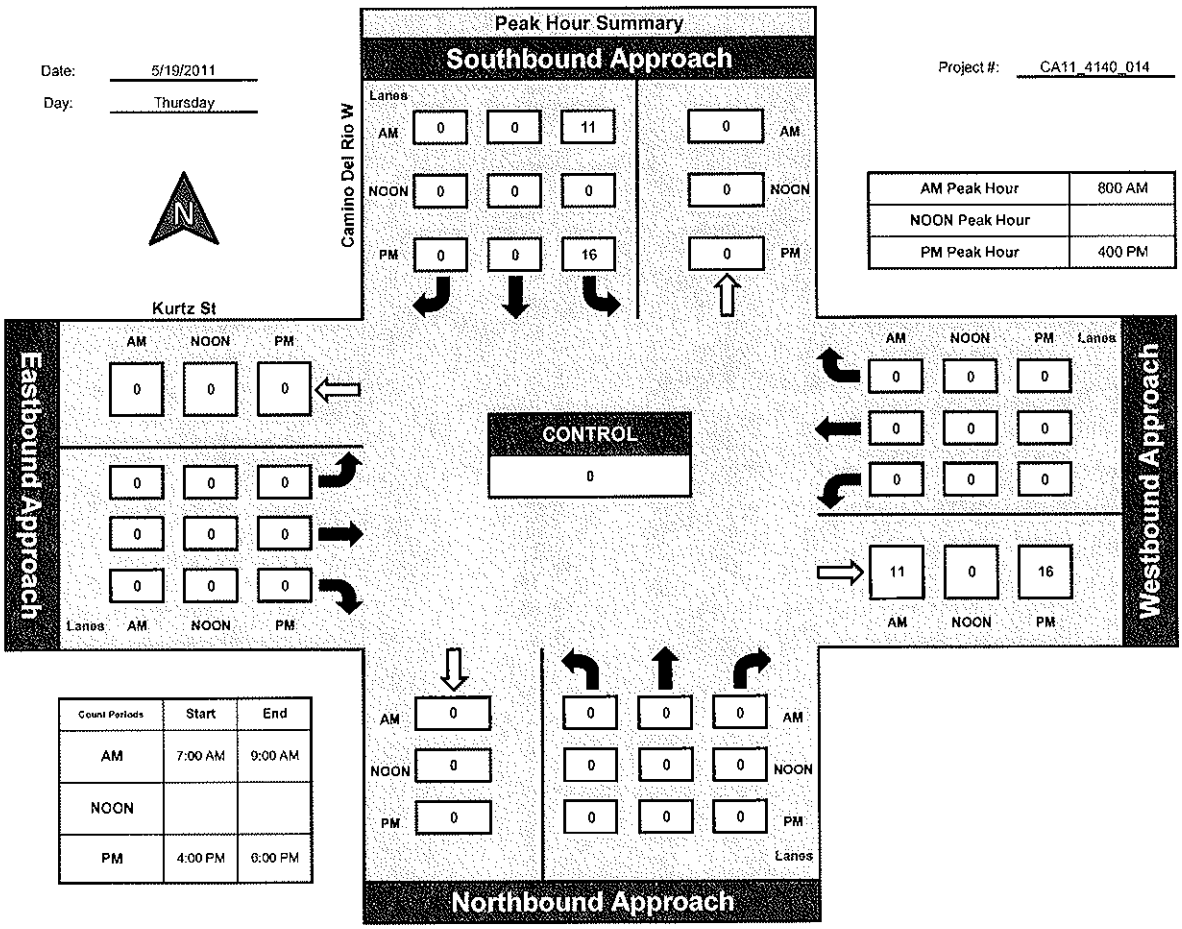
CONTROL :

ITM Peak Hour Summary

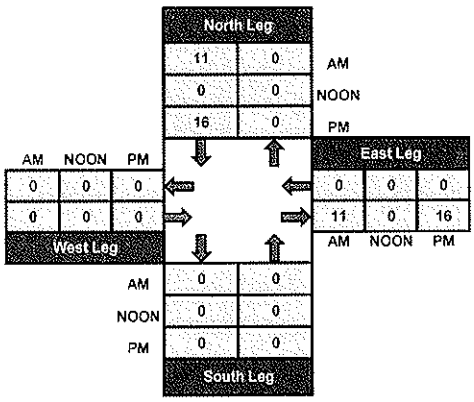
Prepared by:

National Data & Surveying Services

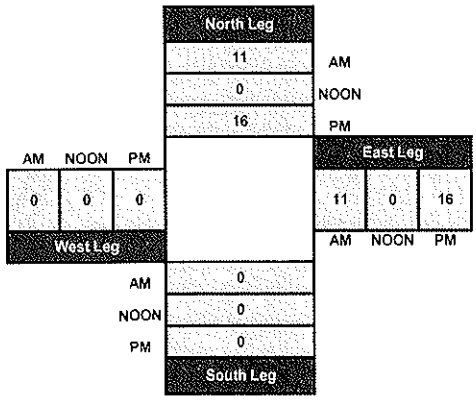
Camino Del Rio W and Kurtz St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

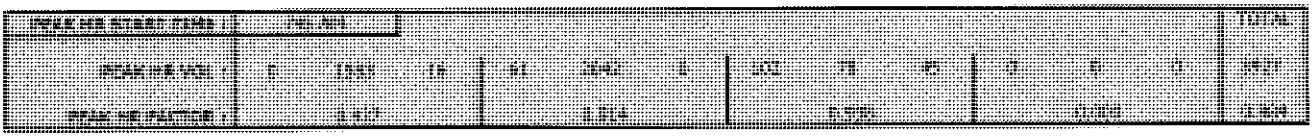
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		217	1	12	475		26	6	6				743
7:15 AM		330	2	8	521		18	13	9				901
7:30 AM		425	1	17	498		28	17	5				991
7:45 AM		386	5	5	524		22	15	17				974
8:00 AM		348	2	13	562		23	26	11				985
8:15 AM		427	4	18	468		25	20	8				970
8:30 AM		422	5	25	488		32	17	9				998
8:45 AM		368	4	23	479		38	23	18				953

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2923	24	121	4015	0	212	137	83	0	0	0	7515
APPROACH %'s :	0.00%	99.19%	0.81%	2.93%	97.07%	0.00%	49.07%	31.71%	19.21%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

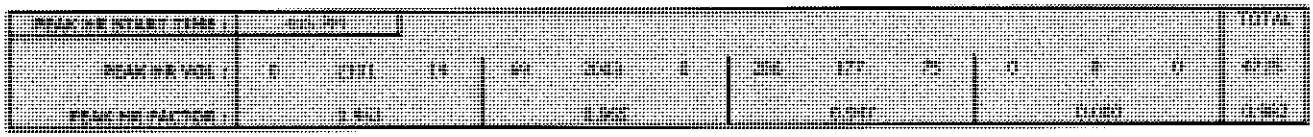
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		500	3	22	447		68	36	14				1090
4:15 PM		547	2	22	510		67	34	21				1203
4:30 PM		553	2	19	466		82	41	16				1179
4:45 PM		495	8	20	498		63	51	21				1156
5:00 PM		506	2	8	529		74	51	17				1187
5:15 PM		489	2	9	531		67	36	20				1154
5:30 PM		417	11	9	507		62	23	12				1041
5:45 PM		438	2	13	563		42	31	12				1101

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3945	32	122	4051	0	525	303	133	0	0	0	9111
APPROACH %'s :	0.00%	99.20%	0.80%	2.92%	97.08%	0.00%	54.63%	31.53%	13.84%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

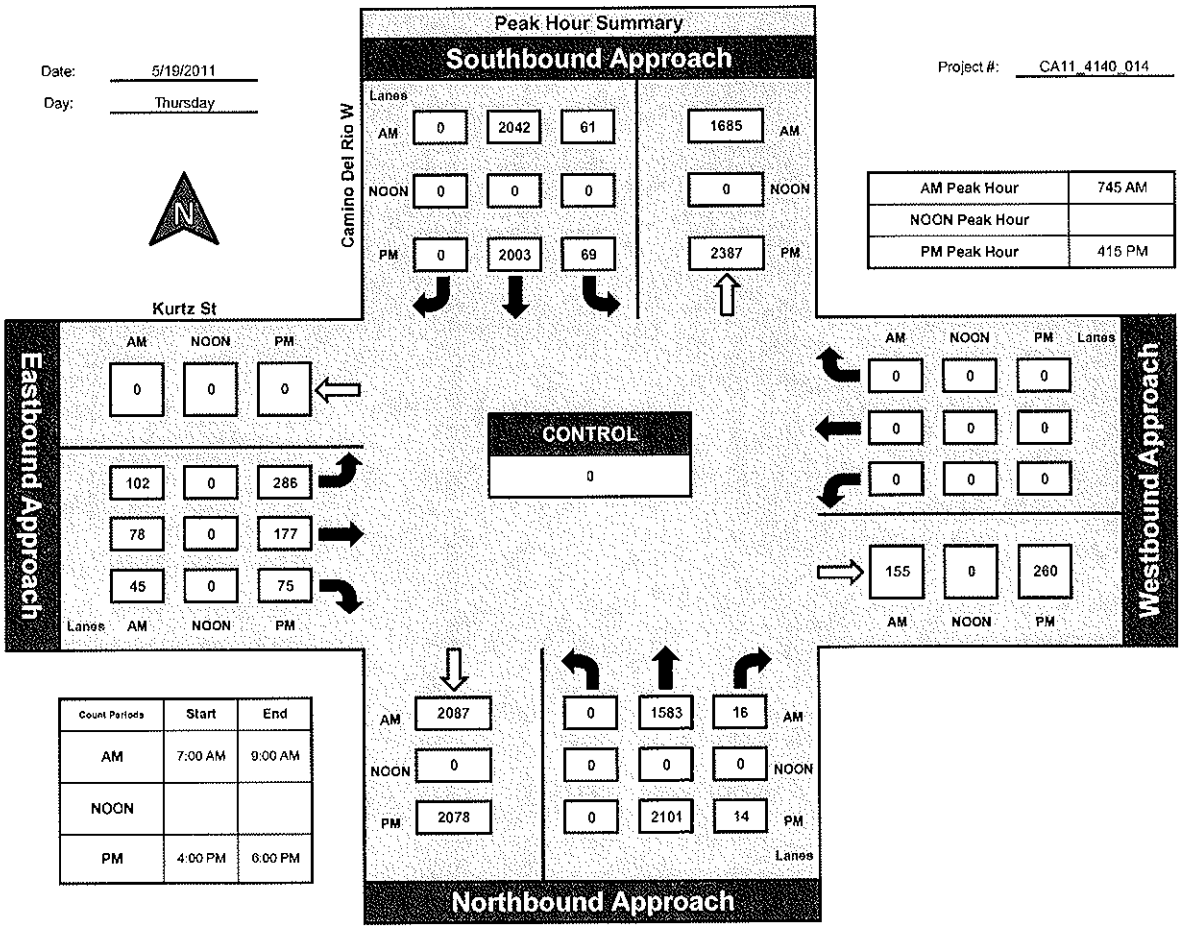
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

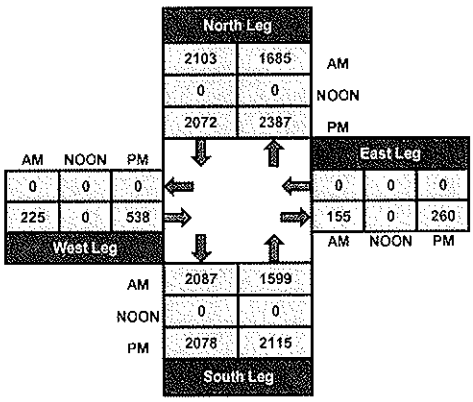
Project #: CA11_4140_014



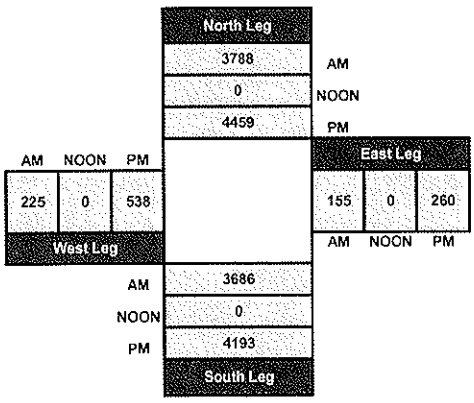
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(20)

6

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

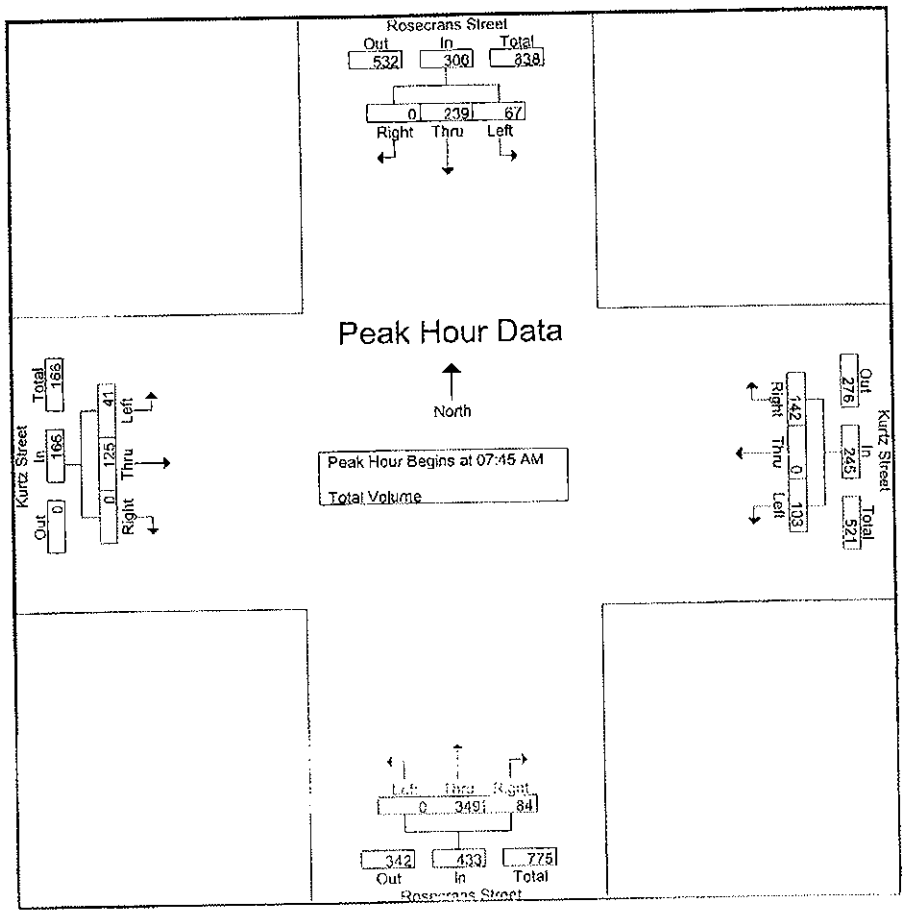
	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
Total	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
07:00 AM	18	36	0	54	17	0	28	45	0	50	23	73	6	26	0	32	204
07:15 AM	28	42	0	70	19	0	33	52	0	68	22	90	4	31	0	35	247
07:30 AM	19	58	0	77	16	0	35	51	0	77	29	106	10	35	0	45	279
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
Total	85	206	0	291	73	0	131	204	0	287	93	380	30	118	0	148	1023
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Grand Total	153	399	0	552	178	0	276	454	0	601	178	779	69	244	0	313	2098
Apprch %	27.7	72.3	0		39.2	0	60.8		0	77.2	22.8		22	78	0		
Total %	7.3	19	0	26.3	8.5	0	13.2	21.6	0	28.6	8.5	37.1	3.3	11.6	0	14.9	

	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	41	125	0	166	1150
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		24.7	75.3	0		
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.946	.913	.975	.854	.744	.000	.767	.913

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	20	70	0	90	21	0	35	56	0	92	19	111	10	35	0	45
+15 mins.	18	44	0	62	18	0	38	56	0	80	23	103	10	26	0	36
+30 mins.	15	61	0	76	36	0	38	74	0	91	20	111	11	26	0	37
+45 mins.	14	64	0	78	28	0	31	59	0	86	22	108	12	42	0	54
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	43	129	0	172
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		25	75	0	
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.948	.913	.975	.896	.768	.000	.796

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

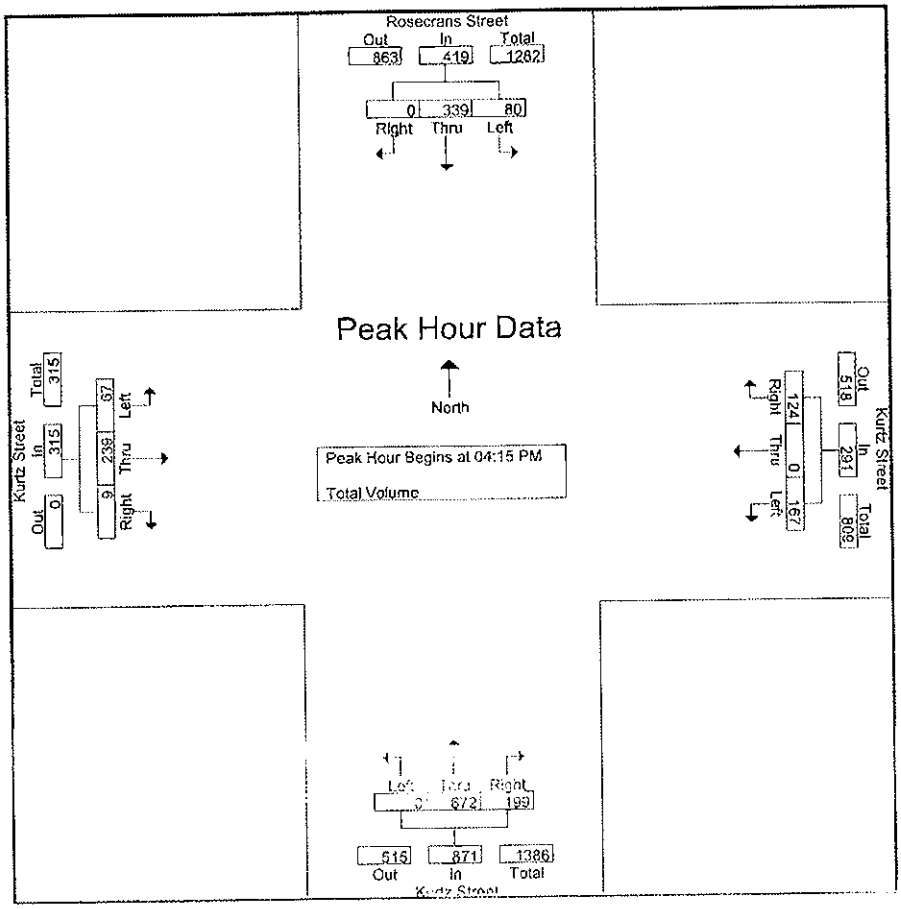
	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	19	88	0	107	34	0	32	66	0	167	48	215	12	60	3	75	463
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
Total	85	342	0	427	170	0	132	302	0	660	205	865	60	228	8	296	1890
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
05:15 PM	10	93	0	103	40	0	35	75	0	150	47	197	15	44	4	63	438
05:30 PM	17	100	0	117	36	0	27	63	0	151	49	200	23	40	2	65	445
05:45 PM	11	105	0	116	45	0	20	65	0	133	45	178	12	35	3	50	409
Total	52	383	0	435	152	0	106	258	0	613	183	796	69	190	13	272	1761
Grand Total	137	725	0	862	322	0	238	560	0	1273	388	1661	129	418	21	568	3651
Apprch %	15.9	84.1	0		57.5	0	42.5		0	76.6	23.4		22.7	73.6	3.7		
Total %	3.8	19.9	0	23.6	8.8	0	6.5	15.3	0	34.9	10.6	45.5	3.5	11.4	0.6	15.6	

	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
Total Volume	80	339	0	419	167	0	124	291	0	672	199	871	67	239	9	315	1896
% App. Total	19.1	80.9	0		57.4	0	42.6		0	77.2	22.8		21.3	75.9	2.9		
PHF	.714	.808	.000	.927	.819	.000	.800	.856	.000	.938	.843	.976	.698	.841	.563	.838	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM								04:15 PM							
+0 mins.	14	85	0	99	34	0	32	66	0	165	51	216	12	60	2	74
+15 mins.	10	93	0	103	49	0	36	85	0	152	59	211	13	53	2	68
+30 mins.	17	100	0	117	51	2	25	76	0	174	47	221	21	55	1	77
+45 mins.	11	105	0	116	36	0	39	75	0	179	42	221	19	71	4	94
Total Volume	52	383	0	435	170	0	132	302	0	672	199	871	67	239	9	315
% App. Total	12	88	0		56.3	0	43.7		0	77.2	22.8		21.3	75.9	2.9	
PHF	.765	.912	.000	.929	.833	.000	.846	.888	.000	.939	.843	.976	.698	.842	.563	.838

(21)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	54	78			77	3			43				255
7:15 AM	57	76			71	2			42				248
7:30 AM	55	84			69	1			44				253
7:45 AM	78	101			91	1			58				329
8:00 AM	68	107			95	1			67				338
8:15 AM	89	99			80	4			65				337
8:30 AM	59	84			87	3			57				290
8:45 AM	56	80			66	2			73				277

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	516	709	0	0	636	17	0	0	449	0	0	0	2327
APPROACH %'s :	42.12%	57.88%	0.00%	0.00%	97.40%	2.60%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

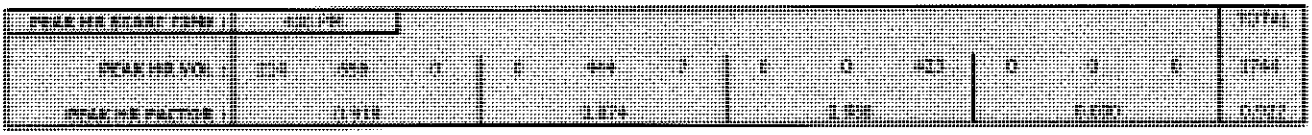
Project ID: CA11_4140_015 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	59	178			127	2			107				473
4:15 PM	38	185			100	3			106				432
4:30 PM	67	146			123	1			104				441
4:45 PM	50	147			94	1			106				398
5:00 PM	36	176			120	2			125				459
5:15 PM	47	137			69	3			110				366
5:30 PM	44	96			83	5			91				319
5:45 PM	39	90			86	1			103				319

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	380	1155	0	0	802	18	0	0	852	0	0	0	3207
APPROACH %'s :	24.76%	75.24%	0.00%	0.00%	97.80%	2.20%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

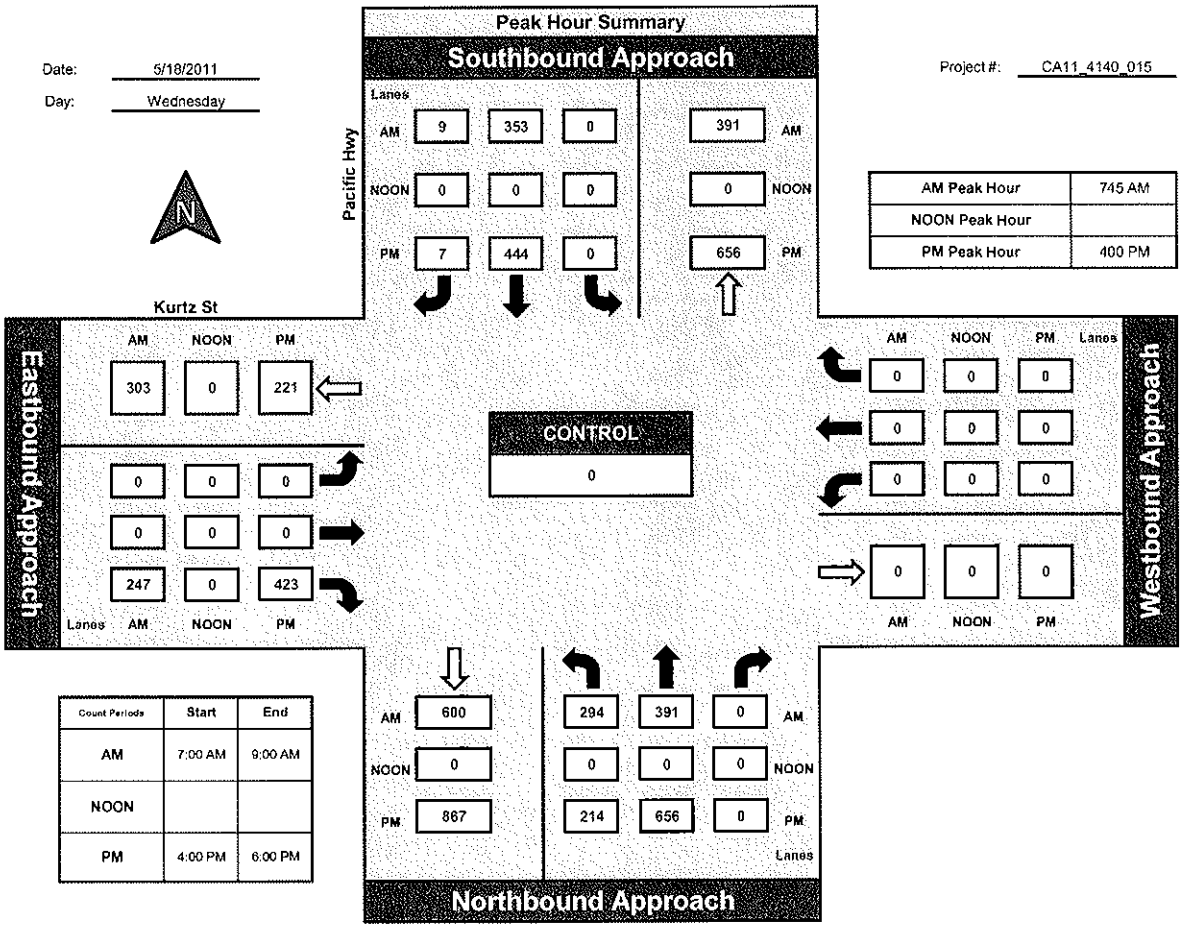
National Data & Surveying Services

Pacific Hwy and Kurtz St , City of San Diego

Date: 5/18/2011

Day: Wednesday

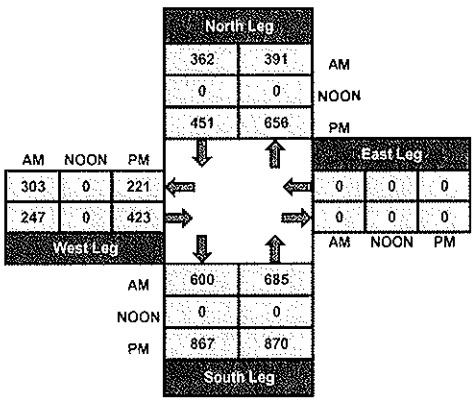
Project #: CA11_4140_015



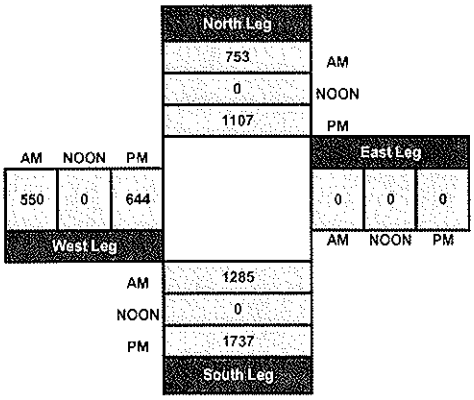
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(23)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

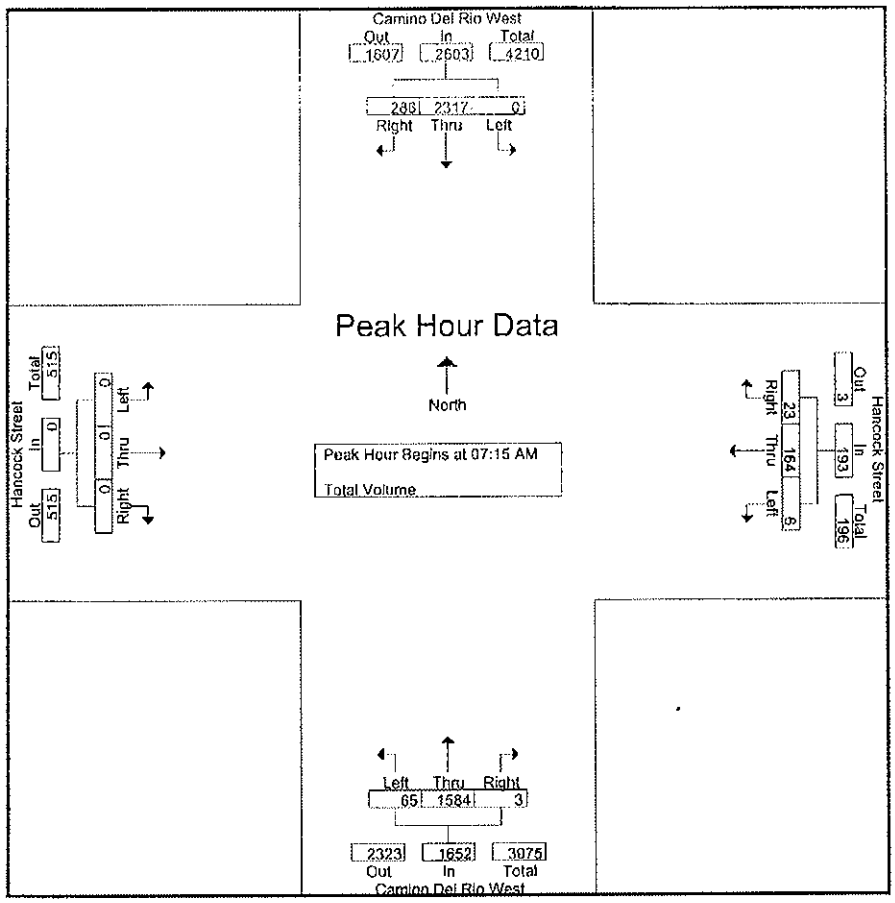
	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
Total	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
07:00 AM	0	589	35	624	9	12	8	29	15	279	9	303	0	0	0	0	956
07:15 AM	0	618	39	657	0	30	11	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	3	41	3	47	10	455	0	465	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	3	443	0	0	0	0	1146
Total	0	2311	214	2525	14	122	25	161	56	1498	12	1566	0	0	0	0	4252
08:00 AM	0	595	107	702	1	54	6	61	24	365	0	389	0	0	0	0	1152
08:15 AM	0	515	70	585	2	47	7	56	14	389	1	404	0	0	0	0	1045
08:30 AM	0	425	94	519	6	54	17	77	16	411	0	427	0	0	0	0	1023
Grand Total	0	4371	517	4888	32	289	63	384	124	2888	22	3034	0	0	0	0	8306
Apprch %	0	89.4	10.6		8.3	75.3	16.4		4.1	95.2	0.7		0	0	0		
Total %	0	52.6	6.2	58.8	0.4	3.5	0.8	4.6	1.5	34.8	0.3	36.5	0	0	0	0	

	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**618**	39	657	0	30	**11**	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	**3**	41	3	47	10	**455**	0	**465**	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	**3**	443	0	0	0	0	1146
08:00 AM	0	595	**107**	**702**	1	**54**	6	**61**	**24**	365	0	389	0	0	0	0	**1152**
Total Volume	0	2317	286	2603	6	164	23	193	65	1584	3	1652	0	0	0	0	4448
% App. Total	0	89	11		3.1	85	11.9		3.9	95.9	0.2		0	0	0		
PHF	.000	.937	.668	.927	.500	.759	.523	.791	.677	.870	.250	.888	.000	.000	.000	.000	.965

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				06:45 AM			
+0 mins.	0	618	39	657	2	39	3	44	10	455	0	465	0	0	0	0
+15 mins.	0	525	60	585	1	54	6	61	15	425	3	443	0	0	0	0
+30 mins.	0	579	80	659	2	47	7	56	24	365	0	389	0	0	0	0
+45 mins.	0	595	107	702	6	54	17	77	14	389	1	404	0	0	0	0
Total Volume	0	2317	286	2603	11	194	33	238	63	1634	4	1701	0	0	0	0
% App. Total	0	89	11		4.6	81.5	13.9		3.7	96.1	0.2		0	0	0	
PHF	.000	.937	.668	.927	.458	.898	.485	.773	.656	.898	.333	.915	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

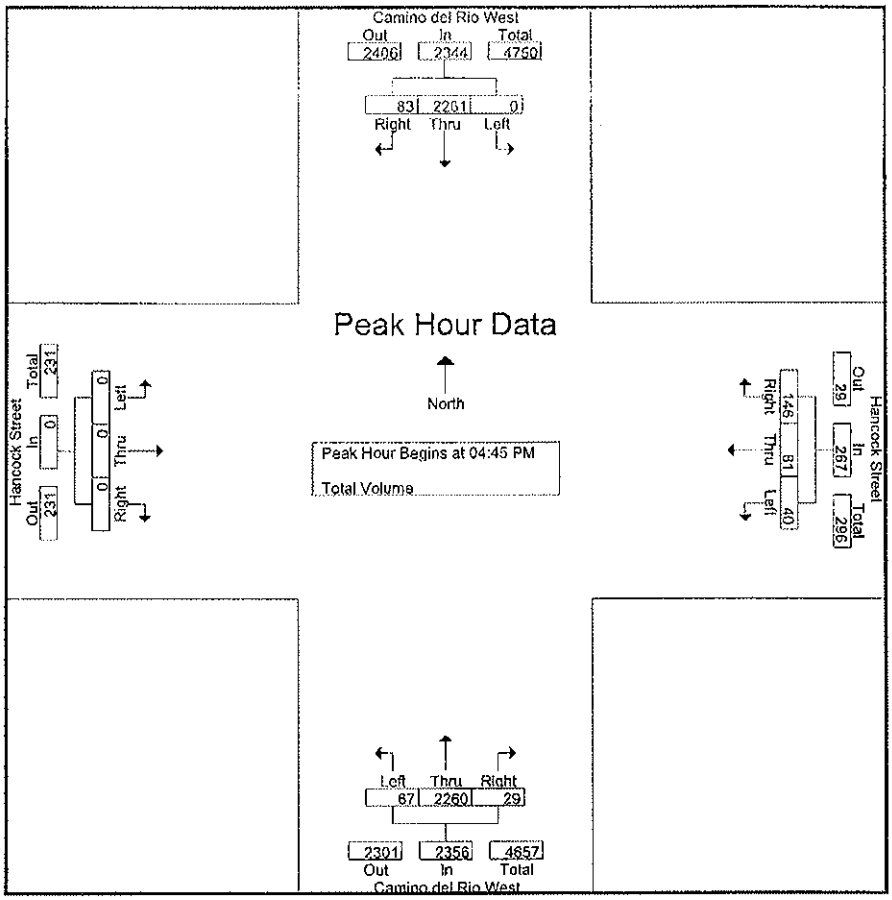
	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	476	31	507	1	34	14	49	17	585	5	607	0	0	0	0	1163
04:15 PM	0	523	30	553	5	23	34	62	11	525	5	541	0	0	0	0	1156
04:30 PM	0	532	25	557	9	21	33	63	11	569	2	582	0	0	0	0	1202
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
Total	0	2061	112	2173	29	97	118	244	68	2264	21	2353	0	0	0	0	4770
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
05:45 PM	0	538	23	561	8	21	27	56	15	489	7	511	0	0	0	0	1128
Total	0	2269	80	2349	34	83	136	253	53	2164	27	2244	0	0	0	0	4846
Grand Total	0	4330	192	4522	63	180	254	497	121	4428	48	4597	0	0	0	0	9616
Apprch %	0	95.8	4.2		12.7	36.2	51.1		2.6	96.3	1		0	0	0		
Total %	0	45	2	47	0.7	1.9	2.6	5.2	1.3	46	0.5	47.8	0	0	0	0	

	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
Total Volume	0	2261	83	2344	40	81	146	267	67	2260	29	2356	0	0	0	0	4967
% App. Total	0	96.5	3.5		15	30.3	54.7		2.8	95.9	1.2		0	0	0		
PHF	.000	.971	.798	.975	.714	.653	.869	.845	.578	.959	.518	.945	.000	.000	.000	.000	.983

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	0	570	20	590	5	23	34	62	11	569	2	582	0	0	0	0
+15 mins.	0	579	18	597	9	21	33	63	29	585	9	623	0	0	0	0
+30 mins.	0	582	19	601	14	19	37	70	11	525	14	550	0	0	0	0
+45 mins.	0	538	23	561	6	31	42	79	19	589	4	612	0	0	0	0
Total Volume	0	2269	80	2349	34	94	146	274	70	2268	29	2367	0	0	0	0
% App. Total	0	96.6	3.4		12.4	34.3	53.3		3	95.8	1.2		0	0	0	
PHF	.000	.975	.870	.977	.607	.758	.869	.867	.603	.963	.518	.950	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

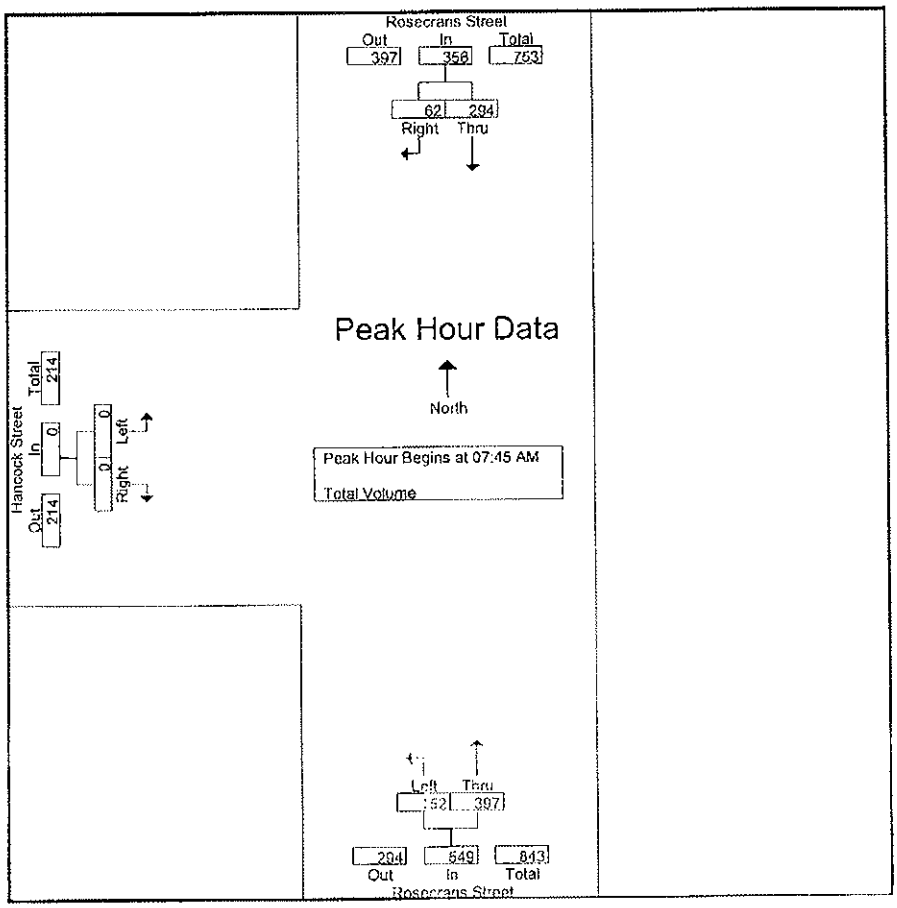
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:45 AM	46	6	52	40	70	110	0	0	0	162
Total	46	6	52	40	70	110	0	0	0	162
07:00 AM	50	5	55	23	59	82	0	0	0	137
07:15 AM	66	13	79	25	93	118	0	0	0	197
07:30 AM	72	19	91	27	101	128	0	0	0	219
07:45 AM	87	14	101	27	116	143	0	0	0	244
Total	275	51	326	102	369	471	0	0	0	797
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Grand Total	528	105	633	267	720	987	0	0	0	1620
Apprch %	83.4	16.6		27.1	72.9		0	0		
Total %	32.6	6.5	39.1	16.5	44.4	60.9	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	87	14	101	27	116	143	0	0	0	244
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Total Volume	294	62	356	152	397	549	0	0	0	905
% App. Total	82.6	17.4		27.7	72.3		0	0		
PHF	.845	.861	.881	.844	.856	.960	.000	.000	.000	.927

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:45 AM			06:45 AM		
+0 mins.	72	19	91	27	116	143	0	0	0
+15 mins.	87	14	101	45	85	130	0	0	0
+30 mins.	60	18	78	44	99	143	0	0	0
+45 mins.	70	16	86	36	97	133	0	0	0
Total Volume	289	67	356	152	397	549	0	0	0
% App. Total	81.2	18.8		27.7	72.3		0	0	
PHF	.830	.882	.881	.844	.856	.960	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

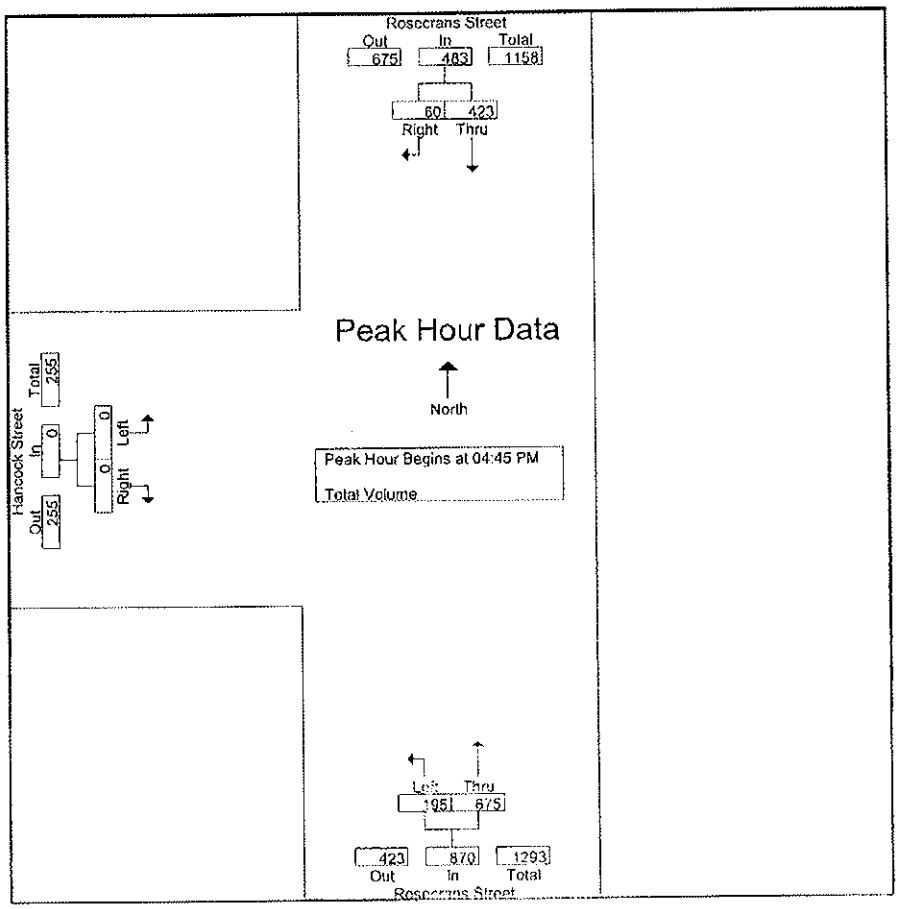
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	104	18	122	48	157	205	0	0	0	327
04:15 PM	109	17	126	53	153	206	0	0	0	332
04:30 PM	106	20	126	44	158	202	0	0	0	328
04:45 PM	89	14	103	51	187	238	0	0	0	341
Total	408	69	477	196	655	851	0	0	0	1328
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
05:45 PM	117	12	129	31	138	169	0	0	0	298
Total	451	58	509	175	626	801	0	0	0	1310
Grand Total	859	127	986	371	1281	1652	0	0	0	2638
Apprch %	87.1	12.9		22.5	77.5		0	0		
Total %	32.6	4.8	37.4	14.1	48.6	62.6	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	89	14	103	51	187	238	0	0	0	341
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
Total Volume	423	60	483	195	675	870	0	0	0	1353
% App. Total	87.6	12.4		22.4	77.6		0	0		
PHF	.896	.882	.901	.956	.902	.914	.000	.000	.00	.990

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			04:00 PM		
+0 mins.	107	17	124	44	158	202	0	0	0
+15 mins.	109	13	122	51	187	238	0	0	0
+30 mins.	118	16	134	51	167	218	0	0	0
+45 mins.	117	12	129	48	168	216	0	0	0
Total Volume	451	58	509	194	680	874	0	0	0
% App. Total	88.6	11.4		22.2	77.8		0	0	
PHF	.956	.853	.950	.951	.909	.918	.000	.000	.000

(25)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				12			37	101				14	164
7:15 AM				16			46	158				24	244
7:30 AM				15			58	111				31	215
7:45 AM				17			60	103				32	212
8:00 AM				12			86	117				23	238
8:15 AM				10			66	76				18	170
8:30 AM				14			43	62				37	156
8:45 AM				22			58	66				27	173
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	118	0	0	454	794	0	0	0	206	1572
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	36.38%	63.62%	0.00%	0.00%	0.00%	100.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021

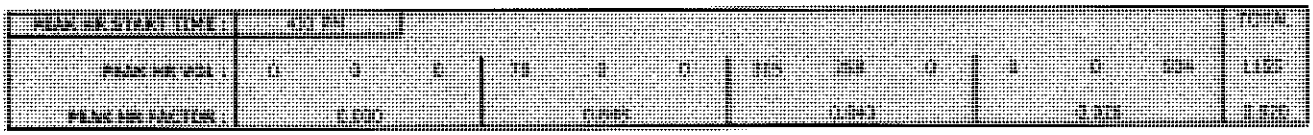
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				11			54	46				124	235
4:15 PM				18			66	63				107	254
4:30 PM				15			66	68				136	285
4:45 PM				17			78	58				116	269
5:00 PM				23			83	50				131	287
5:15 PM				23			88	82				121	314
5:30 PM				14			79	45				54	192
5:45 PM				23			124	38				75	260
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	144	0	0	638	450	0	0	0	864	2096
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	58.64%	41.36%	0.00%	0.00%	0.00%	100.00%	



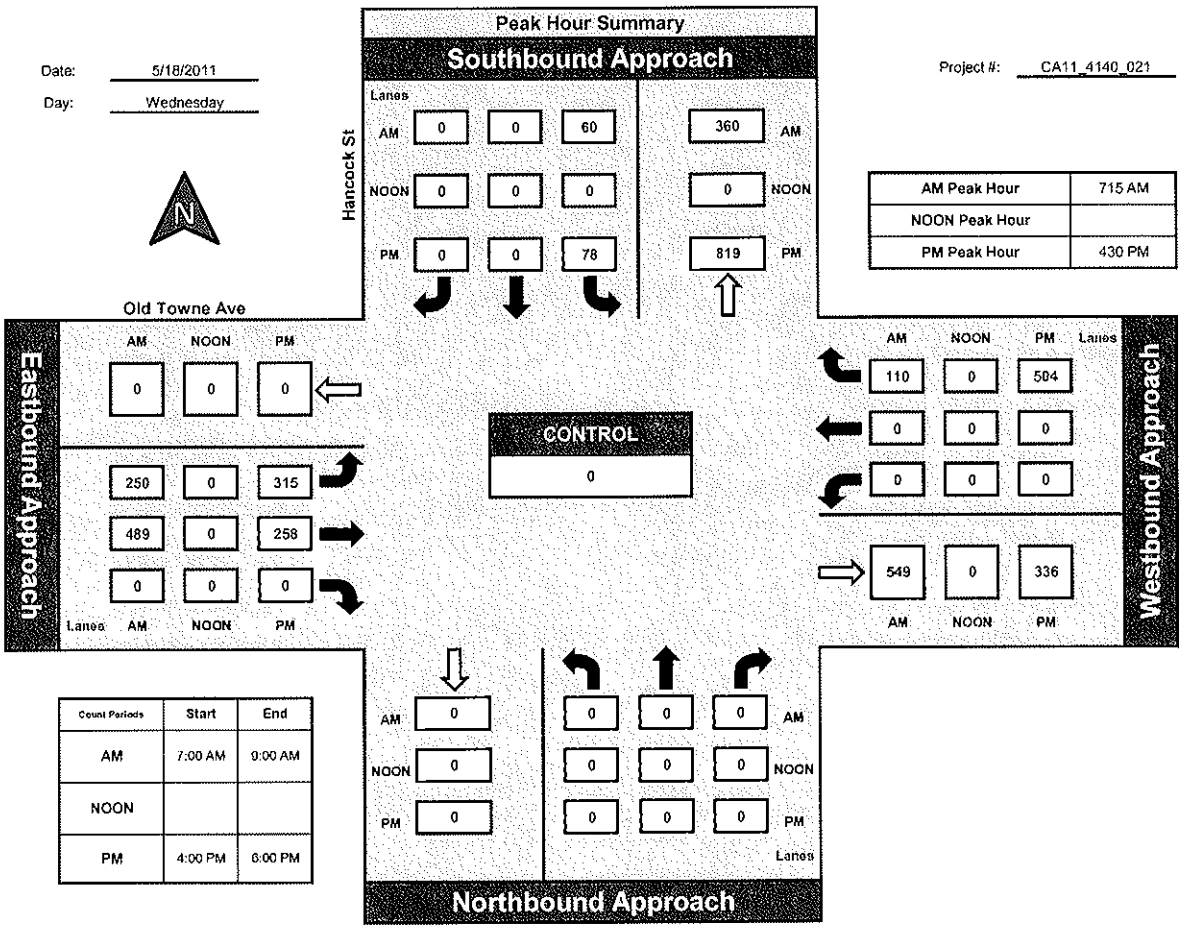
CONTROL :

ITM Peak Hour Summary

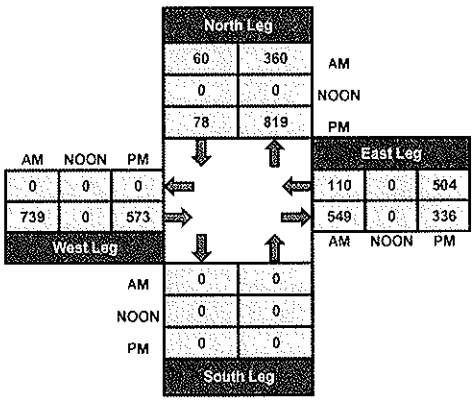
Prepared by:

National Data & Surveying Services

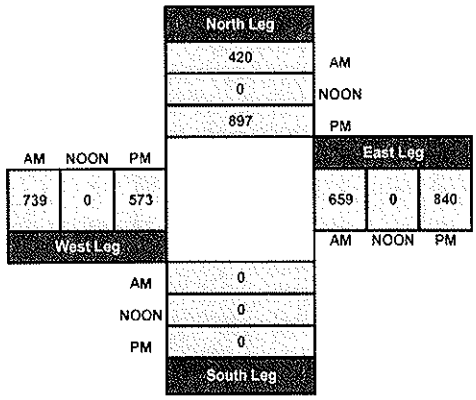
Hancock St and Old Towne Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(26)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	13	2	7	1	0	1	5	21	91	2	2	0	145
7:15 AM	19	1	9	0	1	0	1	21	141	2	3	2	200
7:30 AM	35	0	5	0	0	0	1	24	110	0	1	0	176
7:45 AM	23	1	8	0	0	1	2	33	81	0	3	1	153
8:00 AM	16	0	13	0	0	0	3	45	79	5	12	0	173
8:15 AM	9	0	10	0	1	0	0	21	67	4	4	0	116
8:30 AM	28	1	7	0	1	1	0	27	55	0	12	0	132
8:45 AM	14	1	7	0	2	2	1	33	47	1	7	0	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	6	66	1	5	5	13	225	671	14	44	3	1210
APPROACH %'s :	68.56%	2.62%	28.82%	9.09%	45.45%	45.45%	1.43%	24.75%	73.82%	22.95%	72.13%	4.92%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	120	0	18	0	0	0	2	27	31	1	8	0	207
4:15 PM	79	0	19	0	1	5	2	43	32	2	19	1	203
4:30 PM	116	1	14	0	1	5	1	42	39	4	19	0	242
4:45 PM	97	2	12	1	2	5	1	32	44	2	12	0	210
5:00 PM	100	2	7	1	1	3	1	33	41	2	26	0	217
5:15 PM	109	2	17	2	2	0	5	47	48	2	18	0	252
5:30 PM	42	0	11	0	1	1	1	30	28	2	5	0	121
5:45 PM	60	1	11	1	0	1	0	36	27	1	20	0	158
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	723	8	109	5	8	20	13	290	290	16	127	1	1610
APPROACH %'s :	86.07%	0.95%	12.98%	15.15%	24.24%	60.61%	2.19%	48.90%	48.90%	11.11%	88.19%	0.69%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

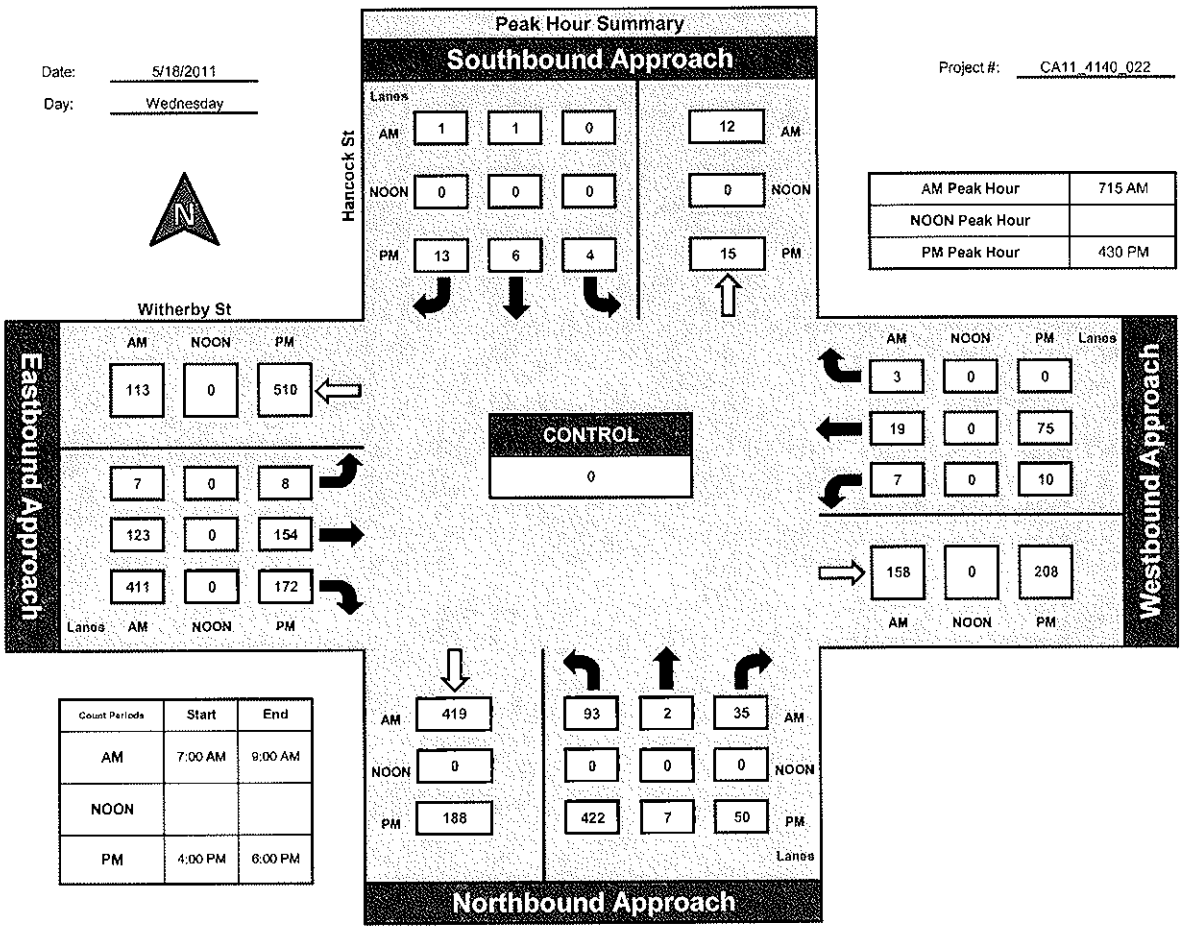
National Data & Surveying Services

Hancock St and Witherby St , City of San Diego

Date: 5/18/2011

Day: Wednesday

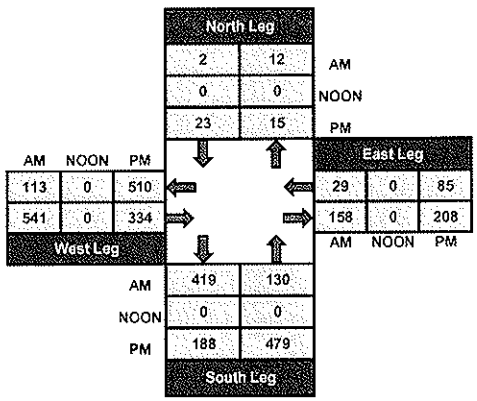
Project #: CA11_4140_022



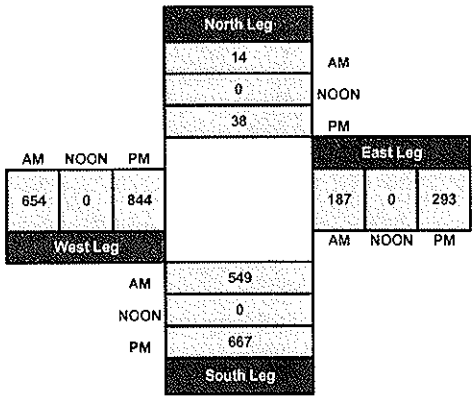
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(28)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					235	2			1	6			244
7:15 AM					216	4			1	3			224
7:30 AM					268	1			4	5			278
7:45 AM					355	7			2	6			370
8:00 AM					323	1			2	5			331
8:15 AM					367	5			5	7			384
8:30 AM					359	1			1	10			371
8:45 AM					346	1			2	12			361

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	2469	22	0	0	18	54	0	0	2563
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.12%	0.88%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

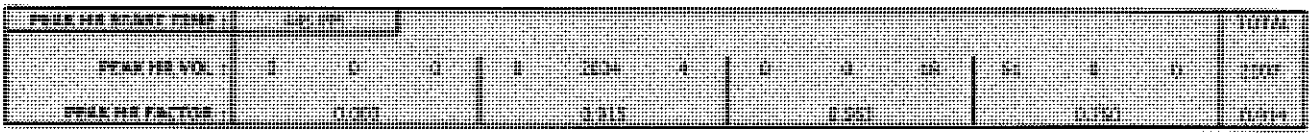
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					291	1			1	9			302
4:15 PM					344	4			7	6			361
4:30 PM					388	2			7	10			407
4:45 PM					477	0			7	17			501
5:00 PM					556	1			8	11			576
5:15 PM					536	1			3	7			547
5:30 PM					465	2			0	16			483
5:45 PM					381	2			0	13			396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3438	13	0	0	33	89	0	0	3573
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.62%	0.38%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



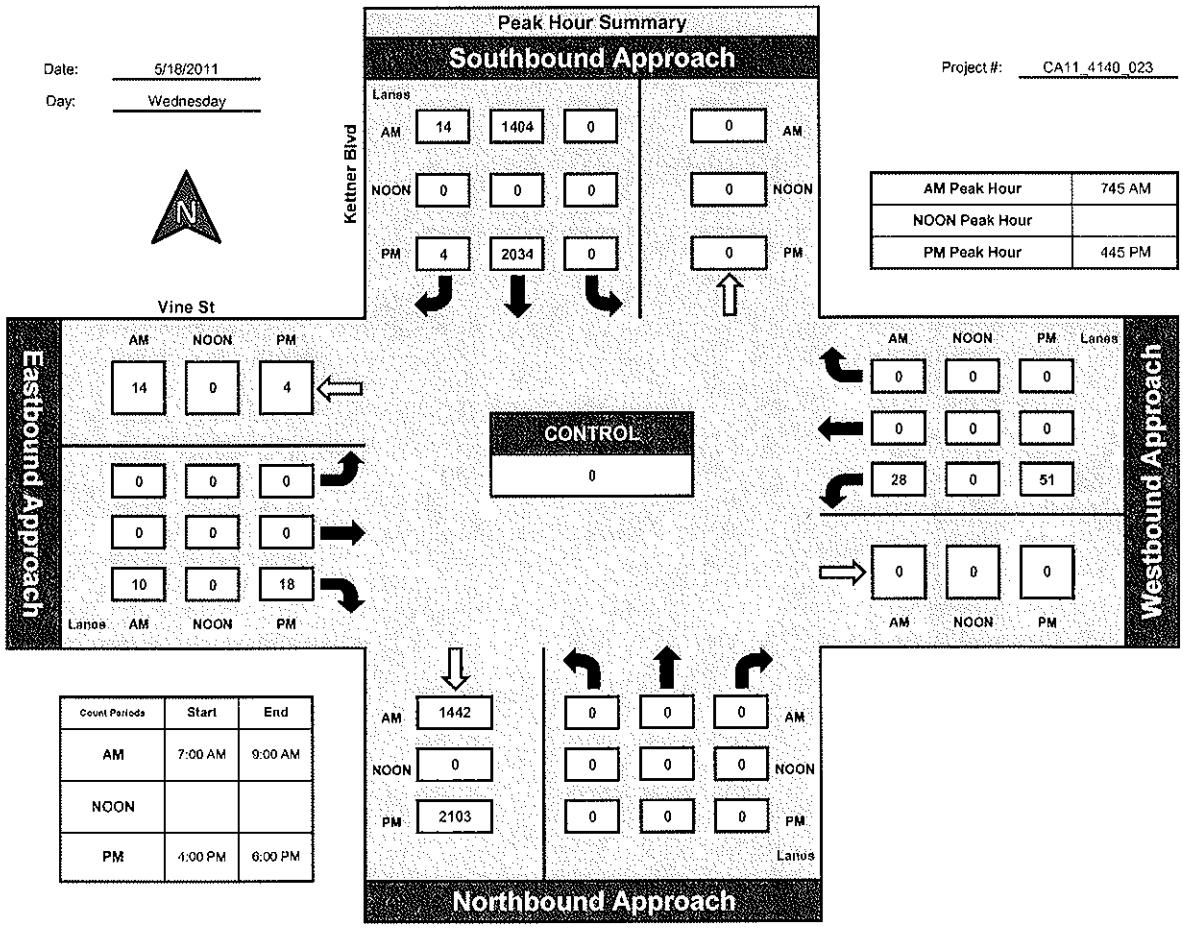
CONTROL :

ITM Peak Hour Summary

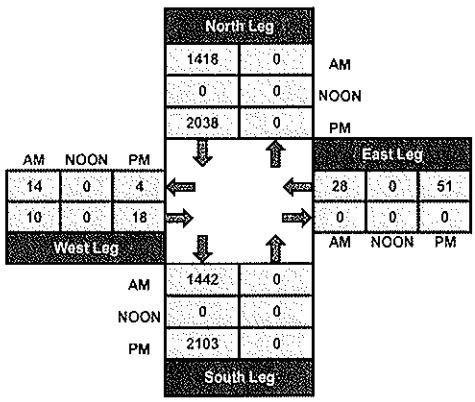
Prepared by:

National Data & Surveying Services

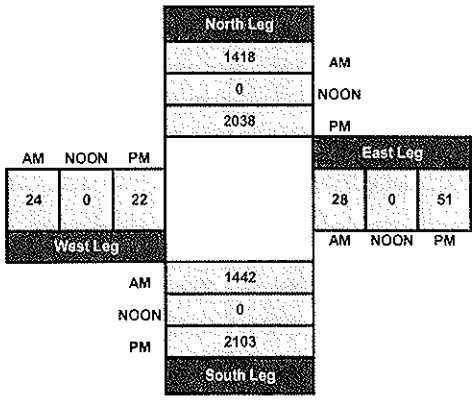
Kettner Blvd and Vine St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(31)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_018

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	450					19			222				691
7:15 AM	410					7			265				682
7:30 AM	358					15			272				645
7:45 AM	444					22			274				740
8:00 AM	413					18			286				717
8:15 AM	418					17			312				747
8:30 AM	390					16			309				715
8:45 AM	341					15			274				630

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3224	0	0	0	0	129	0	0	2214	0	0	0	5567
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]													
[redacted]													
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

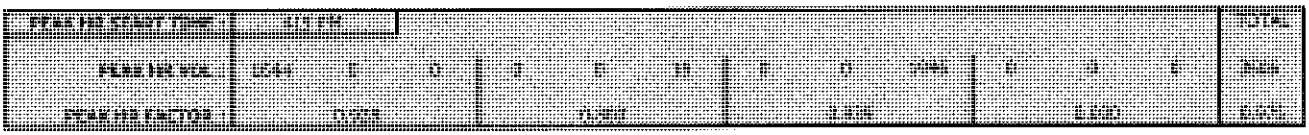
Project ID: CA11_4140_018 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	376					1			501				878
4:15 PM	404					3			518				925
4:30 PM	371					4			498				873
4:45 PM	426					5			470				901
5:00 PM	443					4			460				907
5:15 PM	405					2			436				843
5:30 PM	351					2			384				737
5:45 PM	333					2			309				644

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3109	0	0	0	0	23	0	0	3576	0	0	0	6708
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_018

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
	73	0	AM
	0	0	NOON
	16	0	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
1738	0	1660		0	0	0
1181	0	1946		0	0	0

	South Leg	
AM	1181	1665
NOON	0	0
PM	1946	1644

Total Volume Per Leg

	North Leg	
	73	AM
	0	NOON
	16	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
2919	0	3606		0	0	0

	South Leg
AM	2846
NOON	0
PM	3590

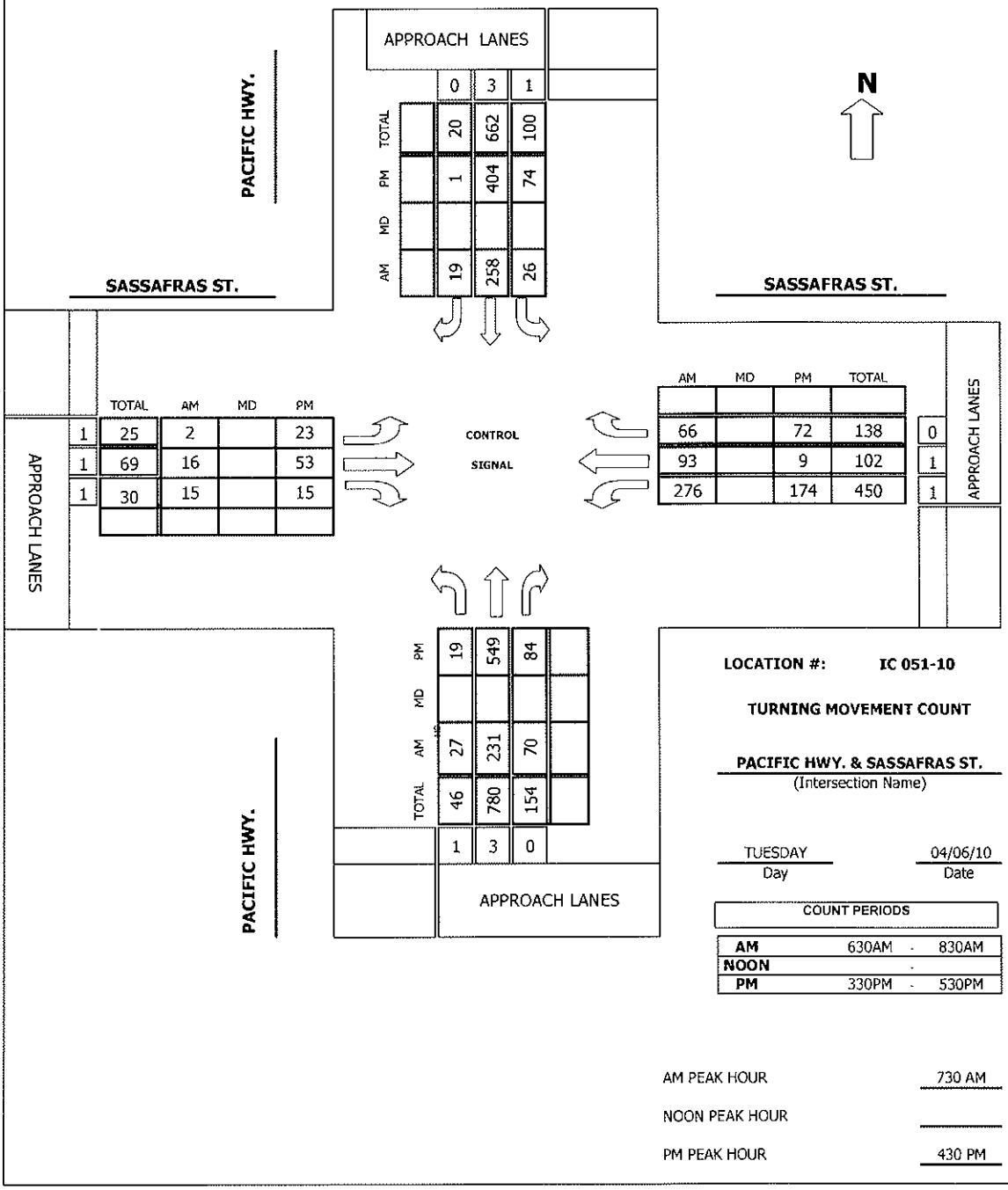
(34)

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: IC 051-10

TMC SUMMARY OF PACIFIC HWY. & SASSAFRAS ST.



LOCATION #: IC 051-10

TURNING MOVEMENT COUNT

PACIFIC HWY. & SASSAFRAS ST.
(Intersection Name)

TUESDAY (Day) 04/06/10 (Date)

COUNT PERIODS			
AM	630AM	-	830AM
NOON		-	
PM	330PM	-	530PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM	5	39	19	3	38	2	1	0	2	75	32	5	221
6:45 AM	6	47	9	4	63	1	1	1	1	104	15	7	259
7:00 AM	7	45	15	5	45	2	0	0	4	73	18	13	227
7:15 AM	8	55	16	4	67	3	0	0	1	50	21	8	233
7:30 AM	6	35	13	4	65	6	0	1	2	68	30	13	243
7:45 AM	7	72	12	7	69	4	0	3	2	77	20	19	292
8:00 AM	5	71	16	6	68	6	1	3	6	64	19	17	282
8:15 AM	9	53	29	9	56	3	1	9	5	67	24	17	282
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	53	417	129	42	471	27	4	17	23	578	179	99	2039
Approach %	8.85	69.62	21.54	7.78	87.22	5.00	9.09	38.64	52.27	67.52	20.91	11.57	
App/Depart	599	/	520	540	/	1072	44	/	188	856	/	259	

AM Peak Hr Begins at: 730 AM

PEAK													
Volumes	27	231	70	26	258	19	2	16	15	276	93	66	1099
Approach %	8.23	70.43	21.34	8.58	85.15	6.27	6.06	48.48	45.45	63.45	21.38	15.17	
PEAK HR. FACTOR:		0.891			0.947			0.550			0.938		0.941

CONTROL: SIGNAL
COMMENT 1:
COMMENT 2:

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	5	115	37	20	89	1	1	8	4	50	2	15	347
3:45 PM	6	127	26	16	90	1	2	2	3	42	1	19	335
4:00 PM	7	126	23	13	105	1	1	12	7	46	5	16	362
4:15 PM	5	98	23	18	105	1	2	11	4	59	4	17	347
4:30 PM	3	117	23	20	105	1	5	16	2	44	4	18	358
4:45 PM	6	130	19	17	99	0	3	7	3	42	1	17	344
5:00 PM	8	138	25	19	104	0	8	23	6	44	1	21	397
5:15 PM	2	164	17	18	96	0	7	7	4	44	3	16	378
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	42	1015	193	141	793	5	29	86	33	371	21	139	2868
Approach %	3.36	81.20	15.44	15.02	84.45	0.53	19.59	58.11	22.30	69.87	3.95	26.18	
App/Depart	1250	/	1183	939	/	1197	148	/	420	531	/	68	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	19	549	84	74	404	1	23	53	15	174	9	72	1477
Approach %	2.91	84.20	12.88	15.45	84.34	0.21	25.27	58.24	16.48	68.24	3.53	28.24	
PEAK HR. FACTOR:		0.891			0.950			0.615			0.966		0.930

CONTROL: SIGNAL
COMMENT 1: 0
COMMENT 2: 0

FIELD DATA SERVICES OF ARIZONA, INC.

520.316.6745

Pedestrian & Bicycle Study

Location: PACIFIC HWY. & SASSAFRAS ST.

Date: 04/06/10
Day: TUESDAY

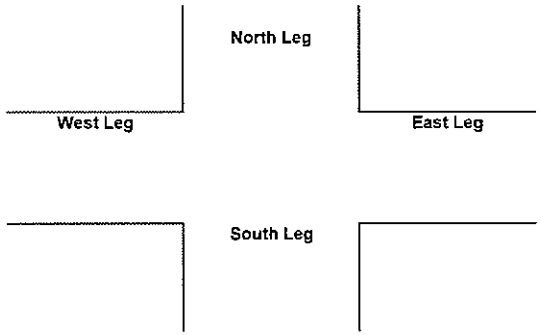
City: SAN DIEGO
Project #: IC 051-10

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	2	2	0
6:45 AM	0	1	0	0
7:00 AM	0	1	1	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	0
7:45 AM	0	1	0	0
8:00 AM	0	1	0	1
8:15 AM	0	1	0	0
TOTAL	0	8	3	1

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	0	1	2
6:45 AM	0	0	0	4
7:00 AM	0	0	0	2
7:15 AM	0	0	1	0
7:30 AM	0	0	1	0
7:45 AM	0	0	0	1
8:00 AM	0	0	0	2
8:15 AM	0	0	1	2
TOTAL	0	0	4	13

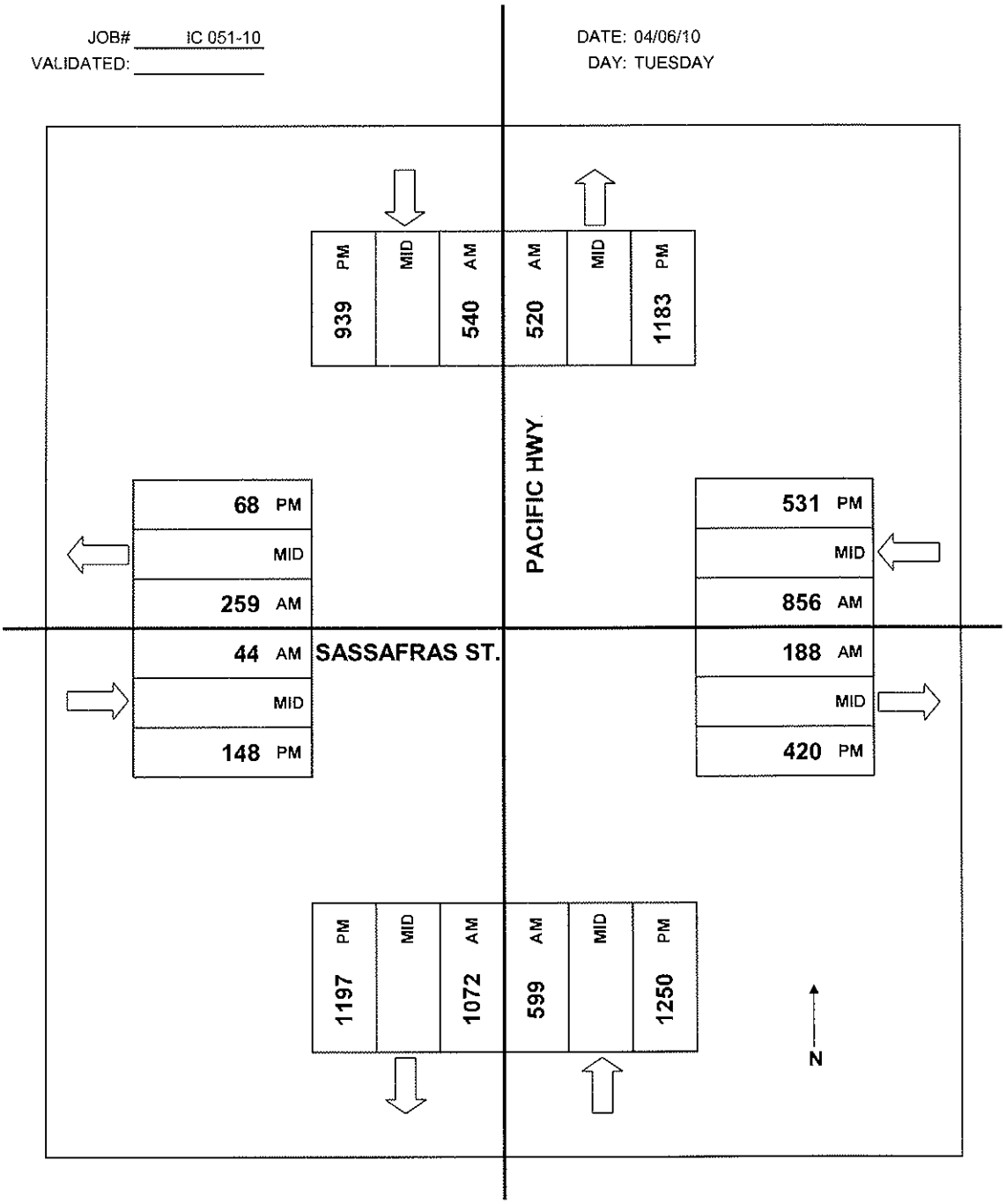
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	0	1
3:45 PM	0	0	0	0
4:00 PM	0	3	0	0
4:15 PM	0	1	0	2
4:30 PM	0	6	0	0
4:45 PM	0	1	0	2
5:00 PM	0	2	0	0
5:15 PM	0	0	0	0
TOTAL	0	13	0	5

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	2	0
3:45 PM	0	0	4	1
4:00 PM	0	0	2	2
4:15 PM	0	0	3	1
4:30 PM	0	0	1	2
4:45 PM	0	0	0	1
5:00 PM	0	0	2	1
5:15 PM	0	0	0	1
TOTAL	0	0	14	9



JOB# IC 051-10
VALIDATED: _____

DATE: 04/06/10
DAY: TUESDAY



(36)

2

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

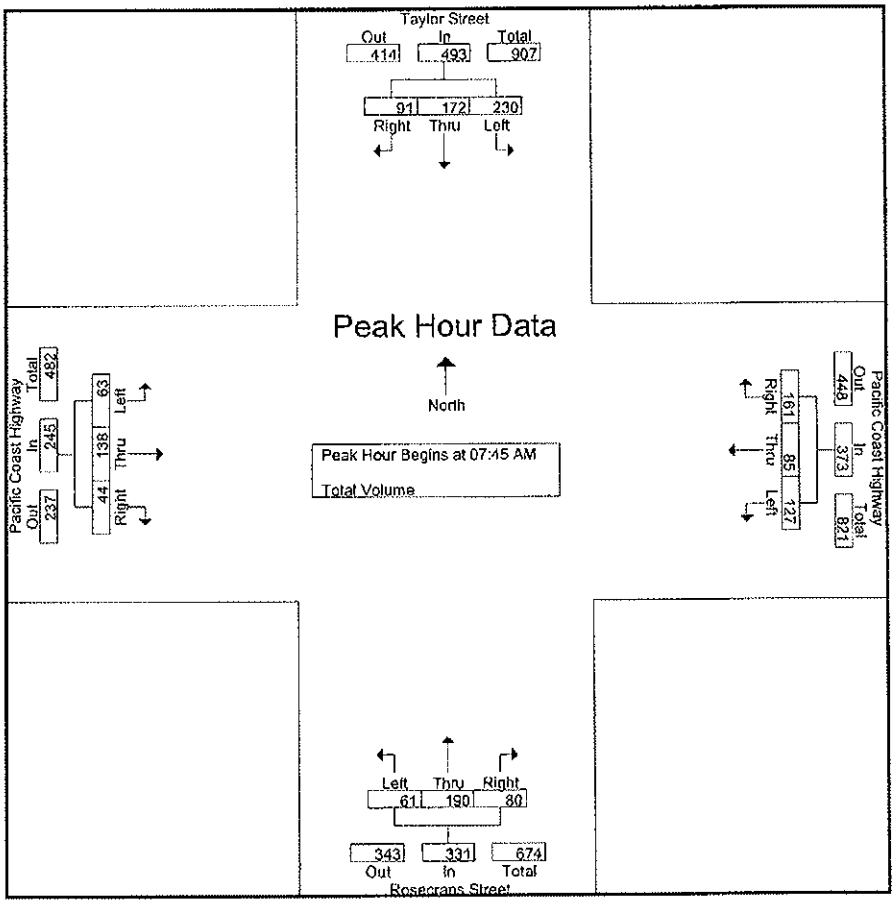
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
Total	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
07:00 AM	76	19	16	111	23	11	18	52	10	23	27	60	15	26	12	53	276
07:15 AM	92	21	11	124	43	18	21	82	13	29	21	63	12	21	6	39	308
07:30 AM	65	44	24	133	37	19	31	87	10	41	30	81	8	30	14	52	353
07:45 AM	66	53	20	139	37	20	41	98	11	51	18	80	22	50	15	87	404
Total	299	137	71	507	140	68	111	319	44	144	96	284	57	127	47	231	1341
08:00 AM	58	31	19	108	36	21	45	102	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	29	118	24	20	33	77	19	68	19	106	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Grand Total	533	268	162	963	250	146	261	657	101	304	186	591	114	236	82	432	2643
Apprch %	55.3	27.8	16.8		38.1	22.2	39.7		17.1	51.4	31.5		26.4	54.6	19		
Total %	20.2	10.1	6.1	36.4	9.5	5.5	9.9	24.9	3.8	11.5	7	22.4	4.3	8.9	3.1	16.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**66**	**53**	20	**139**	37	20	41	98	11	51	18	80	**22**	**50**	**15**	**87**	**404**
08:00 AM	58	31	19	108	36	21	**45**	**102**	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	**29**	118	24	20	33	77	**19**	**68**	19	**106**	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Total Volume	230	172	91	493	127	85	161	373	61	190	80	331	63	138	44	245	1442
% App. Total	46.7	34.9	18.5		34	22.8	43.2		18.4	57.4	24.2		25.7	56.3	18		
PHF	.871	.811	.784	.887	.858	.885	.894	.914	.803	.699	.870	.781	.716	.690	.733	.704	.892

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	76	19	16	111	37	20	41	98	10	41	**30**	81	**22**	**50**	**15**	**87**
+15 mins.	**92**	21	11	124	36	21	**45**	**102**	11	51	18	80	9	27	12	48
+30 mins.	65	44	**24**	133	24	20	33	77	13	31	23	67	13	31	7	51
+45 mins.	66	**53**	20	**139**	30	**24**	42	96	**19**	**68**	19	**106**	19	30	10	59
Total Volume	299	137	71	507	127	85	161	373	53	191	90	334	63	138	44	245
% App. Total	59	27	14		34	22.8	43.2		15.9	57.2	26.9		25.7	56.3	18	
PHF	.813	.646	.740	.912	.858	.885	.894	.914	.697	.702	.750	.788	.716	.690	.733	.704

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009

Groups Printed- Total Volume

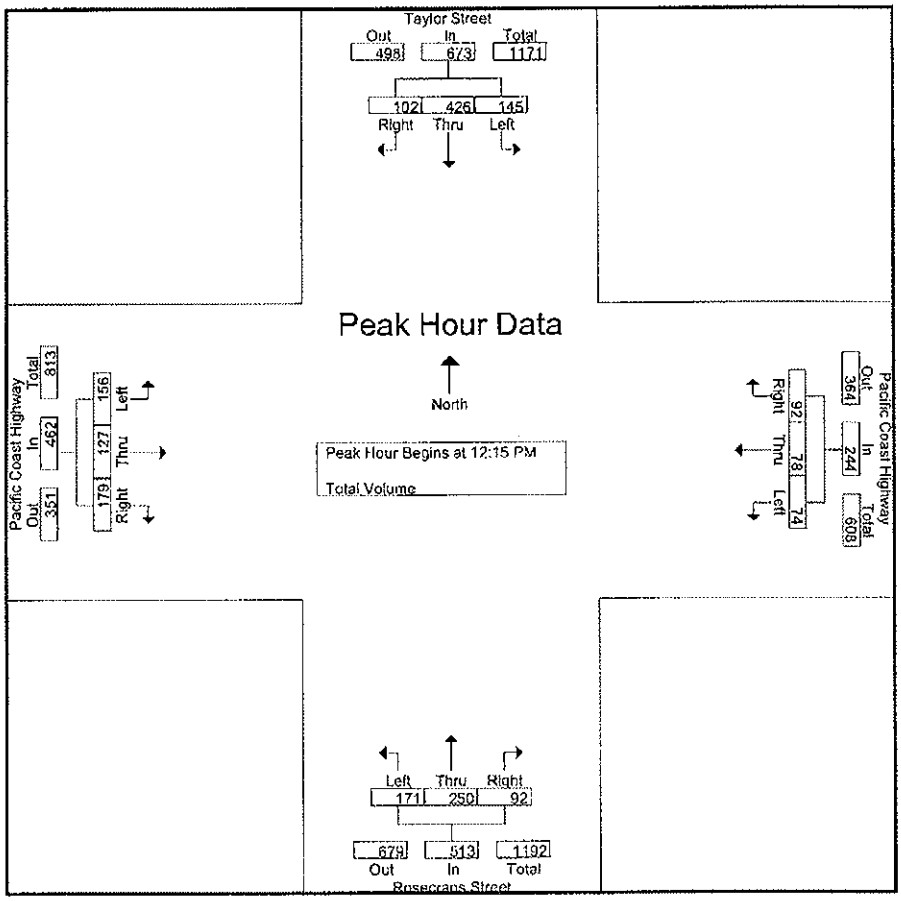
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	23	86	27	136	16	17	27	60	42	60	13	115	46	24	48	118	429
11:45 AM	21	94	29	144	16	23	13	52	27	77	21	125	45	28	54	127	448
Total	44	180	56	280	32	40	40	112	69	137	34	240	91	52	102	245	877
12:00 PM	30	70	19	119	13	28	32	73	33	62	12	107	41	32	41	114	413
12:15 PM	34	116	22	172	29	13	26	68	33	66	31	130	47	36	39	122	492
12:30 PM	34	110	33	177	14	20	18	52	45	58	25	128	38	26	54	118	475
12:45 PM	31	118	32	181	13	17	20	50	45	63	15	123	47	39	43	129	483
Total	129	414	106	649	69	78	96	243	156	249	83	488	173	133	177	483	1863
01:00 PM	46	82	15	143	18	28	28	74	48	63	21	132	24	26	43	93	442
01:15 PM	28	85	10	123	24	24	15	63	19	50	15	84	61	40	65	166	436
Grand Total	247	761	187	1195	143	170	179	492	292	499	153	944	349	251	387	987	3618
Apprch %	20.7	63.7	15.6		29.1	34.6	36.4		30.9	52.9	16.2		35.4	25.4	39.2		
Total %	6.8	21	5.2	33	4	4.7	4.9	13.6	8.1	13.8	4.2	26.1	9.6	6.9	10.7	27.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	34	116	22	172	**29**	13	26	68	33	**66**	**31**	130	**47**	36	39	122	**492**
12:30 PM	34	110	**33**	177	14	20	18	52	45	58	25	128	38	26	**54**	118	475
12:45 PM	31	**118**	32	**181**	13	17	20	50	45	63	15	123	47	**39**	43	**129**	483
01:00 PM	**46**	82	15	143	18	**28**	**28**	**74**	**48**	63	21	**132**	24	26	43	93	442
Total Volume	145	426	102	673	74	78	92	244	171	250	92	513	156	127	179	462	1892
% App. Total	21.5	63.3	15.2		30.3	32	37.7		33.3	48.7	17.9		33.8	27.5	38.7		
PHF	.788	.903	.773	.930	.638	.696	.821	.824	.891	.947	.742	.972	.830	.814	.829	.895	.961

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				12:15 PM				12:30 PM			
+0 mins.	34	116	22	172	16	17	27	60	33	**66**	31	130	38	26	54	118
+15 mins.	34	110	**33**	177	16	23	13	52	45	58	25	128	47	39	43	129
+30 mins.	31	**118**	32	**181**	13	**28**	**32**	**73**	45	63	15	123	24	26	43	93
+45 mins.	**46**	82	15	143	**29**	13	26	68	**48**	63	21	**132**	**61**	**40**	**65**	**166**
Total Volume	145	426	102	673	74	81	98	253	171	250	92	513	170	131	205	506
% App. Total	21.5	63.3	15.2		29.2	32	38.7		33.3	48.7	17.9		33.6	25.9	40.5	
PHF	.788	.903	.773	.930	.638	.723	.766	.866	.891	.947	.742	.972	.697	.819	.788	.762

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

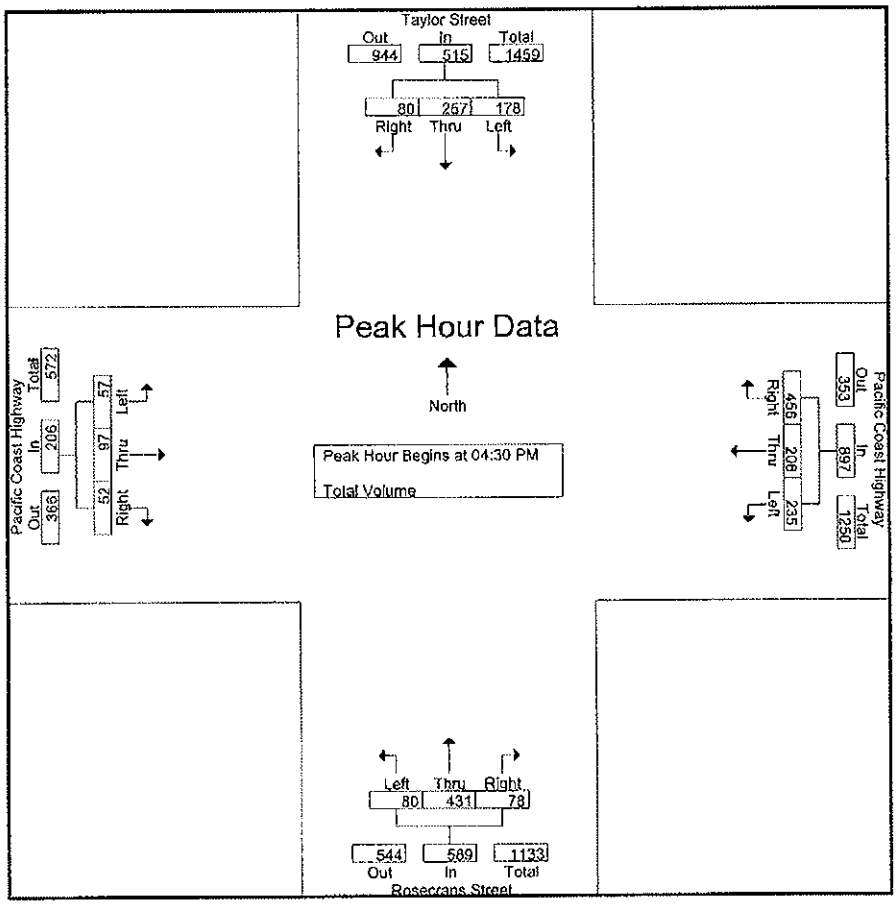
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	57	49	27	133	70	65	123	258	19	87	19	125	22	23	17	62	578
04:15 PM	32	54	20	106	83	46	103	232	22	64	32	118	11	27	12	50	506
04:30 PM	51	56	15	122	60	48	127	235	25	113	30	168	19	27	13	59	584
04:45 PM	40	57	16	113	62	38	107	207	18	90	10	118	14	13	7	34	472
Total	180	216	78	474	275	197	460	932	84	354	91	529	66	90	49	205	2140
05:00 PM	46	79	21	146	57	61	115	233	20	133	16	169	16	27	14	57	605
05:15 PM	41	65	28	134	56	59	107	222	17	95	22	134	8	30	18	56	546
05:30 PM	42	78	17	137	70	32	103	205	19	102	24	145	14	15	12	41	528
05:45 PM	42	80	20	142	42	36	92	170	18	90	22	130	12	24	15	51	493
Total	171	302	86	559	225	188	417	830	74	420	84	578	50	96	59	205	2172
Grand Total	351	518	164	1033	500	385	877	1762	158	774	175	1107	116	186	108	410	4312
Apprch %	34	50.1	15.9		28.4	21.9	49.8		14.3	69.9	15.8		28.3	45.4	26.3		
Total %	8.1	12	3.8	24	11.6	8.9	20.3	40.9	3.7	17.9	4.1	25.7	2.7	4.3	2.5	9.5	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**51**	56	15	122	60	48	**127**	**235**	**25**	113	**30**	168	**19**	27	13	**59**	584
04:45 PM	40	57	16	113	**62**	38	107	207	18	90	10	118	14	13	7	34	472
05:00 PM	46	**79**	21	**146**	57	**61**	115	233	20	**133**	16	**169**	16	27	14	57	**605**
05:15 PM	41	65	**28**	134	56	59	107	222	17	95	22	134	8	**30**	**18**	56	546
Total Volume	178	257	80	515	235	206	456	897	80	431	78	589	57	97	52	206	2207
% App. Total	34.6	49.9	15.5		26.2	23	50.8		13.6	73.2	13.2		27.7	47.1	25.2		
PHF	.873	.813	.714	.882	.948	.844	.898	.954	.800	.810	.650	.871	.750	.808	.722	.873	.912

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	**46**	79	21	**146**	70	**65**	123	**258**	**25**	113	**30**	168	**19**	27	13	**59**
+15 mins.	41	65	**28**	134	**83**	46	103	232	18	90	10	118	14	13	7	34
+30 mins.	42	78	17	137	60	48	**127**	235	20	**133**	16	**169**	16	27	14	57
+45 mins.	42	**80**	20	142	62	38	107	207	17	95	22	134	8	**30**	**18**	56
Total Volume	171	302	86	559	275	197	460	932	80	431	78	589	57	97	52	206
% App. Total	30.6	54	15.4		29.5	21.1	49.4		13.6	73.2	13.2		27.7	47.1	25.2	
PHF	.929	.944	.768	.957	.828	.758	.906	.903	.800	.810	.650	.871	.750	.808	.722	.873

(37)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	29	8	0	29	27	0	0	2	9	7	27	158
7:15 AM	27	35	2	0	32	33	1	0	0	7	11	31	179
7:30 AM	33	36	8	1	39	39	1	0	4	7	19	25	212
7:45 AM	37	43	9	1	31	38	1	0	6	9	35	45	255
8:00 AM	24	56	12	1	26	37	0	1	5	9	46	55	272
8:15 AM	27	37	7	0	21	69	1	0	3	7	51	42	265
8:30 AM	31	33	7	0	27	52	0	0	2	11	29	43	235
8:45 AM	24	43	5	5	28	61	1	0	5	11	28	41	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	223	312	58	8	233	356	5	1	27	70	226	309	1828
APPROACH %'s :	37.61%	52.61%	9.78%	1.34%	39.03%	59.63%	15.15%	3.03%	81.82%	11.57%	37.36%	51.07%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	91	46	3	1	42	31	0	0	1	15	16	34	280
4:15 PM	97	66	2	1	41	28	0	1	6	21	22	45	330
4:30 PM	96	70	4	0	52	39	0	1	6	17	26	38	349
4:45 PM	104	67	2	0	45	29	0	0	5	21	20	50	343
5:00 PM	107	54	1	0	53	46	0	0	9	24	26	50	370
5:15 PM	99	69	2	0	52	23	1	1	1	9	16	57	330
5:30 PM	76	52	3	0	47	36	1	0	4	16	25	53	313
5:45 PM	42	39	1	0	33	27	0	0	2	10	17	38	209
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	712	463	18	2	365	259	2	3	34	133	168	365	2524
APPROACH %'s :	59.68%	38.81%	1.51%	0.32%	58.31%	41.37%	5.13%	7.69%	87.18%	19.97%	25.23%	54.80%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

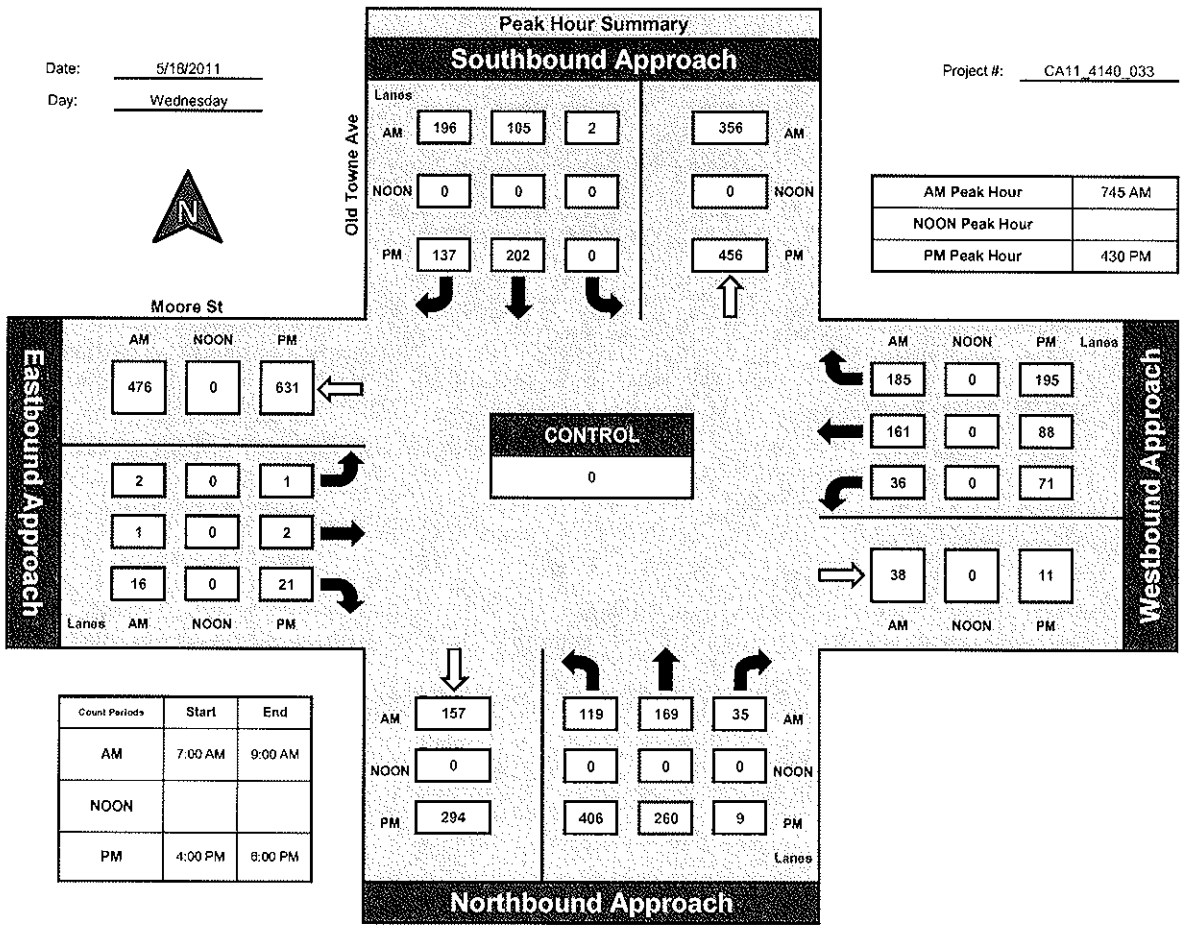
National Data & Surveying Services

Old Towne Ave and Moore St , City of San Diego

Date: 5/18/2011

Day: Wednesday

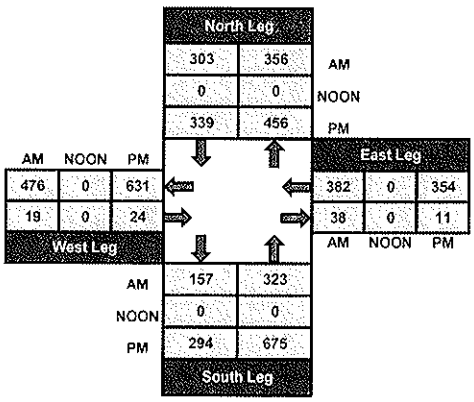
Project #: CA11_4140_033



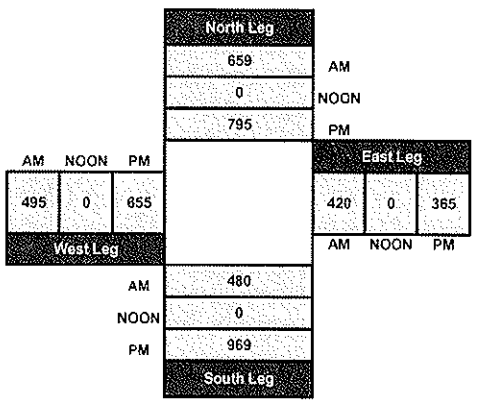
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(38)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

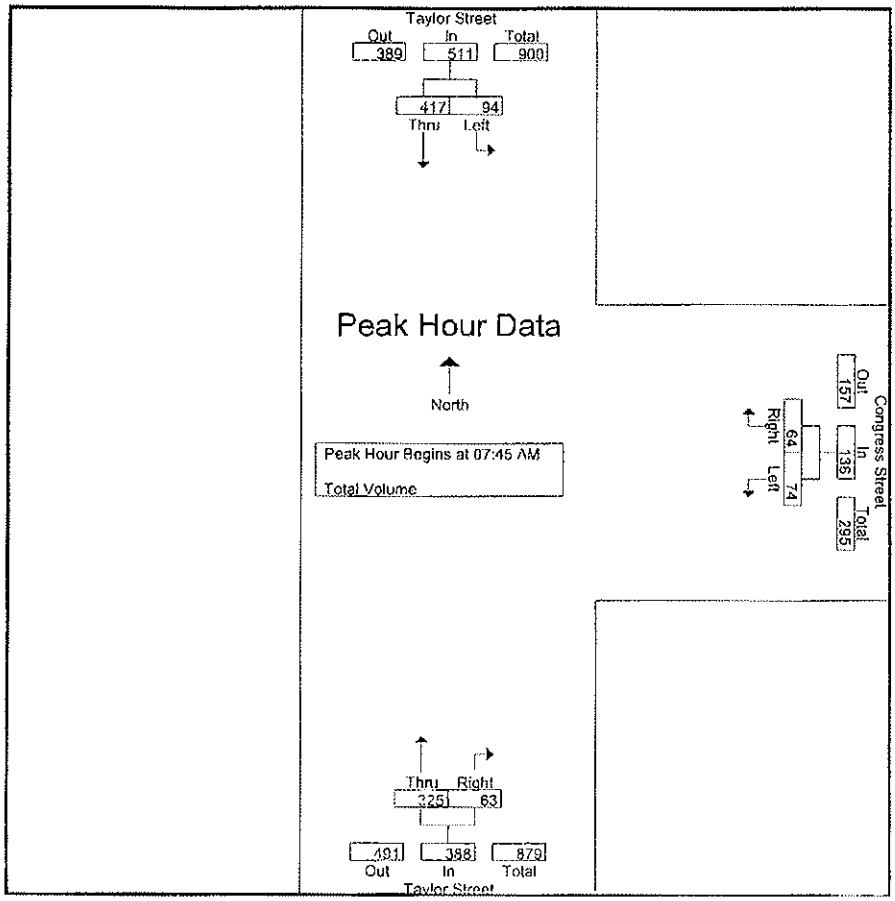
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:45 AM	10	92	102	13	4	17	42	11	53	172
Total	10	92	102	13	4	17	42	11	53	172
07:00 AM	14	108	122	7	11	18	58	6	64	204
07:15 AM	13	124	137	10	12	22	55	8	63	222
07:30 AM	21	121	142	9	17	26	63	8	71	239
07:45 AM	23	122	145	19	18	37	93	13	106	288
Total	71	475	546	45	58	103	269	35	304	953
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	19	32	80	18	98	252
08:30 AM	27	99	126	29	11	40	80	19	99	265
Grand Total	152	862	1014	113	108	221	543	96	639	1874
Apprch %	15	85		51.1	48.9		85	15		
Total %	8.1	46	54.1	6	5.8	11.8	29	5.1	34.1	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	23	**122**	**145**	19	18	37	**93**	13	**106**	**288**
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	**19**	32	80	18	98	252
08:30 AM	**27**	99	126	**29**	11	**40**	80	19	99	265
Total Volume	94	417	511	74	64	138	325	63	388	1037
% App. Total	18.4	81.6		53.6	46.4		83.8	16.2		
PHF	.870	.855	.881	.638	.842	.863	.874	.829	.915	.901

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:45 AM		
+0 mins.	14	108	122	19	18	37	93	13	106
+15 mins.	13	124	137	13	16	29	72	13	85
+30 mins.	21	121	142	13	19	32	80	18	98
+45 mins.	23	122	145	29	11	40	80	19	99
Total Volume	71	475	546	74	64	138	325	63	388
% App. Total	13	87		53.6	46.4		83.8	16.2	
PHF	.772	.958	.941	.638	.842	.863	.874	.82[illegible]	.915

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

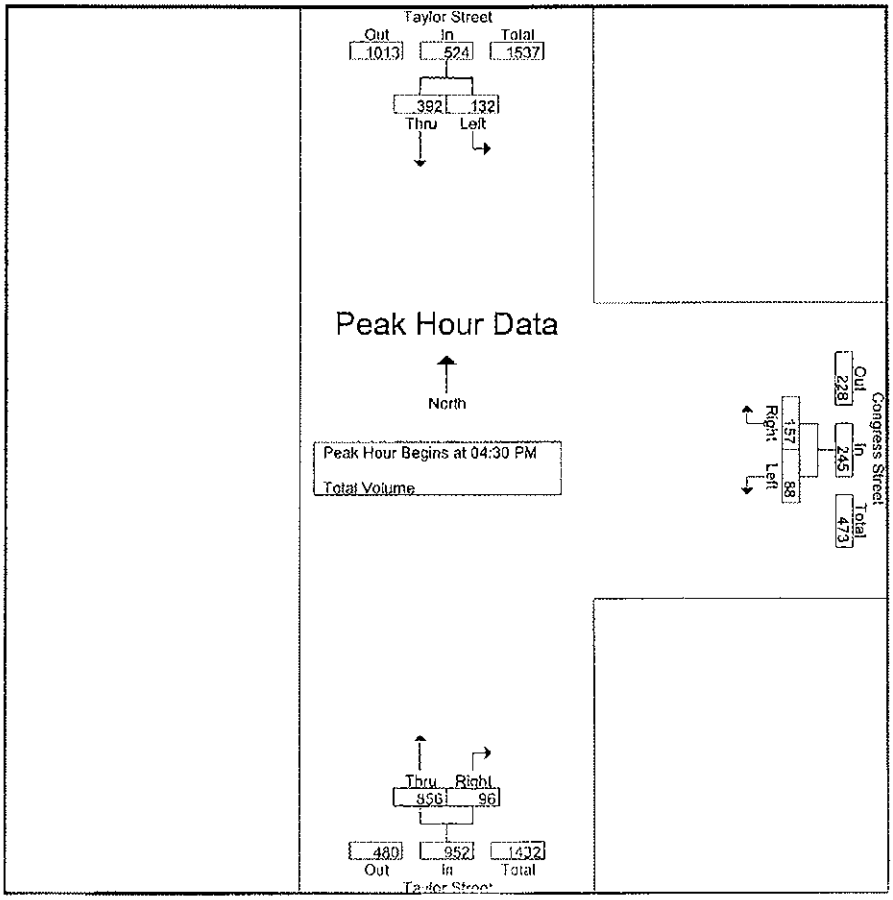
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	33	104	137	21	37	58	197	16	213	408
04:15 PM	29	85	114	12	25	37	182	12	194	345
04:30 PM	52	93	145	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
Total	135	368	503	71	133	204	795	72	867	1574
05:00 PM	26	111	137	24	36	60	240	20	260	457
05:15 PM	33	102	135	26	50	76	200	32	232	443
05:30 PM	28	101	129	24	33	57	194	26	220	406
05:45 PM	31	95	126	16	35	51	173	22	195	372
Total	118	409	527	90	154	244	807	100	907	1678
Grand Total	253	777	1030	161	287	448	1602	172	1774	3252
Apprch %	24.6	75.4		35.9	64.1		90.3	9.7		
Total %	7.8	23.9	31.7	5	8.8	13.8	49.3	5.3	54.6	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**52**	93	**145**	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
05:00 PM	26	111	137	24	36	60	**240**	20	**260**	**457**
05:15 PM	33	102	135	26	50	76	200	32	232	443
Total Volume	132	392	524	88	157	245	856	96	952	1721
% App. Total	25.2	74.8		35.9	64.1		89.9	10.1		
PHF	.635	.883	.903	.846	.785	.806	.892	.750	.915	.941

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
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Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	26	111	137	20	38	58	224	25	249
+15 mins.	33	102	135	24	36	60	192	24	216
+30 mins.	28	101	129	26	50	76	240	20	260
+45 mins.	31	95	126	24	33	57	200	32	232
Total Volume	118	409	527	94	157	251	856	96	952
% App. Total	22.4	77.6		37.5	62.5		89.9	10.1	
PHF	.894	.921	.962	.904	.785	.826	.893	.75	.915

(39)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

Day: WEDNESDAY

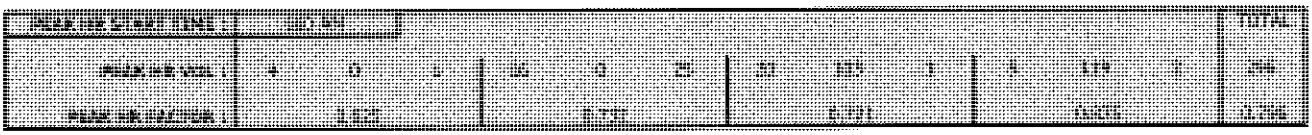
City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	2		2	2	12	1	0	12	1	32
7:15 AM	0	0	0	3		4	4	15	2	0	25	0	53
7:30 AM	2	0	1	4		4	2	25	0	0	21	0	59
7:45 AM	0	1	0	3		3	6	25	0	0	23	1	62
8:00 AM	1	0	0	3		3	2	24	0	2	23	1	59
8:15 AM	0	0	1	4		4	4	18	0	1	28	0	60
8:30 AM	1	0	0	3		11	5	28	0	1	35	0	84
8:45 AM	2	0	0	6		7	9	33	1	1	33	1	93

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	1	2	28	0	38	34	180	4	5	200	4	502
APPROACH %'s :	66.67%	11.11%	22.22%	42.42%	0.00%	57.58%	15.60%	82.57%	1.83%	2.39%	95.69%	1.91%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

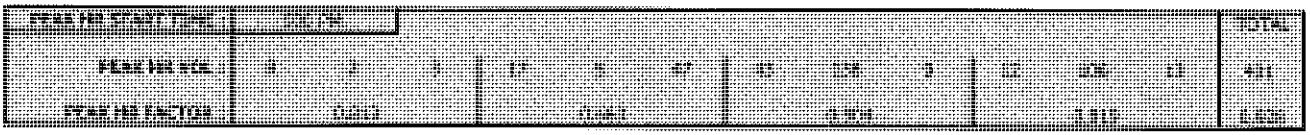
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	1	5	1	11	6	28	2	0	32	1	87
4:15 PM	0	2	1	7	0	5	6	28	2	0	34	4	89
4:30 PM	0	2	1	4	1	9	10	35	1	2	35	3	103
4:45 PM	1	0	2	3	0	6	10	26	0	1	27	4	80
5:00 PM	2	0	1	3	0	9	7	37	2	3	25	5	94
5:15 PM	2	0	0	2	0	11	10	32	2	4	31	5	99
5:30 PM	1	2	1	3	1	14	11	34	1	3	35	2	108
5:45 PM	3	0	1	9	4	13	15	33	4	2	15	1	100
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	6	8	36	7	78	75	253	14	15	234	25	760
APPROACH %'s :	39.13%	26.09%	34.78%	29.75%	5.79%	64.46%	21.93%	73.98%	4.09%	5.47%	85.40%	9.12%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

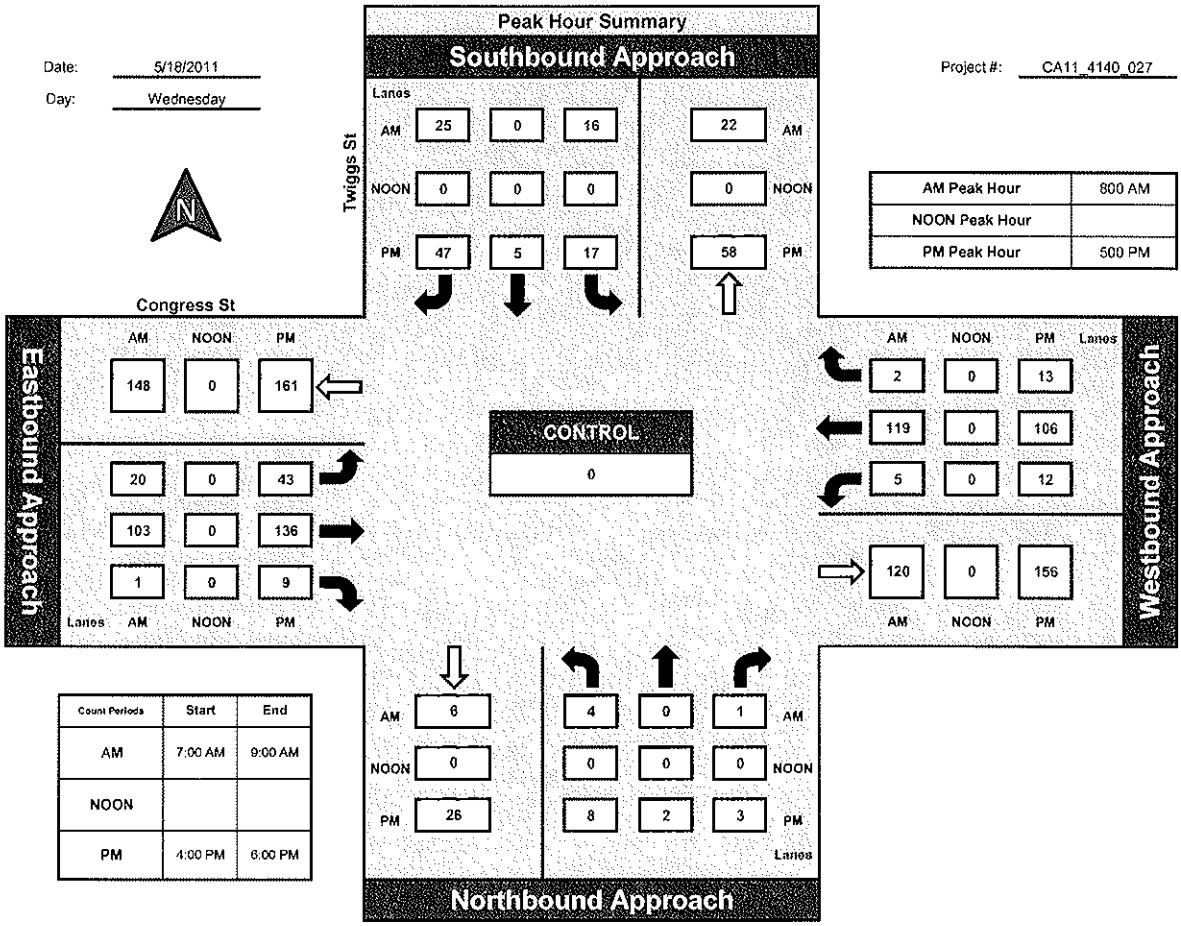
National Data & Surveying Services

Twiggs St and Congress St , City of San Diego

Date: 5/18/2011

Day: Wednesday

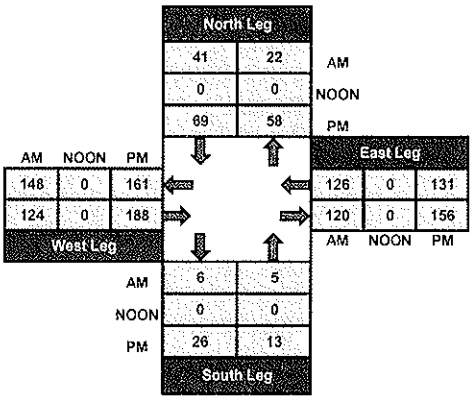
Project #: CA11_4140_027



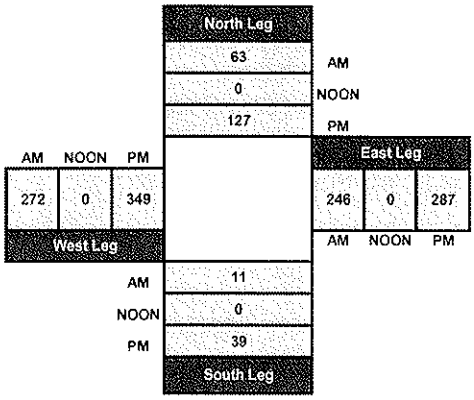
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(40)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	3	2	0	1	3	3	1	10	3	0	7	1	34
7:15 AM	7	1	0	3	3	1	0	12	6	1	17	0	51
7:30 AM	1	0	1	3	3	1	0	24	2	0	19	1	55
7:45 AM	2	2	1	2	3	0	2	27	1	0	19	0	59
8:00 AM	3	1	2	3	3	2	1	23	2	1	24	1	66
8:15 AM	0	0	0	2	3	1	1	19	1	0	27	4	58
8:30 AM	2	0	1	2	4	0	2	22	3	2	35	1	74
8:45 AM	3	1	0	3	4	2	1	27	12	2	30	2	87
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	7	5	19	26	10	8	164	30	6	178	10	484
APPROACH %'s :	63.64%	21.21%	15.15%	34.55%	47.27%	18.18%	3.96%	81.19%	14.85%	3.09%	91.75%	5.15%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

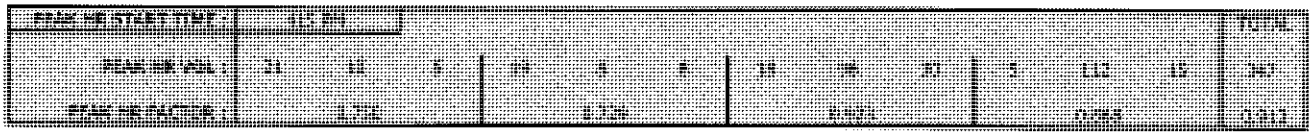
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	2	1	2	6	0	2	4	28	2	2	30	3	82
4:15 PM	5	2	1	7	2	3	5	26	6	1	33	4	95
4:30 PM	4	2	3	5	2	1	5	29	5	0	28	4	88
4:45 PM	6	5	1	5	0	1	2	20	7	3	26	5	81
5:00 PM	6	1	0	2	4	3	6	21	12	1	25	2	83
5:15 PM	4	1	2	4	3	7	2	24	7	2	30	1	87
5:30 PM	9	0	0	5	2	0	5	34	2	0	28	2	87
5:45 PM	6	3	3	9	1	2	3	27	10	0	16	6	86
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	42	15	12	43	14	19	32	209	51	9	216	27	689
APPROACH %'s :	60.87%	21.74%	17.39%	56.58%	18.42%	25.00%	10.96%	71.58%	17.47%	3.57%	85.71%	10.71%	



CONTROL :

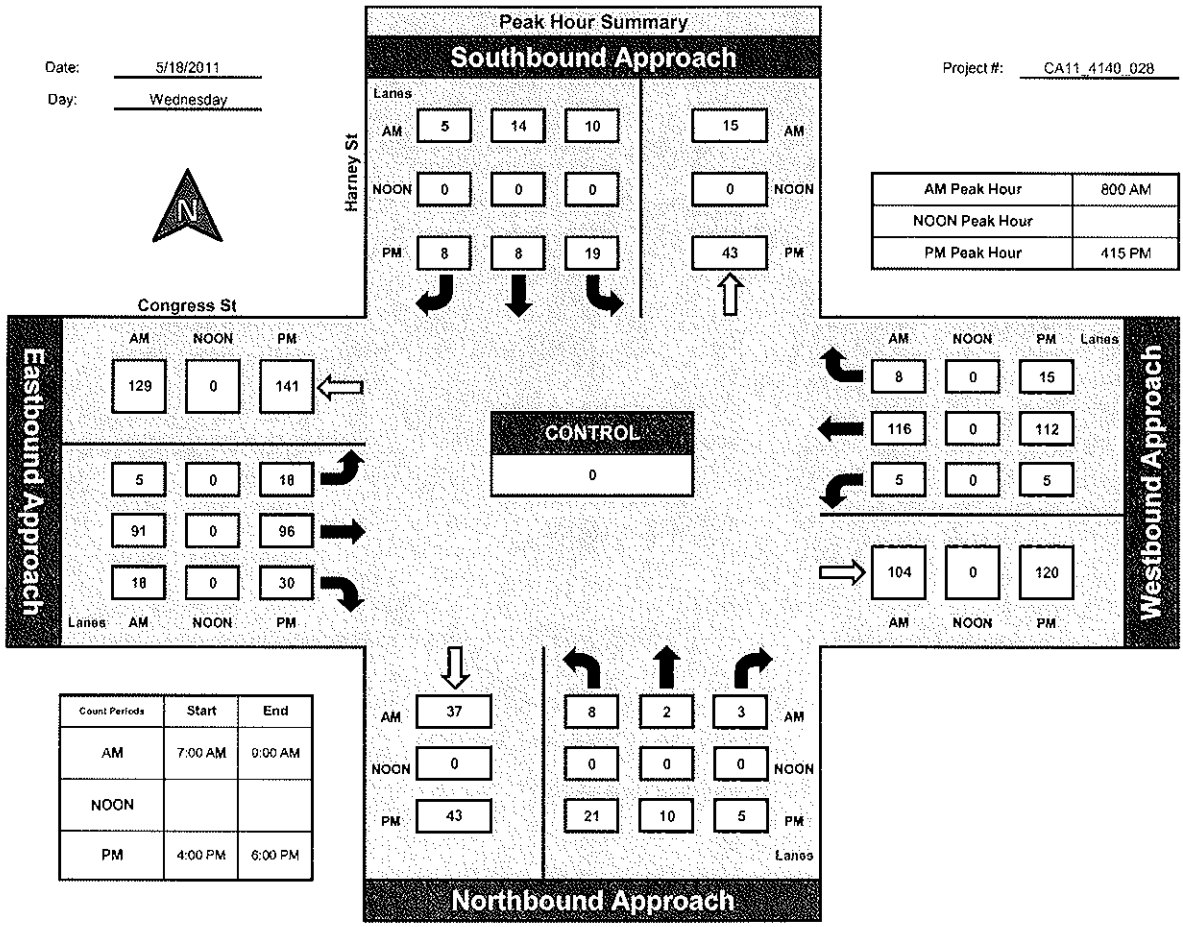
ITM Peak Hour Summary

Prepared by:

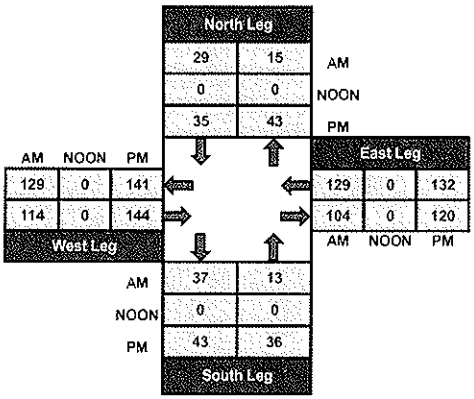
NDS

National Data & Surveying Services

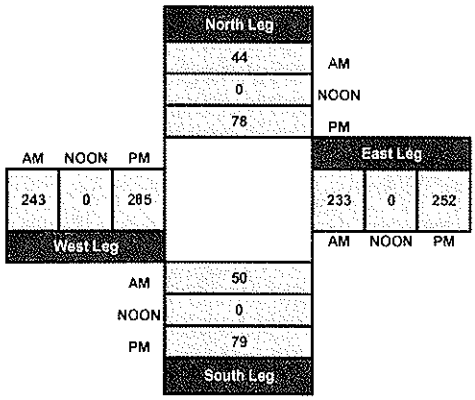
Harney St and Congress St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0			0			2	0			2
7:15 AM	1	0	1			0			2	1			5
7:30 AM	0	0	1			2			3	2			8
7:45 AM	0	0	1			4			1	1			7
8:00 AM	0	2	2			0			2	2			8
8:15 AM	2	3	3			2			3	6			19
8:30 AM	0	0	2			0			2	3			7
8:45 AM	0	3	2			5			1	4			15
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	8	12	0	0	13	0	0	16	19	0	0	71
APPROACH %'s :	13.04%	34.78%	52.17%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	
[illegible]	[illegible]												

CONTROL :

Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below **PM**

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	1	3			0			2	2			9
4:15 PM	2	2	1			3			4	1			13
4:30 PM	1	2	0			0			0	2			5
4:45 PM	1	1	0			2			5	0			9
5:00 PM	1	1	1			2			2	1			8
5:15 PM	0	1	1			3			1	3			9
5:30 PM	1	1	4			3			1	3			13
5:45 PM	2	2	0			2			3	2			11

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	11	10	0	0	15	0	0	18	14	0	0	77
APPROACH %'s :	30.00%	36.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

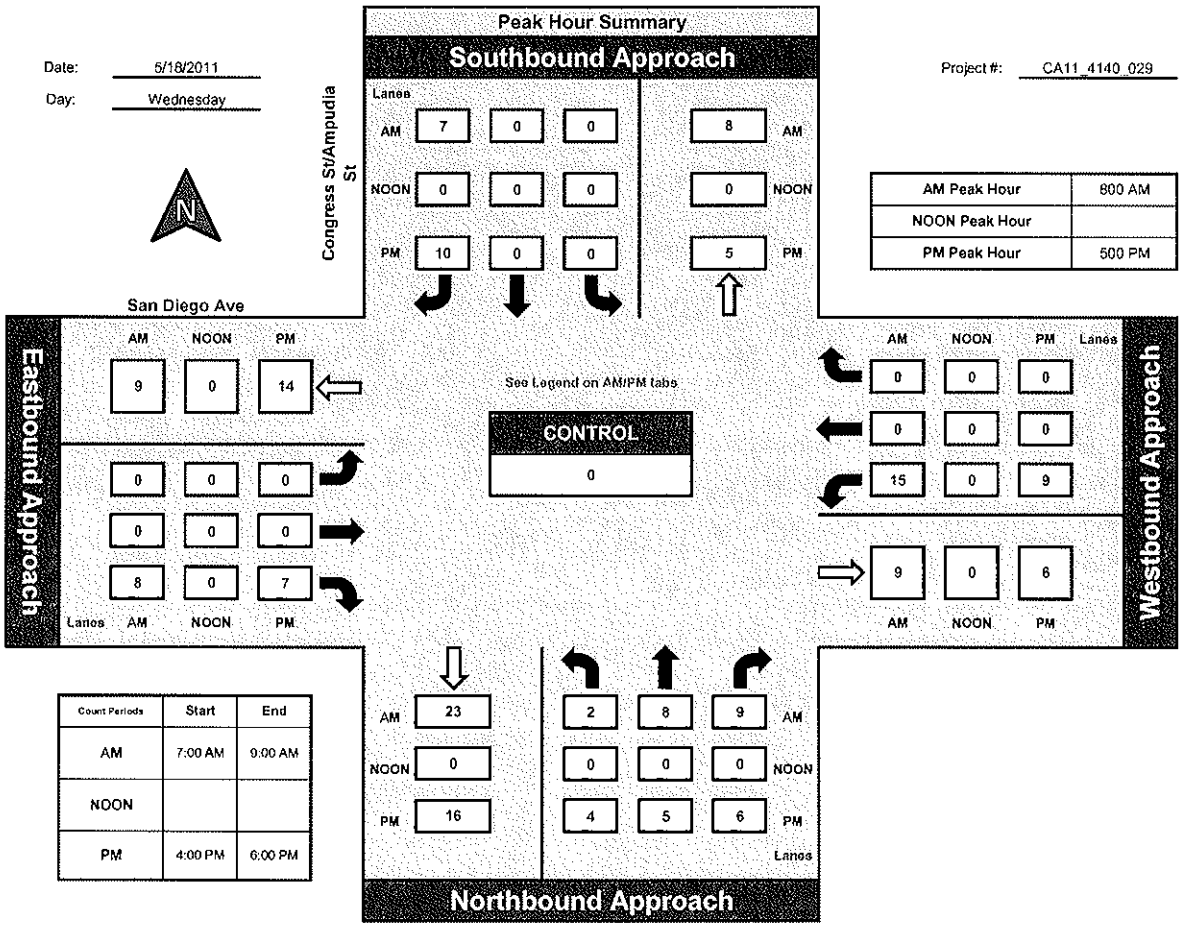
Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

ITM Peak Hour Summary

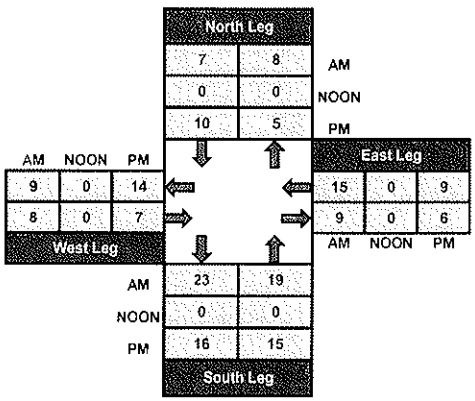
Prepared by:

National Data & Surveying Services

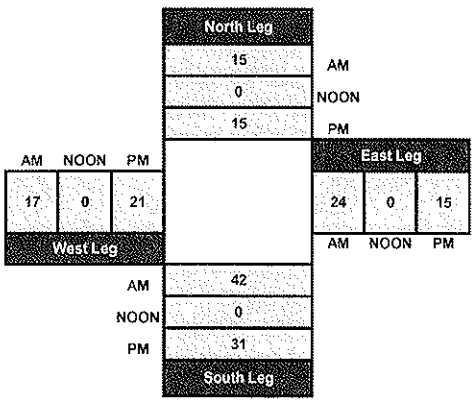
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		5	2	0			13	0	8	21	0	49
7:15 AM	0		6	0	0			8	3	17	22	1	57
7:30 AM	0		20	0	0			17	3	20	27	0	87
7:45 AM	0		18	0	1			16	0	30	33	2	100
8:00 AM	1		16	1	1			8	1	34	41	1	104
8:15 AM	1		14	1	0			14	0	27	63	0	120
8:30 AM	0		18	0	0			14	0	37	57	0	126
8:45 AM	0		19	0	0			13	0	30	61	0	123
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	116	4	2	0	0	103	7	203	325	4	766
APPROACH %'s :	1.69%	0.00%	98.31%	66.67%	33.33%	0.00%	0.00%	93.64%	6.36%	38.16%	61.09%	0.75%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029

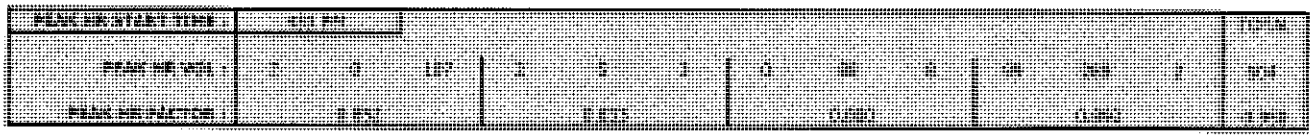
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		28	0	3	1		44	1	19	52	0	148
4:15 PM	1		24	0	1	0		22	1	20	49	1	119
4:30 PM	1		31	1	0	2		23	2	24	73	1	158
4:45 PM	0		24	0	2	0		19	2	22	69	0	138
5:00 PM	1		25	0	2	0		26	4	29	61	1	149
5:15 PM	0		27	1	1	1		20	0	24	85	0	159
5:30 PM	0		21	0	2	0		22	0	24	72	1	142
5:45 PM	0		31	0	0	0		25	2	16	76	0	150
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	211	2	11	4	0	201	12	178	537	4	1163
APPROACH %'s :	1.40%	0.00%	98.60%	11.76%	64.71%	23.53%	0.00%	94.37%	5.63%	24.76%	74.69%	0.56%	



CONTROL :

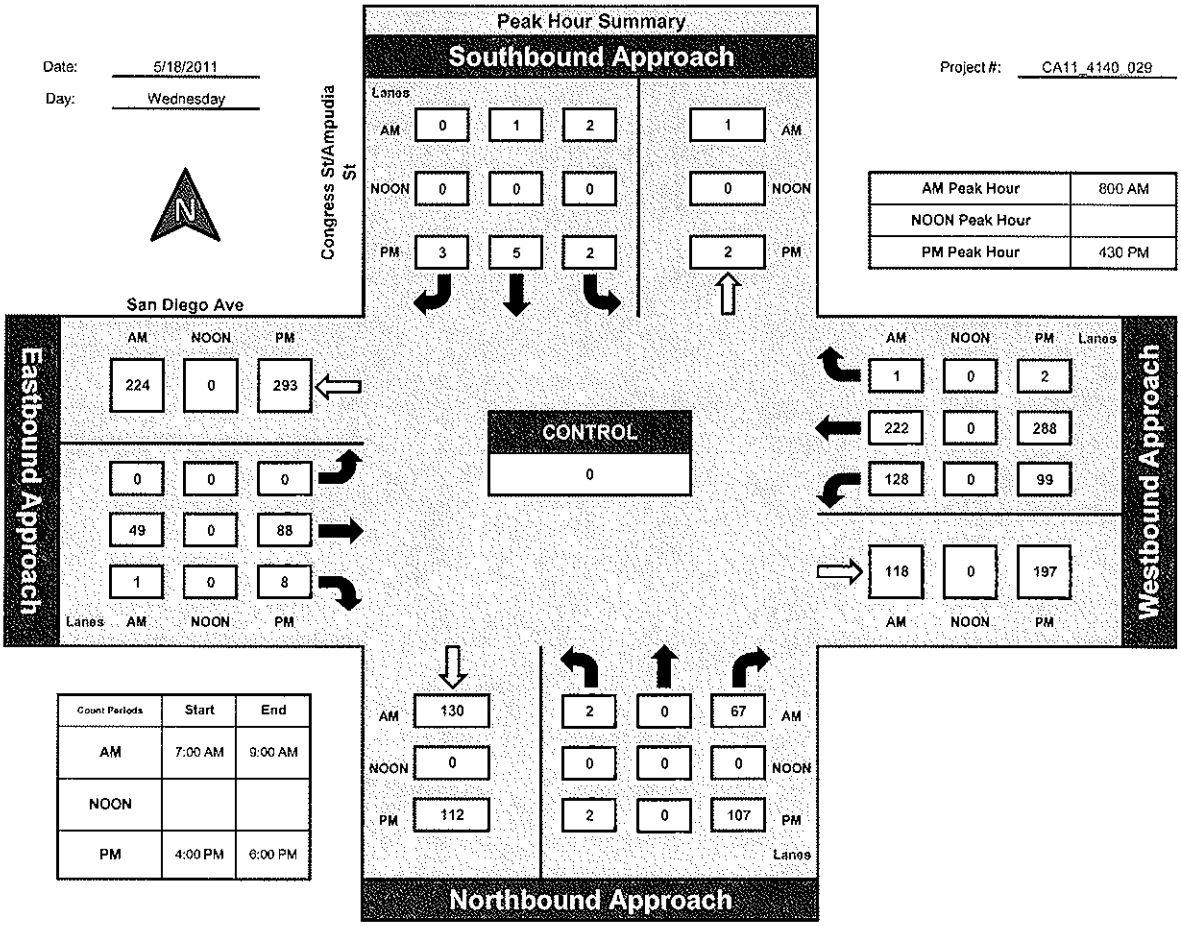
ITM Peak Hour Summary

Prepared by:

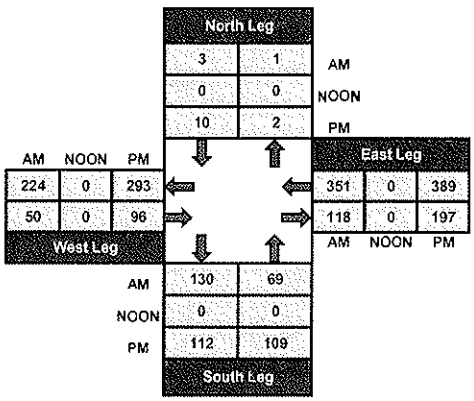
NDS

National Data & Surveying Services

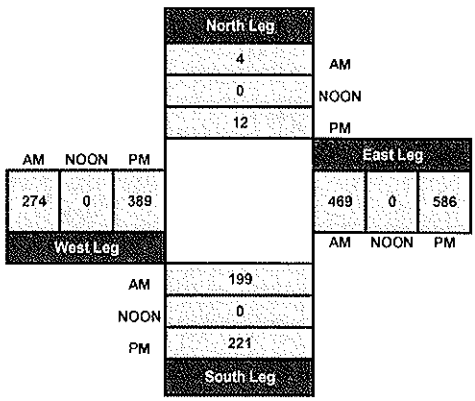
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(42)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		2	0	5	3					3		6	19
7:15 AM		3	2	4	6					2		8	25
7:30 AM		3	3	7	5					1		11	30
7:45 AM		3	3	10	4					3		19	42
8:00 AM		1	1	5	4					2		21	34
8:15 AM		4	0	3	8					2		35	52
8:30 AM		8	2	8	7					6		35	66
8:45 AM		6	1	9	10					8		37	71

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	30	12	51	47	0	0	0	0	27	0	172	339
APPROACH %'s :	0.00%	71.43%	28.57%	52.04%	47.96%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	13.57%	0.00%	86.43%	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		6	3	10	5					9		15	48
4:15 PM		9	5	12	7					8		16	57
4:30 PM		6	8	5	4					13		29	65
4:45 PM		7	6	10	2					9		21	55
5:00 PM		8	2	10	5					5		23	53
5:15 PM		9	4	14	4					8		31	70
5:30 PM		6	8	7	4					12		30	67
5:45 PM		7	6	10	2					9		20	54

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	58	42	78	33	0	0	0	0	73	0	185	469
APPROACH %'s :	0.00%	58.00%	42.00%	70.27%	29.73%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	28.29%	0.00%	71.71%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

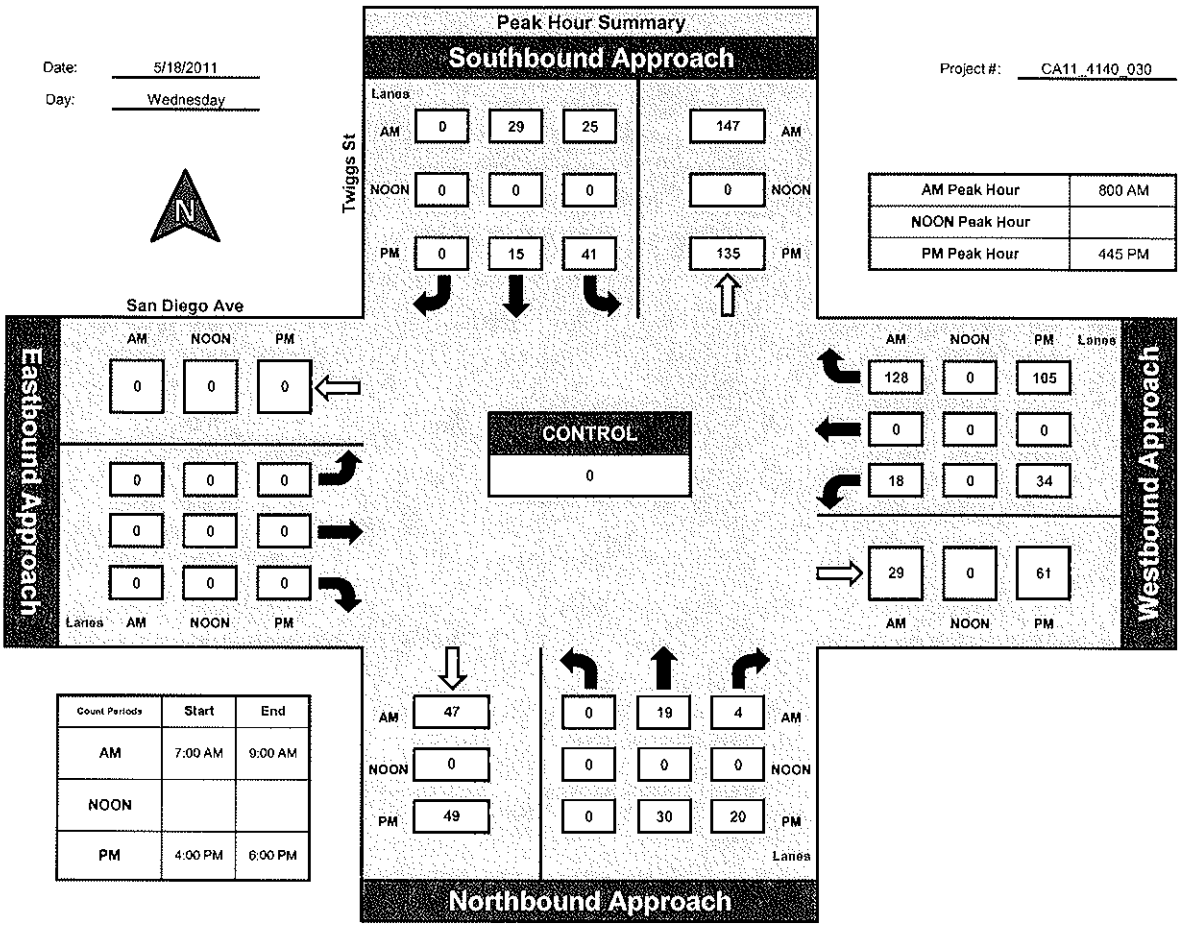
National Data & Surveying Services

Twiggs St and San Diego Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

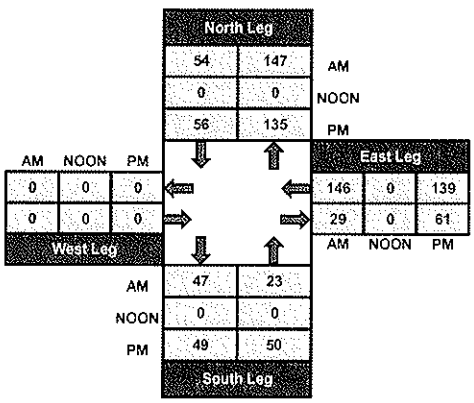
Project #: CA11_4140_030



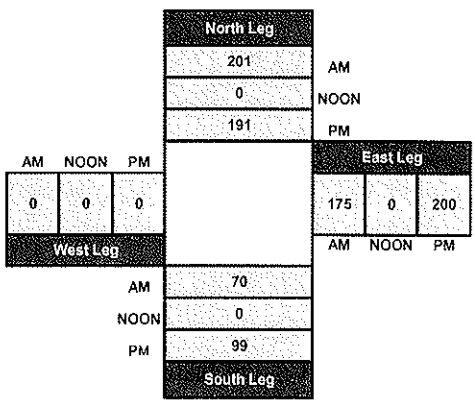
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(43)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	2	0	11	8	1	0	4	0	0	8	8	43
7:15 AM	1	0	0	8	5	1	0	6	1	1	6	9	38
7:30 AM	0	0	0	13	6	0	1	8	0	0	7	15	50
7:45 AM	1	3	0	15	6	2	1	7	1	0	26	13	75
8:00 AM	1	0	1	7	6	2	1	6	2	0	20	17	63
8:15 AM	1	3	0	14	5	2	0	1	0	2	31	26	85
8:30 AM	2	0	2	9	5	1	0	9	1	1	39	19	88
8:45 AM	1	0	0	7	2	7	0	8	1	0	35	21	82
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	8	3	84	43	16	3	49	6	4	172	128	524
APPROACH %'s :	42.11%	42.11%	15.79%	58.74%	30.07%	11.19%	5.17%	84.48%	10.34%	1.32%	56.58%	42.11%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	1	3	17	9	2	1	11	3	1	22	23	93
4:15 PM	0	4	1	15	6	1	0	15	3	3	29	22	99
4:30 PM	1	4	3	16	5	2	2	16	2	5	31	19	106
4:45 PM	0	4	2	14	1	1	1	14	0	5	29	27	98
5:00 PM	0	7	4	24	7	0	0	16	1	8	34	23	124
5:15 PM	3	3	5	21	7	1	0	19	5	6	39	25	134
5:30 PM	1	6	3	16	9	3	1	17	0	9	36	27	128
5:45 PM	1	2	1	29	5	2	2	15	2	7	28	21	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	31	22	152	49	12	7	123	16	44	248	187	897
APPROACH %'s :	10.17%	52.54%	37.29%	71.36%	23.00%	5.63%	4.79%	84.25%	10.96%	9.19%	51.77%	39.04%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

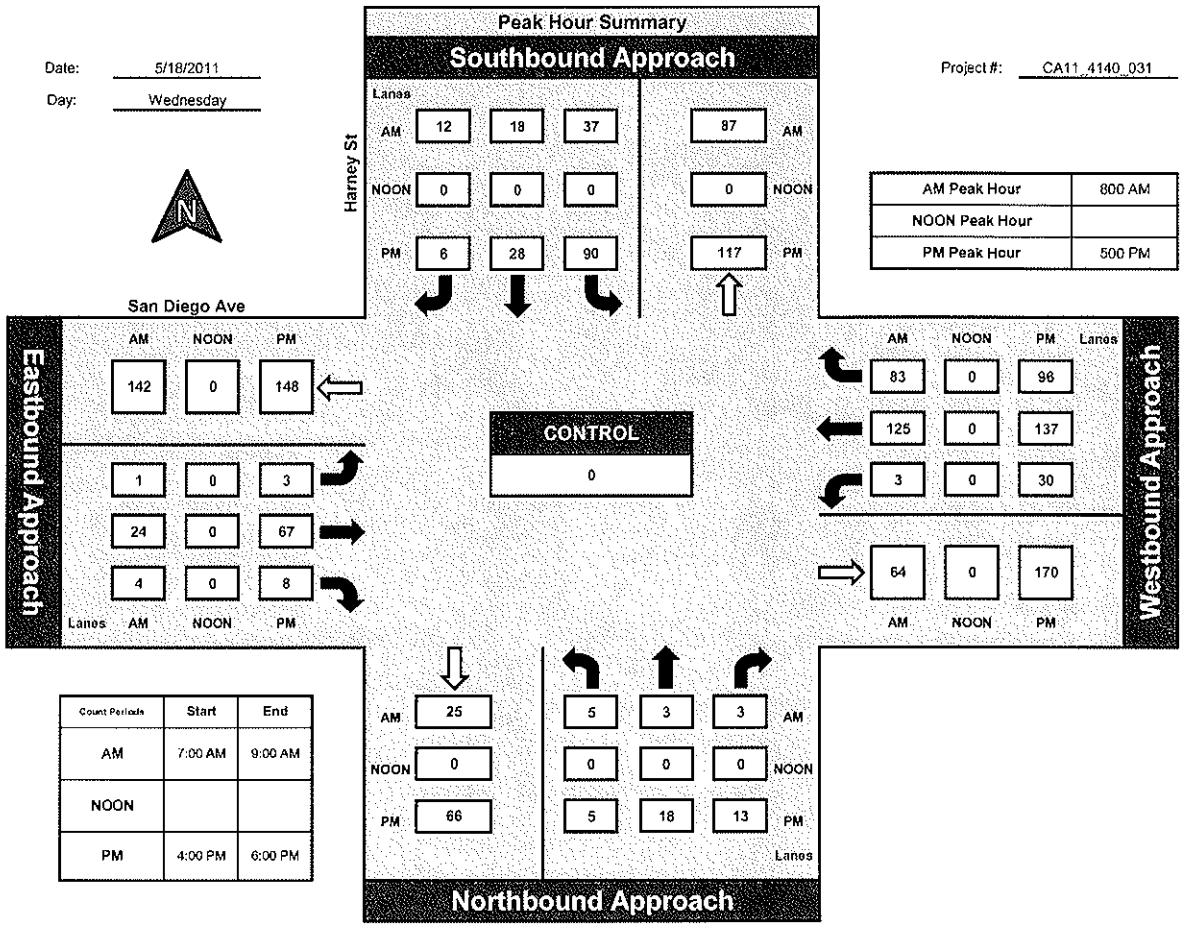
CONTROL :

ITM Peak Hour Summary

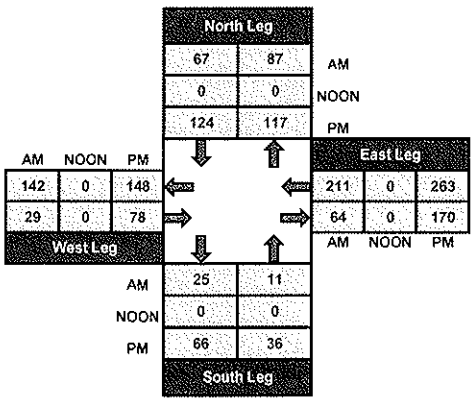
Prepared by:

National Data & Surveying Services

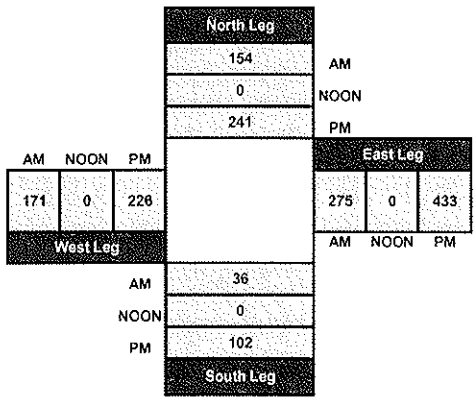
Harney St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(44)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	24	8	10	0	3	0	0	1	18	27	5	0	96
7:15 AM	31	7	11	0	8	2	0	6	14	30	9	0	118
7:30 AM	33	14	8	1	12	0	1	4	30	40	17	3	163
7:45 AM	51	4	10	1	4	1	4	5	24	38	12	0	154
8:00 AM	63	12	12	0	5	1	0	10	14	38	15	1	171
8:15 AM	53	8	7	0	5	1	2	7	22	55	42	1	203
8:30 AM	39	5	13	0	7	1	4	7	21	65	55	2	219
8:45 AM	43	2	13	0	5	1	3	16	16	63	47	2	211
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	337	60	84	2	49	7	14	56	159	356	202	9	1335
APPROACH %'s :	70.06%	12.47%	17.46%	3.45%	84.48%	12.07%	6.11%	24.45%	69.43%	62.79%	35.63%	1.59%	
[illegible]	[illegible]												TOTAL
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	46	3	15	1	18	1	2	7	63	32	28	1	217
4:15 PM	50	7	18	0	11	2	2	12	30	14	18	0	164
4:30 PM	55	7	22	1	10	3	0	15	40	24	38	4	219
4:45 PM	66	6	25	2	15	3	2	14	29	18	20	2	202
5:00 PM	62	11	18	0	12	2	0	11	44	28	30	3	221
5:15 PM	73	6	24	2	8	7	2	8	41	18	31	1	221
5:30 PM	64	2	30	3	16	5	2	13	27	21	32	0	215
5:45 PM	60	9	19	2	9	3	4	16	36	33	28	0	219
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	476	51	171	11	99	26	14	96	310	188	225	11	1678
APPROACH %'s :	68.19%	7.31%	24.50%	8.09%	72.79%	19.12%	3.33%	22.86%	73.81%	44.34%	53.07%	2.59%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

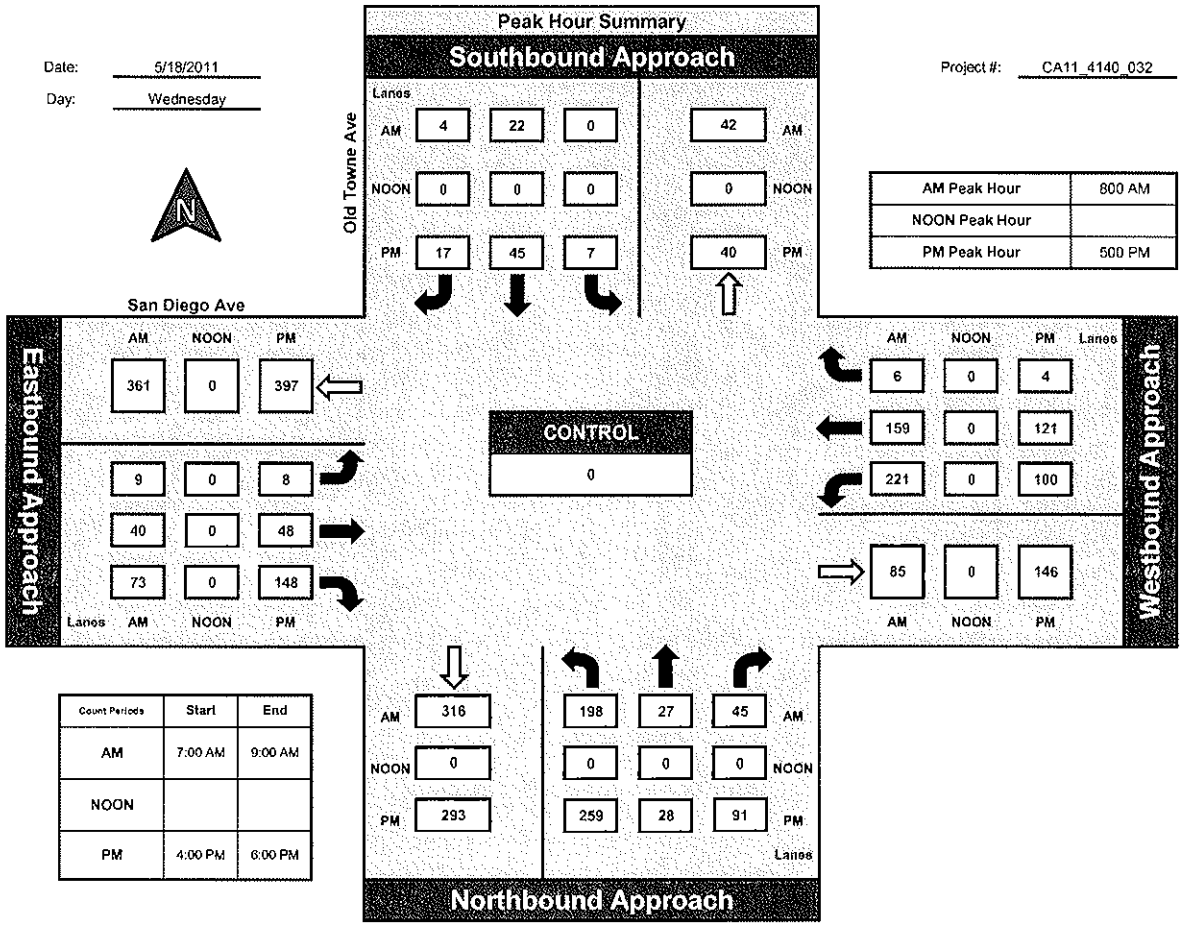
CONTROL :

ITM Peak Hour Summary

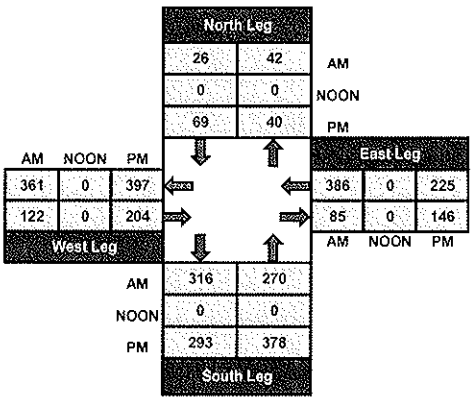
Prepared by:

National Data & Surveying Services

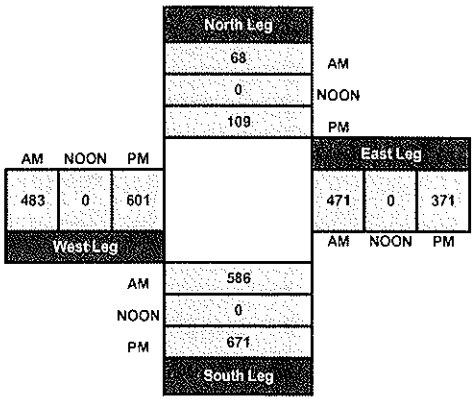
Old Towne Ave and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(45)

Intersection Turning Movement

Prepared by:

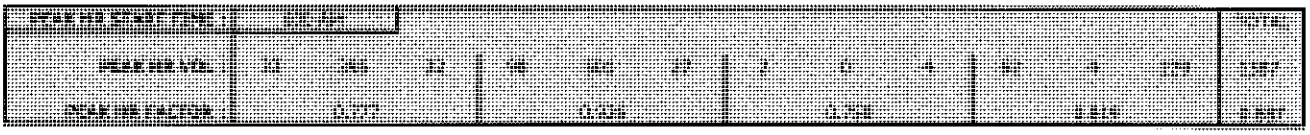
National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	5	44	6	16	108	3	1	1	2	10	2	14	212
7:15 AM	8	73	8	21	105	3	0	0	0	12	0	18	248
7:30 AM	12	81	6	18	131	3	0	0	1	14	0	38	304
7:45 AM	14	74	9	37	155	4	1	0	1	22	2	45	364
8:00 AM	15	63	11	25	134	9	0	0	2	16	2	38	315
8:15 AM	3	84	5	17	113	7	1	0	0	16	1	57	304
8:30 AM	9	128	11	23	125	4	0	0	2	11	1	63	377
8:45 AM	6	120	5	33	129	7	1	0	0	19	0	71	391
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	72	667	61	190	1000	40	4	1	8	120	8	344	2515
APPROACH %'s :	9.00%	83.38%	7.63%	15.45%	81.30%	3.25%	30.77%	7.69%	61.54%	25.42%	1.69%	72.88%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	206	24	32	66	3	5	0	3	23	0	31	394
4:15 PM	0	190	16	42	90	0	5	0	2	19	2	41	407
4:30 PM	4	211	27	49	98	2	5	0	1	20	0	38	455
4:45 PM	3	195	15	45	69	2	1	1	2	16	2	47	398
5:00 PM	5	214	22	42	84	1	3	1	1	15	0	43	431
5:15 PM	3	189	14	52	86	1	6	0	1	14	0	51	417
5:30 PM	1	175	24	39	81	2	3	0	3	17	1	31	377
5:45 PM	1	121	30	44	89	0	0	1	0	19	0	37	342
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	1501	172	345	663	11	28	3	13	143	5	319	3221
APPROACH %'s :	1.06%	88.76%	10.17%	33.86%	65.06%	1.08%	63.64%	6.82%	29.55%	30.62%	1.07%	68.31%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Taylor St and Juan St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_017

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	626	626	AM
NOON	0	0	NOON
PM	531	1003	PM

West Leg				East Leg			
AM	NOON	PM		AM	NOON	PM	
64	0	23		295	0	246	AM
6	0	22		130	0	268	NOON
							PM

	South Leg	
AM	567	460
NOON	0	0
PM	407	902

Total Volume Per Leg

	North Leg
AM	1252
NOON	0
PM	1534

West Leg			East Leg		
AM	NOON	PM			
70	0	45	425	0	514
			AM	NOON	PM

	South Leg
AM	1027
NOON	0
PM	1309

(46)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	1	1	0	0	0	0	14	5	0	19	0	47
7:15 AM	7	0	3	0	0	1	1	21	7	0	27	1	68
7:30 AM	8	0	1	0	0	0	0	20	9	1	34	1	74
7:45 AM	9	0	5	0	0	2	0	23	9	0	42	0	90
8:00 AM	6	1	0	1	1	0	0	29	18	0	24	0	80
8:15 AM	14	1	2	0	1	0	0	18	15	1	29	0	81
8:30 AM	11	1	2	1	0	1	0	20	7	0	26	0	69
8:45 AM	23	2	2	0	1	0	0	25	14	0	38	1	106
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	85	6	16	2	3	4	1	170	84	2	239	3	615
APPROACH %'s :	79.44%	5.61%	14.95%	22.22%	33.33%	44.44%	0.39%	66.67%	32.94%	0.82%	97.95%	1.23%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

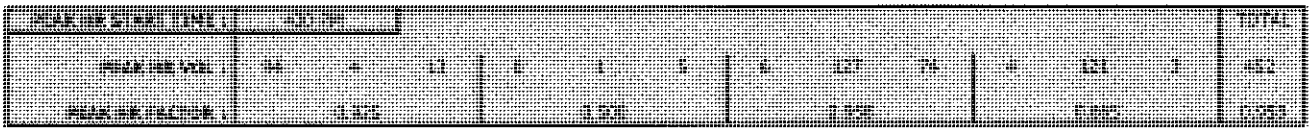
Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	23	0	3	0	0	0	1	36	15	2	23	0	103
4:15 PM	18	0	6	0	0	0	1	32	15	6	17	1	96
4:30 PM	23	3	4	0	1	2	1	37	13	1	26	1	112
4:45 PM	28	0	2	0	0	1	2	30	20	1	34	0	118
5:00 PM	22	1	3	0	0	1	0	31	23	0	26	2	109
5:15 PM	21	0	4	0	0	1	3	29	18	2	35	0	113
5:30 PM	20	1	2	1	1	1	0	33	15	1	32	0	107
5:45 PM	21	0	4	0	0	0	0	26	26	2	23	1	103

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	176	5	28	1	2	6	8	254	145	15	216	5	861
APPROACH %'s :	84.21%	2.39%	13.40%	11.11%	22.22%	66.67%	1.97%	62.41%	35.63%	6.36%	91.53%	2.12%	



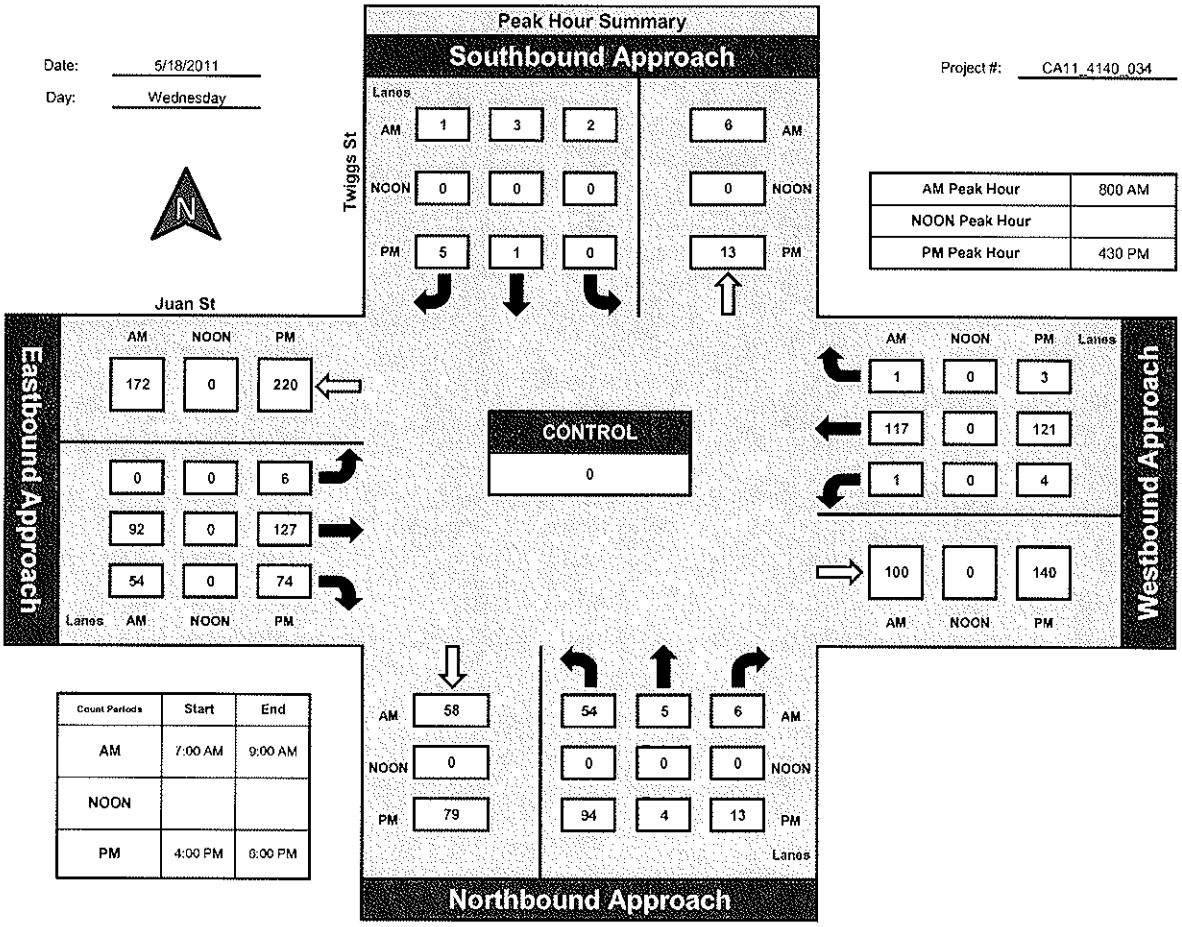
CONTROL :

ITM Peak Hour Summary

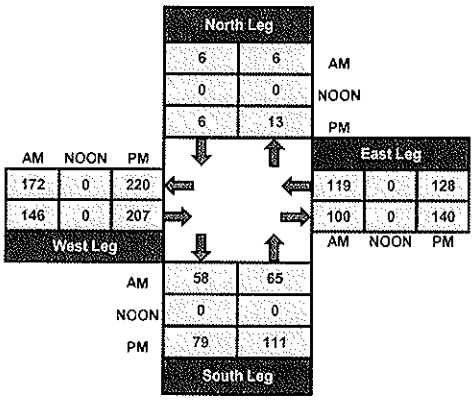
Prepared by:

National Data & Surveying Services

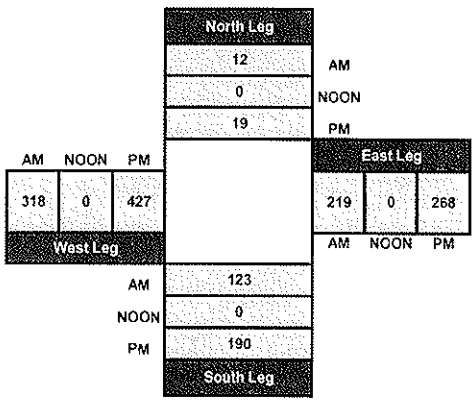
Twiggs St and Juan St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(47)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	6	1	6	0	1	1	1	10	0	9	15	0	50
7:15 AM	5	1	6	0	0	1	1	14	3	8	19	0	58
7:30 AM	8	1	6	0	0	3	1	9	6	15	38	0	87
7:45 AM	9	1	5	0	0	0	2	16	13	12	28	0	86
8:00 AM	4	1	9	0	0	1	4	15	11	6	24	0	75
8:15 AM	0	1	5	2	1	0	1	0	0	5	1	1	17
8:30 AM	13	0	4	0	0	1	0	17	8	8	23	0	74
8:45 AM	19	1	2	0	0	0	1	18	7	9	22	2	81

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	7	43	2	2	7	11	99	48	72	170	3	528
APPROACH %'s :	56.14%	6.14%	37.72%	18.18%	18.18%	63.64%	6.96%	62.66%	30.38%	29.39%	69.39%	1.22%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	11	0	3	0	0	0	0	26	10	10	23	0	83
4:15 PM	11	2	3	2	0	1	1	28	11	9	10	0	78
4:30 PM	11	1	11	0	0	2	1	30	9	4	16	1	86
4:45 PM	15	2	7	0	0	2	2	25	9	2	18	0	82
5:00 PM	14	0	13	0	0	2	1	22	13	3	16	2	86
5:15 PM	17	0	5	0	3	3	0	19	10	5	17	1	80
5:30 PM	24	2	8	0	1	0	3	18	12	4	11	0	83
5:45 PM	13	0	6	0	0	1	2	29	6	6	16	2	81
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	116	7	56	2	4	11	10	197	80	43	127	6	659
APPROACH %'s :	64.80%	3.91%	31.28%	11.76%	23.53%	64.71%	3.48%	68.64%	27.87%	24.43%	72.16%	3.41%	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harney St and Juan St , City of San Diego

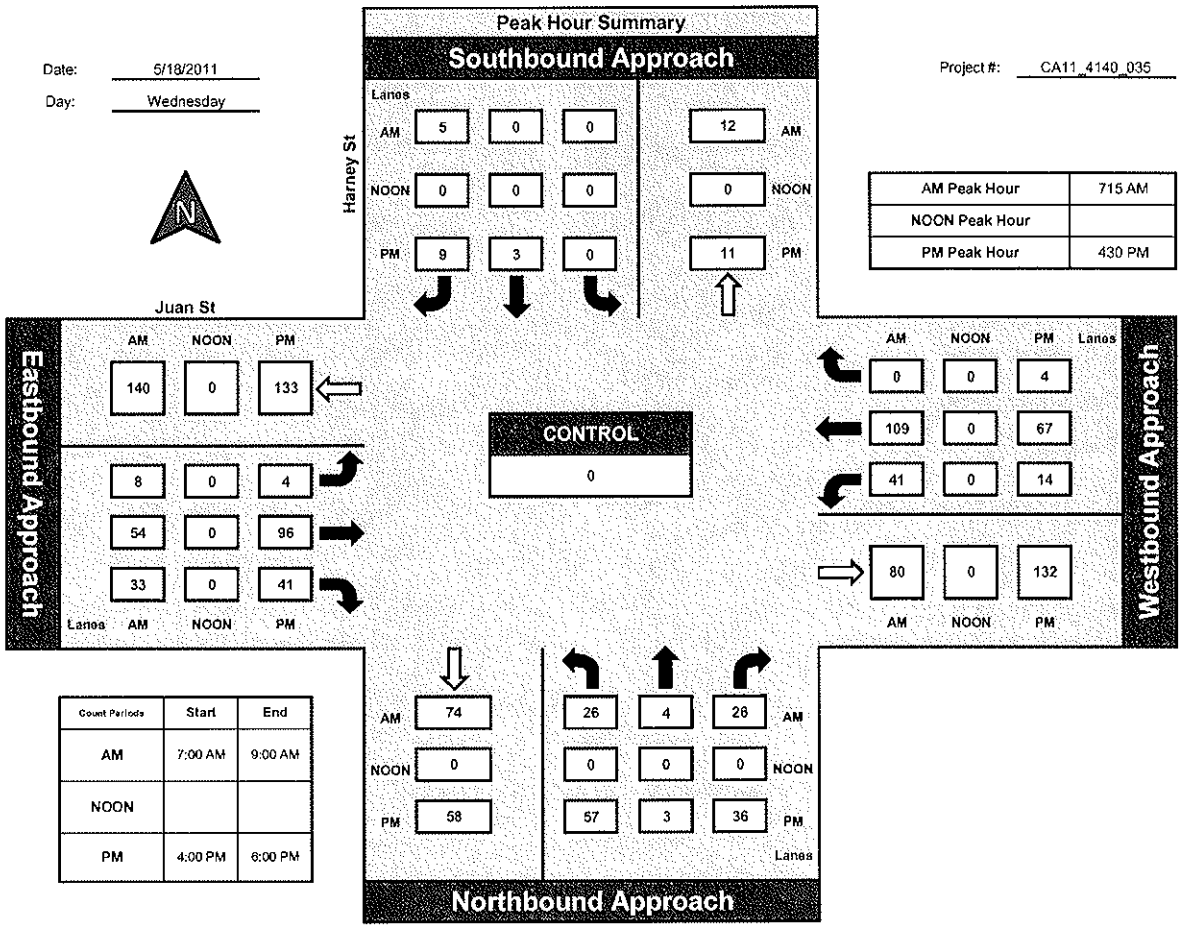
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

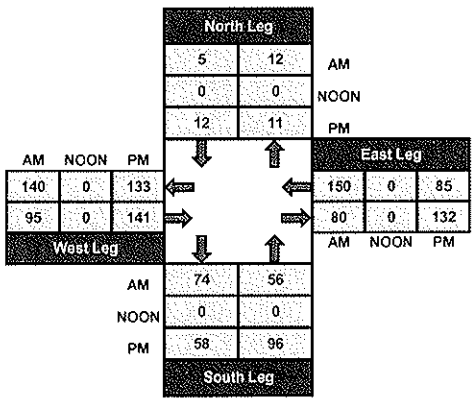
Project #: CA11_4140_035

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

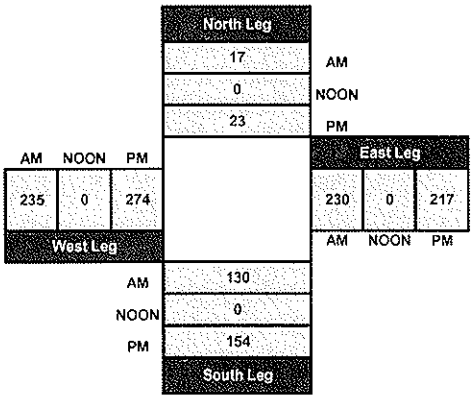


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(48)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	30	30	0	0	118	13	7	0	44			2	244
7:15 AM	49	34	0	0	100	18	9	0	46			0	256
7:30 AM	66	48	1	1	135	39	13	0	51			1	355
7:45 AM	73	38	1	0	152	64	18	0	74			2	422
8:00 AM	57	38	0	0	137	36	27	0	67			0	362
8:15 AM	77	56	0	0	119	50	17	0	36			0	355
8:30 AM	119	63	0	0	125	49	8	3	58			2	427
8:45 AM	111	76	0	0	141	57	7	2	53			2	449
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	582	383	2	1	1027	326	106	5	429	0	0	9	2870
APPROACH %'s :	60.19%	39.61%	0.21%	0.07%	75.85%	24.08%	19.63%	0.93%	79.44%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	364	233	1	1	533	199	65	3	274	0	0	5	1676
PEAK HR FACTOR :	0.788			0.250			0.778			0.000			0.945

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	104	167	2	0	57	37	16	0	36			3	422
4:15 PM	95	152	4	0	68	18	14	0	58			3	412
4:30 PM	120	164	1	2	70	32	20	4	56			4	473
4:45 PM	115	131	1	0	73	34	19	1	40			3	417
5:00 PM	120	165	4	1	68	23	23	2	48			3	457
5:15 PM	113	146	4	0	83	18	16	0	56			4	440
5:30 PM	103	114	1	0	74	16	18	0	57			1	384
5:45 PM	81	87	2	1	72	24	14	1	48			3	333
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	851	1126	19	4	565	202	140	8	399	0	0	24	3338
APPROACH %'s :	42.64%	56.41%	0.95%	0.52%	73.28%	26.20%	25.59%	1.46%	72.94%	0.00%	0.00%	100.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

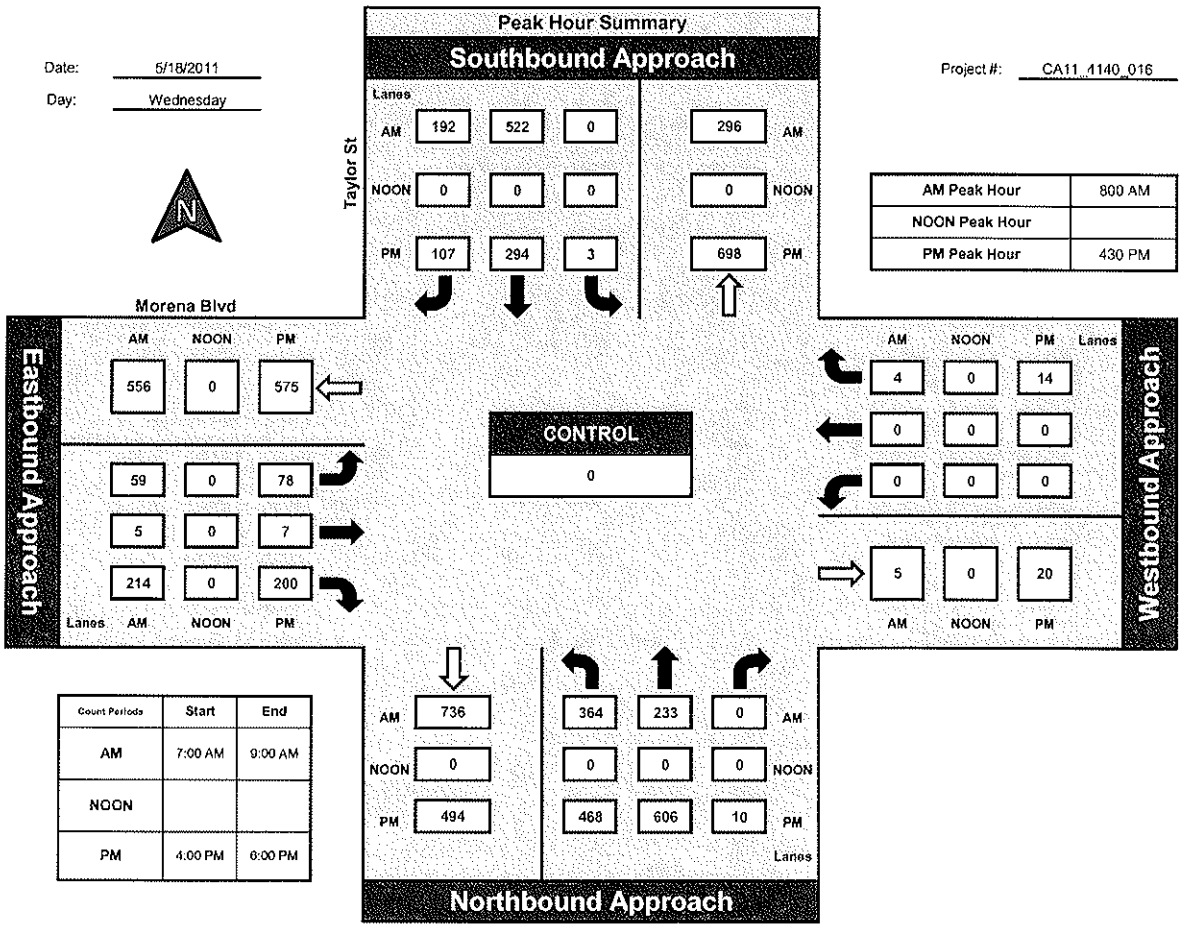
National Data & Surveying Services

Taylor St and Morena Blvd , City of San Diego

Date: 5/18/2011

Day: Wednesday

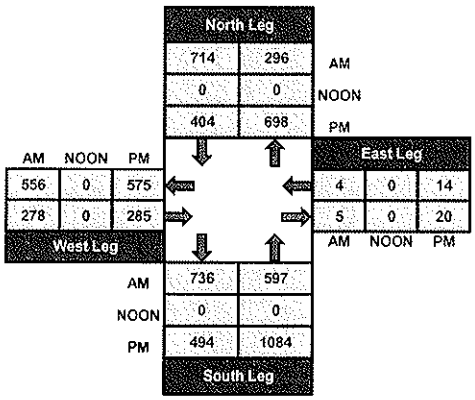
Project #: CA11_4140_016



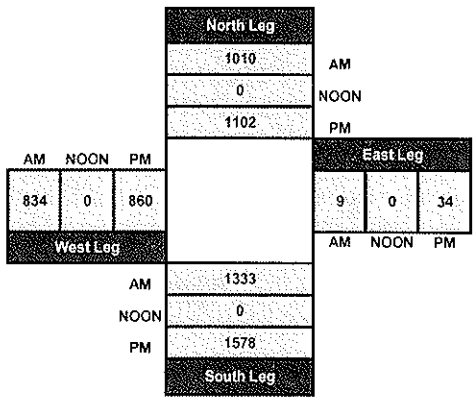
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

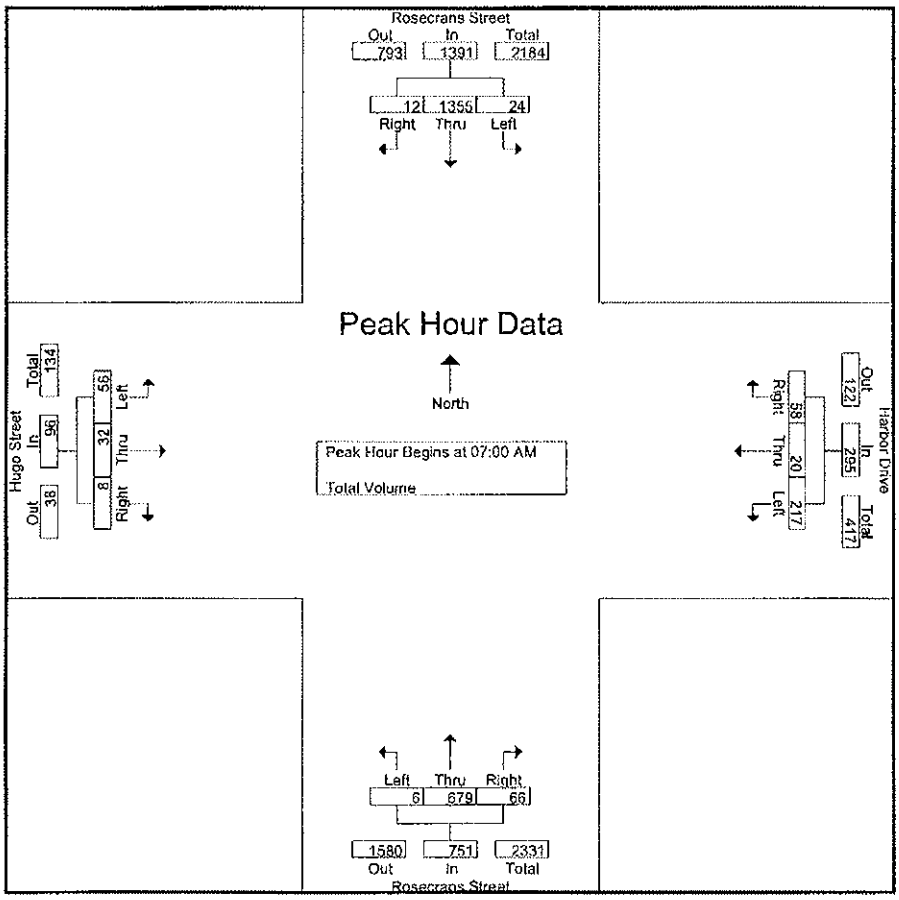
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	4	315	1	320	57	9	9	75	0	86	17	103	6	3	1	10	508
06:45 AM	3	387	5	395	43	7	9	59	0	101	9	110	10	5	3	18	582
Total	7	702	6	715	100	16	18	134	0	187	26	213	16	8	4	28	1090
07:00 AM	4	366	4	374	40	2	18	60	3	138	17	158	13	7	2	22	614
07:15 AM	4	340	1	345	74	12	15	101	1	181	21	203	14	11	2	27	676
07:30 AM	7	330	5	342	46	5	9	60	0	179	16	195	18	9	3	30	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
08:00 AM	5	277	1	283	40	16	11	67	0	183	18	201	15	14	1	30	581
08:15 AM	5	283	2	290	56	7	10	73	0	160	19	179	22	4	0	26	568
Grand Total	41	2617	21	2679	413	59	97	569	6	1209	129	1344	109	58	13	180	4772
Apprch %	1.5	97.7	0.8		72.6	10.4	17		0.4	90	9.6		60.6	32.2	7.2		
Total %	0.9	54.8	0.4	56.1	8.7	1.2	2	11.9	0.1	25.3	2.7	28.2	2.3	1.2	0.3	3.8	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	**366**	4	**374**	40	2	**18**	60	**3**	138	17	158	**13**	7	2	22	614
07:15 AM	4	340	1	345	74	**12**	15	**101**	1	**181**	**21**	**203**	14	**11**	2	27	**676**
07:30 AM	7	330	**5**	342	46	5	9	60	0	179	16	195	**18**	9	**3**	**30**	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total Volume	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
% App. Total	1.7	97.4	0.9		73.6	6.8	19.7		0.8	90.4	8.8		58.3	33.3	8.3		
PHF	.667	.926	.600	.930	.733	.417	.806	.730	.500	.938	.786	.925	.778	.727	.667	.800	.937

Counts Unlimited Inc.
25286 Jaclyn Avenue
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951-485-7934

City of San Diego
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Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	3	387	5	395	74	12	15	101	1	181	21	203	14	11	2	27
+15 mins.	4	366	4	374	46	5	9	60	0	179	16	195	18	9	3	30
+30 mins.	4	340	1	345	57	1	16	74	2	181	12	195	11	5	1	17
+45 mins.	7	330	5	342	40	16	11	67	0	183	18	201	15	14	1	30
Total Volume	18	1423	15	1456	217	34	51	302	3	724	67	794	58	39	7	104
% App. Total	1.2	97.7	1		71.9	11.3	16.9		0.4	91.2	8.4		55.8	37.5	6.7	
PHF	.643	.919	.750	.922	.733	.531	.797	.748	.375	.989	.798	.978	.806	.696	.583	.867

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

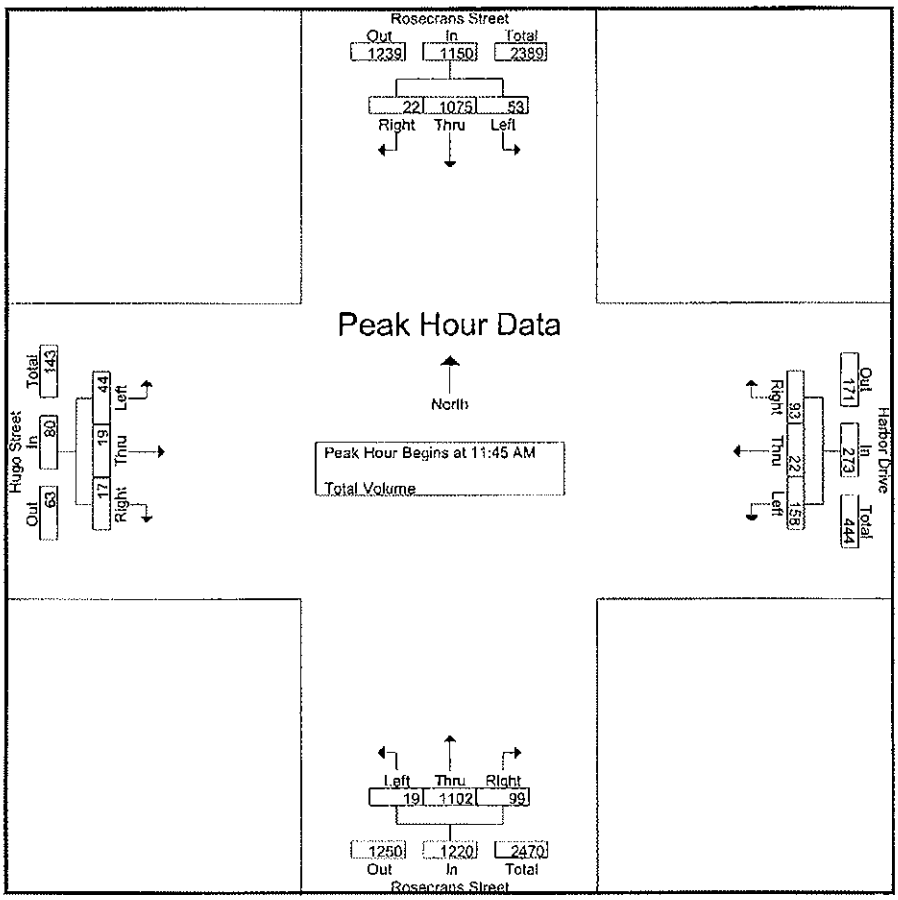
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	10	242	4	256	43	8	24	75	5	287	27	319	15	10	2	27	677
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
Total	21	521	10	552	71	12	43	126	10	597	54	661	29	14	7	50	1389
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
12:45 PM	12	280	8	300	37	7	27	71	4	264	24	292	13	9	6	28	691
Total	54	1076	24	1154	167	25	101	293	18	1056	96	1170	43	24	18	85	2702
01:00 PM	12	244	4	260	41	7	26	74	3	270	32	305	11	6	4	21	660
01:15 PM	10	214	5	229	36	5	19	60	2	280	29	311	13	6	0	19	619
Grand Total	97	2055	43	2195	315	49	189	553	33	2203	211	2447	96	50	29	175	5370
Apprch %	4.4	93.6	2		57	8.9	34.2		1.3	90	8.6		54.9	28.6	16.6		
Total %	1.8	38.3	0.8	40.9	5.9	0.9	3.5	10.3	0.6	41	3.9	45.6	1.8	0.9	0.5	3.3	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
Total Volume	53	1075	22	1150	158	22	93	273	19	1102	99	1220	44	19	17	80	2723
% App. Total	4.6	93.5	1.9		57.9	8.1	34.1		1.6	90.3	8.1		55	23.8	21.2		
PHF	.576	.873	.917	.893	.898	.786	.750	.875	.950	.889	.917	.892	.786	.679	.850	.870	.934

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				11:30 AM				12:15 PM			
+0 mins.	10	255	6	271	**44**	6	25	75	**5**	287	**27**	319	9	7	5	21
+15 mins.	**23**	233	5	261	44	**7**	18	69	5	**310**	27	**342**	11	4	4	19
+30 mins.	9	**308**	5	**322**	42	5	**31**	**78**	5	245	26	276	**13**	**9**	**6**	**28**
+45 mins.	12	280	**8**	300	37	7	27	71	5	262	25	292	11	6	4	21
Total Volume	54	1076	24	1154	167	25	101	293	20	1104	105	1229	44	26	19	89
% App. Total	4.7	93.2	2.1		57	8.5	34.5		1.6	89.8	8.5		49.4	29.2	21.3	
PHF	.587	.873	.750	.896	.949	.893	.815	.939	1.000	.890	.972	.898	.846	.722	.792	.795

Counts Unlimited Inc.
26286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

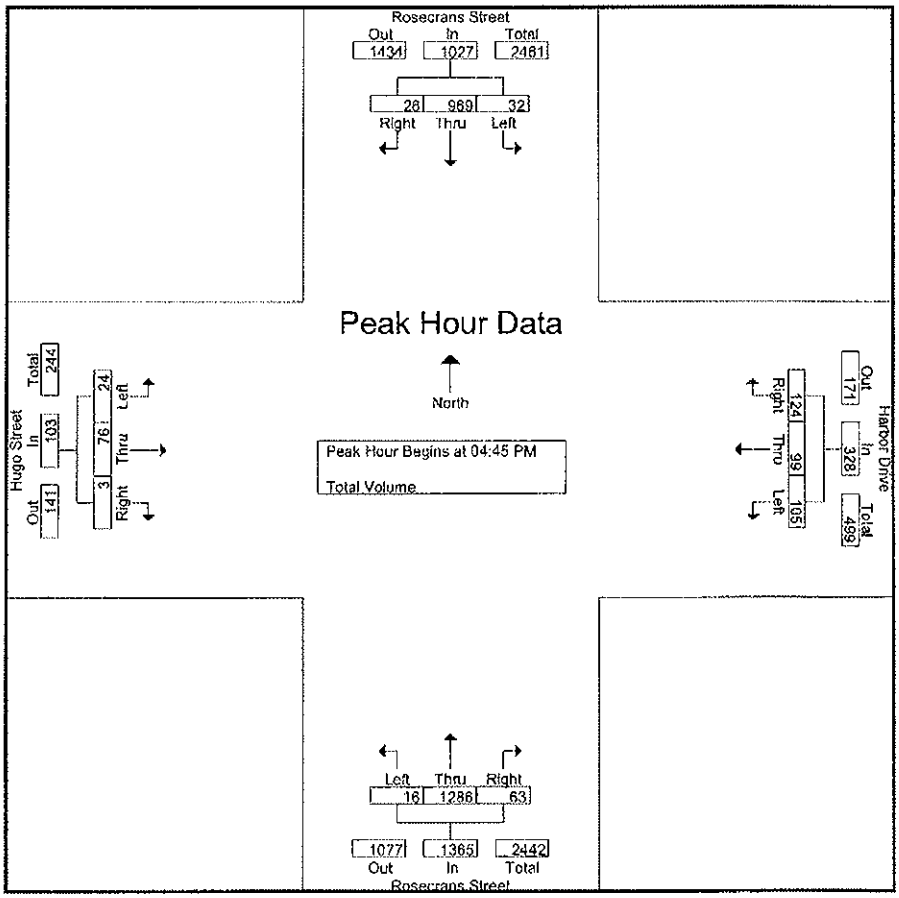
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	198	5	211	33	10	22	65	5	351	17	373	12	8	3	23	672
04:15 PM	3	200	11	214	37	12	27	76	8	319	9	336	13	9	2	24	650
04:30 PM	7	221	8	236	45	23	39	107	8	228	6	242	10	12	7	29	614
04:45 PM	9	241	4	254	28	21	37	86	7	251	12	270	9	13	0	22	632
Total	27	860	28	915	143	66	125	334	28	1149	44	1221	44	42	12	98	2568
05:00 PM	10	247	16	273	21	22	31	74	5	401	13	419	5	15	0	20	786
05:15 PM	5	251	5	261	29	27	29	85	2	322	28	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	29	27	83	2	312	10	324	2	27	2	31	677
05:45 PM	5	229	1	235	29	28	24	81	1	245	6	252	2	7	4	13	581
Total	28	957	23	1008	106	106	111	323	10	1280	57	1347	17	70	7	94	2772
Grand Total	55	1817	51	1923	249	172	236	657	38	2429	101	2568	61	112	19	192	5340
Apprch %	2.9	94.5	2.7		37.9	26.2	35.9		1.5	94.6	3.9		31.8	58.3	9.9		
Total %	1	34	1	36	4.7	3.2	4.4	12.3	0.7	45.5	1.9	48.1	1.1	2.1	0.4	3.6	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	9	241	4	254	28	21	**37**	**86**	**7**	251	12	270	9	13	0	22	632
05:00 PM	**10**	247	**16**	**273**	21	22	31	74	5	**401**	13	**419**	5	15	0	20	**786**
05:15 PM	5	**251**	5	261	**29**	27	29	85	2	322	**28**	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	**29**	27	83	2	312	10	324	2	**27**	2	**31**	677
Total Volume	32	969	26	1027	105	99	124	328	16	1286	63	1365	24	76	3	103	2823
% App. Total	3.1	94.4	2.5		32	30.2	37.8		1.2	94.2	4.6		23.3	73.8	2.9		
PHF	.800	.965	.406	.940	.905	.853	.838	.953	.571	.802	.563	.814	.667	.704	.375	.831	.898

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:45 PM				04:45 PM			
+0 mins.	9	241	4	254	**45**	23	**39**	**107**	7	251	12	270	9	13	0	22
+15 mins.	**10**	247	**16**	**273**	28	21	37	86	5	**401**	13	**419**	5	15	0	20
+30 mins.	5	**251**	5	261	21	22	31	74	2	322	28	352	8	21	1	30
+45 mins.	8	230	1	239	29	**27**	29	85	2	312	10	324	2	**27**	**2**	**31**
Total Volume	32	969	26	1027	123	93	136	352	16	1286	63	1365	24	76	3	103
% App. Total	3.1	94.4	2.5		34.9	26.4	38.6		1.2	94.2	4.6		23.3	73.8	2.9	
PHF	.800	.965	.406	.940	.683	.861	.872	.822	.571	.802	.563	.814	.667	.704	.375	.831

Counts Unlimited Inc.
25286 Jaclyn Avenue
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951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

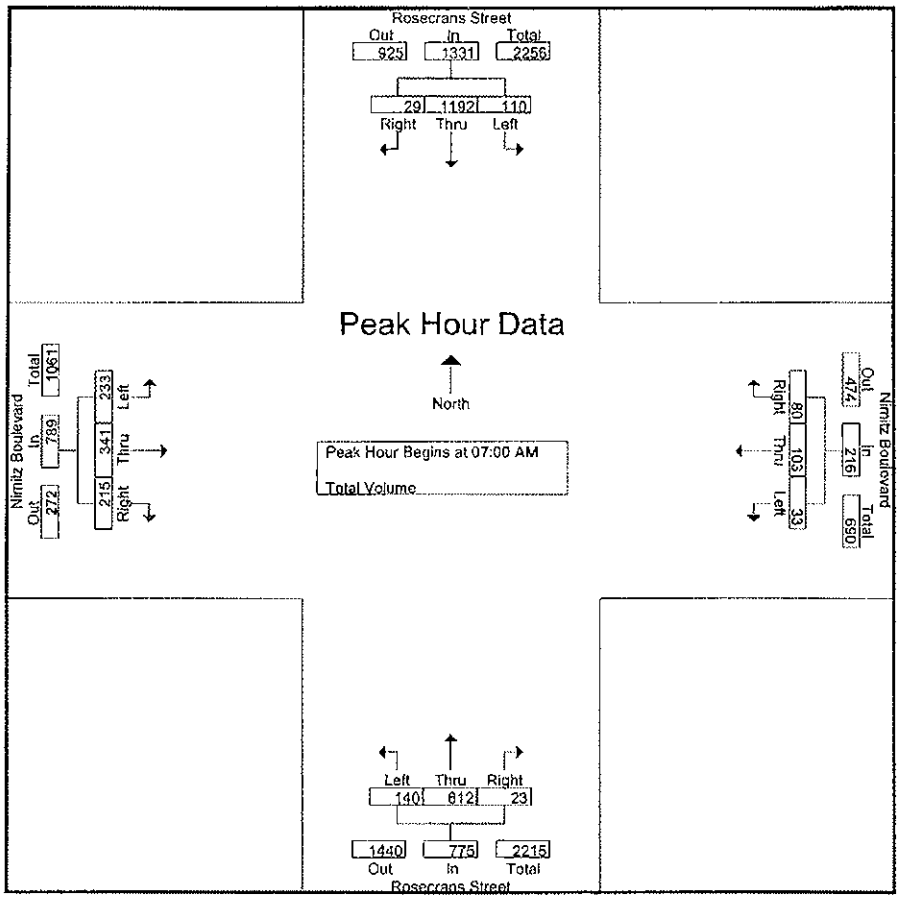
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	38	254	22	314	6	38	22	66	30	69	10	109	62	66	47	175	664
06:45 AM	28	322	19	369	5	33	24	62	45	89	3	137	62	71	60	193	761
Total	66	576	41	683	11	71	46	128	75	158	13	246	124	137	107	368	1425
07:00 AM	25	324	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	8	359	9	26	20	55	34	151	7	192	74	74	58	206	812
07:30 AM	28	272	8	308	13	29	23	65	37	158	6	201	49	103	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	39	166	8	213	66	100	49	215	782
Total	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
08:00 AM	34	230	8	272	4	27	12	43	38	161	8	207	85	54	43	182	704
08:15 AM	28	250	22	300	6	24	20	50	49	149	10	208	61	65	56	182	740
Grand Total	238	2248	100	2586	54	225	158	437	302	1080	54	1436	503	597	421	1521	5980
Apprch %	9.2	86.9	3.9		12.4	51.5	36.2		21	75.2	3.8		33.1	39.3	27.7		
Total %	4	37.6	1.7	43.2	0.9	3.8	2.6	7.3	5.1	18.1	0.9	24	8.4	10	7	25.4	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	25	**324**	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	**8**	**359**	9	26	20	55	34	151	7	192	**74**	74	**58**	206	**812**
07:30 AM	28	272	8	308	**13**	**29**	**23**	**65**	37	158	6	201	49	**103**	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	**39**	**166**	**8**	**213**	66	100	49	**215**	782
Total Volume	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
% App. Total	8.3	89.6	2.2		15.3	47.7	37		18.1	79	3		29.5	43.2	27.2		
PHF	.743	.920	.906	.927	.635	.888	.870	.831	.897	.922	.719	.910	.787	.828	.927	.917	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				07:30 AM				07:15 AM			
+0 mins.	**38**	254	**22**	314	6	**38**	22	**66**	37	158	6	201	74	74	**58**	206
+15 mins.	28	322	19	**369**	5	33	**24**	62	39	**166**	8	**213**	49	**103**	53	205
+30 mins.	25	**324**	6	355	7	23	21	51	38	161	8	207	66	100	49	**215**
+45 mins.	37	314	8	359	9	26	20	55	**49**	149	**10**	208	**85**	54	43	182
Total Volume	128	1214	55	1397	27	120	87	234	163	634	32	829	274	331	203	808
% App. Total	9.2	86.9	3.9		11.5	51.3	37.2		19.7	76.5	3.9		33.9	41	25.1	
PHF	.842	.937	.625	.946	.750	.789	.906	.886	.832	.955	.800	.973	.806	.803	.875	.940

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

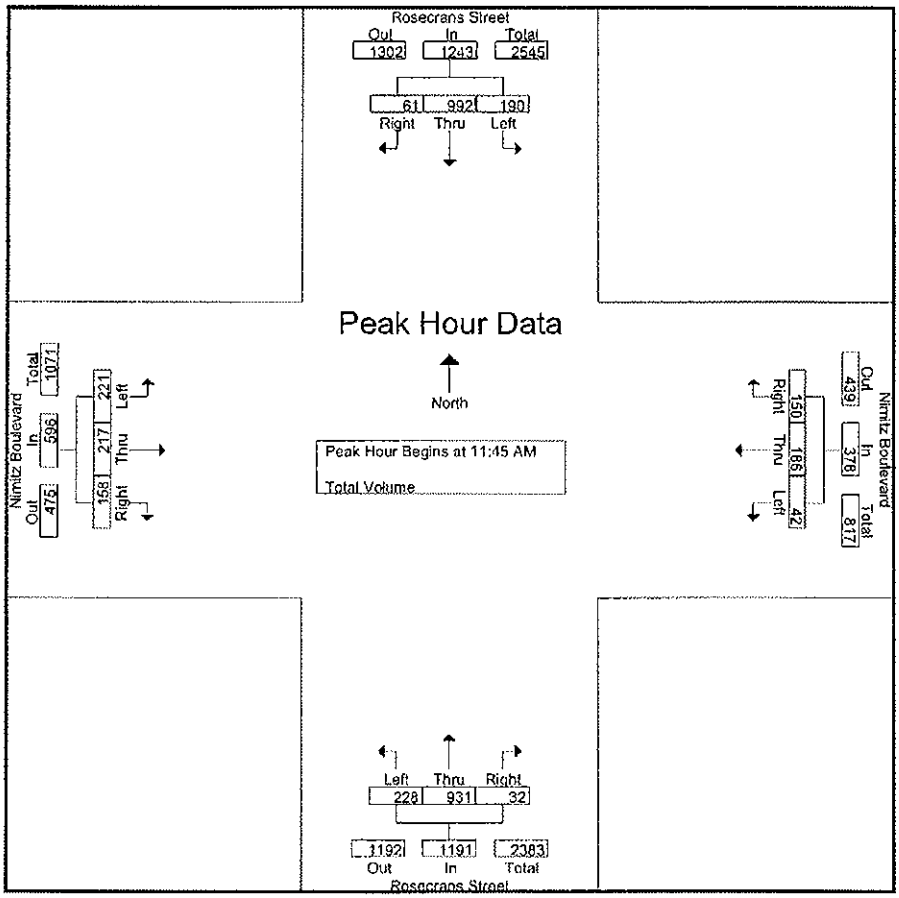
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	43	201	17	261	16	36	49	101	53	229	9	291	52	56	33	141	794
11:45 AM	43	272	15	330	13	51	43	107	62	266	11	339	64	45	37	146	922
Total	86	473	32	591	29	87	92	208	115	495	20	630	116	101	70	287	1716
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	63	46	163	766
12:15 PM	56	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	17	323	16	48	36	100	55	239	9	303	50	59	40	149	875
12:45 PM	42	249	22	313	11	41	35	87	62	258	10	330	37	45	62	144	874
Total	189	969	68	1226	40	176	142	358	228	923	31	1182	194	217	183	594	3360
01:00 PM	44	184	34	262	6	56	43	105	56	208	10	274	29	36	38	103	744
01:15 PM	35	195	25	255	6	59	36	101	69	230	11	310	36	45	34	115	781
Grand Total	354	1821	159	2334	81	378	313	772	468	1856	72	2396	375	399	325	1099	6601
Apprch %	15.2	78	6.8		10.5	49	40.5		19.5	77.5	3		34.1	36.3	29.6		
Total %	5.4	27.6	2.4	35.4	1.2	5.7	4.7	11.7	7.1	28.1	1.1	36.3	5.7	6	4.9	16.6	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	43	**272**	15	**330**	13	**51**	**43**	**107**	**62**	**266**	**11**	**339**	**64**	45	37	146	**922**
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	**63**	**46**	**163**	766
12:15 PM	**56**	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	**17**	323	**16**	48	36	100	55	239	9	303	50	59	40	149	875
Total Volume	190	992	61	1243	42	186	150	378	228	931	32	1191	221	217	158	596	3408
% App. Total	15.3	79.8	4.9		11.1	49.2	39.7		19.1	78.2	2.7		37.1	36.4	26.5		
PHF	.848	.912	.897	.942	.656	.912	.872	.883	.919	.875	.727	.878	.863	.861	.859	.914	.924

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
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Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:45 AM				12:30 PM				12:30 PM				11:45 AM			
+0 mins.	43	**272**	15	**330**	**16**	48	36	100	55	239	9	303	**64**	45	37	146
+15 mins.	45	214	13	272	11	41	35	87	62	**258**	10	**330**	54	**63**	**46**	**163**
+30 mins.	**56**	246	16	318	6	56	**43**	**105**	56	208	10	274	53	50	35	138
+45 mins.	46	260	**17**	323	6	59	36	101	69	230	**11**	310	50	59	40	149
Total Volume	190	992	61	1243	39	204	150	393	242	935	40	1217	221	217	158	596
% App. Total	15.3	79.8	4.9		9.9	51.9	38.2		19.9	76.8	3.3		37.1	36.4	26.5	
PHF	.848	.912	.897	.942	.609	.864	.872	.936	.877	.906	.909	.922	.863	.861	.859	.914

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
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Groups Printed- Total Volume

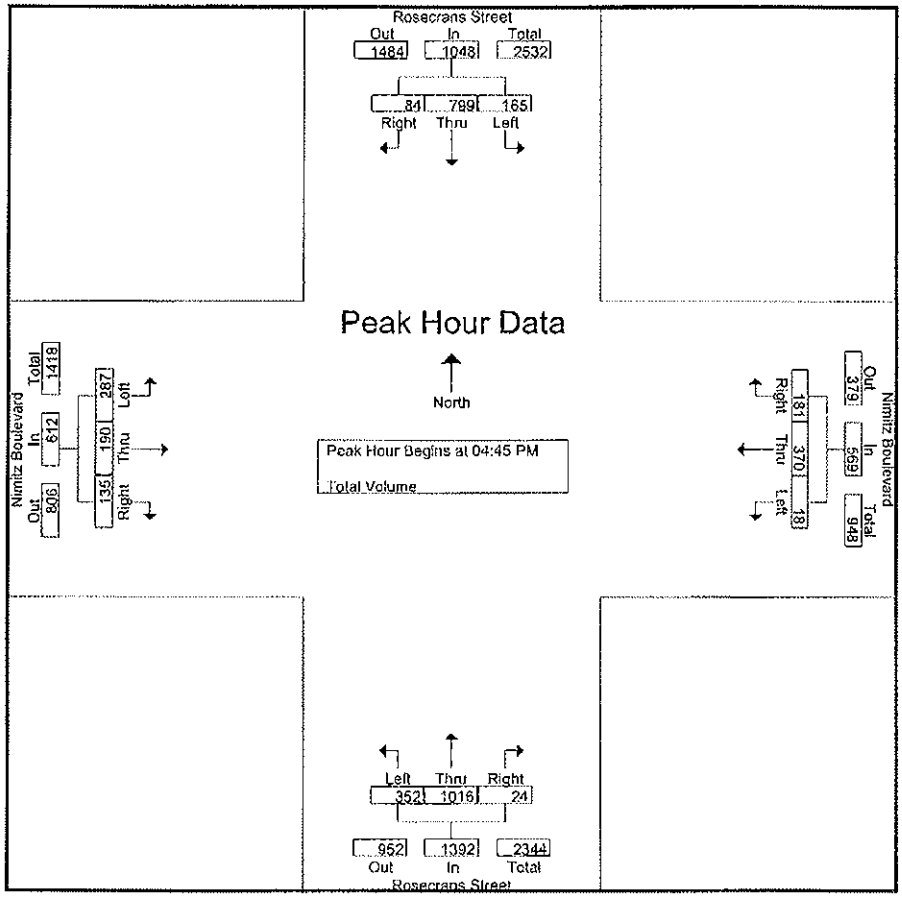
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	35	181	30	246	2	83	42	127	82	278	11	371	75	48	34	157	901
04:15 PM	45	199	25	269	3	92	42	137	67	259	7	333	61	67	37	165	904
04:30 PM	37	191	20	248	4	110	50	164	58	211	7	276	72	50	37	159	847
04:45 PM	47	216	22	285	6	92	56	154	79	205	6	290	81	51	37	169	898
Total	164	787	97	1048	15	377	190	582	286	953	31	1270	289	216	145	650	3550
05:00 PM	48	168	18	234	3	114	43	160	110	283	11	404	77	40	35	152	950
05:15 PM	38	208	23	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
05:45 PM	48	196	26	270	4	59	37	100	72	208	6	286	50	42	34	126	782
Total	166	779	88	1033	16	337	162	515	345	1019	24	1388	256	181	132	569	3505
Grand Total	330	1566	185	2081	31	714	352	1097	631	1972	55	2658	545	397	277	1219	7055
Apprch %	15.9	75.3	8.9		2.8	65.1	32.1		23.7	74.2	2.1		44.7	32.6	22.7		
Total %	4.7	22.2	2.6	29.5	0.4	10.1	5	15.5	8.9	28	0.8	37.7	7.7	5.6	3.9	17.3	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	47	**216**	22	**285**	**6**	92	**56**	154	79	205	6	290	**81**	**51**	37	**169**	898
05:00 PM	**48**	168	18	234	**3**	**114**	43	**160**	**110**	**283**	**11**	**404**	77	40	35	152	**950**
05:15 PM	38	208	**23**	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
Total Volume	165	799	84	1048	18	370	181	569	352	1016	24	1392	287	190	135	612	3621
% App. Total	15.7	76.2	8		3.2	65	31.8		25.3	73	1.7		46.9	31	22.1		
PHF	.859	.925	.913	.919	.750	.811	.808	.889	.800	.898	.545	.861	.886	.931	.912	.905	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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File Name : SDCRONIPM
Site Code : 9102139
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	35	181	**30**	246	3	92	42	137	79	205	6	290	75	48	34	157
+15 mins.	45	199	25	269	4	110	50	**164**	**110**	**283**	11	**404**	61	**67**	**37**	165
+30 mins.	37	191	20	248	**6**	92	**56**	154	96	269	6	371	72	50	37	159
+45 mins.	**47**	**216**	22	**285**	3	**114**	43	160	67	259	1	327	**81**	51	37	**169**
Total Volume	164	787	97	1048	16	408	191	615	352	1016	24	1392	289	216	145	650
% App. Total	15.6	75.1	9.3		2.6	66.3	31.1		25.3	73	1.7		44.5	33.2	22.3	
PHF	.872	.911	.808	.919	.667	.895	.853	.938	.800	.898	.545	.861	.892	.806	.980	.962

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Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
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Groups Printed- Total Volume

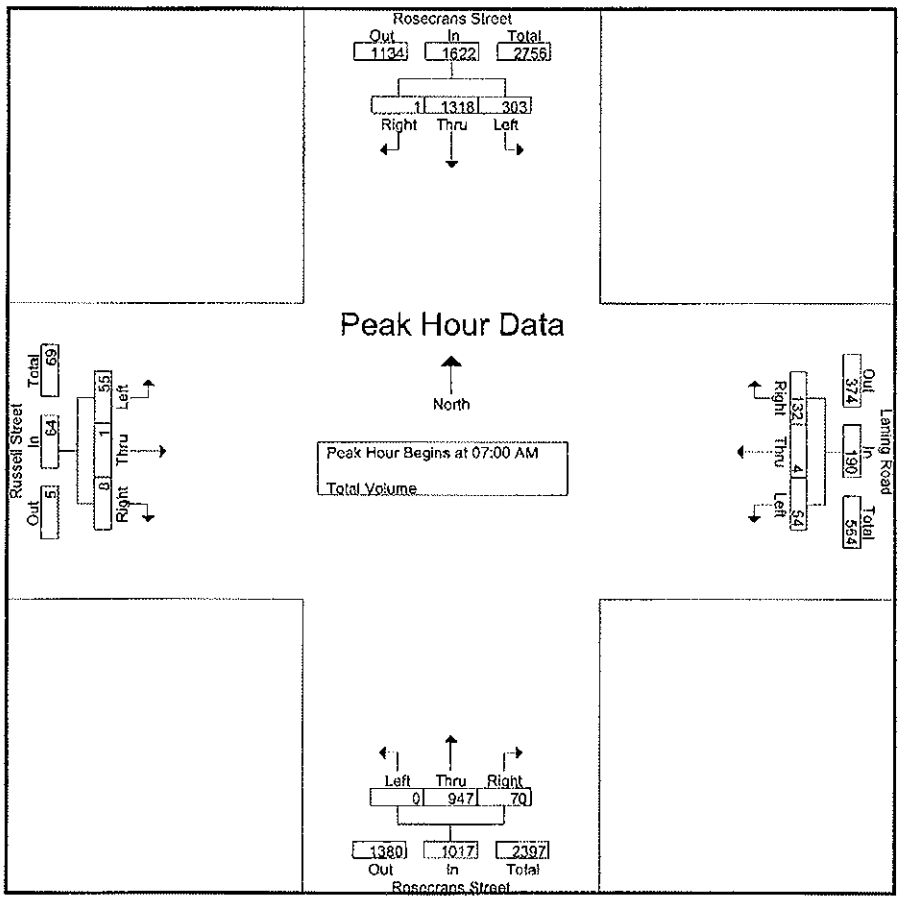
	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	46	248	0	294	15	0	34	49	0	127	1	128	14	2	0	16	487
06:45 AM	68	350	0	418	11	0	29	40	0	155	12	167	7	0	0	7	632
Total	114	598	0	712	26	0	63	89	0	282	13	295	21	2	0	23	1119
07:00 AM	58	411	1	470	13	1	42	56	0	227	10	237	16	0	7	23	786
07:15 AM	109	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	21	2	35	58	0	221	12	233	18	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	251	36	287	6	0	0	6	645
Total	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
08:00 AM	65	270	0	335	32	1	30	63	0	252	46	298	11	0	0	11	707
08:15 AM	53	371	0	424	32	0	32	64	0	243	20	263	10	2	0	12	763
Grand Total	535	2557	1	3093	144	5	257	406	0	1724	149	1873	97	5	8	110	5482
Apprch %	17.3	82.7	0		35.5	1.2	63.3		0	92	8		88.2	4.5	7.3		
Total %	9.8	46.6	0	56.4	2.6	0.1	4.7	7.4	0	31.4	2.7	34.2	1.8	0.1	0.1	2	

	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	58	**411**	**1**	**470**	13	1	**42**	56	**0**	227	10	237	16	0	**7**	**23**	**786**
07:15 AM	**109**	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	**21**	**2**	35	**58**	0	221	12	233	**18**	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	**251**	**36**	**287**	6	0	0	6	645
Total Volume	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
% App. Total	18.7	81.3	0.1		28.4	2.1	69.5		0	93.1	6.9		85.9	1.6	12.5		
PHF	.695	.802	.250	.863	.643	.500	.786	.819	.000	.943	.486	.886	.764	.250	.286	.696	.920

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
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Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:30 AM				07:30 AM				06:45 AM			
+0 mins.	68	350	0	418	21	2	35	58	0	221	12	233	7	0	0	7
+15 mins.	58	411	1	470	12	0	24	36	0	251	36	287	16	0	7	23
+30 mins.	109	356	0	465	32	1	30	63	0	252	46	298	15	1	0	16
+45 mins.	82	289	0	371	32	0	32	64	0	243	20	263	18	0	1	19
Total Volume	317	1406	1	1724	97	3	121	221	0	967	114	1081	56	1	8	65
% App. Total	18.4	81.6	0.1		43.9	1.4	54.8		0	89.5	10.5		86.2	1.5	12.3	
PHF	.727	.855	.250	.917	.758	.375	.864	.863	.000	.959	.620	.907	.778	.250	.286	.707

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
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File Name : SDCRORUPM
Site Code : 9102111
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Groups Printed- Total Volume

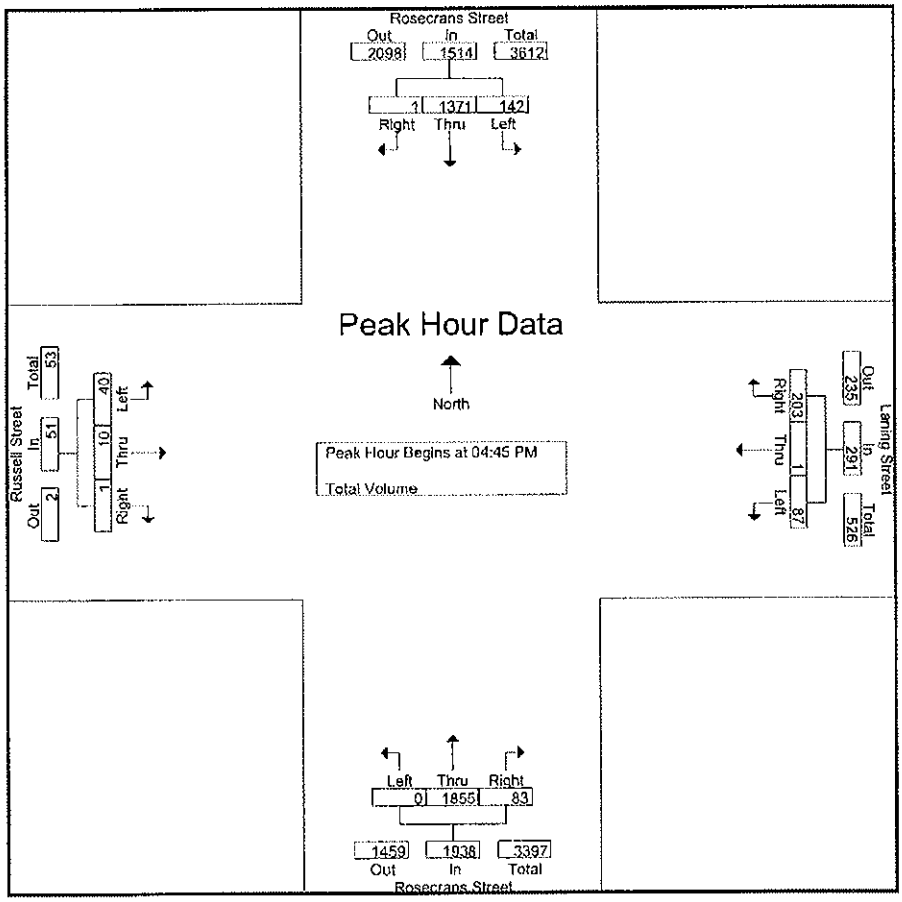
	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	280	0	308	21	4	56	81	1	374	26	401	11	0	0	11	801
04:15 PM	41	268	2	311	29	0	54	83	1	394	30	425	8	1	1	10	829
04:30 PM	38	266	1	305	22	0	63	85	0	404	14	418	8	1	1	10	818
04:45 PM	45	348	0	393	21	0	67	88	0	430	21	451	5	1	1	7	939
Total	152	1162	3	1317	93	4	240	337	2	1602	91	1695	32	3	3	38	3387
05:00 PM	39	310	1	350	15	0	71	86	0	528	22	550	8	1	0	9	995
05:15 PM	31	342	0	373	27	1	41	69	0	457	22	479	12	4	0	16	937
05:30 PM	27	371	0	398	24	0	24	48	0	440	18	458	15	4	0	19	923
05:45 PM	27	327	4	358	18	0	27	45	0	356	30	386	4	1	0	5	794
Total	124	1350	5	1479	84	1	163	248	0	1781	92	1873	39	10	0	49	3649
Grand Total	276	2512	8	2796	177	5	403	585	2	3383	183	3568	71	13	3	87	7036
Apprch %	9.9	89.8	0.3		30.3	0.9	68.9		0.1	94.8	5.1		81.6	14.9	3.4		
Total %	3.9	35.7	0.1	39.7	2.5	0.1	5.7	8.3	0	48.1	2.6	50.7	1	0.2	0	1.2	

	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**45**	348	0	393	21	0	67	**88**	0	430	21	451	5	1	**1**	7	939
05:00 PM	39	310	1	350	15	0	71	86	0	**528**	**22**	**550**	8	1	0	9	**995**
05:15 PM	31	342	0	373	**27**	1	41	69	0	457	22	479	12	**4**	0	16	937
05:30 PM	27	371	0	**398**	24	0	24	48	0	440	18	458	**15**	4	0	**19**	923
Total Volume	142	1371	1	1514	87	1	203	291	0	1855	83	1938	40	10	1	51	3794
% App. Total	9.4	90.6	0.1		29.9	0.3	69.8		0	95.7	4.3		78.4	19.6	2		
PHF	.789	.924	.250	.951	.806	.250	.715	.827	.000	.878	.943	.881	.667	.625	.250	.671	.953

Counts Unlimited Inc.
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City of San Diego
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File Name : SDCRORUPM
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	**45**	348	0	393	29	0	54	83	0	430	21	451	5	1	1	7
+15 mins.	39	310	1	350	22	0	63	85	0	**528**	**22**	**550**	8	1	0	9
+30 mins.	31	342	0	373	21	0	67	**88**	0	457	22	479	12	4	0	16
+45 mins.	27	**371**	0	**398**	15	0	**71**	86	0	440	18	458	15	4	0	19
Total Volume	142	1371	1	1514	87	0	255	342	0	1855	83	1938	40	10	1	51
% App. Total	9.4	90.6	0.1		25.4	0	74.6		0	95.7	4.3		78.4	19.6	2	
PHF	.789	.924	.250	.951	.750	.000	.898	.972	.000	.878	.943	.881	.667	.625	.250	.671

(S2)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					28	20				26	447		521
7:15 AM					20	12				38	434		504
7:30 AM					30	11				42	382		465
7:45 AM					45	19				62	433		559
8:00 AM					33	20				51	378		482
8:15 AM					46	22				48	373		489
8:30 AM					42	17				66	351		476
8:45 AM					57	15				47	346		465
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	301	136	0	0	0	380	3144	0	3961
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	68.88%	31.12%	#DIV/0!	#DIV/0!	#DIV/0!	10.78%	89.22%	0.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					80	11				36	222		349
4:15 PM					82	12				39	221		354
4:30 PM					74	20				51	219		364
4:45 PM					95	17				43	256		411
5:00 PM					101	20				52	211		384
5:15 PM					97	14				50	223		384
5:30 PM					100	16				52	227		395
5:45 PM					89	20				45	250		404

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	718	130	0	0	0	368	1829	0	3045
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	84.67%	15.33%	#DIV/0!	#DIV/0!	#DIV/0!	16.75%	83.25%	0.00%	



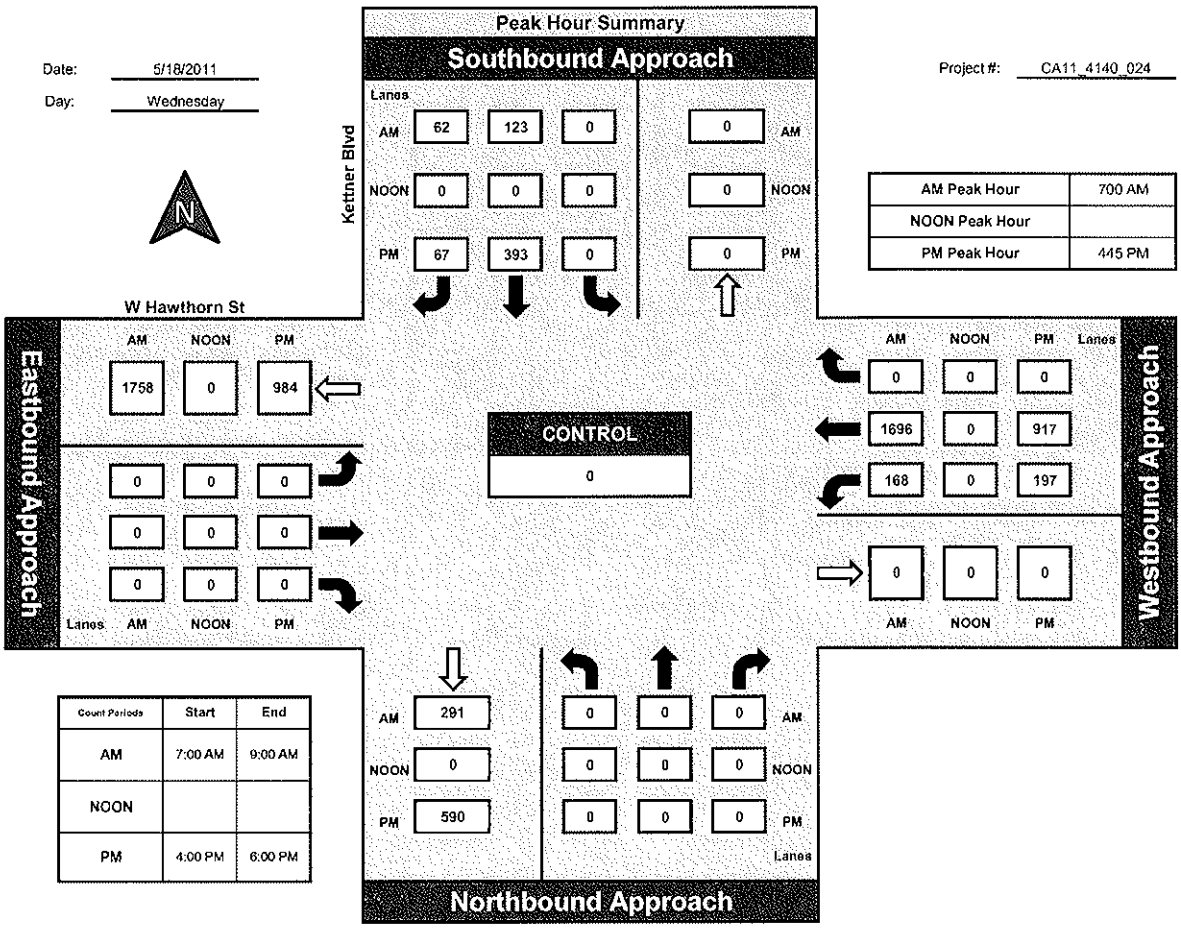
CONTROL :

ITM Peak Hour Summary

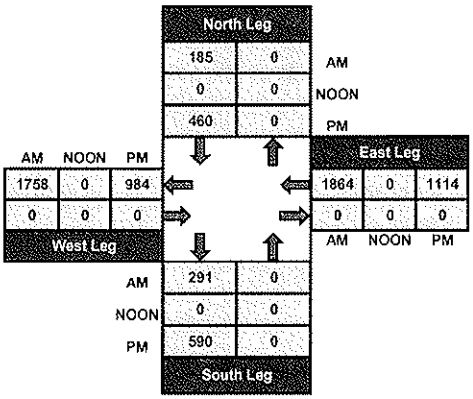
Prepared by:

National Data & Surveying Services

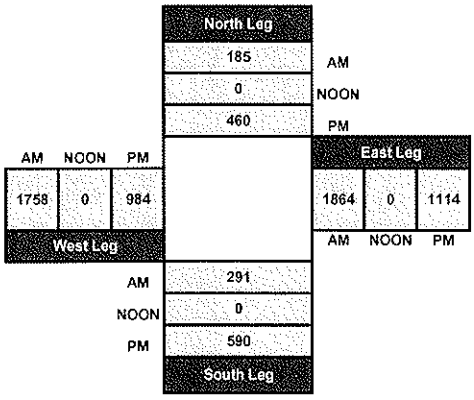
Kettner Blvd and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(53)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				20	31			201	5				257
7:15 AM				18	47			179	6				250
7:30 AM				24	47			200	5				276
7:45 AM				34	76			209	5				324
8:00 AM				24	61			199	5				289
8:15 AM				19	72			213	7				311
8:30 AM				31	77			220	8				336
8:45 AM				36	66			229	10				341
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	206	477	0	0	1650	51	0	0	0	2384
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	30.16%	69.84%	0.00%	0.00%	97.00%	3.00%	#DIV/0!	#DIV/0!	#DIV/0!	
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				54	63			362	4				483
4:15 PM				53	66			366	14				499
4:30 PM				53	74			428	4				559
4:45 PM				65	76			353	13				507
5:00 PM				70	79			385	7				541
5:15 PM				52	89			367	15				523
5:30 PM				69	85			326	14				494
5:45 PM				42	91			312	9				454
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	458	623	0	0	2899	80	0	0	0	4060
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	42.37%	57.63%	0.00%	0.00%	97.31%	2.69%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

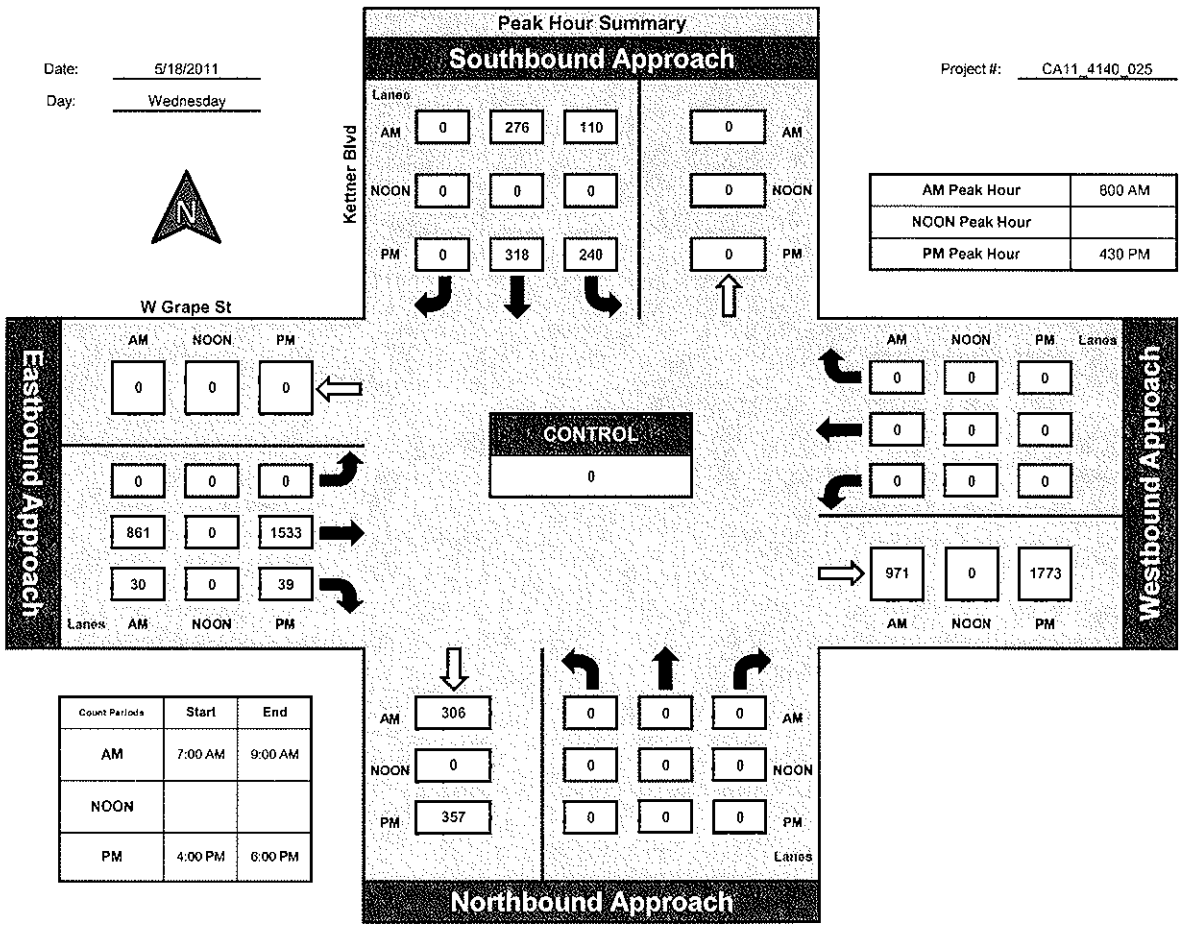
ITM Peak Hour Summary

Prepared by:

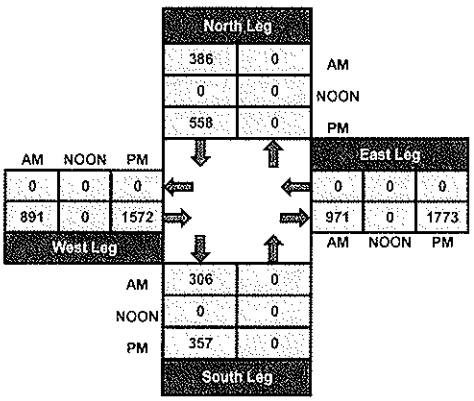
NDS

National Data & Surveying Services

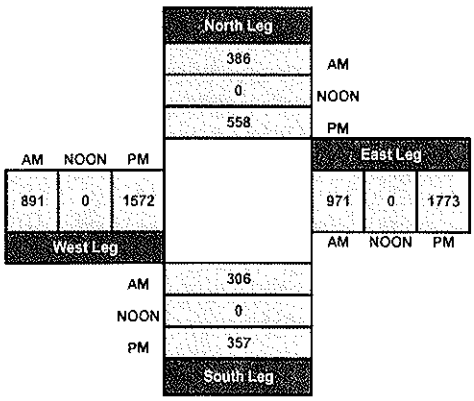
Kettner Blvd and W Grape St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(54)

Intersection Turning Movement

Prepared by:

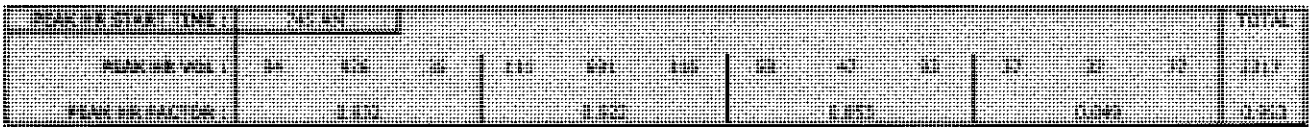
National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	189	8	29	120	16	7	8	15	4	5	8	424
7:15 AM	27	220	11	30	141	25	18	3	10	4	10	6	505
7:30 AM	21	228	15	34	167	29	12	9	15	8	5	20	563
7:45 AM	19	240	10	32	185	32	13	14	20	4	4	15	588
8:00 AM	32	209	12	28	160	31	11	11	22	11	10	19	556
8:15 AM	22	218	10	27	174	25	12	7	30	9	12	19	565
8:30 AM	21	259	3	24	172	28	22	15	21	13	6	24	608
8:45 AM	11	226	11	25	176	19	17	12	18	12	10	22	559
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	168	1789	80	229	1295	205	112	79	151	65	62	133	4368
APPRDACH %'s :	8.25%	87.83%	3.93%	13.24%	74.90%	11.86%	32.75%	23.10%	44.15%	25.00%	23.85%	51.15%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	19	291	21	28	313	3	13	13	32	19	5	21	778
4:15 PM	21	294	24	36	309	5	10	17	35	24	8	22	805
4:30 PM	28	261	36	38	327	1	10	11	38	17	8	19	794
4:45 PM	17	265	28	41	330	1	11	16	42	23	7	20	801
5:00 PM	19	267	25	26	313	2	17	25	51	34	11	43	833
5:15 PM	6	284	27	37	306	6	21	18	58	28	15	34	840
5:30 PM	17	245	36	37	301	9	11	11	39	31	14	26	777
5:45 PM	14	203	37	57	306	9	9	14	37	34	10	20	750
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	141	2110	234	300	2505	36	102	125	332	210	78	205	6378
APPROACH %'s :	5.67%	84.91%	9.42%	10.56%	88.17%	1.27%	18.25%	22.36%	59.39%	42.60%	15.82%	41.58%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]												

CONTROL :

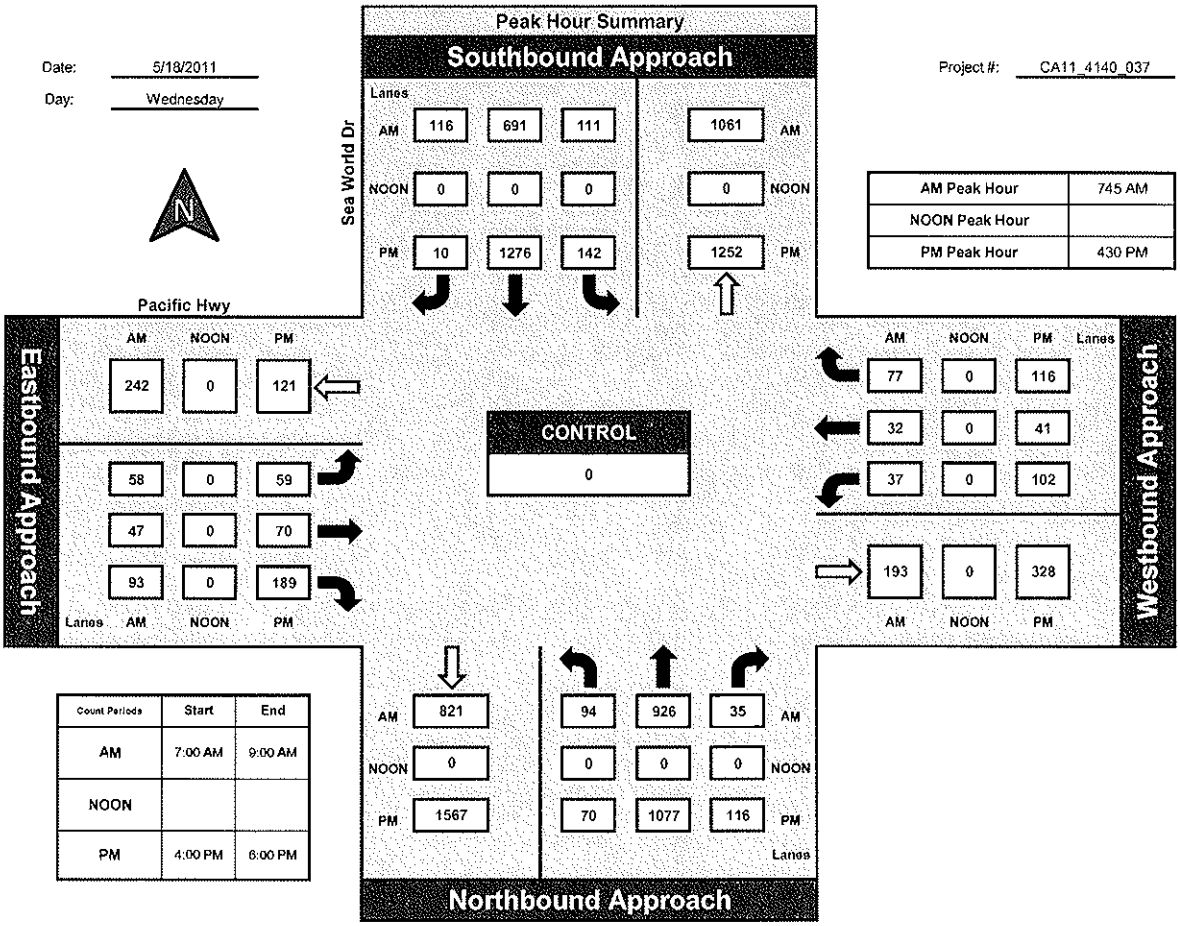
ITM Peak Hour Summary

Prepared by:

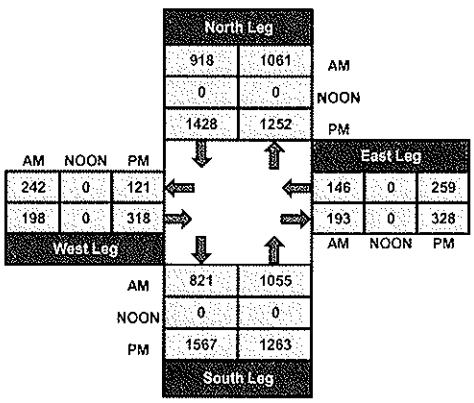
NDS

National Data & Surveying Services

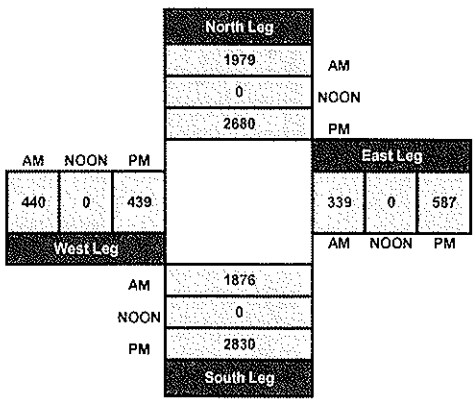
Sea World Dr and Pacific Hwy , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7												7
7:15 AM	12												12
7:30 AM	10												10
7:45 AM	15												15
8:00 AM	4												4
8:15 AM	7												7
8:30 AM	8												8
8:45 AM	13												13
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	76	0	0	0	0	0	0	0	0	0	0	0	76
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

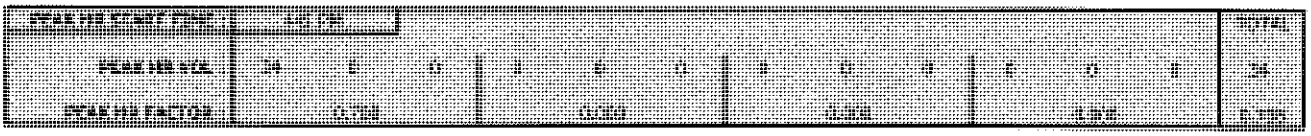
National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	9												9
4:15 PM	9												9
4:30 PM	7												7
4:45 PM	8												8
5:00 PM	7												7
5:15 PM	7												7
5:30 PM	12												12
5:45 PM	5												5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	0	0	0	0	0	0	0	0	0	0	0	64
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	



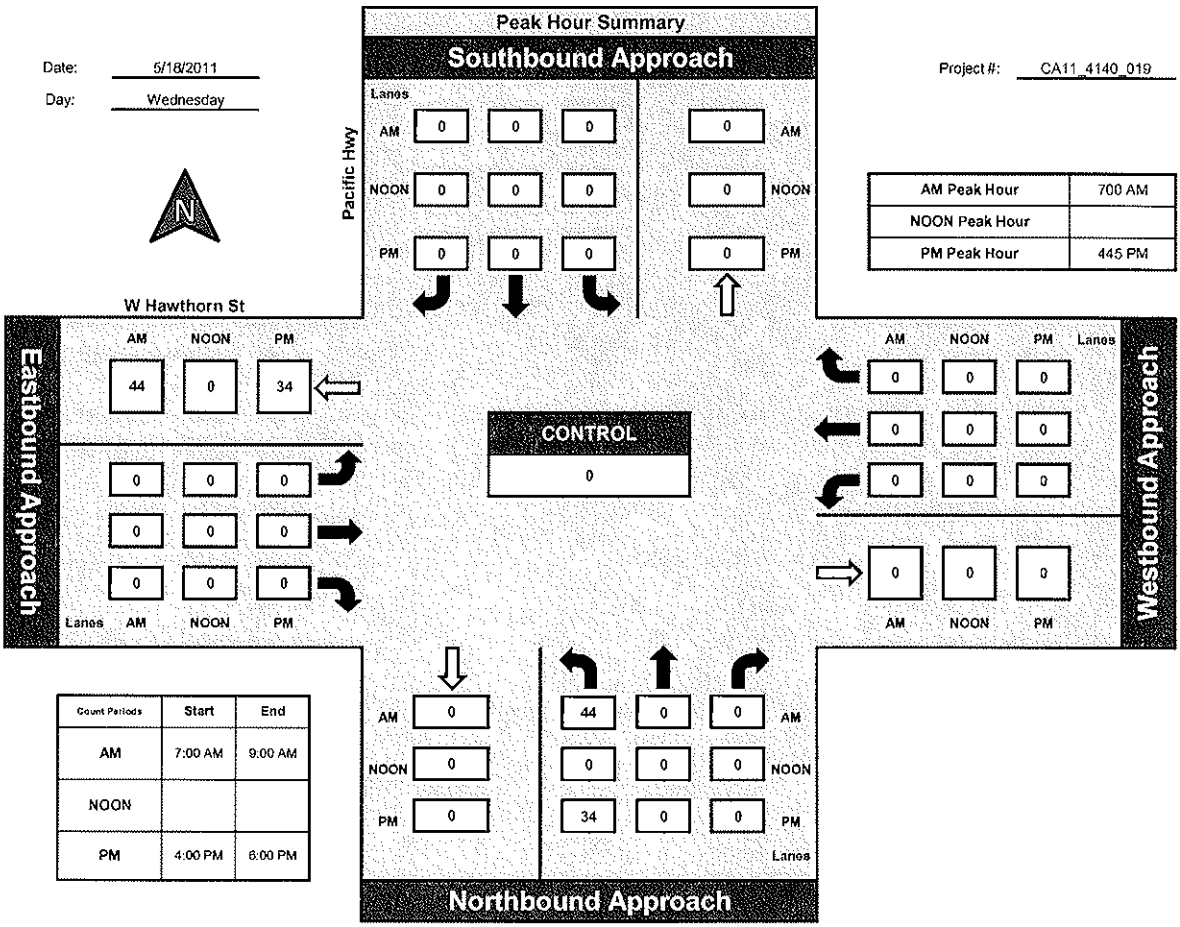
CONTROL :

ITM Peak Hour Summary

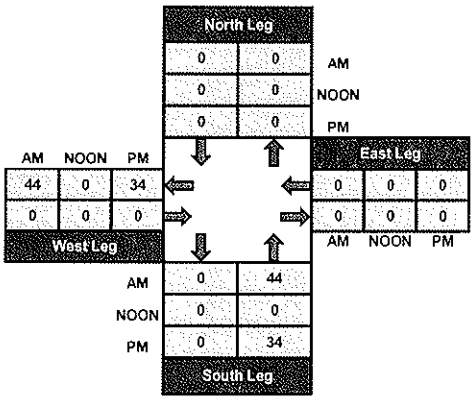
Prepared by:

National Data & Surveying Services

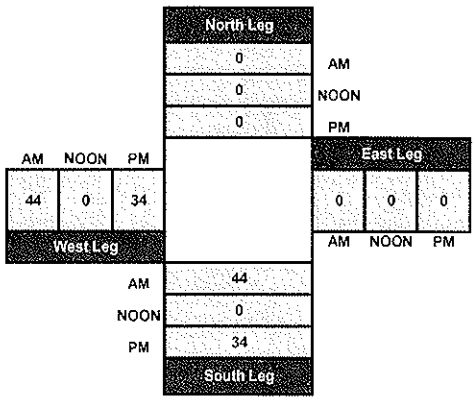
Pacific Hwy and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	36			24	7				86	360	12	545
7:15 AM	19	41			37	4				72	341	20	534
7:30 AM	13	45			35	5				90	284	18	490
7:45 AM	12	36			43	3				114	327	20	555
8:00 AM	12	41			35	7				83	294	15	487
8:15 AM	17	42			43	3				54	316	19	494
8:30 AM	13	47			52	9				70	269	16	476
8:45 AM	11	55			43	4				59	279	27	478
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	117	343	0	0	312	42	0	0	0	628	2470	147	4059
APPROACH %'s :	25.43%	74.57%	0.00%	0.00%	88.14%	11.86%	#DIV/0!	#DIV/0!	#DIV/0!	19.35%	76.12%	4.53%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	16	63			61	1				36	170	16	363
4:15 PM	23	70			61	5				34	173	22	388
4:30 PM	15	69			65	5				24	188	17	383
4:45 PM	21	70			54	5				30	222	17	419
5:00 PM	14	101			65	5				21	191	18	415
5:15 PM	13	108			51	3				26	190	20	411
5:30 PM	12	86			48	7				30	178	22	383
5:45 PM	13	80			53	3				33	216	22	420
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	127	647	0	0	458	34	0	0	0	234	1528	154	3182
APPROACH %'s :	16.41%	83.59%	0.00%	0.00%	93.09%	6.91%	#DIV/0!	#DIV/0!	#DIV/0!	12.21%	79.75%	8.04%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Hawthorn St , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_019

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Southbound Approach (Pacific Hwy)

Lanes				
AM	19	139	0	228 AM
NOON	0	0	0	0 NOON
PM	18	217	0	457 PM

Eastbound Approach (W Hawthorn St)

	AM	NOON	PM
	1395	0	845
	0	0	0
	0	0	0
	0	0	0
Lanes	AM	NOON	PM

CONTROL: 0

Westbound Approach

Lanes	AM	NOON	PM
	70	0	82
	1312	0	775
	362	0	110
	0	0	0
	AM	NOON	PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

AM	501	64	158	0 AM
NOON	0	0	0	0 NOON
PM	327	52	375	0 PM
				Lanes

Total Ins & Outs

	North Leg		
	158	228	AM
	0	0	NOON
	235	457	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
1395	0	845		1744	0	967
0	0	0		0	0	0

	South Leg	
AM	501	222
NOON	0	0
PM	327	427

Total Volume Per Leg

North Leg	
386	AM
0	NOON
692	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1395	0	845	1744	0	967

South Leg	
AM	723
NOON	0
PM	754

(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				0									
7:15 AM				4									4
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				0									
8:15 AM				1									1
8:30 AM				1									1
8:45 AM				5									5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	14	0	0	0	0	0	0	0	0	14
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				1									1
4:15 PM				3									3
4:30 PM				2									2
4:45 PM				0									
5:00 PM				3									3
5:15 PM				1									1
5:30 PM				4									4
5:45 PM				2									2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	16	0	0	0	0	0	0	0	0	16
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

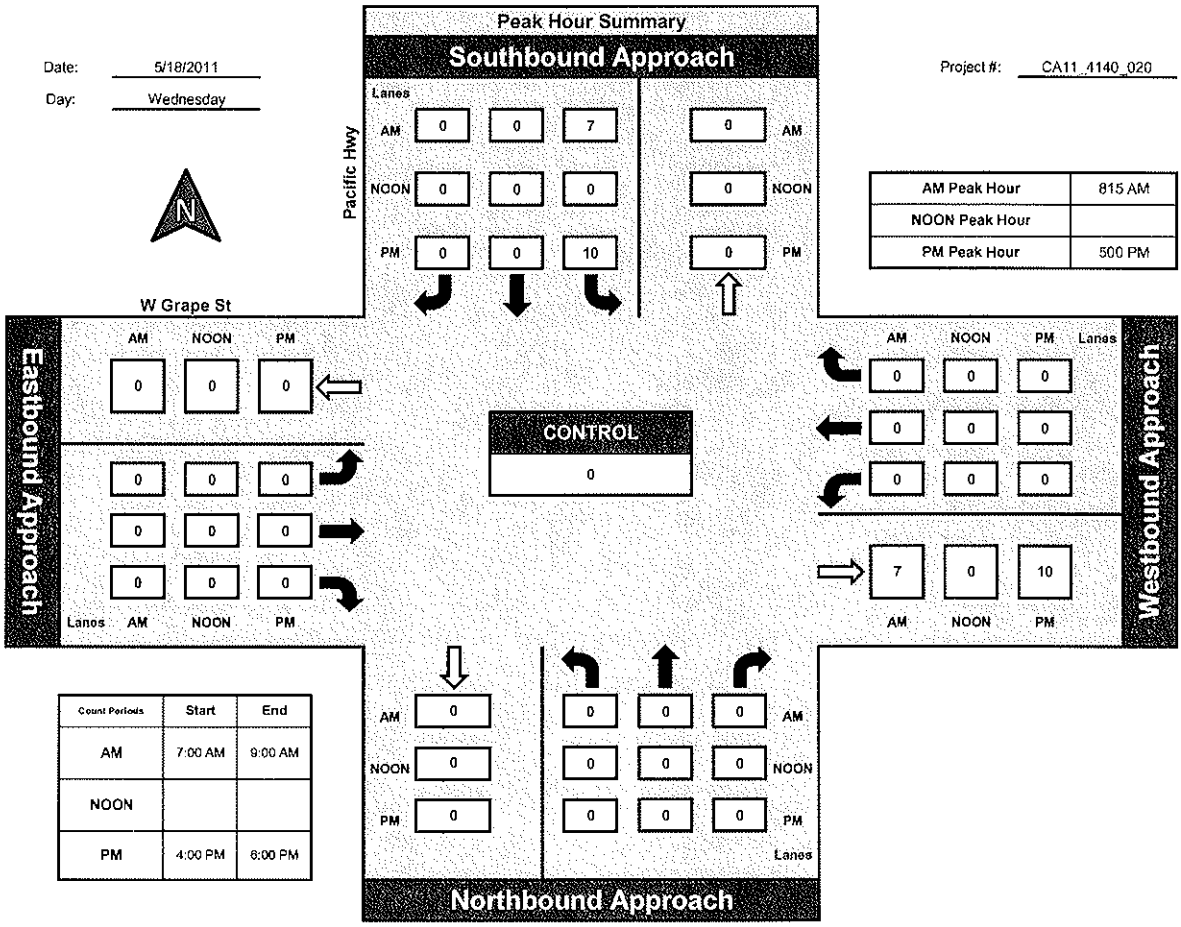
National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

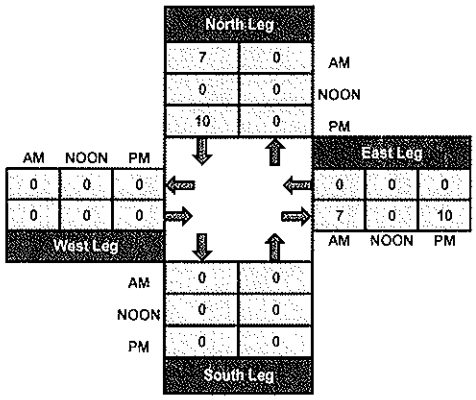
Project #: CA11_4140_020



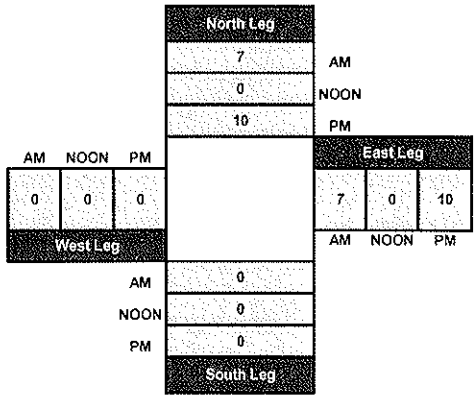
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

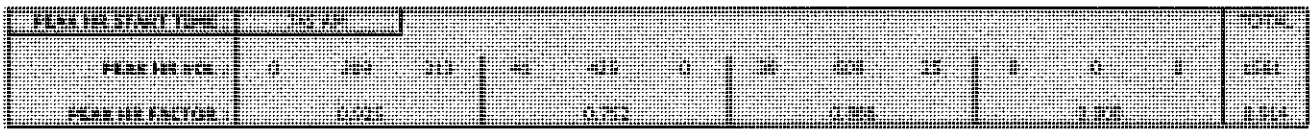
Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		51	41	6	79		15	166	7				365
7:15 AM		50	47	5	92		12	122	3				331
7:30 AM		56	51	11	112		8	137	5				380
7:45 AM		48	66	9	146		14	138	6				427
8:00 AM		55	42	8	107		8	148	8				376
8:15 AM		52	52	11	84		4	155	2				360
8:30 AM		54	53	13	88		13	168	9				398
8:45 AM		65	41	17	100		13	177	9				422

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	431	393	80	808	0	87	1211	49	0	0	0	3059
APPROACH %'s :	0.00%	52.31%	47.69%	9.01%	90.99%	0.00%	6.46%	89.90%	3.64%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		87	95	21	77		7	260	6				553
4:15 PM		95	87	29	76		5	243	9				544
4:30 PM		76	96	23	71		8	297	7				578
4:45 PM		86	79	23	69		6	257	6				526
5:00 PM		112	84	19	73		17	276	5				586
5:15 PM		113	73	17	63		12	311	6				595
5:30 PM		91	70	21	69		6	232	11				500
5:45 PM		85	57	19	69		10	242	10				492
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	745	641	172	567	0	71	2118	60	0	0	0	4374
APPROACH %'s :	0.00%	53.75%	46.25%	23.27%	76.73%	0.00%	3.16%	94.18%	2.67%	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_020

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach

Lanes					
AM	0	425	41	248	AM
NOON	0	0	0	0	NOON
PM	0	276	82	430	PM

Pacific Hwy

W Grape St

Eastbound Approach

Lanes	AM	NOON	PM
	0	0	0
	39	0	43
	609	0	1141
	25	0	24

Westbound Approach

Lanes	AM	NOON	PM
	0	0	0
	0	0	0
	0	0	0
	863	0	1555

CONTROL

0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	450	0	209	213	AM
NOON	0	0	0	0	NOON
PM	300	0	387	332	PM

Total Ins & Outs

	North Leg	
AM	466	248
NOON	0	0
PM	358	430

West Leg	AM	NOON	PM
AM	0	0	0
NOON	673	0	1208
PM			

East Leg	AM	NOON	PM
AM	0	0	0
NOON	863	0	1555
PM			

	South Leg	
AM	450	422
NOON	0	0
PM	300	719

Total Volume Per Leg

	North Leg
AM	714
NOON	0
PM	788

West Leg	AM	NOON	PM
AM	673	0	1208
NOON			
PM			

East Leg	AM	NOON	PM
AM	863	0	1555
NOON			
PM			

	South Leg
AM	872
NOON	0
PM	1019

(57)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		204	28	21	125					34		14	426
7:15 AM		234	55	33	116					38		19	495
7:30 AM		238	57	43	156					42		29	565
7:45 AM		240	74	56	145					40		25	580
8:00 AM		246	49	22	173					38		19	547
8:15 AM		211	59	29	183					59		28	569
8:30 AM		266	62	31	184					60		26	629
8:45 AM		214	67	26	171					51		25	554
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1853	451	261	1253	0	0	0	0	362	0	185	4365
APPROACH %'s :	0.00%	80.43%	19.57%	17.24%	82.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	66.18%	0.00%	33.82%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		296	82	64	304					74		36	856
4:15 PM		304	82	63	301					61		34	845
4:30 PM		295	82	67	319					72		31	866
4:45 PM		285	82	69	328					78		35	877
5:00 PM		275	122	80	316					72		25	890
5:15 PM		298	105	64	334					79		27	907
5:30 PM		256	78	63	302					74		34	807
5:45 PM		238	99	56	328					75		26	822
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2247	732	526	2532	0	0	0	0	585	0	248	6870
APPROACH %'s :	0.00%	75.43%	24.57%	17.20%	82.80%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	70.23%	0.00%	29.77%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and Friars Rd , City of San Diego

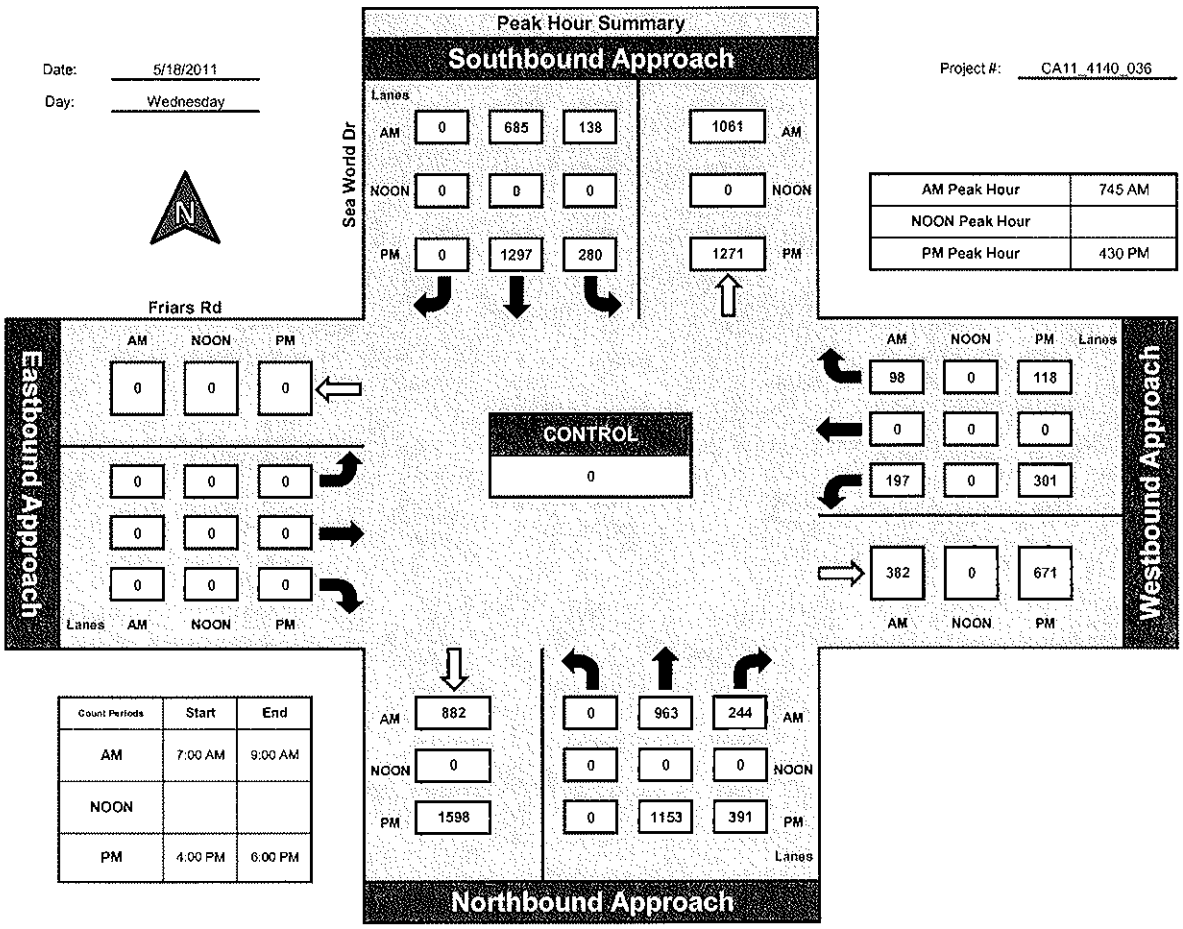
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

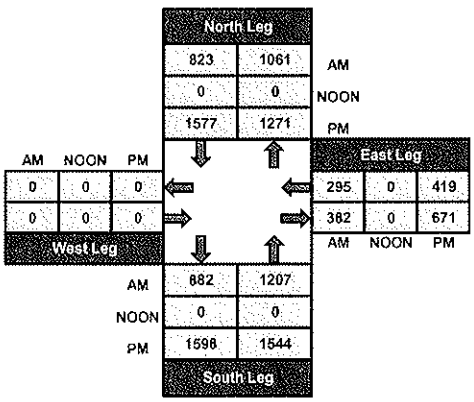
Project #: CA11_4140_036

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

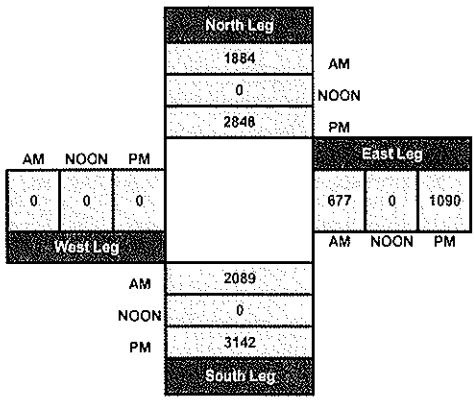


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(58)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		0	32	0	113		198	5	55	45		448
7:15 AM	0		0	48	0	153		226	19	57	50		553
7:30 AM	0		1	67	0	167		238	19	73	55		620
7:45 AM	0		0	75	1	183		258	13	78	57		665
8:00 AM	0		0	78	0	126		226	9	88	85		612
8:15 AM	0		0	68	1	178		235	18	79	57		636
8:30 AM	0		0	77	0	123		282	20	70	92		664
8:45 AM	1		0	68	0	162		249	19	61	67		627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	0	1	513	2	1205	0	1912	122	561	508	0	4825
APPROACH %'s :	50.00%	0.00%	50.00%	29.83%	0.12%	70.06%	0.00%	94.00%	6.00%	52.48%	47.52%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				65	1	257		270	51	76	76	1	797
4:15 PM				86	2	279		268	53	60	81	1	830
4:30 PM				85	0	272		239	47	90	83	1	817
4:45 PM				83	0	295		234	51	77	71	1	812
5:00 PM				76	1	279		275	63	65	69	0	828
5:15 PM				66	0	282		272	57	75	65	0	817
5:30 PM				74	0	282		239	53	53	68	0	769
5:45 PM				62	1	303		168	61	51	63	0	709
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	597	5	2249	0	1965	436	547	576	4	6379
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	20.94%	0.18%	78.88%	0.00%	81.84%	18.16%	48.54%	51.11%	0.35%	

[redacted]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 SB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_038

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach

Sea World Dr

Lanes					
AM	610	2	298	0	AM
NOON	0	0	0	0	NOON
PM	1125	3	330	3	PM

Eastbound Approach

I-5 SB Ramps

Lanes	AM	NOON	PM
	901	0	1429
	0	0	0
	1001	0	1016
	60	0	214

Westbound Approach

Lanes	AM	NOON	PM
	0	0	3
	291	0	304
	315	0	292
	1299	0	1346

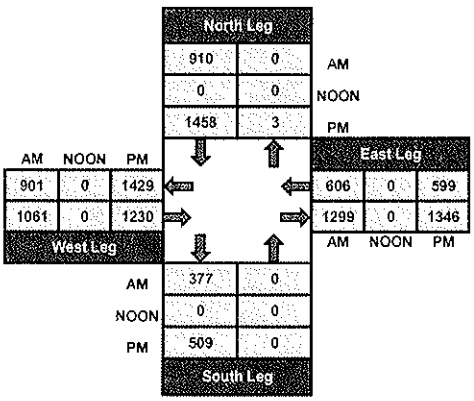
CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

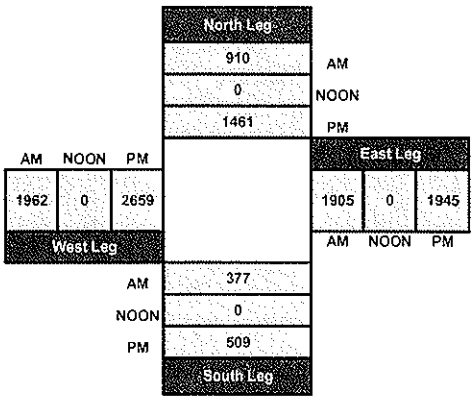
Northbound Approach

Lanes					
AM	377	0	0	0	AM
NOON	0	0	0	0	NOON
PM	509	0	0	0	PM

Total Ins & Outs



Total Volume Per Leg



(59)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

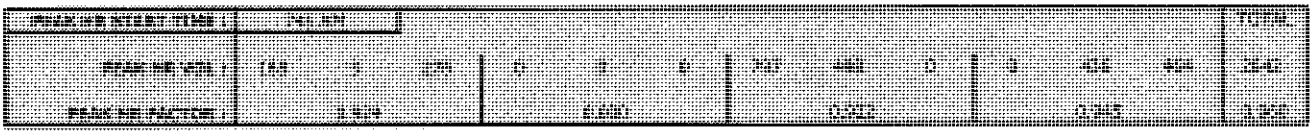
Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	21	0	45				174	50	0		72	77	439
7:15 AM	33	0	49				205	74	0		81	93	535
7:30 AM	31	0	65				193	108	0		92	117	606
7:45 AM	33	0	88				180	157	0		107	120	685
8:00 AM	44	0	67				186	113	0		122	116	648
8:15 AM	35	3	61				202	106	0		108	106	621
8:30 AM	56	0	60				229	122	0		99	122	688
8:45 AM	54	0	71				193	131	1		82	105	637

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	307	3	506	0	0	0	1562	861	1	0	763	856	4859
APPROACH %'s :	37.62%	0.37%	62.01%	#DIV/0!	#DIV/0!	#DIV/0!	64.44%	35.52%	0.04%	0.00%	47.13%	52.87%	



CONTROL :

Intersection Turning Movement

Prepared by:

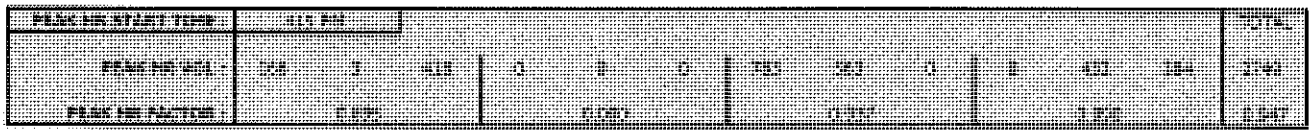
National Data & Surveying Services

Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	43	1	69				195	137			111	102	658
4:15 PM	44	0	120				208	149			100	105	726
4:30 PM	57	0	98				196	125			114	92	682
4:45 PM	31	0	96				183	126			110	96	642
5:00 PM	34	3	104				196	163			108	91	699
5:15 PM	36	0	109				210	127			99	90	671
5:30 PM	38	0	98				197	117			88	67	605
5:45 PM	37	1	69				144	79			70	61	461
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	320	5	763	0	0	0	1529	1023	0	0	800	704	5144
APPROACH %'s :	29.41%	0.46%	70.13%	#DIV/0!	#DIV/0!	#DIV/0!	59.91%	40.09%	0.00%	0.00%	53.19%	46.81%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 NB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_039

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach (Sea World Dr)

Lanes					
AM	0	0	0	1264	AM
NOON	0	0	0	0	NOON
PM	0	0	0	1170	PM

Eastbound Approach (I-5 NB Ramps)

Lanes	AM	NOON	PM
	604	0	598
	797	0	783
	498	0	563
	0	0	0

Westbound Approach

Lanes	AM	NOON	PM
	464	0	384
	436	0	432
	0	0	0
	774	0	981

CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	0	168	3	276	AM
NOON	0	0	0	0	NOON
PM	0	166	3	418	PM

Total Ins & Outs

North Leg		
0	1264	AM
0	0	NOON
0	1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
604	0	598	900	0	816
1295	0	1346	774	0	981

South Leg		
0	447	AM
0	0	NOON
0	587	PM

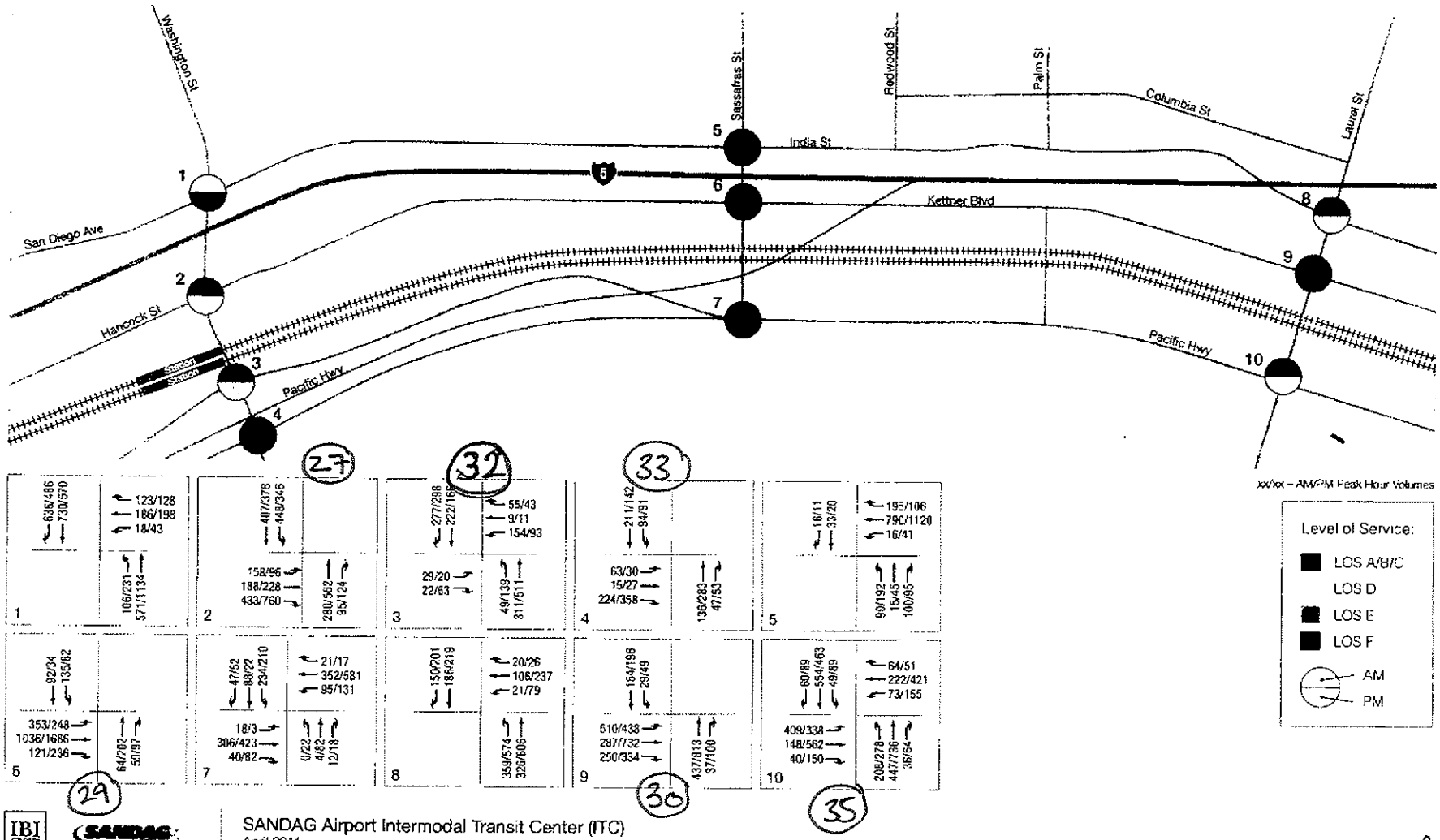
Total Volume Per Leg

North Leg	
1264	AM
0	NOON
1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1899	0	1944	1674	0	1797

South Leg	
447	AM
0	NOON
587	PM

Existing AM/PM Peak Hour Traffic Volumes and Level of Service



Cyclists and Pedestrian Counts

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

2

PROJECT#: 11-4140-001
N/S Street: W Mission Bay Dr
E/W Street: I-8 WB Off-Ramp
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	0	2	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0
7:45 AM	0	0	0	0	1	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	2	2	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	2	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4167-001
N/S Street: West Mission Bay Dr
E/W Street: Channel Way
DATE: 6/9/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0
TOTALS	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

4

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-003
N/S Street: Midway Dr
E/W Street: Sport Arena Blvd/W Point Loma Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	1	2	0	0	0
7:15 AM	4	3	0	1	0	1	1	0
7:30 AM	0	0	0	0	1	0	0	0
7:45 AM	0	0	1	1	2	0	0	1
8:00 AM	1	0	0	0	0	0	0	1
8:15 AM	2	2	3	0	0	1	1	0
8:30 AM	1	1	2	0	1	0	1	1
8:45 AM	0	1	0	0	1	0	0	0
TOTALS	**9**	**7**	**8**	**3**	**7**	**2**	**3**	**3**
	4	4	5	0	2	1	2	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	3
7:30 AM	0	0	0	1	3	0	0	2
7:45 AM	0	0	0	0	1	0	0	3
8:00 AM	0	0	2	2	0	0	0	5
8:15 AM	0	0	2	2	0	0	0	2
8:30 AM	0	0	1	2	0	0	0	6
8:45 AM	0	0	0	0	1	0	0	2
TOTALS	**0**	**1**	**5**	**7**	**5**	**0**	**0**	**23**
	0	0	5	6	1	0	0	15

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	3	0	0	0	0	2
4:15 PM	3	2	1	0	0	2	1	0
4:30 PM	0	2	2	0	0	0	1	0
4:45 PM	0	0	4	0	0	0	3	1
5:00 PM	1	2	2	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	1	2	0	0	0	0	1	1
5:45 PM	0	0	1	0	0	0	2	1
TOTALS	**5**	**9**	**13**	**0**	**0**	**2**	**9**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	3
4:15 PM	1	1	0	0	1	0	1	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	3	1	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	2	0	0	0	0	0
TOTALS	**1**	**5**	**5**	**1**	**1**	**0**	**2**	**4**

5

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-004
N/S Street: Kemper St
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	1
7:15 AM	0	0	1	0	0	1	1	2
7:30 AM	0	0	0	2	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	2	0	0	0	2
8:15 AM	0	0	0	1	0	2	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	0	1	1	5	5	3
TOTALS	**0**	**0**	**2**	**6**	**2**	**8**	**8**	**10**
	0	0	1	4	1	7	6	6

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	1	0	0	0	0
8:45 AM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**4**	**2**	**2**	**0**	**0**	**0**
	0	0	4	2	1	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	5	2	2	2	0	1	2
4:15 PM	0	5	5	5	1	1	1	1
4:30 PM	2	1	7	0	0	0	1	4
4:45 PM	0	4	2	4	3	6	0	1
5:00 PM	2	0	1	2	0	1	2	2
5:15 PM	3	2	2	3	0	2	2	0
5:30 PM	1	0	1	0	0	0	1	2
5:45 PM	0	0	2	2	0	0	1	1
TOTALS	**8**	**17**	**22**	**18**	**6**	**10**	**9**	**13**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**

6

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-005
N/S Street: East Dr
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	1	0	0	0	0
7:15 AM	0	0	1	0	0	0	2	1
7:30 AM	1	0	0	0	0	0	2	3
7:45 AM	0	0	1	0	0	0	0	1
8:00 AM	0	0	2	0	0	1	3	1
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	3	0
8:45 AM	0	0	1	0	0	0	2	1
TOTALS	**1**	**0**	**7**	**1**	**0**	**1**	**12**	**7**
	0	0	3	0	0	1	8	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**1**
	0	0	1	0	0	0	1	0

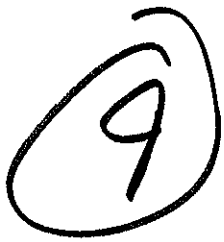
P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	9	3
4:15 PM	1	0	0	0	0	0	2	5
4:30 PM	1	0	0	0	0	0	5	3
4:45 PM	0	0	0	0	0	0	3	4
5:00 PM	1	0	0	0	0	0	7	2
5:15 PM	0	1	0	0	0	0	5	4
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	8	0	0	0	0	0	5	5
TOTALS	**11**	**1**	**0**	**0**	**0**	**1**	**38**	**28**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0
5:45 PM	0	0	1	1	0	0	0	0
TOTALS	**1**	**2**	**4**	**2**	**1**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-006
N/S Street: Midway Dr
E/W Street: Enterprise St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	3	0	0	0	0	0	0	0
TOTALS	**3**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
	3	0	0	0	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	1	1	0	0	0	0	0	0
8:15 AM	1	3	0	0	0	0	0	0
8:30 AM	0	4	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**12**	**0**	**0**	**0**	**0**	**0**	**0**
	2	8	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**3**	**1**	**0**	**0**

10

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-007
N/S Street: Midway Dr
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	2	0	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	0	0	0	0
8:30 AM	1	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**5**	**0**	**0**	**1**	**0**	**0**	**0**
	3	5	0	0	1	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	6	0	0	3	1	0	0
7:15 AM	4	2	0	0	2	2	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	2	3	0	0	0	2	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	3	5	0	0	1	3	0	0
8:30 AM	0	1	0	0	2	0	0	0
8:45 AM	1	2	0	0	1	1	0	0
TOTALS	**12**	**19**	**0**	**0**	**9**	**10**	**0**	**0**
	5	9	0	0	3	5	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	1	0	0	0	0	0	0
4:15 PM	1	2	0	0	1	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	1	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTALS	**7**	**4**	**0**	**0**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	1	0	0
4:15 PM	0	1	0	0	0	1	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	1	3	0	0	1	0	0	0
5:00 PM	2	1	0	0	1	0	0	0
5:15 PM	0	2	0	0	1	0	0	0
5:30 PM	0	1	0	0	1	1	0	0
5:45 PM	1	1	0	0	0	1	0	0
TOTALS	**5**	**10**	**0**	**0**	**4**	**4**	**0**	**0**

11

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-008
N/S Street: Hancock St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	2	0	0
7:15 AM	0	1	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	1	2
7:45 AM	2	2	1	1	0	2	1	2
8:00 AM	0	2	1	1	0	0	1	2
8:15 AM	2	2	2	5	0	1	0	3
8:30 AM	0	2	1	0	0	0	0	3
8:45 AM	0	1	1	3	0	3	2	0
TOTALS	**4**	**11**	**7**	**11**	**1**	**9**	**5**	**13**
	2	7	5	9	0	4	3	8

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0
8:00 AM	0	1	2	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**
	0	1	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	1	1	3	1	0	1
4:15 PM	1	1	1	3	1	2	2	4
4:30 PM	1	4	0	2	1	0	2	2
4:45 PM	3	1	2	1	2	2	2	3
5:00 PM	5	2	0	1	0	1	1	1
5:15 PM	0	2	0	4	1	4	0	5
5:30 PM	1	1	0	2	2	2	2	3
5:45 PM	0	4	1	3	0	1	1	1
TOTALS	**11**	**18**	**5**	**17**	**10**	**13**	**10**	**20**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**3**	**1**	**0**	**0**	**0**	**0**

12

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-009
N/S Street: Kemper St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	2	2	3	0	0	0
7:15 AM	1	0	0	0	1	2	0	0
7:30 AM	0	0	0	1	0	1	0	0
7:45 AM	3	0	1	1	3	2	0	1
8:00 AM	0	0	0	0	1	2	1	0
8:15 AM	2	0	2	1	4	2	0	1
8:30 AM	1	0	2	2	2	0	0	0
8:45 AM	1	1	2	1	2	1	0	1
TOTALS	**8**	**2**	**9**	**8**	**16**	**10**	**1**	**3**
	4	1	6	4	9	S	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	1	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0
7:30 AM	0	2	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	1	0	0
8:15 AM	0	0	2	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	3	0	1	1	0	0
TOTALS	**1**	**5**	**9**	**0**	**2**	**3**	**1**	**1**
	0	0	8	0	1	2	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	4	3	1	0	0	0	0
4:45 PM	1	2	2	2	3	0	1	0
5:00 PM	3	1	1	2	5	1	0	1
5:15 PM	2	0	3	0	0	0	1	0
5:30 PM	2	1	1	2	2	0	0	0
5:45 PM	1	0	0	1	0	0	0	0
TOTALS	**10**	**8**	**11**	**8**	**10**	**2**	**2**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	1	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**3**	**6**	**1**	**0**	**0**	**0**	**0**

13

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-010
N/S Street: Sport Arena Driveway
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	1	1	1	0	0	0
7:45 AM	1	0	0	0	1	0	0	0
8:00 AM	0	0	0	1	0	0	0	0
8:15 AM	1	0	0	2	3	0	0	0
8:30 AM	2	0	0	2	1	0	0	0
8:45 AM	1	0	2	2	1	2	0	0
TOTALS	**5**	**0**	**4**	**8**	**9**	**2**	**0**	**0**
	4	0	2	7	5	2	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	1	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**1**	**4**	**3**	**3**	**0**	**0**	**0**	**0**
	0	3	3	2	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	1	1	0	0	0
4:15 PM	3	1	1	0	0	1	0	0
4:30 PM	4	0	1	1	1	1	0	0
4:45 PM	4	1	0	0	0	2	0	0
5:00 PM	2	5	0	1	0	1	0	0
5:15 PM	1	2	3	1	0	1	0	0
5:30 PM	1	0	2	2	0	0	0	0
5:45 PM	1	0	2	1	1	0	0	0
TOTALS	**17**	**9**	**10**	**7**	**3**	**6**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	2	0	0	0	0	0
4:45 PM	0	0	3	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	3	0	0	0	0	0
5:45 PM	1	1	0	0	0	0	0	0
TOTALS	**1**	**3**	**10**	**0**	**0**	**0**	**0**	**0**

14

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-011
N/S Street: East Dr
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	3	3	0	1	1	2	0	0
7:15 AM	3	2	0	2	0	1	0	0
7:30 AM	2	1	2	0	0	1	0	0
7:45 AM	1	0	2	2	0	0	0	0
8:00 AM	0	2	1	0	1	1	0	0
8:15 AM	4	2	0	1	1	4	0	0
8:30 AM	5	3	3	4	1	4	0	0
8:45 AM	4	1	3	3	4	5	0	0
TOTALS	**22**	**14**	**11**	**13**	**8**	**18**	**0**	**0**
	13	8	7	8	7	14	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	1	0	0	0	0	0
7:15 AM	0	0	1	2	1	1	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	2	2	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	1	1	0	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**3**	**10**	**5**	**2**	**1**	**1**	**0**	**0**
	3	4	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	2	0	0	0	0	0	0
4:15 PM	3	1	3	1	0	0	0	0
4:30 PM	2	2	4	6	1	0	0	0
4:45 PM	1	2	3	2	0	0	0	0
5:00 PM	3	3	1	4	1	0	0	0
5:15 PM	2	5	0	3	0	2	0	0
5:30 PM	4	6	1	2	0	0	0	0
5:45 PM	3	2	0	5	0	0	0	0
TOTALS	**24**	**23**	**12**	**23**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	2	0	0	1	0	0	0	0
4:45 PM	3	1	0	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0
TOTALS	**7**	**1**	**1**	**6**	**0**	**0**	**0**	**0**

17

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-012
N/S Street: Pacific Hwy
E/W Street: Sports Arena Blvd
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	2	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**5**
	0	0	0	0	0	0	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	7
7:15 AM	0	0	0	0	0	0	0	8
7:30 AM	0	0	0	0	0	0	1	3
7:45 AM	0	0	0	0	0	0	1	8
8:00 AM	0	0	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	1	5
8:30 AM	0	0	0	0	0	0	1	9
8:45 AM	0	0	0	0	0	0	0	5
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**51**
	0	0	0	0	0	0	3	28

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**

18

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-013
N/S Street: Kurtz St
E/W Street: Hancock St
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**
	0	0	3	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
	0	0	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

19

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-014
N/S Street: Camino Del Rio W
E/W Street: Kurtz St
DATE: 5/19/2011
CITY: San Diego

DAY: Thursday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	2	0	0	0	0
7:15 AM	0	0	2	2	1	0	0	0	0	0
7:30 AM	0	0	2	3	2	1	1	0	1	1
7:45 AM	0	0	0	3	0	0	1	0	0	1
8:00 AM	0	0	1	3	0	0	0	0	0	0
8:15 AM	0	0	2	3	1	1	0	1	1	0
8:30 AM	0	0	0	1	1	1	1	0	1	0
8:45 AM	0	0	2	1	4	2	0	1	1	1
TOTALS	**0**	**0**	**9**	**21**	**9**	**7**	**3**	**2**	**4**	**3**
	0	0	5	8	6	4	1	2	3	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	2	1	0	0	0	0
8:15 AM	0	0	2	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	1	2	0	0	0	1
TOTALS	**0**	**0**	**8**	**3**	**1**	**0**	**0**	**2**
	0	0	6	3	0	0	0	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	1	5	0	1	0	0	0	0
4:15 PM	0	0	4	6	0	2	0	0	0	0
4:30 PM	0	0	2	2	2	0	1	5	0	0
4:45 PM	0	0	1	3	2	2	0	0	1	1
5:00 PM	0	0	3	3	7	3	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	7	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0
4:45 PM	0	0	2	2	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	2	1	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

21

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-015
N/S Street: Pacific Hwy
E/W Street: Kurtz St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
	0	0	0	0	0	0	0	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	8
7:15 AM	0	0	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	11
8:15 AM	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**51**
	0	0	0	0	0	0	1	27

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

22

PROJECT#: 11-4167-002
N/S Street: Hancock St
E/W Street: Channel Way
DATE: 6/9/2011
DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	1	0
TOTALS	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

25

PROJECT#: 11-4140-021
N/S Street: Hancock St
E/W Street: Old Towne Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
	2	1	0	0	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	2	0	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-022
N/S Street: Hancock St
E/W Street: Witherby St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	0	0	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	0	0	1	0	1	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	1	1	0	0
TOTALS	**0**	**0**	**6**	**1**	**2**	**2**	**0**	**1**
	0	0	6	0	1	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**
	0	0	0	1	0	2	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	2	0
4:30 PM	0	0	1	1	0	0	2	1
4:45 PM	0	0	0	1	0	0	2	0
5:00 PM	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	2	1	1	0	1	4
TOTALS	**0**	**0**	**4**	**3**	**2**	**0**	**9**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	2	0	2	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	2	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

28

PROJECT#: 11-4140-023
N/S Street: Kettner Blvd
E/W Street: Vine St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
	0	0	0	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
	0	0	0	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**

31

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-018
N/S Street: Pacific Hwy
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**
	0	0	0	0	0	0	2	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
	0	0	0	0	0	0	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-016
N/S Street: Taylor St
E/W Street: Morena Blvd
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	1	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	1	0	0
8:30 AM	0	0	0	0	3	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**4**	**2**	**1**	**0**
	0	0	1	0	3	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	1	5
7:30 AM	0	0	1	1	2	0	1	0
7:45 AM	0	0	2	1	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	1	1	0	1	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**5**	**3**	**3**	**0**	**5**	**11**
	0	0	1	1	1	0	1	4

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	1	0	0	1	0
4:45 PM	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	2	0	0	0
5:15 PM	0	0	0	1	1	0	2	2
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**1**	**2**	**4**	**2**	**5**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	1	2	0	1	1
4:30 PM	0	0	1	0	2	0	1	1
4:45 PM	0	0	1	0	2	0	1	0
5:00 PM	0	0	1	1	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	2	3	0	0	1
5:45 PM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**3**	**5**	**12**	**0**	**4**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

37

PROJECT#: 11-4140-033
N/S Street: Old Towne Ave
E/W Street: Moore St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	2	0	0	0	0	2	0	0
8:00 AM	2	1	0	0	0	0	0	0
8:15 AM	2	1	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**6**	**5**	**0**	**0**	**1**	**3**	**0**	**0**
	6	2	0	0	0	3	0	0

0 1.3541667

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
	0	0	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	2	0	0	0
4:15 PM	1	1	0	0	1	1	0	0
4:30 PM	0	1	0	0	2	0	0	0
4:45 PM	0	1	0	0	1	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	1	0	1	0	0	1	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**4**	**5**	**2**	**0**	**6**	**2**	**1**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-027
N/S Street: Twiggs St
E/W Street: Congress St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	2	7	0	0	0	0
7:15 AM	0	1	2	1	0	1	0	0
7:30 AM	1	1	3	1	0	0	0	0
7:45 AM	1	0	2	0	0	0	0	0
8:00 AM	0	0	5	0	0	0	0	0
8:15 AM	0	2	1	1	0	0	0	0
8:30 AM	2	1	9	3	0	0	0	0
8:45 AM	1	2	10	1	0	0	0	0
TOTALS	**6**	**8**	**34**	**14**	**0**	**1**	**0**	**0**
	3	5	25	5	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	2	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0
8:30 AM	0	3	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**3**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	3	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	8	9	7	0	0	1	8
4:15 PM	0	4	15	7	0	2	0	7
4:30 PM	1	2	6	9	5	5	0	2
4:45 PM	4	10	4	9	0	4	0	2
5:00 PM	5	3	16	5	1	1	2	0
5:15 PM	8	9	13	8	2	5	6	4
5:30 PM	7	5	12	4	4	0	2	8
5:45 PM	3	3	10	9	3	6	0	5
TOTALS	**34**	**44**	**85**	**58**	**15**	**23**	**11**	**36**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	2	1	0	0	0	0	0
4:45 PM	0	2	4	0	0	4	0	0
5:00 PM	1	2	0	0	0	0	0	0
5:15 PM	1	1	1	0	0	2	0	0
5:30 PM	1	0	1	0	0	0	0	0
5:45 PM	0	5	0	0	0	0	0	0
TOTALS	**4**	**14**	**8**	**0**	**0**	**6**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

40

PROJECT#: 11-4140-028
N/S Street: Harney St
E/W Street: Congress St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	0	0	0
7:15 AM	0	1	2	2	0	0	1	0
7:30 AM	1	0	2	2	1	1	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	4	0	0	0	0	0
8:15 AM	0	2	2	1	2	0	0	1
8:30 AM	2	1	5	2	0	0	0	0
8:45 AM	3	0	3	1	0	0	1	0
TOTALS	**6**	**4**	**20**	**13**	**3**	**1**	**2**	**1**
	5	3	14	4	2	0	1	1 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0
7:45 AM	0	3	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	2	0	0	0	0	0
8:30 AM	1	3	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	2	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	4	0	2	0	0	6	1
4:15 PM	0	0	6	4	4	3	2	1
4:30 PM	0	2	2	1	0	0	4	2
4:45 PM	2	4	5	3	1	3	4	0
5:00 PM	0	4	3	4	0	0	4	0
5:15 PM	0	0	6	2	0	0	3	2
5:30 PM	3	5	3	5	1	1	2	1
5:45 PM	2	1	3	2	0	0	3	0
TOTALS	**8**	**20**	**28**	**23**	**6**	**7**	**28**	**7**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	0	2	1	0	0	0	0	0
4:45 PM	0	1	3	0	0	0	0	0
5:00 PM	0	2	1	0	0	0	0	0
5:15 PM	0	1	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	3	0	0	0	0	0	0
TOTALS	**0**	**11**	**8**	**0**	**0**	**0**	**0**	**0**

41

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-029
N/S Street: Congress St/Ampudia St
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	2	0	0	1	0	1	0	0	0
7:45 AM	0	0	1	0	2	0	0	1	0	0
8:00 AM	2	0	0	0	3	2	0	0	0	0
8:15 AM	2	1	0	0	1	2	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0
TOTALS	**4**	**3**	**1**	**0**	**8**	**4**	**1**	**3**	**1**	**0**
	4	1	0	0	5	4	0	1	1	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	1	0
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	3	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**2**	**0**	**0**	**2**	**0**
	0	0	3	0	0	0	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	1	2	0	2
4:15 PM	0	0	0	0	3	0	1	4	0	3
4:30 PM	0	1	0	0	4	1	3	5	1	4
4:45 PM	0	0	0	0	3	2	2	3	2	2
5:00 PM	2	4	0	0	3	1	1	0	4	0
5:15 PM	1	0	0	0	2	2	2	0	2	0
5:30 PM	2	1	1	0	3	0	2	3	2	3
5:45 PM	0	2	0	0	0	1	1	2	0	1
TOTALS	**5**	**8**	**1**	**0**	**19**	**7**	**13**	**19**	**11**	**15**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	1	0
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	1	0	1	0	1	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0
TOTALS	**0**	**0**	**7**	**1**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

42

PROJECT#: 11-4140-030
N/S Street: Twiggs St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	3	0	1	0	0	0
7:15 AM	3	6	5	3	1	1	0	0
7:30 AM	4	8	9	5	0	4	0	0
7:45 AM	10	15	13	13	2	0	0	0
8:00 AM	12	22	12	8	5	9	0	0
8:15 AM	15	10	11	7	6	6	0	0
8:30 AM	18	11	9	15	3	11	0	0
8:45 AM	25	21	15	11	8	14	0	0
TOTALS	**88**	**94**	**77**	**62**	**26**	**45**	**0**	**0**
	70	64	47	41	22	40	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	22	26	25	8	5	8	0	0
4:15 PM	12	12	25	29	5	11	0	0
4:30 PM	33	16	22	8	4	11	0	0
4:45 PM	15	26	37	19	11	21	0	0
5:00 PM	25	29	21	16	3	10	0	0
5:15 PM	15	12	29	27	3	11	0	0
5:30 PM	34	13	17	10	4	10	0	0
5:45 PM	19	23	41	29	8	19	0	0
TOTALS	**175**	**157**	**217**	**146**	**43**	**101**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-031
N/S Street: Harney St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

43

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	5	1	2	3	0	1	0
7:15 AM	7	12	9	2	2	2	1	2
7:30 AM	14	8	12	10	10	13	11	6
7:45 AM	14	21	15	17	7	9	10	10
8:00 AM	13	29	14	11	12	10	8	7
8:15 AM	21	18	14	10	10	7	12	4
8:30 AM	18	15	12	19	2	11	2	9
8:45 AM	31	25	13	11	14	16	12	11
TOTALS	**118**	**133**	**90**	**82**	**60**	**68**	**57**	**49**
	83	87	53	51	38	44	34	31

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0
8:30 AM	2	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**4**	**0**	**2**	**2**	**0**	**0**	**0**	**0**
	3	0	2	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	52	28	36	28	17	9	0	9
4:15 PM	48	32	24	17	7	3	5	12
4:30 PM	48	28	24	16	7	10	14	5
4:45 PM	40	25	30	23	13	5	7	2
5:00 PM	30	26	37	25	5	7	15	4
5:15 PM	31	26	26	16	14	6	6	23
5:30 PM	36	39	17	35	7	12	1	16
5:45 PM	46	58	16	33	11	9	7	12
TOTALS	**331**	**262**	**210**	**193**	**81**	**61**	**55**	**83**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	3	1	0	1	0	0	0	0
4:30 PM	3	3	0	3	1	0	0	0
4:45 PM	0	1	2	0	0	0	0	0
5:00 PM	3	0	2	0	2	0	0	0
5:15 PM	0	1	0	2	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0
5:45 PM	0	3	1	0	0	1	0	0
TOTALS	**9**	**10**	**6**	**6**	**3**	**1**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

44

PROJECT#: 11-4140-032
N/S Street: Old Towne Ave
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	2	1	0	0	0	1	0
8:00 AM	0	4	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	1	0	0	1	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**4**	**7**	**4**	**1**	**0**	**0**	**4**	**2**
	0	4	2	1	0	0	3	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**
	0	1	2	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	1	0	0
4:15 PM	0	2	3	2	2	0	0	1
4:30 PM	2	2	2	3	0	1	2	0
4:45 PM	1	0	2	1	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	1	2	1	0	0	0	0	0
5:30 PM	1	4	1	1	0	2	2	3
5:45 PM	2	0	1	1	0	1	0	0
TOTALS	**10**	**10**	**10**	**9**	**2**	**5**	**4**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0
TOTALS	**1**	**10**	**2**	**0**	**0**	**0**	**0**	**1**

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PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-017
N/S Street: Taylor St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	1	1	2	0
7:30 AM	1	0	0	0	1	1	0	0
7:45 AM	1	1	0	0	3	1	0	0
8:00 AM	0	1	0	0	1	2	0	0
8:15 AM	1	0	0	0	2	1	0	0
8:30 AM	0	0	0	0	5	2	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**14**	**8**	**2**	**0**
	1	1	0	0	8	5	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	1
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	1
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**0**	**3**	**0**	**1**	**0**	**2**	**5**
	0	0	2	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	1	2	1	0	0
4:15 PM	1	1	0	1	1	4	0	0
4:30 PM	0	0	0	0	0	3	1	0
4:45 PM	0	0	1	4	2	0	0	1
5:00 PM	0	0	0	1	1	2	2	0
5:15 PM	0	2	0	0	0	4	9	0
5:30 PM	0	0	0	1	0	3	0	0
5:45 PM	1	0	0	2	1	0	4	0
TOTALS	**2**	**4**	**1**	**10**	**7**	**17**	**16**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	1	0
4:30 PM	2	0	0	0	0	0	1	2
4:45 PM	0	0	1	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**2**	**0**	**1**	**0**	**4**	**6**

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PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-034
N/S Street: Twiggs St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	4	2	0	0	2	0	0
7:30 AM	0	1	0	1	0	0	0	0
7:45 AM	1	0	1	1	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0
8:45 AM	0	5	2	2	1	1	0	0
TOTALS	**1**	**12**	**5**	**6**	**1**	**3**	**0**	**0**
	0	7	2	3	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1
7:45 AM	2	0	0	0	1	0	0	0
8:00 AM	1	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**6**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
	3	0	0	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	0
4:45 PM	0	0	2	6	0	18	2	0
5:00 PM	0	0	1	0	1	11	0	0
5:15 PM	0	0	2	0	2	4	0	0
5:30 PM	0	0	1	0	0	0	1	1
5:45 PM	0	0	6	0	6	1	8	0
TOTALS	**0**	**0**	**14**	**6**	**9**	**37**	**11**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

47

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-035
N/S Street: Harney St
E/W Street: Juan St
DATE: 5/18/2011
DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	7	0	0	0	0	1	3
7:15 AM	0	1	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	4
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0
TOTALS	**3**	**8**	**2**	**1**	**0**	**2**	**1**	**7**
	1	1	1	1	0	2	0	4

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**
	0	2	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	3	0	2	2	2
4:15 PM	0	0	2	1	2	0	2	1
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	1	2	0	0	1	0	5	0
5:00 PM	2	4	2	1	3	4	3	0
5:15 PM	3	1	2	4	0	2	2	2
5:30 PM	0	0	0	2	0	1	0	0
5:45 PM	0	2	1	0	2	0	3	4
TOTALS	**7**	**10**	**7**	**11**	**8**	**9**	**19**	**9**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0
TOTALS	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**1**

Table 3.1
Rosecrans Corridor 2-Hour AM Peak Period Pedestrian Counts

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Taylor Street / Congress Street	61	82 (Taylor St.)	29 (Congress St.)	15 (Taylor St.)	187
Rosecrans Street-Taylor Street / Pacific Highway	34 (PCH)	129 (Taylor St.)	21 (PCH)	61 (Rosecrans St.)	245
Rosecrans Street / Jefferson Street	69 (Jefferson St.)	1 (Rosecrans St.)	0 (Jefferson St.)	0 (Rosecrans St.)	70
Rosecrans Street / Moore Street	37 (Moore St.)	4 (Rosecrans St.)	0 (Moore St.)	4 (Rosecrans St.)	45
Rosecrans Street / Hancock Street	30 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	30
Rosecrans Street / Kurtz Street	47 (Kurtz St.)	4 (Rosecrans St.)	21 (Kurtz St.)	2 (Rosecrans St.)	74
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	9 (Sports Arena Blvd.)	9 (Rosecrans St.)	45 (Sports Arena Blvd.)	18 (Rosecrans St.)	100
Rosecrans Street / Midway Drive	18 (Midway Dr.)	14 (Rosecrans St.)	27 (Midway Dr.)	25 (Rosecrans St.)	84
Rosecrans Street / N. Evergreen Street	8 (Evergreen St.)	6 (Rosecrans St.)	5 (Evergreen St.)	0 (Rosecrans St.)	19
Rosecrans Street / Lytton Street	8 (Lytton St.)	0 (Rosecrans St.)	0 (Lytton St.)	3 (Rosecrans St.)	11
Rosecrans Street / Roosevelt Road	0	15 (Rosecrans St.)	11 (Roosevelt Rd.)	2 (Rosecrans St.)	28
Rosecrans Street / Curtis Street	9 (Curtis St.)	0 (Rosecrans St.)	0	0 (Rosecrans St.)	9
Rosecrans Street / Womble Road		82 (Rosecrans St.)	12 (Womble Rd.)	0 (Rosecrans St.)	94
Rosecrans Street / Xenophon Street	17 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	17
Rosecrans Street / Farragut Road-Voltaire Street	4 (Voltaire St.)	5 (Rosecrans St.)	17 (Farragut Rd.)	12 (Rosecrans St.)	38
Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	1 (Laning Rd.)	1 (Rosecrans St.)	2
Rosecrans Street / Oliphant Street	8 (Oliphant St.)	0 (Rosecrans St.)	8	0 (Rosecrans St.)	16
Rosecrans Street / Macualay Street	18 (Macualay St.)	1 (Rosecrans St.)	5 (DW)	3 (Rosecrans St.)	27
Rosecrans Street / Nimitz Boulevard	23 (Nimitz Blvd.)	14 (Rosecrans St.)	24 (Nimitz Blvd.)	19 (Rosecrans St.)	80
Rosecrans Street / Jarvis Street	23 (Jarvis St.)	8 (Rosecrans St.)	9 (Jarvis St.)	11 (Rosecrans St.)	51
Rosecrans Street / N. Harbor Drive-Hugo Street	14 (Hugo St.)	13 (Rosecrans St.)	16 (Harbor Dr.)	13 (Rosecrans St.)	56
Rosecrans Street / Garrison Street	11 (Garrison St.)	0 (Rosecrans St.)	0 (Garrison St.)	0 (Rosecrans St.)	11
Rosecrans Street / Carleton Street	25 (Carleton St.)	16 (Rosecrans St.)	11 (Carleton St.)	13 (Rosecrans St.)	65
Rosecrans Street / Shelter Island Drive-Byron Street	10 (Byron St.)	11 (Rosecrans St.)	14 (Shelter Island Dr.)	13 (Rosecrans St.)	48

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	15 (Canon St.)	23 (Rosecrans St.)	24 (Canon St.)	10 (Rosecrans St.)	72
Rosecrans Street / Talbot Street	10 (Talbot St.)	14 (Rosecrans St.)	5 (Talbot St.)	13 (Rosecrans St.)	42
Camino del Rio W. / Moore Street	1 (Moore St.)	0 (Camino del Rio)	0 (Moore St.)	3 (Camino del Rio)	4
#23 Camino del Rio W. / Hancock Street	0 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	0
#19 Camino del Rio W. / Kurtz Street	0 (Kurtz St.)	0 (Rosecrans St.)	0 (Kurtz St.)	0 (Rosecrans St.)	0
TOTAL	509	451	305	241	1,525

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 4 pedestrians along the northwest leg of the intersection (Camino del Rio) and 15 pedestrians along the south leg (Rosecrans St.).

Table 3.2
Rosecrans Corridor 2-Hour PM Peak Period Pedestrian Counts

	Intersection	West Leg	North Leg	East Leg	South Leg	Total
#38	Taylor Street / Congress Street	46	26 (Taylor St.)	81 (Congress St.)	53 (Taylor St.)	206
#36	Rosecrans Street-Taylor Street / Pacific Highway	23 (PCH)	170 (Taylor St.)	15 (PCH)	27 (Rosecrans St.)	235
	Rosecrans Street / Jefferson Street	86 (Jefferson St.)	0 (Rosecrans St.)	0 (Jefferson St.)	2 (Rosecrans St.)	88
	Rosecrans Street / Moore Street	57 (Moore St.)	7 (Rosecrans St.)	2 (Moore St.)	0 (Rosecrans St.)	66
#24	Rosecrans Street / Hancock Street	66 (Hancock St.)	0 (Rosecrans St.)	145 (Hancock St.)	0 (Rosecrans St.)	211
#20	Rosecrans Street / Kurtz Street	51 (Kurtz St.)	17 (Rosecrans St.)	43 (Kurtz St.)	3 (Rosecrans St.)	114
#15	Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	31 (Sports Arena Blvd.)	10 (Rosecrans St.)	29 (Sports Arena Blvd.)	63 (Rosecrans St.)	156
#7	Rosecrans Street / Midway Drive	48 (Midway Dr.)	40 (Rosecrans St.)	65 (Midway Dr.)	42 (Rosecrans St.)	195
	Rosecrans Street / N. Evergreen Street	11 (Evergreen St.)	11 (Rosecrans St.)	8 (Evergreen St.)	1 (Rosecrans St.)	31
#1	Rosecrans Street / Lytton Street	6 (Lytton St.)	6 (Rosecrans St.)	1 (Lytton St.)	0 (Rosecrans St.)	13
	Rosecrans Street / Roosevelt Road	0	7 (Rosecrans St.)	4 (Roosevelt Rd.)	0 (Rosecrans St.)	11
	Rosecrans Street / Curtis Street	5 (Curtis St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	5
	Rosecrans Street / Womble Road		32 (Rosecrans St.)	7 (Womble Rd.)	0 (Rosecrans St.)	39
	Rosecrans Street / Xenophon Street	6 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	6
	Rosecrans Street / Farragut Road-Voltaire Street	1 (Voltaire St.)	5 (Rosecrans St.)	13 (Farragut Rd.)	20 (Rosecrans St.)	39
#51	Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	3 (Laning Rd.)	0 (Rosecrans St.)	3
	Rosecrans Street / Oliphant Street	34 (Oliphant St.)	0 (Rosecrans St.)	47	0 (Rosecrans St.)	81
	Rosecrans Street / Macualay Street	8 (Macualay St.)	0 (Rosecrans St.)	12 (DW)	1 (Rosecrans St.)	21
#50	Rosecrans Street / Nimitz Boulevard	26 (Nimitz Blvd.)	25 (Rosecrans St.)	26 (Nimitz Blvd.)	41 (Rosecrans St.)	118
	Rosecrans Street / Jarvis Street	19 (Jarvis St.)	2 (Rosecrans St.)	20 (Jarvis St.)	5 (Rosecrans St.)	46
#49	Rosecrans Street / N. Harbor Drive-Hugo Street	4 (Hugo St.)	5 (Rosecrans St.)	3 (Harbor Dr.)	6 (Rosecrans St.)	18
	Rosecrans Street / Garrison Street	34 (Garrison St.)	0 (Rosecrans St.)	47 (Garrison St.)	0 (Rosecrans St.)	81
	Rosecrans Street / Carleton Street	15 (Carleton St.)	22 (Rosecrans St.)	10 (Carleton St.)	11 (Rosecrans St.)	58
	Rosecrans Street / Shelter Island Drive-Byron Street	9 (Byron St.)	8 (Rosecrans St.)	15 (Shelter Island Dr.)	19 (Rosecrans St.)	51

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	11 (Canon St.)	25 (Rosecrans St.)	28 (Canon St.)	11 (Rosecrans St.)	75
Rosecrans Street / Talbot Street	9 (Talbot St.)	20 (Rosecrans St.)	13 (Talbot St.)	19 (Rosecrans St.)	61
Camino del Rio W. / Moore Street	0 (Moore St.)	0 (Camino del Rio)	1 (Moore St.)	0 (Camino del Rio)	1
#23 Camino del Rio W. / Hancock Street	15 (Hancock St.)	20 (Rosecrans St.)	2 (Hancock St.)	1 (Rosecrans St.)	38
#19 Camino del Rio W. / Kurtz Street	15 (Kurtz St.)	20 (Rosecrans St.)	2 (Kurtz St.)	1 (Rosecrans St.)	38
TOTAL	636	478	642	326	2,105

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 9 pedestrians along the northwest leg of the intersection (Camino del Rio) and 14 pedestrians along the south leg (Rosecrans St.).

Table 5.1
Rosecrans Corridor 2-Hour AM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	3/9	0/0 (Taylor St.)	7/0 (Congress St.)	0/0 (Taylor St.)	19
Rosecrans Street - Taylor Street / Pacific Coast Highway	3/10 (PCH)	5/0 (Taylor St.)	7/0 (PCH)	0/5 (Rosecrans St.)	30
Rosecrans Street / Jefferson Street	2/13 (Jefferson St.)	0/0 (Rosecrans St.)	0/0 (Jefferson St.)	0/0 (Rosecrans St.)	15
Rosecrans Street / Moore Street	4/12 (Moore St.)	0/0 (Rosecrans St.)	10/2 (Moore St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Hancock Street	4/12 (Hancock St.)	0/0 (Rosecrans St.)	10/2 (Hancock St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Kurtz Street	1/8 (Kurtz St.)	2/0 (Rosecrans St.)	14/0 (Kurtz St.)	0/1 (Rosecrans St.)	26
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	0/0 (Sports Arena Blvd.)	0/1 (Rosecrans St.)	7/3 (Sports Arena Blvd.)	0/6 (Rosecrans St.)	20
Rosecrans Street / Midway Drive	0/7 (Midway Dr.)	3/1 (Rosecrans St.)	6/3 (Midway Dr.)	2/3 (Rosecrans St.)	25
Rosecrans Street / N. Evergreen Street	0/6 (Evergreen St.)	1/2 (Rosecrans St.)	6/2 (Evergreen St.)	0/0 (Rosecrans St.)	17
Rosecrans Street / Lytton Street	0/5 (Lytton St.)	2/1 (Rosecrans St.)	1/0 (Lytton St.)	0/0 (Rosecrans St.)	9
Rosecrans Street / Roosevelt Road	1/6	0/1 (Rosecrans St.)	7/1 (Roosevelt Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Curtis Street	1/6 (Curtis St.)	3/0 (Rosecrans St.)	0/0	1/3 (Rosecrans St.)	14
Rosecrans Street / Womble Road		2/4 (Rosecrans St.)	9/1 (Womble Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Xenophon Street	0/2 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	2
Rosecrans Street / Farragut Road-Voltaire Street	0/5 (Voltaire St.)	0/0 (Rosecrans St.)	3/0 (Farragut Rd.)	0/0 (Rosecrans St.)	8
Rosecrans Street / Russell Street-Laning Road	0/4 (Russell St.)	5/0 (Rosecrans St.)	17/0 (Laning Rd.)	0/12 (Rosecrans St.)	38
Rosecrans Street / Oliphant Street	0/4 (Oliphant St.)	0/0 (Rosecrans St.)	8/0	0/0 (Rosecrans St.)	12
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	7/1 (DW)	0/0 (Rosecrans St.)	13
Rosecrans Street / Nimitz Boulevard	1/4 (Nimitz Blvd.)	12/0 (Rosecrans St.)	8/1 (Nimitz Blvd.)	0/6 (Rosecrans St.)	32
Rosecrans Street / Jarvis Street	0/13 (Jarvis St.)	0/0 (Rosecrans St.)	5/0 (Jarvis St.)	1/0 (Rosecrans St.)	19
Rosecrans Street / N. Harbor Drive-Hugo Street	0/3 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/1 (Rosecrans St.)	7
Rosecrans Street / Garrison Street	0/4 (Garrison St.)	0/0	8/0 (Garrison St.)	0/0 (Rosecrans St.)	12
Rosecrans Street / Carleton Street	1/3 (Carleton St.)	1/0 (Rosecrans St.)	3/0 (Carleton St.)	1/0 (Rosecrans St.)	9

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/4 *(Byron St.)*	2/1 *(Rosecrans St.)*	2/0 *(Shelter Island Dr.)*	0/0 *(Rosecrans St.)*	9
Rosecrans Street / Canon Street	0/5 *(Canon St.)*	10/0 *(Rosecrans St.)*	2/0 *(Canon St.)*	0/12 *(Rosecrans St.)*	29
Rosecrans Street / Talbot Street	0/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	2/0 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6
Camino del Rio W. / Moore Street	0/6 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	3/0 *(Camino del Rio)*	9
#23 Camino del Rio W. / Hancock Street	0/1 *(Hancock St.)*	2/0 *(Rosecrans St.)*	1/0 *(Hancock St.)*	0/0 *(Rosecrans St.)*	4
#19 Camino del Rio W. / Kurtz Street	0/1 *(Kurtz St.)*	2/0 *(Rosecrans St.)*	1/0 *(Kurtz St.)*	0/0 *(Rosecrans St.)*	4
TOTAL	183	63	170	57	476

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 1 bicyclist southwest bound along the northwest leg of the intersection (Camino del Rio) and 0 west bound and 2 east bound along the south leg (Rosecrans St.).

Table 5.2
Rosecrans Corridor 2-Hour PM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	9/12	4/0 (Taylor St.)	18/2 (Congress St.)	1/1 (Taylor St.)	47
Rosecrans Street-Taylor Street / Pacific Coast Highway	9/12 (PCH)	21/2 (Taylor St.)	15/3 (PCH)	1/9 (Rosecrans St.)	72
Rosecrans Street / Jefferson Street	7/28 (Jefferson St.)	0/0 (Rosecrans St.)	4/1 (Jefferson St.)	0/0 (Rosecrans St.)	40
Rosecrans Street / Moore Street	4/20 (Moore St.)	0/0 (Rosecrans St.)	20/2 (Moore St.)	0/0 (Rosecrans St.)	46
Rosecrans Street / Hancock Street	1/1 (Hancock St.)	0/0 (Rosecrans St.)	20/5 (Hancock St.)	0/0 (Rosecrans St.)	27
Rosecrans Street / Kurtz Street	2/3 (Kurtz St.)	29/1 (Rosecrans St.)	3/0 (Kurtz St.)	3/15 (Rosecrans St.)	56
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	2/3 (Sports Arena Blvd.)	2/2 (Rosecrans St.)	6/4 (Sports Arena Blvd.)	6/13 (Rosecrans St.)	43
Rosecrans Street / Midway Drive	3/7 (Midway Dr.)	5/4 (Rosecrans St.)	8/3 (Midway Dr.)	0/7 (Rosecrans St.)	37
Rosecrans Street / N. Evergreen Street	2/5 (Evergreen St.)	0/2 (Rosecrans St.)	3/1 (Evergreen St.)	0/1 (Rosecrans St.)	14
Rosecrans Street / Lytton Street	0/3 (Lytton St.)	1/0 (Rosecrans St.)	2/0 (Lytton St.)	1/3 (Rosecrans St.)	10
Rosecrans Street / Roosevelt Road	2/1	0/2 (Rosecrans St.)	7/2 (Roosevelt Rd.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Curtis Street	0/1 (Curtis St.)	0/0 (Rosecrans St.)	0/0	0/0 (Rosecrans St.)	1
Rosecrans Street / Womble Road		2/2 (Rosecrans St.)	6/1 (Womble Rd.)	0/0 (Rosecrans St.)	11
Rosecrans Street / Xenophon Street	0/6 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	6
Rosecrans Street / Farragut Road-Voltaire Street	0/9 (Voltaire St.)	0/0 (Rosecrans St.)	10/0 (Farragut Rd.)	0/0 (Rosecrans St.)	19
Rosecrans Street / Russell Street-Laning Road	0/1 (Russell St.)	5/0 (Rosecrans St.)	11/0 (Laning Rd.)	0/20 (Rosecrans St.)	37
Rosecrans Street / Oliphant Street	0/3 (Oliphant St.)	0/0 (Rosecrans St.)	11/0	0/0 (Rosecrans St.)	14
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	6/2 (DW)	0/1 (Rosecrans St.)	14
Rosecrans Street / Nimitz Boulevard	0/2 (Nimitz Blvd.)	12/1 (Rosecrans St.)	6/2 (Nimitz Blvd.)	0/8 (Rosecrans St.)	31
Rosecrans Street / Jarvis Street	0/0 (Jarvis St.)	9/0 (Rosecrans St.)	0/0 (Jarvis St.)	0/1 (Rosecrans St.)	10
Rosecrans Street / N. Harbor Drive-Hugo Street	0/2 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/4 (Rosecrans St.)	9
Rosecrans Street / Garrison Street	0/3 (Garrison St.)	0/0 (Rosecrans St.)	11/0 (Garrison St.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Carleton Street	1/1 (Carleton St.)	1/0 (Rosecrans St.)	5/4 (Carleton St.)	1/0 (Rosecrans St.)	13

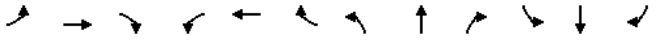
Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/2 *(Byron St.)*	5/0 *(Rosecrans St.)*	4/1 *(Shelter Island Dr.)*	1/0 *(Rosecrans St.)*	13
Rosecrans Street / Canon Street	1/5 *(Canon St.)*	12/0 *(Rosecrans St.)*	8/1 *(Canon St.)*	0/6 *(Rosecrans St.)*	33
Rosecrans Street / Talbot Street	1/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6/1 *(Talbot St.)*	0/0 *(Rosecrans St.)*	12
Camino del Rio W. / Moore Street	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0
Camino del Rio W. / Hancock Street	0/12 *(Hancock St.)*	8/0 *(Rosecrans St.)*	0/0 *(Hancock St.)*	0/2 *(Rosecrans St.)*	22
Camino del Rio W. / Kurtz Street	0/12 *(Kurtz St.)*	8/0 *(Rosecrans St.)*	0/0 *(Kurtz St.)*	0/2 *(Rosecrans St.)*	22
TOTAL	207	140	228	107	687

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:
*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 2 bicyclists southwest bound along the northwest leg of the intersection (Camino del Rio) and 2 bicyclists west bound and 1 bicyclist east bound along the south leg (Rosecrans St.).

Appendix E
Peak Hour Intersection Worksheets – Existing Conditions

Existing AM
1: Rosecrans St. & Lytton St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Volume (vph)	3	1019	308	142	1311	161	349	285	15	546	254	77
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	1084	328	151	1395	171	371	303	16	581	270	82
RTOR Reduction (vph)	0	0	227	0	0	68	0	0	12	0	8	0
Lane Group Flow (vph)	3	1084	101	151	1395	103	371	303	4	581	344	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	0.8	38.9	38.9	7.6	45.6	45.6	17.6	28.6	28.6	37.4	46.6	
Effective Green, g (s)	1.2	40.2	40.2	8.0	47.0	47.0	18.0	29.4	29.4	36.4	47.8	
Actuated g/C Ratio	0.01	0.31	0.31	0.06	0.36	0.36	0.14	0.23	0.23	0.28	0.37	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	16	1572	483	211	1279	542	475	421	353	496	659	
v/s Ratio Prot	0.00	0.21		c0.04	c0.39		c0.11	c0.16		c0.33	0.19	
v/s Ratio Perm			0.06			0.07			0.00			
v/c Ratio	0.19	0.69	0.21	0.72	1.09	0.19	0.78	0.72	0.01	1.17	0.52	
Uniform Delay, d1	63.9	39.4	33.2	59.9	41.5	28.4	54.1	46.5	39.0	46.8	32.2	
Progression Factor	1.00	1.00	1.00	1.39	0.60	0.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	2.5	1.0	5.9	49.6	0.5	7.5	6.1	0.0	96.9	0.3	
Delay (s)	66.0	41.9	34.2	89.4	74.3	15.1	61.6	52.6	39.0	143.7	32.5	
Level of Service	E	D	C	F	E	B	E	D	D	F	C	
Approach Delay (s)		40.2			69.7			57.2			101.7	
Approach LOS		D			E			E			F	

Intersection Summary				
HCM Average Control Delay	65.4	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/5/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	452	1054	306	0	0	428
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	1158	333	0	0	465
RTOR Reduction (vph)	0	540	0	0	0	0
Lane Group Flow (vph)	497	618	333	0	0	465
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	10.7	10.7	13.9			13.9
Effective Green, g (s)	10.7	10.7	13.9			13.9
Actuated g/C Ratio	0.28	0.28	0.36			0.36
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	952	773	1274			671
v/s Ratio Prot	0.14		0.09			c0.25
v/s Ratio Perm		c0.22				
v/c Ratio	0.52	0.80	0.26			0.69
Uniform Delay, d1	11.8	13.0	8.7			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.2	5.4	0.0			2.5
Delay (s)	12.0	18.4	8.8			13.0
Level of Service	B	B	A			B
Approach Delay (s)	16.5		8.8			13.0
Approach LOS	B		A			B

Intersection Summary				
HCM Average Control Delay	14.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	57.0%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
3: Channel Way & W Mission Bay Dr 4/5/2012

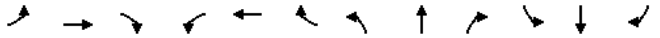


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	34	921	41	0	897
Peak Hour Factor	0.65	0.65	0.92	0.92	0.91	0.91
Hourly flow rate (vph)	0	52	1001	45	0	986
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked						
vC, conflicting volume	1352	359			1046	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1352	359			1046	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	141	636			661	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	52	400	400	245	329	329	329
Volume Left	0	0	0	0	0	0	0
Volume Right	52	0	0	45	0	0	0
cSH	636	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.24	0.24	0.14	0.19	0.19	0.19
Queue Length 95th (ft)	7	0	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	11.2	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	29.7%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
4: Sports Arena & W Mission Bay Dr 4/5/2012

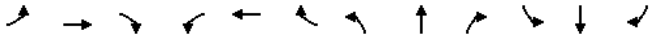


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Volume (vph)	412	277	244	16	125	223	149	327	19	298	428	171
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.79	0.79	0.79	0.94	0.94	0.94
Adj. Flow (vph)	438	295	260	19	147	262	189	414	24	317	455	182
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	357	376	122	19	147	262	189	414	24	249	523	182
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Split		pm+ov	Split		Free	Split		Free	Split		Free
Protected Phases	2	2	3	1	1		3	3		4	4	
Permitted Phases			2			Free			Free			Free
Actuated Green, G (s)	32.2	32.2	54.0	19.4	19.4	119.4	21.8	21.8	119.4	26.3	26.3	119.4
Effective Green, g (s)	33.1	33.1	55.8	20.4	20.4	119.4	22.7	22.7	119.4	27.2	27.2	119.4
Actuated g/C Ratio	0.28	0.28	0.47	0.17	0.17	1.00	0.19	0.19	1.00	0.23	0.23	1.00
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0		3.1	3.1		5.5	5.5	
Lane Grp Cap (vph)	466	485	785	302	605	1563	337	673	1562	367	767	1561
v/s Ratio Prot	0.21	c0.21	0.03	0.01	c0.04		0.11	c0.12		0.15	c0.16	
v/s Ratio Perm			0.05			0.17			0.02			0.12
v/c Ratio	0.77	0.78	0.15	0.06	0.24	0.17	0.56	0.62	0.02	0.68	0.68	0.12
Uniform Delay, d1	39.6	39.7	18.3	41.5	42.8	0.0	43.8	44.3	0.0	42.1	42.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	6.9	0.1	0.4	0.9	0.2	2.2	1.7	0.0	7.0	3.5	0.2
Delay (s)	46.3	46.7	18.4	41.9	43.7	0.2	46.0	46.0	0.0	49.1	45.7	0.2
Level of Service	D	D	B	D	D	A	D	D	A	D	D	A
Approach Delay (s)		39.1			17.0			44.3			37.9	
Approach LOS		D			B			D			D	

Intersection Summary					
HCM Average Control Delay	36.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.61				
Actuated Cycle Length (s)	119.4	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	69.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Existing AM
5: Kemper St & Midway Dr 4/5/2012

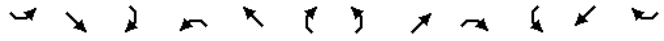


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Volume (vph)	97	95	91	25	89	53	64	309	35	62	390	70
Peak-hour factor, PHF	0.80	0.80	0.80	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Adj. Flow (vph)	121	119	114	27	98	58	73	351	40	67	419	75
RTOR Reduction (vph)	0	0	88	0	0	49	0	5	0	0	0	44
Lane Group Flow (vph)	121	119	26	27	98	9	73	386	0	67	419	31
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	12.9	12.9	17.6	11.9	11.9	11.9	4.7	33.1		4.7	33.1	33.1
Effective Green, g (s)	13.8	13.8	18.9	12.8	12.8	12.8	5.1	34.0		5.1	34.0	34.0
Actuated g/C Ratio	0.17	0.17	0.23	0.16	0.16	0.16	0.06	0.42		0.06	0.42	0.42
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	284	299	437	277	292	244	214	1448		110	1473	659
v/s Ratio Prot	c0.07	0.07	0.00	0.02	c0.05		0.02	0.11		c0.04	c0.12	
v/s Ratio Perm			0.01			0.01						0.02
v/c Ratio	0.43	0.40	0.06	0.10	0.34	0.04	0.34	0.27		0.61	0.28	0.05
Uniform Delay, d1	30.4	30.2	24.5	29.5	30.7	29.2	36.7	15.7		37.3	15.8	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.9	0.0	0.2	0.7	0.1	0.3	0.2		6.4	0.2	0.1
Delay (s)	31.4	31.1	24.5	29.7	31.3	29.3	37.0	15.8		43.7	16.0	14.3
Level of Service	C	C	C	C	C	C	D	B		D	B	B
Approach Delay (s)		29.1			30.4			19.2			19.1	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	22.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
6: Midway Dr & East Dr 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.98			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	3528		1770	3487			1750			1691	
Flt Permitted	0.33	1.00		0.42	1.00			0.76			0.83	
Satd. Flow (perm)	612	3528		791	3487			1382			1430	
Volume (vph)	16	537	10	25	629	68	19	3	5	16	2	15
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.61	0.61	0.61	0.75	0.75	0.75
Adj. Flow (vph)	18	590	11	29	740	80	31	5	8	21	3	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	7	0	0	18	0
Lane Group Flow (vph)	18	600	0	29	813	0	0	37	0	0	26	0
Confl. Peds. (#/hr)			3						1			10
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.4	41.6		42.4	41.6			4.1			4.1	
Effective Green, g (s)	43.7	42.5		43.7	42.5			5.0			5.0	
Actuated g/C Ratio	0.72	0.70		0.72	0.70			0.08			0.08	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	463	2470		589	2441			114			118	
v/s Ratio Prot	0.00	0.17		c0.00	c0.23							
v/s Ratio Perm	0.03			0.03				c0.03			0.02	
v/c Ratio	0.04	0.24		0.05	0.33			0.32			0.22	
Uniform Delay, d1	2.4	3.3		2.4	3.6			26.3			26.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.6			0.3	
Delay (s)	2.4	3.3		2.4	3.6			26.8			26.4	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		3.3			3.6			26.8			26.4	
Approach LOS		A			A			C			C	

Intersection Summary				
HCM Average Control Delay	4.8	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.33			
Actuated Cycle Length (s)	60.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	35.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
7: Rosecrans St. & Midway Dr 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Volume (vph)	156	1299	67	204	1658	246	207	255	152	64	297	169
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	1367	71	215	1745	259	218	268	160	67	313	178
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	125	0	0	144
Lane Group Flow (vph)	164	1433	0	215	1990	0	218	268	35	67	313	34
Confl. Peds. (#/hr)	14		25	25		14	27		14	18		27
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	13.9	50.4		25.8	62.4		11.0	27.6	27.6	7.4	24.0	24.0
Effective Green, g (s)	14.3	51.5		26.2	63.4		11.4	28.5	28.5	7.8	24.9	24.9
Actuated g/C Ratio	0.11	0.40		0.20	0.49		0.09	0.22	0.22	0.06	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	195	1995		692	2421		301	776	337	106	678	290
v/s Ratio Prot	c0.09	0.28		0.06	c0.40		c0.06	0.08		c0.04	c0.09	
v/s Ratio Perm									0.02			0.02
v/c Ratio	0.84	0.72		0.31	0.82		0.72	0.35	0.10	0.63	0.46	0.12
Uniform Delay, d1	56.7	33.1		44.2	28.5		57.8	42.9	40.5	59.7	46.6	43.5
Progression Factor	0.81	0.69		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	1.1		0.1	2.5		7.1	0.1	0.0	8.7	0.2	0.1
Delay (s)	60.2	24.1		44.3	30.9		64.9	43.0	40.6	68.4	46.8	43.5
Level of Service	E	C		D	C		E	D	D	E	D	D
Approach Delay (s)		27.8			32.2			49.8			48.3	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM Average Control Delay	34.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	84.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

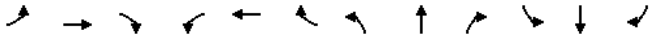
Existing AM
9: Enterprise St & Midway Dr 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	82	502	25	0	492
Peak Hour Factor	0.85	0.85	0.89	0.89	0.85	0.85
Hourly flow rate (vph)	0	96	564	28	0	579
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	870	301			594	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	870	301			594	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			100	
cM capacity (veh/h)	291	692			976	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	96	376	216	289	289
Volume Left	0	0	0	0	0
Volume Right	96	0	28	0	0
cSH	692	1700	1700	1700	1700
Volume to Capacity	0.14	0.22	0.13	0.17	0.17
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	11.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
10: Barnett Ave & Midway Dr 4/5/2012

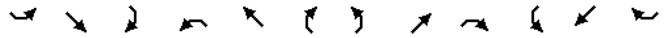


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	784	0	0	1211	527	0	0	0	397	0	95
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.81	0.92	0.81
Adj. Flow (vph)	0	852	0	0	1302	567	0	0	0	490	0	117
RTOR Reduction (vph)	0	0	0	0	0	267	0	0	0	0	0	90
Lane Group Flow (vph)	0	852	0	0	1302	300	0	0	0	490	0	27
Confl. Peds. (#/hr)						8				8		
Turn Type						custom				Prot		custom
Protected Phases		2			2	8				1		
Permitted Phases												1
Actuated Green, G (s)		26.8			26.8	22.3				12.9		12.9
Effective Green, g (s)		26.8			26.8	21.8				12.9		12.9
Actuated g/C Ratio		0.48			0.48	0.39				0.23		0.23
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	3.0				2.5		2.5
Lane Grp Cap (vph)		1688			1688	1081				788		363
v/s Ratio Prot		0.24			c0.37	0.11				c0.14		
v/s Ratio Perm												0.02
v/c Ratio		0.50			0.77	0.28				0.62		0.07
Uniform Delay, d1		10.1			12.2	11.8				19.5		17.0
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		0.2			2.2	0.1				1.3		0.1
Delay (s)		10.4			14.4	11.9				20.8		17.0
Level of Service		B			B	B				C		B
Approach Delay (s)		10.4			13.6			0.0			20.1	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	14.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	52.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
11: Sports Arena & Hancock 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9					4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91					1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes	1.00	1.00		0.78	1.00					1.00		1.00
Frt	1.00	1.00		1.00	0.98					1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)	1770	3532		1384	4970					1770		1583
Flt Permitted	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (perm)	1770	3532		1384	4970					1770		1583
Volume (vph)	104	484	6	1	331	52	0	0	0	18	0	33
Peak-hour factor, PHF	0.96	0.96	0.96	0.80	0.80	0.80	0.92	0.92	0.92	0.63	0.63	0.63
Adj. Flow (vph)	108	504	6	1	414	65	0	0	0	29	0	52
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	0	44
Lane Group Flow (vph)	108	510	0	1	462	0	0	0	0	29	0	8
Confl. Peds. (#/hr)	9		14	14		9			4	4		11
Turn Type	Prot			Prot					Free	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases									Free			
Actuated Green, G (s)	7.1	42.6		0.6	36.1					9.4		9.4
Effective Green, g (s)	7.1	42.6		0.6	36.1					9.4		10.3
Actuated g/C Ratio	0.11	0.64		0.01	0.54					0.14		0.15
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	188	2252		12	2686					249		244
v/s Ratio Prot	c0.06	c0.14		0.00	0.09					c0.02		0.01
v/s Ratio Perm												
v/c Ratio	0.57	0.23		0.08	0.17					0.12		0.03
Uniform Delay, d1	28.4	5.1		32.8	7.8					25.1		24.0
Progression Factor	1.00	1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2	2.6	0.1		1.1	0.1					0.1		0.0
Delay (s)	31.0	5.2		33.9	7.8					25.1		24.0
Level of Service	C	A		C	A					C		C
Approach Delay (s)		9.7			7.9			0.0			24.4	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	10.0	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.24			
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	9.3	
Intersection Capacity Utilization	33.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
12: Kemper Street & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Volume (vph)	62	40	90	46	23	100	68	481	76	117	327	80
Peak-hour factor, PHF	0.80	0.80	0.80	0.78	0.78	0.78	0.94	0.94	0.94	0.83	0.83	0.83
Adj. Flow (vph)	78	50	112	59	29	128	72	512	81	141	394	96
RTOR Reduction (vph)	0	94	0	0	0	117	0	13	0	0	38	0
Lane Group Flow (vph)	78	68	0	59	29	11	72	580	0	141	452	0
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	9.9	9.9		5.0	5.0	5.0	2.8	24.1		8.8	30.1	
Effective Green, g (s)	10.8	10.8		5.9	5.9	5.9	3.2	25.0		9.2	31.0	
Actuated g/C Ratio	0.16	0.16		0.09	0.09	0.09	0.05	0.37		0.14	0.46	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	286	270		156	164	140	164	1296		243	2287	
v/s Ratio Prot	c0.04	0.04		c0.03	0.02		0.02	c0.17		c0.08	0.09	
v/s Ratio Perm						0.01						
v/c Ratio	0.27	0.25		0.38	0.18	0.08	0.44	0.45		0.58	0.20	
Uniform Delay, d1	24.6	24.5		28.8	28.3	28.0	31.0	15.8		27.0	10.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.5		0.6	0.2	0.1	0.7	0.3		2.3	0.0	
Delay (s)	25.1	25.0		29.3	28.4	28.1	31.7	16.1		29.3	10.6	
Level of Service	C	C		C	C	C	C	B		C	B	
Approach Delay (s)		25.0			28.5			17.8			14.8	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	19.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
13: Sports Arena & 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99			0.97		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	3433	3464		1759	5042			1747		1770	1602	
Flt Permitted	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (perm)	3433	3464		1759	5042			1747		1770	1602	
Volume (vph)	72	482	63	20	458	25	26	5	8	25	3	40
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.71	0.71	0.71
Adj. Flow (vph)	77	513	67	24	539	29	35	7	11	35	4	56
RTOR Reduction (vph)	0	5	0	0	3	0	0	10	0	0	54	0
Lane Group Flow (vph)	77	575	0	24	565	0	0	43	0	35	6	0
Confl. Peds. (#/hr)	4		9	9		4			7	7		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Effective Green, g (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Actuated g/C Ratio	0.03	0.58		0.01	0.56			0.09		0.04	0.04	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	118	2021		20	2825			161		69	62	
v/s Ratio Prot	c0.02	c0.17		0.01	0.11			c0.02		c0.02	0.00	
v/s Ratio Perm												
v/c Ratio	0.65	0.28		1.20	0.20			0.27		0.51	0.10	
Uniform Delay, d1	33.2	7.2		34.4	7.6			29.4		32.8	32.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	9.5	0.0		270.0	0.0			0.3		2.1	0.3	
Delay (s)	42.6	7.3		304.4	7.6			29.7		34.9	32.5	
Level of Service	D	A		F	A			C		C	C	
Approach Delay (s)		11.4			19.6			29.7			33.4	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	17.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
14: Sports Arena & East Dr 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (prot)	1770	5037		1770	5024			1770	1542			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (perm)	1770	5037		1770	5024			1770	1542			1611
Volume (vph)	30	524	26	41	544	36	13	0	34	0	0	2
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.78	0.78	0.78	0.50	0.50	0.50
Adj. Flow (vph)	33	576	29	44	579	38	17	0	44	0	0	4
RTOR Reduction (vph)	0	4	0	0	5	0	0	0	39	0	0	0
Lane Group Flow (vph)	33	601	0	44	612	0	0	17	5	0	0	4
Confl. Peds. (#/hr)	21		15	15		21			21	21		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Effective Green, g (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Actuated g/C Ratio	0.02	0.65		0.02	0.65			0.11	0.11			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	27	3288		27	3280			199	174			1611
v/s Ratio Prot	0.02	0.12		c0.02	c0.12							
v/s Ratio Perm								0.01	0.00			0.00
v/c Ratio	1.22	0.18		1.63	0.19			0.09	0.03			0.00
Uniform Delay, d1	31.9	4.4		31.9	4.4			25.8	25.6			0.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	247.9	0.0		404.3	0.0			0.1	0.0			0.0
Delay (s)	279.8	4.5		436.2	4.5			25.8	25.6			0.0
Level of Service	F	A		F	A			C	C			A
Approach Delay (s)		18.7			33.2			25.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary				
HCM Average Control Delay	26.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.20			
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
15: Rosecrans St. & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (prot)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (perm)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Volume (vph)	171	1325	179	0	1887	296	155	154	10	242	215	101
Peak-hour factor, PHF	0.86	0.95	0.90	1.00	0.95	0.90	0.82	0.80	0.62	0.76	0.81	0.92
Adj. Flow (vph)	199	1395	199	0	1986	329	189	192	16	318	265	110
RTOR Reduction (vph)	0	13	0	0	0	0	0	4	0	0	0	87
Lane Group Flow (vph)	199	1581	0	0	1986	329	128	265	0	195	388	23
Confl. Peds. (#/hr)				45			18		9	9		45
Confl. Bikes (#/hr)									1			10
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	11.1	71.0			54.7	125.0	10.1	10.1		26.0	26.0	26.0
Effective Green, g (s)	12.5	73.1			56.6	125.0	10.1	10.1		26.0	26.0	26.0
Actuated g/C Ratio	0.10	0.58			0.45	1.00	0.08	0.08		0.21	0.21	0.21
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	343	2918			2302	1583	130	268		335	656	300
v/s Ratio Prot	0.06	c0.32			c0.39		0.08	c0.08		0.12	c0.12	0.02
v/s Ratio Perm						0.21						
v/c Ratio	0.58	0.54			0.86	0.21	0.98	0.99		0.58	0.59	0.08
Uniform Delay, d1	53.7	15.8			30.7	0.0	57.4	57.4		44.6	44.7	39.8
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.7			4.6	0.3	73.7	52.1		3.1	1.7	0.2
Delay (s)	55.4	16.5			35.3	0.3	131.1	109.5		47.7	46.4	40.0
Level of Service	E	B			D	A	F	F		D	D	D
Approach Delay (s)		20.8			30.3			116.4			45.8	
Approach LOS		C			C			F			D	

Intersection Summary				
HCM Average Control Delay	35.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	88.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	678	568	24
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	737	598	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	979	312	623			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	979	312	623			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	247	684	954			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	368	368	399	225
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	25
cSH	684	1700	1700	1700	1700
Volume to Capacity	0.06	0.22	0.22	0.23	0.13
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Existing AM
19: Kurtz & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1681	1752	1583		5085		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1681	1752	1583		5085		1770	6408	
Volume (vph)	0	0	0	112	78	45	0	1577	0	83	2142	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	122	85	47	0	1660	0	86	2208	0
RTOR Reduction (vph)	0	0	0	0	0	6	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	101	106	41	0	1660	0	86	2208	0
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				22.3	22.3	22.3		84.2		9.0	97.9	
Effective Green, g (s)				23.2	23.2	23.2		85.4		9.4	98.8	
Actuated g/C Ratio				0.18	0.18	0.18		0.66		0.07	0.76	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				300	313	283		3340		128	4870	
v/s Ratio Prot								c0.33		c0.05	0.34	
v/s Ratio Perm				0.06	0.06	0.03						
v/c Ratio				0.34	0.34	0.15		0.50		0.67	0.45	
Uniform Delay, d1				46.7	46.7	45.0		11.4		58.8	5.7	
Progression Factor				1.00	1.00	1.00		1.00		1.10	0.16	
Incremental Delay, d2				0.2	0.2	0.1		0.5		3.9	0.1	
Delay (s)				46.9	46.9	45.1		11.9		68.8	1.0	
Level of Service				D	D	D		B		E	A	
Approach Delay (s)		0.0			46.6			11.9			3.5	
Approach LOS		A			D			B			A	

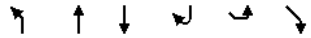
Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
20: Rosecrans St & Kurtz 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3364		1744	3539		1770		1548	1770	1863	
Flt Permitted		1.00		0.44	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3364		804	3539		1770		1548	1770	1863	
Volume (vph)	0	349	84	87	294	0	103	0	142	41	125	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.97	0.97	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	367	88	90	303	0	112	0	154	44	133	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	65	0	0	0
Lane Group Flow (vph)	0	446	0	90	303	0	112	0	89	44	133	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		74.3		85.7	85.7		13.1		74.3	17.0	17.0	
Effective Green, g (s)		75.2		86.6	86.6		13.5		75.2	17.9	17.9	
Actuated g/C Ratio		0.58		0.67	0.67		0.10		0.58	0.14	0.14	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1946		589	2358		184		895	244	257	
v/s Ratio Prot		c0.13		c0.01	0.09		c0.06			0.02	c0.07	
v/s Ratio Perm				0.09					0.06			
v/c Ratio		0.23		0.15	0.13		0.61		0.10	0.18	0.52	
Uniform Delay, d1		13.3		7.9	7.9		55.7		12.3	49.6	52.0	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.82	0.81	
Incremental Delay, d2		0.3		0.0	0.1		5.6		0.2	0.3	1.6	
Delay (s)		13.6		8.0	8.0		61.3		12.5	41.1	44.0	
Level of Service		B		A	A		E		B	D	D	
Approach Delay (s)		13.6			8.0			33.0			43.2	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
21: Pacific Highway & Kurtz St 4/5/2012

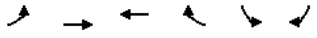


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	294	391	444	7	0	247
Peak Hour Factor	0.91	0.91	0.94	0.94	0.92	0.92
Hourly flow rate (vph)	323	430	472	7	0	268
Pedestrians		2				
Lane Width (ft)		12.0				
Walking Speed (ft/s)		4.0				
Percent Blockage		0				
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	480				1265	163
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	480				1265	163
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	65				100	68
cM capacity (veh/h)	918				104	851

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	323	143	143	143	189	189	102	268
Volume Left	323	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	7	268
cSH	918	1700	1700	1700	1700	1700	1700	851
Volume to Capacity	0.35	0.08	0.08	0.08	0.11	0.11	0.06	0.32
Queue Length 95th (ft)	40	0	0	0	0	0	0	34
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Lane LOS	B							B
Approach Delay (s)	4.7				0.0			11.2
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
22: Hancock & Channel Way 4/5/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	31	125	67	26	4	14
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	38	154	84	32	5	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1157				
pX, platoon unblocked						
vC, conflicting volume	116				331	100
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	116				331	100
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	98
cM capacity (veh/h)	1472				647	956

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	38	154	116	24
Volume Left	38	0	0	5
Volume Right	0	0	32	19
cSH	1472	1700	1700	864
Volume to Capacity	0.03	0.09	0.07	0.03
Queue Length 95th (ft)	2	0	0	2
Control Delay (s)	7.5	0.0	0.0	9.3
Lane LOS	A			A
Approach Delay (s)	1.5		0.0	9.3
Approach LOS				A

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
23: Hancock St & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frt		0.98					1.00	1.00			1.00	0.85
Flt Protected		1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3475					1770	5078			5085	1583
Flt Permitted		1.00					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3475					1770	5078			5085	1583
Volume (vph)	10	184	23	0	0	0	75	1594	15	0	2215	286
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	194	24	0	0	0	82	1752	16	0	2434	314
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	224	0	0	0	0	82	1768	0	0	2434	241
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		30.1					19.8	90.1			65.9	65.9
Effective Green, g (s)		31.0					20.2	91.0			66.8	66.8
Actuated g/C Ratio		0.24					0.16	0.70			0.51	0.51
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		829					275	3555			2613	813
v/s Ratio Prot		c0.06					0.05	c0.35			c0.48	
v/s Ratio Perm												0.15
v/c Ratio		0.27					0.30	0.50			0.93	0.30
Uniform Delay, d1		40.3					48.6	9.0			29.5	18.1
Progression Factor		0.90					0.89	0.52			1.00	1.00
Incremental Delay, d2		0.1					0.2	0.5			7.5	0.9
Delay (s)		36.4					43.3	5.1			37.0	19.1
Level of Service		D					D	A			D	B
Approach Delay (s)		36.4			0.0			6.8			34.9	
Approach LOS		D			A			A			C	

Intersection Summary				
HCM Average Control Delay	24.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
25: Old Town St & Hancock St 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	157	0	0	113	250	489
Peak Hour Factor	0.88	0.88	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	178	0	0	131	275	537

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	178	131	275	537
Volume Left (vph)	178	0	275	0
Volume Right (vph)	0	131	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.0	4.8	5.7	5.2
Degree Utilization, x	0.30	0.18	0.44	0.78
Capacity (veh/h)	566	707	615	674
Control Delay (s)	11.5	8.9	12.0	23.3
Approach Delay (s)	11.5	8.9	19.4	
Approach LOS	B	A	C	

Intersection Summary			
Delay	16.9		
HCM Level of Service	C		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
26: Witherby St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	93	2	35	0	1	1	7	19	3	9	166	471
Peak Hour Factor	0.84	0.84	0.84	0.76	0.76	0.76	0.91	0.91	0.91	0.91	0.72	0.72
Hourly flow rate (vph)	111	2	42	0	1	1	8	21	3	10	231	654

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	155	3	32	240	654
Volume Left (vph)	111	0	8	10	0
Volume Right (vph)	42	1	3	0	654
Hadj (s)	0.02	-0.27	0.02	0.05	-0.67
Departure Headway (s)	5.6	5.6	5.3	5.1	4.3
Degree Utilization, x	0.24	0.00	0.05	0.34	0.79
Capacity (veh/h)	609	592	646	697	816
Control Delay (s)	10.4	8.6	8.5	9.4	20.2
Approach Delay (s)	10.4	8.6	8.5	17.3	
Approach LOS	B	A	A	C	

Intersection Summary				
Delay		16.0		
HCM Level of Service		C		
Intersection Capacity Utilization		45.8%	ICU Level of Service	A
Analysis Period (min)		15		

Existing AM
27: Washington St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	1583
Volume (vph)	0	256	95	448	396	0	0	0	0	158	188	233
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	278	103	487	430	0	0	0	0	172	204	253
RTOR Reduction (vph)	0	0	54	0	0	0	0	0	0	0	0	207
Lane Group Flow (vph)	0	278	49	487	430	0	0	0	0	121	255	46
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		41.8	41.8	18.4	64.6					15.6	15.6	15.6
Effective Green, g (s)		42.7	42.7	18.8	65.5					16.5	16.5	16.5
Actuated g/C Ratio		0.47	0.47	0.21	0.73					0.18	0.18	0.18
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1679	751	717	2576					295	615	290
v/s Ratio Prot		0.08		c0.14	c0.12							
v/s Ratio Perm			0.03							0.08	0.08	0.03
v/c Ratio		0.17	0.07	0.68	0.17					0.41	0.41	0.16
Uniform Delay, d1		13.5	12.8	32.8	3.8					32.5	32.5	30.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	2.0	0.1					0.3	0.2	0.1
Delay (s)		13.7	13.0	34.8	3.9					32.8	32.6	31.0
Level of Service		B	B	C	A					C	C	C
Approach Delay (s)		13.5			20.4			0.0			32.0	
Approach LOS		B			C			A			C	

Intersection Summary						
HCM Average Control Delay		22.8	HCM Level of Service		C	
HCM Volume to Capacity ratio		0.35				
Actuated Cycle Length (s)		90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization		37.6%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

Existing AM
28: Vine St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	10	28	0	0	0	0	0	0	1404	14
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	20	40	0	0	0	0	0	0	1478	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1485	1485	500	513	1493	0	1493			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1485	1485	500	513	1493	0	1493			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	91	100	100	100			100		
cM capacity (veh/h)	86	124	516	427	122	1084	446			1622		

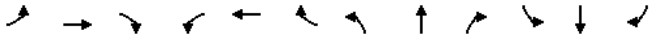
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	20	40	591	591	310
Volume Left	0	40	0	0	0
Volume Right	20	0	0	0	15
cSH	516	427	1700	1700	1700
Volume to Capacity	0.04	0.09	0.35	0.35	0.18
Queue Length 95th (ft)	3	8	0	0	0
Control Delay (s)	12.3	14.3	0.0	0.0	0.0
Lane LOS	B	B			
Approach Delay (s)	12.3	14.3	0.0		
Approach LOS	B	B			

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
29: Sassafras St & Kettner Bl 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3468					1770	4951	
Flt Permitted		1.00	1.00		0.81					0.95	1.00	
Satd. Flow (perm)		1863	1583		2850					1770	4951	
Volume (vph)	0	64	59	135	192	0	0	0	0	353	1036	221
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	70	64	147	209	0	0	0	0	384	1126	240
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	60	0
Lane Group Flow (vph)	0	70	40	0	356	0	0	0	0	384	1306	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		19.0	19.0		19.0					23.0	23.0	
Effective Green, g (s)		21.7	21.7		21.7					25.3	25.3	
Actuated g/C Ratio		0.39	0.39		0.39					0.46	0.46	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		735	625		1124					814	2277	
v/s Ratio Prot		0.04									c0.26	
v/s Ratio Perm			0.03		c0.12					0.22		
v/c Ratio		0.10	0.06		0.32					0.47	0.57	
Uniform Delay, d1		10.5	10.3		11.5					10.2	10.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.3	0.2		0.7					2.0	1.1	
Delay (s)		10.7	10.5		12.3					12.2	11.9	
Level of Service		B	B		B					B	B	
Approach Delay (s)		10.6			12.3			0.0			12.0	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM Average Control Delay	12.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	47.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3510		1770	3539						4657	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3510		1770	3539						4657	1362
Volume (vph)	0	637	37	29	178	0	0	0	0	510	287	250
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	692	40	32	193	0	0	0	0	554	312	272
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	728	0	32	193	0	0	0	0	0	866	90
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		37.3		3.0	43.0						25.0	25.0
Effective Green, g (s)		35.5		3.4	42.9						24.1	26.4
Actuated g/C Ratio		0.44		0.04	0.54						0.30	0.33
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1558		75	1898						1403	449
v/s Ratio Prot		c0.21		c0.02	0.05							
v/s Ratio Perm											0.19	0.07
v/c Ratio		0.47		0.43	0.10						1.09dl	0.20
Uniform Delay, d1		15.6		37.3	9.1						24.0	19.2
Progression Factor		1.00		1.33	0.85						1.00	1.00
Incremental Delay, d2		1.0		1.4	0.1						0.6	0.1
Delay (s)		16.6		50.9	7.9						24.6	19.3
Level of Service		B		D	A						C	B
Approach Delay (s)		16.6			14.0			0.0			23.3	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	20.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.5%	ICU Level of Service	C	
Analysis Period (min)	15			

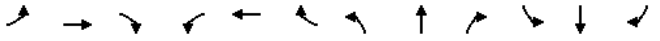
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Existing AM

32: Washington St & Pacific Highway NB Frontage Road

4/5/2012



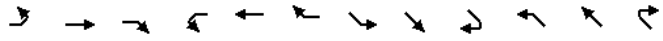
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.94			0.94	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97			0.97	
Satd. Flow (prot)	1770	3539			3539	1583	1610	3106			1702	
Flt Permitted	0.95	1.00			1.00	1.00	0.72	0.78			0.49	
Satd. Flow (perm)	1770	3539			3539	1583	1218	2502			856	
Volume (vph)	49	267	0	0	352	277	154	9	55	29	0	22
Peak-hour factor, PHF	0.95	0.92	0.95	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.83	0.83
Adj. Flow (vph)	52	290	0	0	383	301	164	10	60	32	0	27
RTOR Reduction (vph)	0	0	0	0	0	150	0	48	0	0	25	0
Lane Group Flow (vph)	52	290	0	0	383	151	82	104	0	0	34	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	2.3	48.7			41.5	41.5	14.0	14.0			6.3	
Effective Green, g (s)	2.8	48.7			41.9	41.9	16.4	16.4			6.3	
Actuated g/C Ratio	0.03	0.58			0.50	0.50	0.20	0.20			0.08	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	59	2067			1778	795	240	492			65	
v/s Ratio Prot	c0.03	0.08			c0.11							
v/s Ratio Perm						0.10	c0.07	0.04			c0.04	
v/c Ratio	0.88	0.14			0.22	0.19	0.34	0.21			0.52	
Uniform Delay, d1	40.1	7.9			11.6	11.4	28.9	28.1			37.1	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	76.9	0.0			0.3	0.5	0.3	0.1			3.5	
Delay (s)	117.0	7.9			11.9	11.9	29.2	28.2			40.6	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		24.5			11.9			28.5			40.6	
Approach LOS		C			B			C			D	

Intersection Summary				
HCM Average Control Delay	19.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	83.4	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

33: Washington St & Pacific Highway SB

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.97		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3411		1756	1863		1681	1701	1583			
Flt Permitted		1.00		0.60	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3411		1100	1863		1681	1701	1583			
Volume (vph)	0	186	47	131	397	0	130	15	224	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	202	51	142	432	0	141	16	243	0	0	0
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	69	0	0	0
Lane Group Flow (vph)	0	224	0	142	432	0	76	81	174	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		9.2		22.6	22.6		16.5	16.5	25.7			
Effective Green, g (s)		9.2		22.9	22.9		18.7	18.7	27.9			
Actuated g/C Ratio		0.15		0.36	0.36		0.30	0.30	0.44			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		500		401	679		501	507	804			
v/s Ratio Prot		c0.07			c0.23				c0.06			
v/s Ratio Perm				0.13			0.05	0.05	0.05			
v/c Ratio		0.45		0.35	0.64		0.15	0.16	0.22			
Uniform Delay, d1		24.5		14.6	16.5		16.2	16.3	10.7			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.2		2.4	4.5		0.1	0.1	0.0			
Delay (s)		24.7		17.0	21.0		16.3	16.3	10.8			
Level of Service		C		B	C		B	B	B			
Approach Delay (s)		24.7			20.0			12.9			0.0	
Approach LOS		C			C			B			A	

Intersection Summary				
HCM Average Control Delay	18.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	62.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	41.4%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
34: Sassafras St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.94		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1715		1766	1746		1770	4908		1770	5025	
Flt Permitted	0.65	1.00		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1207	1715		1368	1746		1770	4908		1770	5025	
Volume (vph)	2	16	15	276	93	66	27	231	70	26	258	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	17	16	300	101	72	29	251	76	28	280	21
RTOR Reduction (vph)	0	11	0	0	45	0	0	43	0	0	10	0
Lane Group Flow (vph)	2	22	0	300	128	0	29	284	0	28	291	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	17.2	17.2		16.5	16.5		1.6	22.0		1.3	21.5	
Effective Green, g (s)	17.2	17.2		16.9	16.9		1.6	23.4		1.8	23.6	
Actuated g/C Ratio	0.32	0.32		0.31	0.31		0.03	0.43		0.03	0.43	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	382	542		425	542		52	2111		59	2180	
v/s Ratio Prot		0.01			0.07		c0.02	0.06		0.02	c0.06	
v/s Ratio Perm	0.00			c0.22								
v/c Ratio	0.01	0.04		0.71	0.24		0.56	0.13		0.47	0.13	
Uniform Delay, d1	12.7	12.9		16.6	13.9		26.1	9.4		25.8	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		5.3	0.2		7.2	0.1		5.9	0.1	
Delay (s)	12.7	12.9		21.8	14.2		33.2	9.5		31.7	9.4	
Level of Service	B	B		C	B		C	A		C	A	
Approach Delay (s)		12.9			19.0			11.4			11.3	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM Average Control Delay	14.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	54.4	Sum of lost time (s)	8.3	
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
35: W Laurel St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Volume (vph)	208	401	36	49	319	60	73	222	64	209	148	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	226	436	39	53	347	65	79	241	70	227	161	43
RTOR Reduction (vph)	0	9	0	0	20	0	0	48	0	0	0	38
Lane Group Flow (vph)	226	466	0	53	392	0	79	263	0	227	161	5
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	8.7	20.9		6.6	18.2		6.2	23.7		8.7	26.1	8.7
Effective Green, g (s)	9.1	22.1		7.0	20.0		6.6	24.6		9.1	27.1	9.1
Actuated g/C Ratio	0.12	0.28		0.09	0.25		0.08	0.31		0.12	0.34	0.12
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	204	980		157	875		148	1529		204	1749	178
v/s Ratio Prot	c0.13	c0.13		0.03	0.11		0.04	c0.05		c0.13	0.03	
v/s Ratio Perm												0.00
v/c Ratio	1.11	0.48		0.34	0.45		0.53	0.17		1.11	0.09	0.03
Uniform Delay, d1	34.9	23.5		33.7	24.8		34.6	19.7		34.9	17.5	30.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	94.9	0.5		5.7	0.3		1.8	0.2		96.5	0.1	0.0
Delay (s)	129.7	24.0		39.5	25.1		36.5	19.9		131.4	17.6	30.9
Level of Service	F	C		D	C		D	B		F	B	C
Approach Delay (s)		58.1			26.7			23.3			78.9	
Approach LOS		E			C			C			E	

Intersection Summary				
HCM Average Control Delay	48.4	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.9%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
36: Rosecrans St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Volume (vph)	81	204	90	230	270	91	127	85	161	63	138	44
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	89	224	99	253	297	100	137	91	173	68	150	48
RTOR Reduction (vph)	0	0	47	0	0	54	0	0	132	0	0	38
Lane Group Flow (vph)	89	224	52	253	297	46	137	91	41	68	150	10
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	4.1	35.5	39.7	4.2	35.6	35.6	4.2	16.0	20.2	4.4	16.2	16.2
Effective Green, g (s)	4.5	36.4	41.0	4.6	36.5	36.5	4.6	15.4	18.5	4.8	15.7	15.7
Actuated g/C Ratio	0.06	0.46	0.52	0.06	0.46	0.46	0.06	0.20	0.24	0.06	0.20	0.20
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	101	1637	905	201	864	734	103	693	483	108	706	316
v/s Ratio Prot	0.05	0.06	0.00	c0.07	c0.16		c0.08	0.03	0.00	0.04	c0.04	
v/s Ratio Perm			0.03			0.03			0.02			0.01
v/c Ratio	0.88	0.14	0.06	1.26	0.34	0.06	1.33	0.13	0.08	0.63	0.21	0.03
Uniform Delay, d1	36.8	12.1	9.3	37.1	13.5	11.7	37.1	26.1	23.5	36.1	26.3	25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	52.4	0.2	0.0	150.2	1.1	0.2	200.7	0.1	0.0	8.0	0.3	0.1
Delay (s)	89.2	12.3	9.3	187.2	14.5	11.8	237.7	26.3	23.5	44.1	26.6	25.4
Level of Service	F	B	A	F	B	B	F	C	C	D	C	C
Approach Delay (s)		28.2			81.3			97.3			30.9	
Approach LOS		C			F			F			C	

Intersection Summary				
HCM Average Control Delay	64.6	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	46.1%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
37: Old Town St & Moore St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.91			0.93			0.88	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1807			1699			1703			1638	
Flt Permitted		0.80			1.00			0.97			0.97	
Satd. Flow (perm)		1465			1698			1663			1594	
Volume (vph)	109	219	35	2	105	196	36	161	185	2	1	16
Peak-hour factor, PHF	0.88	0.88	0.88	0.84	0.84	0.84	0.87	0.87	0.87	0.68	0.68	0.68
Adj. Flow (vph)	124	249	40	2	125	233	41	185	213	3	1	24
RTOR Reduction (vph)	0	5	0	0	53	0	0	51	0	0	17	0
Lane Group Flow (vph)	0	408	0	0	307	0	0	388	0	0	11	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		38.3			38.3			17.9			17.9	
Effective Green, g (s)		39.2			39.2			18.8			18.8	
Actuated g/C Ratio		0.59			0.59			0.28			0.28	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		870			1009			474			454	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.18			c0.23			0.01	
v/c Ratio		0.47			0.30			0.82			0.02	
Uniform Delay, d1		7.5			6.6			22.0			17.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.8			10.0			0.0	
Delay (s)		7.7			7.4			32.0			17.0	
Level of Service		A			A			C			B	
Approach Delay (s)		7.7			7.4			32.0			17.0	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	75.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
38: Taylor St & Congress St 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4974		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4974		1770	3539	1770	1583
Volume (vph)	376	52	124	517	74	84
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.86	0.86
Adj. Flow (vph)	409	57	141	588	86	98
RTOR Reduction (vph)	21	0	0	0	0	77
Lane Group Flow (vph)	445	0	141	588	86	21
Confl. Peds. (#/hr)		7	7		30	15
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.8		5.9	40.1	12.5	12.5
Effective Green, g (s)	31.7		6.3	40.1	13.4	13.4
Actuated g/C Ratio	0.51		0.10	0.64	0.21	0.21
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2527		179	2274	380	340
v/s Ratio Prot	0.09		c0.08	c0.17	c0.05	0.01
v/s Ratio Perm						
v/c Ratio	0.18		0.79	0.26	0.23	0.06
Uniform Delay, d1	8.3		27.4	4.8	20.2	19.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2		18.7	0.3	0.1	0.0
Delay (s)	8.4		46.1	5.1	20.3	19.5
Level of Service	A		D	A	C	B
Approach Delay (s)	8.4			13.0	19.9	
Approach LOS	A			B	B	

Intersection Summary				
HCM Average Control Delay	12.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

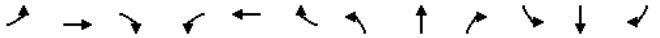
Existing AM
39: Twiggs St & Congress St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	0	1	22	0	25	5	122	7	20	91	1
Peak Hour Factor	0.63	0.63	0.63	0.73	0.73	0.73	0.88	0.88	0.88	0.72	0.72	0.72
Hourly flow rate (vph)	6	0	2	30	0	34	6	139	8	28	126	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	8	64	152	156
Volume Left (vph)	6	30	6	28
Volume Right (vph)	2	34	8	1
Hadj (s)	0.07	-0.19	0.01	0.06
Departure Headway (s)	4.7	4.4	4.2	4.3
Degree Utilization, x	0.01	0.08	0.18	0.19
Capacity (veh/h)	697	755	823	819
Control Delay (s)	7.8	7.8	8.2	8.3
Approach Delay (s)	7.8	7.8	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
HCM Level of Service	A			
Intersection Capacity Utilization	24.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
40: Harney St & Congress St 4/5/2012

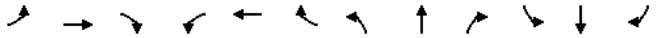


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	2	3	10	14	5	5	116	8	5	91	18
Peak Hour Factor	0.54	0.54	0.54	0.81	0.81	0.81	0.85	0.85	0.85	0.71	0.71	0.71
Hourly flow rate (vph)	24	4	6	12	17	6	6	136	9	7	128	25

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	33	36	152	161
Volume Left (vph)	24	12	6	7
Volume Right (vph)	6	6	9	25
Hadj (s)	0.08	0.00	0.00	-0.05
Departure Headway (s)	4.7	4.6	4.2	4.2
Degree Utilization, x	0.04	0.05	0.18	0.19
Capacity (veh/h)	704	717	824	842
Control Delay (s)	7.9	7.9	8.2	8.1
Approach Delay (s)	7.9	7.9	8.2	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.1		
HCM Level of Service		A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
41: Ampudia St & Congress St 4/5/2012

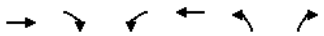


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	10	9	90	8	8	15	128	223	0	67	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	2	11	10	145	13	13	16	138	240	0	75	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								376				
pX, platoon unblocked												
vC, conflicting volume	273	497	78	271	258	152	80			386		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273	497	78	271	258	152	80			386		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	78	98	99	99			100		
cM capacity (veh/h)	646	465	981	648	633	884	1516			1163		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	23	171	154	240	78
Volume Left	2	145	16	0	0
Volume Right	10	13	0	240	2
cSH	622	660	1516	1700	1163
Volume to Capacity	0.04	0.26	0.01	0.14	0.00
Queue Length 95th (ft)	3	26	1	0	0
Control Delay (s)	11.0	12.3	0.9	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.0	12.3	0.3		0.0
Approach LOS	B	B			

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization	33.6%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
42: Twiggs St & San Diego Ave 4/5/2012

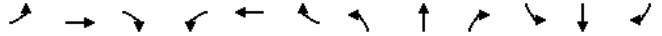


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	18	9	29	29	18	124
Peak Hour Factor	0.58	0.58	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	31	16	41	41	22	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	47	82	175
Volume Left (vph)	0	41	22
Volume Right (vph)	16	0	153
Hadj (s)	-0.17	0.13	-0.46
Departure Headway (s)	4.2	4.4	3.7
Degree Utilization, x	0.05	0.10	0.18
Capacity (veh/h)	821	779	931
Control Delay (s)	7.4	7.9	7.5
Approach Delay (s)	7.4	7.9	7.5
Approach LOS	A	A	A

Intersection Summary			
Delay		7.6	
HCM Level of Service		A	
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
43: Harney St & San Diego Ave 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	5	7	3	37	18	12	3	125	83	3	27	8
Peak Hour Factor	0.69	0.69	0.69	0.80	0.80	0.80	0.89	0.89	0.89	0.73	0.73	0.73
Hourly flow rate (vph)	7	10	4	46	22	15	3	140	93	4	37	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	22	84	237	52
Volume Left (vph)	7	46	3	4
Volume Right (vph)	4	15	93	11
Hadj (s)	-0.02	0.04	-0.20	-0.08
Departure Headway (s)	4.6	4.6	4.0	4.3
Degree Utilization, x	0.03	0.11	0.26	0.06
Capacity (veh/h)	718	731	871	792
Control Delay (s)	7.7	8.1	8.4	7.6
Approach Delay (s)	7.7	8.1	8.4	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
44: San Diego Ave & Old Town St 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.91			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1764	1850		1763	1668			1763			1819	
Flt Permitted	0.68	1.00		0.63	1.00			0.79			1.00	
Satd. Flow (perm)	1265	1850		1164	1668			1438			1819	
Volume (vph)	218	159	6	9	40	63	254	87	65	0	22	4
Peak-hour factor, PHF	0.79	0.79	0.79	0.87	0.87	0.87	0.78	0.78	0.78	0.81	0.81	0.81
Adj. Flow (vph)	276	201	8	10	46	72	326	112	83	0	27	5
RTOR Reduction (vph)	0	2	0	0	41	0	0	14	0	0	3	0
Lane Group Flow (vph)	276	207	0	10	78	0	0	507	0	0	29	0
Confl. Peds. (#/hr)	3		4	4		3	5					5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Effective Green, g (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Actuated g/C Ratio	0.44	0.44		0.44	0.44			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	4.4	4.4		2.1	2.1			2.0			2.0	
Lane Grp Cap (vph)	553	809		509	730			577			730	
v/s Ratio Prot		0.11			0.05						0.02	
v/s Ratio Perm	c0.22			0.01				c0.35				
v/c Ratio	0.50	0.26		0.02	0.11			0.88			0.04	
Uniform Delay, d1	10.0	8.8		7.9	8.2			13.7			9.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	3.2	0.8		0.1	0.3			13.8			0.0	
Delay (s)	13.2	9.6		8.0	8.5			27.6			9.0	
Level of Service	B	A		A	A			C			A	
Approach Delay (s)		11.7			8.5			27.6			9.0	
Approach LOS		B			A			C			A	

Intersection Summary				
HCM Average Control Delay	18.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	54.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

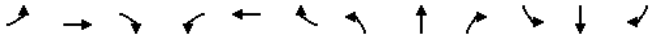
Existing AM
45: Taylor St & 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.90			0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1769	3499		1770	3467			1623			1632	
Flt Permitted	0.39	1.00		0.38	1.00			0.92			0.94	
Satd. Flow (perm)	728	3499		716	3467			1511			1535	
Volume (vph)	33	395	32	98	563	75	62	4	229	2	0	16
Peak-hour factor, PHF	0.78	0.77	0.77	0.93	0.93	0.93	0.82	0.82	0.82	0.75	0.75	0.75
Adj. Flow (vph)	42	513	42	105	605	81	76	5	279	3	0	21
RTOR Reduction (vph)	0	6	0	0	11	0	0	222	0	0	17	0
Lane Group Flow (vph)	42	549	0	105	675	0	0	138	0	0	7	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	29.7	27.9		35.2	30.7			10.9			10.9	
Effective Green, g (s)	31.1	28.9		36.5	31.6			11.8			11.8	
Actuated g/C Ratio	0.54	0.50		0.63	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	433	1756		543	1902			310			314	
v/s Ratio Prot	0.00	0.16		c0.02	c0.19							
v/s Ratio Perm	0.05			0.11				c0.09			0.00	
v/c Ratio	0.10	0.31		0.19	0.35			0.45			0.02	
Uniform Delay, d1	6.2	8.5		4.3	7.3			20.0			18.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.5		0.1	0.5			0.4			0.0	
Delay (s)	6.3	8.9		4.4	7.8			20.4			18.3	
Level of Service	A	A		A	A			C			B	
Approach Delay (s)		8.8			7.3			20.4			18.3	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	10.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
46: Twiggs St & Juan St 4/5/2012

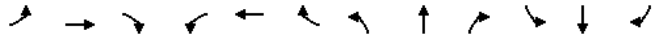


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	54	5	6	2	3	1	5	130	5	30	92	54
Peak Hour Factor	0.60	0.60	0.60	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77
Hourly flow rate (vph)	90	8	10	3	4	1	7	171	7	39	119	70

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	8	184	229
Volume Left (vph)	90	3	7	39
Volume Right (vph)	10	1	7	70
Hadj (s)	0.14	0.00	0.02	-0.12
Departure Headway (s)	5.0	5.0	4.5	4.3
Degree Utilization, x	0.15	0.01	0.23	0.27
Capacity (veh/h)	665	645	774	803
Control Delay (s)	8.9	8.0	8.8	8.9
Approach Delay (s)	8.9	8.0	8.8	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.8		
HCM Level of Service		A		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
47: Harney St & Juan St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	26	9	26	0	0	5	41	109	0	13	54	33
Peak Hour Factor	0.93	0.93	0.93	0.42	0.42	0.42	0.71	0.71	0.71	0.77	0.77	0.77
Hourly flow rate (vph)	28	10	28	0	0	12	58	154	0	17	70	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	12	211	130
Volume Left (vph)	28	0	58	17
Volume Right (vph)	28	12	0	43
Hadj (s)	-0.14	-0.57	0.09	-0.14
Departure Headway (s)	4.5	4.2	4.3	4.2
Degree Utilization, x	0.08	0.01	0.25	0.15
Capacity (veh/h)	730	780	814	829
Control Delay (s)	7.9	7.2	8.8	7.9
Approach Delay (s)	7.9	7.2	8.8	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.3		
HCM Level of Service		A		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
48: Taylor St & Morena Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95			0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00			1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Frt	1.00	1.00			0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3528			3397				1590	1681	1698	1583
Flt Permitted	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3528			3397				1590	1681	1698	1583
Volume (vph)	368	253	5	0	522	192	0	0	4	59	5	214
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.50	0.50	0.50	0.74	0.74	0.74
Adj. Flow (vph)	460	316	6	0	580	213	0	0	8	80	7	289
RTOR Reduction (vph)	0	1	0	0	42	0	0	0	0	0	0	190
Lane Group Flow (vph)	460	321	0	0	751	0	0	0	8	42	45	99
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	7.7	35.5			23.4				57.6	11.9	11.9	11.9
Effective Green, g (s)	8.1	36.4			24.3				57.6	13.2	13.2	13.2
Actuated g/C Ratio	0.14	0.63			0.42				1.00	0.23	0.23	0.23
Clearance Time (s)	4.4	4.9			4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3			3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	483	2230			1433				1590	385	389	363
v/s Ratio Prot	c0.13	0.09			c0.22					0.02	0.03	
v/s Ratio Perm									0.01			c0.06
v/c Ratio	0.95	0.14			0.52				0.01	0.11	0.12	0.27
Uniform Delay, d1	24.6	4.3			12.4				0.0	17.6	17.6	18.2
Progression Factor	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	28.9	0.1			1.4				0.0	0.2	0.2	0.7
Delay (s)	53.4	4.4			13.7				0.0	17.8	17.8	18.9
Level of Service	D	A			B				A	B	B	B
Approach Delay (s)		33.3			13.7			0.0			18.7	
Approach LOS		C			B			A			B	

Intersection Summary				
HCM Average Control Delay	22.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
49: Rosecrans St. & Hugo St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.99		1.00	1.00		1.00	0.89			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1678	3382		1671	3434		1633	1515			1675	
Flt Permitted	0.95	1.00		0.95	1.00		0.68	1.00			0.80	
Satd. Flow (perm)	1678	3382		1671	3434		1175	1515			1381	
Volume (vph)	6	679	66	24	1355	12	217	20	58	56	32	8
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	6	730	71	26	1457	13	233	22	62	60	34	9
RTOR Reduction (vph)	0	6	0	0	0	0	0	47	0	0	3	0
Lane Group Flow (vph)	6	795	0	26	1470	0	233	37	0	0	100	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.2	69.8		4.3	72.9		27.7	27.7			27.7	
Effective Green, g (s)	1.6	70.7		4.7	73.8		28.6	28.6			28.6	
Actuated g/C Ratio	0.01	0.61		0.04	0.64		0.25	0.25			0.25	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	23	2061		68	2185		290	374			340	
v/s Ratio Prot	0.00	0.24		c0.02	c0.43			0.02				
v/s Ratio Perm							c0.20				0.07	
v/c Ratio	0.26	0.39		0.38	0.67		0.80	0.10			0.29	
Uniform Delay, d1	56.6	11.6		54.2	13.4		41.1	33.8			35.5	
Progression Factor	1.00	1.00		1.38	0.37		1.00	1.00			1.00	
Incremental Delay, d2	2.2	0.5		0.7	0.9		14.0	0.0			0.2	
Delay (s)	58.8	12.1		75.7	5.9		55.1	33.8			35.7	
Level of Service	E	B		E	A		E	C			D	
Approach Delay (s)		12.5			7.1			49.4			35.7	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	14.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
50: Rosecrans St. & Lowell St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Volume (vph)	140	612	23	110	1192	29	33	103	80	233	341	215
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	644	24	116	1255	31	35	108	84	245	359	226
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	56	0	87	0
Lane Group Flow (vph)	147	666	0	116	1285	0	35	108	28	245	498	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	11.2	44.5		11.6	44.4		3.7	21.4	33.0	19.8	37.6	
Effective Green, g (s)	11.6	45.4		12.0	45.8		4.1	22.4	34.4	20.2	38.5	
Actuated g/C Ratio	0.10	0.39		0.10	0.39		0.04	0.19	0.30	0.17	0.33	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	177	1375		183	1391		63	683	458	308	1087	
v/s Ratio Prot	c0.08	0.19		0.07	c0.36		c0.02	0.03	0.01	c0.14	c0.15	
v/s Ratio Perm									0.01			
v/c Ratio	0.83	0.48		0.63	0.92		0.56	0.16	0.06	0.80	0.46	
Uniform Delay, d1	51.2	26.5		49.9	33.4		55.1	39.0	29.2	45.9	30.5	
Progression Factor	0.87	1.52		1.23	0.82		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.8	1.2		4.5	10.4		5.9	0.1	0.0	12.4	0.2	
Delay (s)	69.6	41.3		66.1	37.7		61.0	39.1	29.2	58.3	30.8	
Level of Service	E	D		E	D		E	D	C	E	C	
Approach Delay (s)		46.4			40.0			38.8			38.9	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	41.2	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	79.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
51: Rosecrans St. & Laning Rd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected		1.00		0.95	1.00			0.96	1.00		0.96	
Satd. Flow (prot)		5021		1770	3539			1778	1552		1747	
Flt Permitted		1.00		0.95	1.00			0.74	1.00		0.73	
Satd. Flow (perm)		5021		1770	3539			1377	1552		1329	
Volume (vph)	0	947	70	303	1318	1	54	4	132	55	1	8
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	76	329	1433	1	59	4	143	60	1	9
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	118	0	5	0
Lane Group Flow (vph)	0	1100	0	329	1434	0	0	63	25	0	65	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		57.5		24.8	86.7			19.1	19.1		19.1	
Effective Green, g (s)		58.8		25.2	88.0			20.0	20.0		20.0	
Actuated g/C Ratio		0.51		0.22	0.76			0.17	0.17		0.17	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		2545		385	2685			237	268		229	
v/s Ratio Prot		0.22		c0.19	c0.41							
v/s Ratio Perm								0.05	0.02		c0.05	
v/c Ratio		0.43		0.85	0.53			0.27	0.09		0.28	
Uniform Delay, d1		18.1		43.6	5.7			41.6	40.4		41.8	
Progression Factor		0.40		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		16.1	0.8			0.2	0.1		0.2	
Delay (s)		7.7		59.7	6.4			41.9	40.4		42.0	
Level of Service		A		E	A			D	D		D	
Approach Delay (s)		7.7			16.4			40.9			42.0	
Approach LOS		A			B			D			D	

Intersection Summary				
HCM Average Control Delay	15.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	60.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
52: Hawthorne St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.97	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5058						4892	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5058						4892	
Volume (vph)	0	0	0	168	1696	0	0	0	0	0	218	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	179	1804	0	0	0	0	0	303	86
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	0	0	0	1974	0	0	0	0	0	380	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3546						1027	
v/s Ratio Prot											c0.08	
v/s Ratio Perm					0.39							
v/c Ratio					0.56						0.37	
Uniform Delay, d1					6.6						30.4	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.6						0.1	
Delay (s)					7.2						30.5	
Level of Service					A						C	
Approach Delay (s)		0.0			7.2			0.0			30.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	11.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

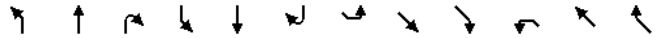
Existing AM
53: Grape St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5055									4985	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5055									4985	
Volume (vph)	0	833	30	0	0	0	0	0	0	110	276	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	896	32	0	0	0	0	0	0	124	310	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	926	0	0	0	0	0	0	0	0	364	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		62.0									19.0	
Effective Green, g (s)		62.0									20.0	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3482									1108	
v/s Ratio Prot		c0.18										
v/s Ratio Perm											0.07	
v/c Ratio		0.27									0.33	
Uniform Delay, d1		5.3									29.4	
Progression Factor		0.54									0.57	
Incremental Delay, d2		0.2									0.2	
Delay (s)		3.1									16.8	
Level of Service		A									B	
Approach Delay (s)		3.1			0.0			0.0			16.8	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	7.4	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.28			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
54: Seaworld Dr & E Mission Bay Dr 4/5/2012

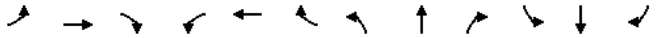


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Volume (vph)	100	926	35	111	691	116	59	70	189	37	32	77
Peak-hour factor, PHF	0.93	0.93	0.93	0.85	0.85	0.85	0.92	0.92	0.92	0.85	0.85	0.85
Adj. Flow (vph)	108	996	38	131	813	136	64	76	205	44	38	91
RTOR Reduction (vph)	0	0	37	0	0	130	0	0	170	0	0	77
Lane Group Flow (vph)	108	996	1	131	813	6	64	76	35	44	38	14
Confl. Peds. (#/hr)	2								2			
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	4.0	29.9	2.3	6.9	32.9	3.2	3.2	10.6	10.6	2.3	8.8	8.8
Effective Green, g (s)	4.0	31.4	2.3	6.9	34.3	3.2	3.2	11.5	11.5	2.3	10.6	10.6
Actuated g/C Ratio	0.06	0.46	0.03	0.10	0.50	0.05	0.05	0.17	0.17	0.03	0.16	0.16
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	202	1632	53	179	1782	74	161	315	264	60	290	246
v/s Ratio Prot	0.03	c0.28		c0.07	c0.23		0.02	c0.04		c0.02	0.02	
v/s Ratio Perm			0.00			0.00			0.02			0.01
v/c Ratio	0.53	0.61	0.02	0.73	0.46	0.09	0.40	0.24	0.13	0.73	0.13	0.06
Uniform Delay, d1	31.1	13.8	31.8	29.7	10.9	31.1	31.5	24.5	24.1	32.6	24.8	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	1.7	0.1	12.4	0.8	0.2	0.6	0.4	0.2	32.5	0.1	0.0
Delay (s)	32.5	15.5	31.9	42.1	11.7	31.2	32.1	24.9	24.3	65.1	24.9	24.5
Level of Service	C	B	C	D	B	C	C	C	C	E	C	C
Approach Delay (s)		17.6			17.9			25.9			34.9	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	19.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
55: Hawthorne St & Pacific Highway 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	5.0
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes				0.94	1.00		1.00	1.00			1.00	1.00
Frt				1.00	0.99		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1665	3509		1770	5085			5085	1545
Flt Permitted				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)				1665	3509		1770	5085			5085	1545
Volume (vph)	0	0	0	362	1326	70	64	158	0	0	139	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	381	1396	74	69	170	0	0	162	22
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	0	0	381	1466	0	69	170	0	0	162	3
Confl. Peds. (#/hr)				68		10	8					8
Turn Type				Perm			Prot					Perm
Protected Phases					6		3	8			4	
Permitted Phases				6								4
Actuated Green, G (s)				35.1	35.1		29.3	45.1			11.4	11.4
Effective Green, g (s)				35.6	34.2		29.3	45.1			11.3	11.3
Actuated g/C Ratio				0.40	0.38		0.33	0.50			0.13	0.13
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	4.9
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	3.3
Lane Grp Cap (vph)				659	1333		576	2548			638	194
v/s Ratio Prot					c0.42		c0.04	0.03			c0.03	
v/s Ratio Perm				0.23								0.00
v/c Ratio				0.58	1.10		0.12	0.07			0.25	0.01
Uniform Delay, d1				21.3	27.9		21.3	11.6			35.5	34.5
Progression Factor				0.77	0.82		0.78	0.85			1.00	1.00
Incremental Delay, d2				3.1	55.1		0.4	0.0			0.2	0.0
Delay (s)				19.6	78.1		17.0	9.9			35.8	34.5
Level of Service				B	E		B	A			D	C
Approach Delay (s)		0.0			66.0			12.0			35.6	
Approach LOS		A			E			B			D	

Intersection Summary				
HCM Average Control Delay	57.9	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
56: Grape St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.92		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5069	1549					4632		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5069	1549					4632		1770	5085	
Volume (vph)	39	609	25	0	0	0	0	209	213	41	460	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.93	0.93	0.93	0.75	0.75	0.75
Adj. Flow (vph)	44	684	28	0	0	0	0	225	229	55	613	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	160	0	0	0	0
Lane Group Flow (vph)	0	728	12	0	0	0	0	294	0	55	613	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		37.8	37.8					27.0		11.0	42.4	
Effective Green, g (s)		38.7	38.7					27.0		11.4	42.4	
Actuated g/C Ratio		0.43	0.43					0.30		0.13	0.47	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2180	666					1390		224	2396	
v/s Ratio Prot								0.06		0.03	c0.12	
v/s Ratio Perm		0.14	0.01									
v/c Ratio		0.33	0.02					0.21		0.25	0.26	
Uniform Delay, d1		17.1	14.7					23.5		35.4	14.3	
Progression Factor		1.00	1.00					1.00		0.89	0.81	
Incremental Delay, d2		0.4	0.0					0.3		2.5	0.2	
Delay (s)		17.5	14.8					23.9		34.2	11.9	
Level of Service		B	B					C		C	B	
Approach Delay (s)		17.4			0.0			23.9			13.7	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	17.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.9	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
57: Seaworld Dr & Friars Rd 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.97	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3360	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3360	1421
Volume (vph)	963	244	138	779	197	98
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.85	0.50
Adj. Flow (vph)	1047	265	144	811	232	196
RTOR Reduction (vph)	0	28	0	0	36	109
Lane Group Flow (vph)	1047	237	144	811	255	28
Confl. Peds. (#/hr)						2
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.5	43.9	5.1	42.8	11.4	11.4
Effective Green, g (s)	34.7	48.3	5.0	44.2	13.6	13.6
Actuated g/C Ratio	0.53	0.73	0.08	0.67	0.21	0.21
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1866	1258	261	2377	694	294
v/s Ratio Prot	c0.30	0.04	c0.04	0.23	c0.08	
v/s Ratio Perm		0.11				0.02
v/c Ratio	0.56	0.19	0.55	0.34	0.37	0.10
Uniform Delay, d1	10.4	2.7	29.3	4.6	22.4	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	1.4	0.4	0.1	0.1
Delay (s)	11.7	2.7	30.8	5.0	22.5	21.2
Level of Service	B	A	C	A	C	C
Approach Delay (s)	9.9			8.9	22.1	
Approach LOS	A			A	C	

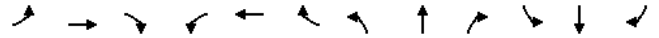
Intersection Summary				
HCM Average Control Delay	11.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM

58: I-5 SB On/I-5 SB Off & Seaworld Dr

12/07/2017



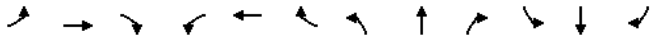
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Future Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1139	68	358	331	0	0	0	0	341	0	712
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1139	29	358	331	0	0	0	0	341	0	713
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		23.6	23.6	7.7	35.5					12.8		57.9
Effective Green, g (s)		24.6	24.6	7.9	36.5					13.4		57.9
Actuated g/C Ratio		0.42	0.42	0.14	0.63					0.23		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1503	663	468	2230					409		1583
v/s Ratio Prot		c0.32		c0.10	0.09					c0.19		
v/s Ratio Perm			0.02									0.45
v/c Ratio		0.76	0.04	0.76	0.15					0.83		0.45
Uniform Delay, d1		14.1	9.8	24.1	4.4					21.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.6	0.1	6.6	0.1					13.0		0.9
Delay (s)		17.7	9.9	30.7	4.5					34.2		0.9
Level of Service		B	A	C	A					C		A
Approach Delay (s)		17.3			18.1			0.0			11.7	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

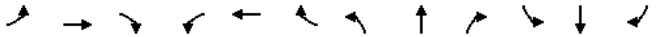
59: Seaworld Dr & I-5 NB On

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.92			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3266			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3266			1770	1583			
Volume (vph)	797	505	0	0	438	464	168	0	276	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88
Adj. Flow (vph)	866	549	0	0	461	488	183	0	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	162	0	0	0	268	0	0	0
Lane Group Flow (vph)	866	549	0	0	787	0	0	183	32	0	0	0
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	15.5	37.8			18.1			5.0	5.0			
Effective Green, g (s)	15.7	38.3			18.6			5.6	5.6			
Actuated g/C Ratio	0.30	0.72			0.35			0.11	0.11			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1019	2562			1148			187	168			
v/s Ratio Prot	c0.25	0.16			c0.24			c0.10				
v/s Ratio Perm									0.02			
v/c Ratio	0.85	0.21			0.69			0.98	0.19			
Uniform Delay, d1	17.5	2.4			14.7			23.6	21.6			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	6.5	0.2			3.3			58.7	0.2			
Delay (s)	24.0	2.6			18.0			82.3	21.8			
Level of Service	C	A			B			F	C			
Approach Delay (s)		15.7			18.0			44.7			0.0	
Approach LOS		B			B			D			A	

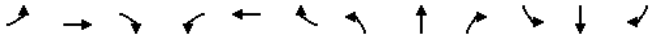
Intersection Summary				
HCM Average Control Delay	21.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	3433	1863			3302			3510	1583			
Flt Permitted	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	3433	1863			3302			3510	1583			
Volume (vph)	359	788	0	0	186	150	21	106	20	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	390	857	0	0	202	163	23	115	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	73	0	0	0	20	0	0	0
Lane Group Flow (vph)	390	857	0	0	292	0	0	138	2	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	15.7	64.1			44.0			6.1	6.1			
Effective Green, g (s)	15.7	64.1			44.0			6.1	6.1			
Actuated g/C Ratio	0.20	0.80			0.55			0.08	0.08			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	674	1493			1816			268	121			
v/s Ratio Prot	0.11	c0.46			0.09							
v/s Ratio Perm								0.04	0.00			
v/c Ratio	0.58	0.57			0.16			0.51	0.01			
Uniform Delay, d1	29.2	2.9			8.9			35.5	34.2			
Progression Factor	1.04	1.61			1.00			1.00	1.00			
Incremental Delay, d2	1.1	1.4			0.2			0.7	0.0			
Delay (s)	31.5	6.2			9.1			36.2	34.2			
Level of Service	C	A			A			D	C			
Approach Delay (s)		14.1			9.1			35.9			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Exisitng PM
1: Rosecrans St. & Lytton St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Volume (vph)	15	1495	429	102	1142	346	414	329	144	279	238	11
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	16	1557	447	106	1190	360	431	343	150	291	248	11
RTOR Reduction (vph)	0	0	173	0	0	123	0	0	93	0	1	0
Lane Group Flow (vph)	16	1557	274	106	1190	237	431	343	57	291	258	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.4	71.6	71.6	8.2	76.3	76.3	23.7	33.3	33.3	29.4	37.2	
Effective Green, g (s)	3.8	72.9	72.9	8.6	77.7	77.7	24.1	34.1	34.1	28.4	38.4	
Actuated g/C Ratio	0.02	0.46	0.46	0.05	0.49	0.49	0.15	0.21	0.21	0.18	0.24	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	42	2317	711	185	1719	730	517	397	331	314	444	
v/s Ratio Prot	0.01	0.31		c0.03	c0.34		0.13	c0.18		c0.16	0.14	
v/s Ratio Perm			0.18			0.16			0.04			
v/c Ratio	0.38	0.67	0.39	0.57	0.69	0.32	0.83	0.86	0.17	0.93	0.58	
Uniform Delay, d1	76.9	34.2	28.8	73.9	31.9	25.1	66.0	60.7	51.4	64.8	53.7	
Progression Factor	1.00	1.00	1.00	0.94	0.77	1.09	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	1.6	1.6	1.7	1.5	0.7	10.6	17.9	0.3	31.7	1.3	
Delay (s)	79.0	35.7	30.3	70.9	26.1	28.1	76.6	78.6	51.7	96.4	55.0	
Level of Service	E	D	C	E	C	C	E	E	D	F	D	
Approach Delay (s)		34.9			29.4			73.3			76.9	
Approach LOS		C			C			E			E	

Intersection Summary				
HCM Average Control Delay	44.5	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/9/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	689	1585	603	0	0	573
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	757	1742	655	0	0	623
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	757	1674	655	0	0	623
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	65.0	65.0	40.5			40.5
Effective Green, g (s)	65.0	65.0	40.5			40.5
Actuated g/C Ratio	0.54	0.54	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1867	1516	1199			631
v/s Ratio Prot	0.22		0.19			c0.33
v/s Ratio Perm		c0.60				
v/c Ratio	0.41	1.10	0.55			0.99
Uniform Delay, d1	15.9	27.2	32.0			39.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	57.1	0.3			32.2
Delay (s)	16.0	84.4	32.3			71.5
Level of Service	B	F	C			E
Approach Delay (s)	63.6		32.3			71.5
Approach LOS	E		C			E

Intersection Summary				
HCM Average Control Delay	59.5	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.06			
Actuated Cycle Length (s)	119.5	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	83.8%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
3: Channel Way & W Mission Bay Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	136	1380	25	0	1200
Peak Hour Factor	0.65	0.87	0.98	0.98	0.90	0.90
Hourly flow rate (vph)	0	156	1408	26	0	1333
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.98	0.98			0.98	
vC, conflicting volume	1865	485			1434	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1847	444			1408	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	72			100	
cM capacity (veh/h)	65	551			473	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	156	563	563	307	444	444	444
Volume Left	0	0	0	0	0	0	0
Volume Right	156	0	0	26	0	0	0
cSH	551	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.33	0.33	0.18	0.26	0.26	0.26
Queue Length 95th (ft)	29	0	0	0	0	0	0
Control Delay (s)	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	14.1	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Exisitng PM
4: Midway Dr & W Point Loma Blvd 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Volume (vph)	359	445	30	312	594	294	350	206	287	39	503	610
Peak-hour factor, PHF	0.88	0.88	0.88	0.90	0.90	0.90	0.99	0.99	0.99	0.84	0.84	0.84
Adj. Flow (vph)	408	506	34	347	660	327	354	208	290	46	599	726
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	159	0	0	0
Lane Group Flow (vph)	408	506	34	324	683	327	274	288	131	46	599	726
Confl. Peds. (#/hr)	6					6	6		3	3		6
Turn Type	Split		Free	Split		Free	Split		pm+ov	Split		Free
Protected Phases	3	3		4	4		2	2	3	1	1	
Permitted Phases			Free			Free			2			Free
Actuated Green, G (s)	39.9	39.9	150.0	34.0	34.0	150.0	25.9	25.9	65.8	30.5	30.5	150.0
Effective Green, g (s)	40.8	40.8	150.0	34.9	34.9	150.0	26.8	26.8	67.6	31.5	31.5	150.0
Actuated g/C Ratio	0.27	0.27	1.00	0.23	0.23	1.00	0.18	0.18	0.45	0.21	0.21	1.00
Clearance Time (s)	4.9	4.9		4.9	4.9		4.9	4.9	4.9	5.0	5.0	
Vehicle Extension (s)	3.1	3.1		5.5	5.5		0.2	0.2	3.1	8.0	8.0	
Lane Grp Cap (vph)	481	963	1583	375	787	1562	300	312	751	372	743	1562
v/s Ratio Prot	c0.23	0.14		0.20	c0.20		0.16	c0.17	0.05	0.03	c0.17	
v/s Ratio Perm			0.02			0.21			0.04			0.46
v/c Ratio	0.85	0.53	0.02	0.86	0.87	0.21	0.91	0.92	0.17	0.12	0.81	0.46
Uniform Delay, d1	51.7	46.4	0.0	55.3	55.3	0.0	60.5	60.6	24.6	48.1	56.3	0.0
Progression Factor	0.90	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.6	1.9	0.0	20.0	11.0	0.3	30.0	31.2	0.0	0.6	8.3	1.0
Delay (s)	61.9	41.5	0.0	75.3	66.4	0.3	90.4	91.8	24.6	48.7	64.6	1.0
Level of Service	E	D	A	E	E	A	F	F	C	D	E	A
Approach Delay (s)		48.8			52.4			68.5			30.4	
Approach LOS		D			D			E			C	

Intersection Summary				
HCM Average Control Delay	48.0	HCM Level of Service		D
HCM Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		16.0
Intersection Capacity Utilization	84.6%	ICU Level of Service		E
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
5: Kemper St & Midway Dr 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Volume (vph)	186	122	157	53	141	74	225	621	59	122	500	140
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	209	137	176	57	152	80	247	682	65	136	556	156
RTOR Reduction (vph)	0	0	126	0	0	70	0	3	0	0	0	81
Lane Group Flow (vph)	168	178	50	57	152	10	247	744	0	136	556	75
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	41.7	18.4	18.4	18.4	17.8	65.8		22.8	70.8	70.8
Effective Green, g (s)	24.8	24.8	43.0	19.3	19.3	19.3	18.2	66.7		23.2	71.7	71.7
Actuated g/C Ratio	0.17	0.17	0.29	0.13	0.13	0.13	0.12	0.44		0.15	0.48	0.48
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	278	289	488	228	240	199	417	1549		274	1692	729
v/s Ratio Prot	0.10	c0.10	0.01	0.03	c0.08		c0.07	c0.21		c0.08	0.16	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.60	0.62	0.10	0.25	0.63	0.05	0.59	0.48		0.50	0.33	0.10
Uniform Delay, d1	58.1	58.2	39.3	58.8	62.0	57.3	62.4	29.4		58.1	24.2	21.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.81		1.13	0.56	0.79
Incremental Delay, d2	3.7	3.9	0.0	0.6	5.4	0.1	1.3	0.9		0.4	0.4	0.2
Delay (s)	61.7	62.0	39.4	59.4	67.4	57.4	59.4	24.6		65.8	13.9	17.2
Level of Service	E	E	D	E	E	E	E	C		E	B	B
Approach Delay (s)		54.3			63.0			33.2			22.8	
Approach LOS		D			E			C			C	

Intersection Summary				
HCM Average Control Delay	37.3	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	70.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
6: Midway Dr & East Dr 4/9/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	1.00		1.00	0.98			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	3530		1770	3452			1682			1676	
Flt Permitted	0.14	1.00		0.23	1.00			0.86			0.82	
Satd. Flow (perm)	269	3530		431	3452			1479			1406	
Volume (vph)	46	943	16	27	1008	164	24	6	34	69	4	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.79	0.79	0.79	0.74	0.74	0.74
Adj. Flow (vph)	51	1036	18	29	1096	178	30	8	43	93	5	70
RTOR Reduction (vph)	0	1	0	0	10	0	0	35	0	0	46	0
Lane Group Flow (vph)	51	1053	0	29	1264	0	0	46	0	0	122	0
Confl. Peds. (#/hr)	3					3	33					33
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.0	45.9		46.2	44.0			12.7			12.7	
Effective Green, g (s)	51.3	46.8		47.5	44.9			13.6			13.6	
Actuated g/C Ratio	0.68	0.62		0.63	0.60			0.18			0.18	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	274	2203		319	2067			268			255	
v/s Ratio Prot	c0.01	0.30		0.00	c0.37							
v/s Ratio Perm	0.12			0.05				0.03			c0.09	
v/c Ratio	0.19	0.48		0.09	0.61			0.17			0.48	
Uniform Delay, d1	5.8	7.6		5.4	9.5			25.9			27.5	
Progression Factor	1.14	1.63		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.7		0.0	1.4			0.1			0.5	
Delay (s)	6.6	13.1		5.5	10.9			26.0			28.0	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		12.8			10.8			26.0			28.0	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	13.2	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
7: Rosecrans St. & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.92	1.00	1.00	0.93
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Volume (vph)	290	1688	63	425	1298	332	312	490	244	130	577	328
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	293	1705	64	429	1311	335	315	495	246	131	583	331
RTOR Reduction (vph)	0	2	0	0	27	0	0	0	195	0	0	202
Lane Group Flow (vph)	293	1767	0	429	1619	0	315	495	51	131	583	129
Confl. Peds. (#/hr)	48		65	65		48	40		42	42		40
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	29.1	68.0		26.5	65.5		17.0	32.3	32.3	14.4	29.7	29.7
Effective Green, g (s)	29.5	69.1		26.9	66.5		17.4	33.2	33.2	14.8	30.6	30.6
Actuated g/C Ratio	0.18	0.43		0.17	0.42		0.11	0.21	0.21	0.09	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	326	2174		577	2005		373	734	304	164	677	281
v/s Ratio Prot	c0.17	c0.35		0.12	c0.34		c0.09	0.14		0.07	c0.16	
v/s Ratio Perm									0.03			0.09
v/c Ratio	0.90	0.81		0.74	0.81		0.84	0.67	0.17	0.80	0.86	0.46
Uniform Delay, d1	63.8	39.8		63.3	41.1		70.0	58.4	52.1	71.1	62.6	57.4
Progression Factor	1.06	0.44		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.8	2.7		4.5	2.6		15.3	1.9	0.1	21.8	10.6	0.4
Delay (s)	88.3	20.2		67.8	43.7		85.3	60.4	52.2	92.9	73.2	57.8
Level of Service	F	C		E	D		F	E	D	F	E	E
Approach Delay (s)		29.8			48.7			65.9			70.8	
Approach LOS		C			D			E			E	

Intersection Summary				
HCM Average Control Delay	49.1	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
9: Enterprise St & Midway Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	228	763	6	0	863
Peak Hour Factor	0.80	0.80	0.87	0.87	0.93	0.93
Hourly flow rate (vph)	0	285	877	7	0	928
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	1346	447			886	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1346	447			886	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	49			100	
cM capacity (veh/h)	142	557			759	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	285	585	299	464	464
Volume Left	0	0	0	0	0
Volume Right	285	0	7	0	0
cSH	557	1700	1700	1700	1700
Volume to Capacity	0.51	0.34	0.18	0.27	0.27
Queue Length 95th (ft)	72	0	0	0	0
Control Delay (s)	18.1	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	18.1	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	42.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
10: Barnett Ave & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	1232	0	0	891	769	0	0	0	739	0	124
Peak-hour factor, PHF	0.86	0.86	0.86	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1433	0	0	938	809	0	0	0	803	0	135
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	0	97
Lane Group Flow (vph)	0	1433	0	0	938	408	0	0	0	803	0	38
Confl. Peds. (#/hr)						6				3		
Turn Type						custom				Prot		custom
Protected Phases		2			2	2				1		
Permitted Phases						8						1
Actuated Green, G (s)		43.0			43.0	43.0				24.0		24.0
Effective Green, g (s)		43.0			43.0	42.5				24.0		24.0
Actuated g/C Ratio		0.51			0.51	0.50				0.29		0.29
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	2.9				2.5		2.5
Lane Grp Cap (vph)		1807			1807	1407				979		451
v/s Ratio Prot		c0.40			0.27	0.15				c0.23		
v/s Ratio Perm												0.02
v/c Ratio		0.79			0.52	0.29				0.82		0.09
Uniform Delay, d1		16.9			13.7	12.1				28.1		22.1
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		2.5			0.2	0.1				5.5		0.1
Delay (s)		19.4			14.0	12.2				33.6		22.1
Level of Service		B			B	B				C		C
Approach Delay (s)		19.4			13.1			0.0			31.9	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	19.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	84.2	Sum of lost time (s)	17.2	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
11: Sport Arena Blvd & Hancock 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9				4.0	4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91				1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99				0.86	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (prot)	1770	3529		1770	5041				1611	1770		1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (perm)	1770	3529		1770	5041				1611	1770		1583
Volume (vph)	86	905	14	20	996	51	0	0	10	56	0	185
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	90	943	15	24	1172	60	0	0	11	62	0	206
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	11	0	0	166
Lane Group Flow (vph)	90	957	0	24	1229	0	0	0	0	62	0	40
Confl. Peds. (#/hr)	18		10	10		18				11		16
Turn Type	Prot			Prot					NA	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases												
Actuated Green, G (s)	8.5	67.0		4.1	62.6				0.0	19.7		19.7
Effective Green, g (s)	8.5	67.0		4.1	62.6				0.0	19.7		20.6
Actuated g/C Ratio	0.08	0.64		0.04	0.60				0.00	0.19		0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	143	2252		69	3005				0	332		311
v/s Ratio Prot	c0.05	c0.27		0.01	0.24					c0.04		0.03
v/s Ratio Perm												
v/c Ratio	0.63	0.43		0.35	0.41				0.00	0.19		0.13
Uniform Delay, d1	46.7	9.4		49.1	11.3				52.5	35.9		34.8
Progression Factor	1.00	1.00		1.50	0.58				1.00	1.00		1.00
Incremental Delay, d2	6.1	0.6		1.0	0.4				0.0	0.1		0.1
Delay (s)	52.8	10.0		74.5	6.9				52.5	36.0		34.9
Level of Service	D	B		E	A				D	D		C
Approach Delay (s)		13.7			8.2			52.5			35.1	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	13.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.40			
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	53.8%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
12: Kemper Street & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Volume (vph)	27	14	40	102	21	102	136	806	19	56	938	108
Peak-hour factor, PHF	0.92	0.92	0.92	0.78	0.78	0.78	0.95	0.95	0.95	0.91	0.91	0.91
Adj. Flow (vph)	29	15	43	131	27	131	143	848	20	62	1031	119
RTOR Reduction (vph)	0	37	0	0	0	115	0	1	0	0	9	0
Lane Group Flow (vph)	29	21	0	131	27	16	143	867	0	62	1141	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	14.8	14.8		11.9	11.9	11.9	8.7	50.1		9.1	50.5	
Effective Green, g (s)	15.7	15.7		12.8	12.8	12.8	9.1	51.0		9.5	51.4	
Actuated g/C Ratio	0.15	0.15		0.12	0.12	0.12	0.09	0.49		0.09	0.49	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	265	244		216	227	189	298	1712		160	2443	
v/s Ratio Prot	c0.02	0.01		c0.07	0.01		0.04	c0.25		0.04	c0.23	
v/s Ratio Perm						0.01						
v/c Ratio	0.11	0.09		0.61	0.12	0.08	0.48	0.51		0.39	0.47	
Uniform Delay, d1	38.6	38.5		43.7	41.1	40.9	45.7	18.4		45.0	17.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.74	0.99		0.59	0.35	
Incremental Delay, d2	0.2	0.2		3.3	0.1	0.1	0.4	1.0		0.5	0.6	
Delay (s)	38.8	38.6		47.0	41.2	41.0	34.2	19.2		27.0	6.9	
Level of Service	D	D		D	D	D	C	B		C	A	
Approach Delay (s)		38.7			43.7			21.3			7.9	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
13: Sport Arena Blvd & 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.94		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	3433	3492		1770	5034			1694		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (perm)	3433	3492		1770	5034			1694		1770	1610	
Volume (vph)	101	786	61	34	931	53	50	11	54	129	13	121
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.79	0.79	0.79	0.93	0.93	0.93
Adj. Flow (vph)	107	836	65	36	990	56	63	14	68	139	14	130
RTOR Reduction (vph)	0	4	0	0	4	0	0	38	0	0	115	0
Lane Group Flow (vph)	107	897	0	36	1042	0	0	107	0	139	29	0
Confl. Peds. (#/hr)	18		7	7		18			6	6		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Effective Green, g (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Actuated g/C Ratio	0.09	0.48		0.08	0.48			0.14		0.12	0.12	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	314	1686		148	2392			231		204	186	
v/s Ratio Prot	c0.03	c0.26		0.02	0.21			c0.06		c0.08	0.02	
v/s Ratio Perm												
v/c Ratio	0.34	0.53		0.24	0.44			0.46		0.68	0.16	
Uniform Delay, d1	44.7	18.9		45.0	18.2			41.8		44.6	41.8	
Progression Factor	1.10	1.07		1.23	0.77			1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.1		0.3	0.6			0.5		7.3	0.1	
Delay (s)	49.6	21.4		55.6	14.6			42.3		51.9	42.0	
Level of Service	D	C		E	B			D		D	D	
Approach Delay (s)		24.4			15.9			42.3			46.8	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
14: Sport Arena Blvd & East Dr 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00	0.99			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.98		1.00	1.00			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (prot)	1770	4954		1770	5074			1788	1563			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (perm)	1770	4954		1770	5074			1788	1563			1611
Volume (vph)	22	837	110	123	989	11	24	5	56	0	0	5
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.78	0.78	0.78	0.30	0.30	0.30
Adj. Flow (vph)	23	890	117	135	1087	12	31	6	72	0	0	17
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	23	999	0	135	1098	0	0	37	6	0	0	17
Confl. Peds. (#/hr)	19		19	19		19			1	1		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Effective Green, g (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Actuated g/C Ratio	0.03	0.66		0.11	0.75			0.09	0.09			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	49	3274		202	3793			160	140			1611
v/s Ratio Prot	0.01	c0.20		c0.08	0.22							
v/s Ratio Perm								0.02	0.00			0.01
v/c Ratio	0.47	0.31		0.67	0.29			0.23	0.05			0.01
Uniform Delay, d1	50.3	7.6		44.6	4.3			44.4	43.7			0.0
Progression Factor	0.81	1.40		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	2.3	0.2		6.3	0.2			0.3	0.0			0.0
Delay (s)	42.9	10.8		50.9	4.5			44.7	43.8			0.0
Level of Service	D	B		D	A			D	D			A
Approach Delay (s)		11.5			9.5			44.1			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
15: Rosecrans St. & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	0.99			1.00	0.98	1.00	0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Volume (vph)	274	1612	442	0	1621	587	251	262	26	372	338	183
Peak-hour factor, PHF	0.86	0.95	0.90	0.25	0.95	0.89	0.85	0.82	0.81	0.93	0.94	0.93
Adj. Flow (vph)	319	1697	491	0	1706	660	295	320	32	400	360	197
RTOR Reduction (vph)	0	33	0	0	0	0	0	3	0	0	0	159
Lane Group Flow (vph)	319	2155	0	0	1706	660	210	434	0	254	506	38
Confl. Peds. (#/hr)	29		31	31		29	63		31	10		63
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	15.6	79.9			59.1	150.0	23.0	23.0		29.2	29.2	29.2
Effective Green, g (s)	17.0	82.0			61.0	150.0	23.0	23.0		29.2	29.2	29.2
Actuated g/C Ratio	0.11	0.55			0.41	1.00	0.15	0.15		0.19	0.19	0.19
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	389	2652			2068	1551	247	506		313	615	281
v/s Ratio Prot	0.09	c0.44			0.34		0.13	c0.13		0.16	c0.16	0.03
v/s Ratio Perm						0.43						
v/c Ratio	0.82	0.81			0.82	0.43	0.85	0.86		0.81	0.82	0.14
Uniform Delay, d1	65.0	27.7			39.7	0.0	61.8	61.9		57.8	57.9	50.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.4	2.8			3.9	0.9	23.3	13.4		15.5	9.2	0.3
Delay (s)	77.4	30.6			43.6	0.9	85.1	75.3		73.3	67.1	50.3
Level of Service	E	C			D	A	F	E		E	E	D
Approach Delay (s)		36.5			31.7			78.5			65.3	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.8
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	852	844	19
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	926	888	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1361	454	908			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1361	454	908			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	100			
cM capacity (veh/h)	139	553	745			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	463	463	592	316
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	20
cSH	553	1700	1700	1700	1700
Volume to Capacity	0.07	0.27	0.27	0.35	0.19
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.0	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM
19: Kurtz & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frpb, ped/bikes				1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes				0.98	1.00	1.00		1.00		1.00	1.00	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1654	1738	1559		5080		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1654	1738	1559		5080		1770	6408	
Volume (vph)	0	0	0	295	177	75	0	1996	14	85	2133	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	311	186	79	0	2101	15	88	2199	0
RTOR Reduction (vph)	0	0	0	0	0	10	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	240	257	69	0	2116	0	88	2199	0
Confl. Peds. (#/hr)				14		3				13		
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				30.4	30.4	30.4		104.1		11.0	119.8	
Effective Green, g (s)				31.3	31.3	31.3		105.3		11.4	120.7	
Actuated g/C Ratio				0.20	0.20	0.20		0.66		0.07	0.75	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				324	340	305		3343		126	4834	
v/s Ratio Prot								c0.42		c0.05	0.34	
v/s Ratio Perm				0.15	0.15	0.04						
v/c Ratio				0.74	0.76	0.22		0.63		0.70	0.45	
Uniform Delay, d1				60.5	60.7	54.1		16.0		72.6	7.3	
Progression Factor				1.00	1.00	1.00		1.00		0.89	1.20	
Incremental Delay, d2				7.7	8.2	0.1		0.9		8.7	0.2	
Delay (s)				68.3	69.0	54.3		16.9		73.3	9.0	
Level of Service				E	E	D		B		E	A	
Approach Delay (s)		0.0			66.7			16.9			11.5	
Approach LOS		A			E			B			B	

Intersection Summary				
HCM Average Control Delay	20.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	68.5%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

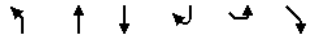
Exisitng PM
20: Rosecrans St & Kurtz 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.94		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3227		1770	3539		1770		1549	1770	1863	
Flt Permitted		1.00		0.23	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3227		435	3539		1770		1549	1770	1863	
Volume (vph)	0	672	199	80	464	0	167	0	124	67	209	0
Peak-hour factor, PHF	1.00	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Adj. Flow (vph)	0	693	205	82	478	0	172	0	128	73	227	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	56	0	0	0
Lane Group Flow (vph)	0	888	0	82	478	0	172	0	72	73	227	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		89.4		101.3	101.3		19.8		89.4	24.7	24.7	
Effective Green, g (s)		90.3		102.2	102.2		20.2		90.3	25.6	25.6	
Actuated g/C Ratio		0.56		0.64	0.64		0.13		0.56	0.16	0.16	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1821		344	2261		223		874	283	298	
v/s Ratio Prot		c0.28		0.01	c0.14		c0.10			0.04	c0.12	
v/s Ratio Perm				0.14					0.05			
v/c Ratio		0.49		0.24	0.21		0.77		0.08	0.26	0.76	
Uniform Delay, d1		20.9		13.2	12.1		67.7		15.9	58.9	64.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.95	0.99	
Incremental Delay, d2		0.9		0.1	0.2		15.1		0.2	0.4	9.1	
Delay (s)		21.9		13.3	12.3		82.8		16.1	56.1	72.6	
Level of Service		C		B	B		F		B	E	E	
Approach Delay (s)		21.9			12.4			54.3			68.6	
Approach LOS		C			B			D			E	

Intersection Summary				
HCM Average Control Delay	30.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	66.6%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
21: Pacific Highway & Kurtz St 4/9/2012

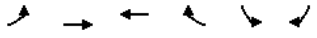


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	214	656	444	7	0	423
Peak Hour Factor	0.92	0.92	0.87	0.87	0.99	0.99
Hourly flow rate (vph)	233	713	510	8	0	427
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	520				1219	176
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	520				1219	176
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	74				100	49
cM capacity (veh/h)	905				128	835

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	233	238	238	238	204	204	110	427
Volume Left	233	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	427
cSH	905	1700	1700	1700	1700	1700	1700	835
Volume to Capacity	0.26	0.14	0.14	0.14	0.12	0.12	0.06	0.51
Queue Length 95th (ft)	26	0	0	0	0	0	0	74
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Lane LOS	B							B
Approach Delay (s)	2.5				0.0			13.7
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
22: Hancock & Channel Way 4/9/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	51	72	159	59	10	70
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	63	89	199	74	13	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1226				
pX, platoon unblocked						
vC, conflicting volume	272				450	236
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				450	236
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	88
cM capacity (veh/h)	1291				539	803

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	63	89	272	107
Volume Left	63	0	0	13
Volume Right	0	0	74	93
cSH	1291	1700	1700	757
Volume to Capacity	0.05	0.05	0.16	0.14
Queue Length 95th (ft)	4	0	0	12
Control Delay (s)	7.9	0.0	0.0	10.5
Lane LOS	A			B
Approach Delay (s)	3.3		0.0	10.5
Approach LOS				B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
23: Hancock St & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frpb, ped/bikes		0.98					1.00	1.00			1.00	0.96
Flpb, ped/bikes		1.00					1.00	1.00			1.00	1.00
Frt		0.92					1.00	1.00			1.00	0.85
Flt Protected		0.99					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3165					1770	5073			5085	1516
Flt Permitted		0.99					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3165					1770	5073			5085	1516
Volume (vph)	40	81	146	0	0	0	87	2175	29	0	2178	83
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	88	159	0	0	0	95	2364	32	0	2367	90
RTOR Reduction (vph)	0	6	0	0	0	0	0	1	0	0	0	21
Lane Group Flow (vph)	0	284	0	0	0	0	95	2395	0	0	2367	69
Confl. Peds. (#/hr)	1		20				15		2			15
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		32.1					13.6	118.1			100.1	100.1
Effective Green, g (s)		33.0					14.0	119.0			101.0	101.0
Actuated g/C Ratio		0.21					0.09	0.74			0.63	0.63
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		653					155	3773			3210	957
v/s Ratio Prot		c0.09					0.05	c0.47			c0.47	
v/s Ratio Perm												0.05
v/c Ratio		0.43					0.61	0.63			0.74	0.07
Uniform Delay, d1		55.4					70.4	10.0			20.4	11.4
Progression Factor		0.81					1.08	1.20			1.00	1.00
Incremental Delay, d2		0.2					4.0	0.7			1.6	0.1
Delay (s)		44.9					79.8	12.6			21.9	11.5
Level of Service		D					E	B			C	B
Approach Delay (s)		44.9			0.0			15.2			21.5	
Approach LOS		D			A			B			C	

Intersection Summary				
HCM Average Control Delay	19.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	79.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

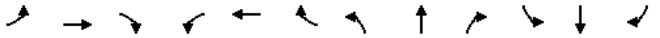
Exisitng PM
25: Old Town St & Hancock St 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	242	0	0	304	294	258
Peak Hour Factor	0.85	0.85	0.93	0.93	0.84	0.84
Hourly flow rate (vph)	285	0	0	327	350	307

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	285	327	350	307
Volume Left (vph)	285	0	350	0
Volume Right (vph)	0	327	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.3	5.3	6.5	5.9
Degree Utilization, x	0.50	0.48	0.63	0.51
Capacity (veh/h)	530	658	547	593
Control Delay (s)	15.5	13.0	18.5	13.7
Approach Delay (s)	15.5	13.0	16.3	
Approach LOS	C	B	C	

Intersection Summary				
Delay	15.2			
HCM Level of Service	C			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
26: Witherby St & Hancock St 4/9/2012

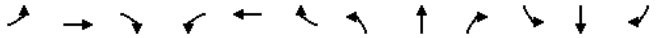


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	87	154	172	10	75	0	422	217	50	15	270	215
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.91	0.91	0.91	0.72	0.72	0.72
Hourly flow rate (vph)	104	183	205	12	94	0	464	238	55	21	375	299

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	492	106	757	396	299
Volume Left (vph)	104	13	464	21	0
Volume Right (vph)	205	0	55	0	299
Hadj (s)	-0.17	0.06	0.11	0.06	-0.67
Departure Headway (s)	7.4	9.5	7.8	8.2	7.5
Degree Utilization, x	1.02	0.28	1.64	0.90	0.62
Capacity (veh/h)	492	371	465	427	469
Control Delay (s)	72.3	16.1	319.6	50.2	20.9
Approach Delay (s)	72.3	16.1	319.6	37.6	
Approach LOS	F	C	F	E	

Intersection Summary				
Delay	149.0			
HCM Level of Service	F			
Intersection Capacity Utilization	93.1%	ICU Level of Service	F	
Analysis Period (min)	15			

Exisitng PM
27: Washington St & Hancock St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Volume (vph)	0	547	124	346	378	0	0	0	0	96	228	760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	595	135	376	411	0	0	0	0	104	248	826
RTOR Reduction (vph)	0	0	99	0	0	0	0	0	0	0	0	253
Lane Group Flow (vph)	0	595	36	376	411	0	0	0	0	104	248	573
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		20.5	20.5	12.7	37.6					32.6	32.6	32.6
Effective Green, g (s)		21.4	21.4	13.1	38.5					33.5	33.5	33.5
Actuated g/C Ratio		0.27	0.27	0.16	0.48					0.42	0.42	0.42
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		947	423	562	1703					674	1420	663
v/s Ratio Prot		c0.17		c0.11	0.12						0.07	
v/s Ratio Perm			0.02							0.06		c0.36
v/c Ratio		0.63	0.09	0.67	0.24					0.15	0.17	0.86
Uniform Delay, d1		25.8	22.0	31.4	12.2					14.4	14.6	21.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2	0.4	2.3	0.3					0.0	0.0	11.0
Delay (s)		29.0	22.4	33.8	12.5					14.5	14.6	32.2
Level of Service		C	C	C	B					B	B	C
Approach Delay (s)		27.7			22.7			0.0			26.9	
Approach LOS		C			C			A			C	

Intersection Summary						
HCM Average Control Delay	25.9	HCM Level of Service		C		
HCM Volume to Capacity ratio	0.75					
Actuated Cycle Length (s)	80.0	Sum of lost time (s)		12.0		
Intersection Capacity Utilization	64.2%	ICU Level of Service		C		
Analysis Period (min)	15					
c Critical Lane Group						

Exisitng PM
28: Vine St & Hancock St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	18	51	0	0	0	0	0	0	2034	4
Peak Hour Factor	0.56	0.56	0.56	0.75	0.75	0.75	0.95	0.95	0.95	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	32	68	0	0	0	0	0	0	2211	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	2213	2213	739	769	2215	0	2215			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2213	2213	739	769	2215	0	2215			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	91	74	100	100	100			100		
cM capacity (veh/h)	24	43	360	265	43	1084	233			1622		

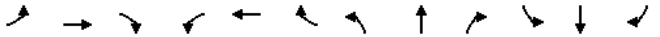
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	32	68	884	884	447
Volume Left	0	68	0	0	0
Volume Right	32	0	0	0	4
cSH	360	265	1700	1700	1700
Volume to Capacity	0.09	0.26	0.52	0.52	0.26
Queue Length 95th (ft)	7	25	0	0	0
Control Delay (s)	16.0	23.2	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	16.0	23.2	0.0		
Approach LOS	C	C			

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Exisitng PM
29: Sassafras St & Kettner Bl 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.96	
Flt Protected		1.00	1.00		0.97					0.95	1.00	
Satd. Flow (prot)		1863	1583		3418					1770	4887	
Flt Permitted		1.00	1.00		0.72					0.95	1.00	
Satd. Flow (perm)		1863	1583		2557					1770	4887	
Volume (vph)	0	202	97	82	34	0	0	0	0	248	686	241
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	220	105	89	37	0	0	0	0	270	746	262
RTOR Reduction (vph)	0	0	52	0	0	0	0	0	0	0	115	0
Lane Group Flow (vph)	0	220	53	0	126	0	0	0	0	270	893	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		22.0	22.0		22.0					20.0	20.0	
Effective Green, g (s)		24.7	24.7		24.7					22.3	22.3	
Actuated g/C Ratio		0.45	0.45		0.45					0.41	0.41	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		837	711		1148					718	1981	
v/s Ratio Prot		c0.12									c0.18	
v/s Ratio Perm			0.03		0.05					0.15		
v/c Ratio		0.26	0.07		0.11					0.38	0.45	
Uniform Delay, d1		9.5	8.6		8.8					11.5	11.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.8	0.2		0.2					1.5	0.7	
Delay (s)		10.2	8.8		9.0					13.0	12.6	
Level of Service		B	A		A					B	B	
Approach Delay (s)		9.8			9.0			0.0			12.7	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	11.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3481		1770	3539						4718	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3481		1770	3539						4718	1362
Volume (vph)	0	813	100	49	196	0	0	0	0	438	732	334
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	884	109	53	213	0	0	0	0	476	796	363
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	0	241
Lane Group Flow (vph)	0	985	0	53	213	0	0	0	0	0	1272	122
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		49.6		6.2	58.5						33.5	33.5
Effective Green, g (s)		47.8		6.6	58.4						32.6	34.9
Actuated g/C Ratio		0.46		0.06	0.56						0.31	0.34
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1600		112	1987						1479	457
v/s Ratio Prot		c0.28		c0.03	0.06							
v/s Ratio Perm											0.27	0.09
v/c Ratio		0.62		0.47	0.11						0.90dl	0.27
Uniform Delay, d1		21.2		47.0	10.6						33.6	25.2
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		1.8		1.1	0.1						5.2	0.1
Delay (s)		23.0		48.2	10.7						38.7	25.3
Level of Service		C		D	B						D	C
Approach Delay (s)		23.0			18.2			0.0			35.8	
Approach LOS		C			B			A			D	

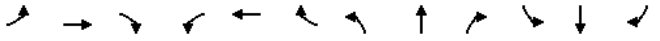
Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM

32: Washington St & Pacific Highway NB Frontage Road 4/9/2012

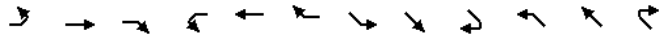


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.88			0.90	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99			0.99	
Satd. Flow (prot)	1770	3539			3539	1583	1610	2969			1653	
Flt Permitted	0.95	1.00			1.00	1.00	0.70	0.90			0.31	
Satd. Flow (perm)	1770	3539			3539	1583	1184	2690			514	
Volume (vph)	139	511	0	0	766	372	93	11	140	20	0	63
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	151	555	0	0	833	404	101	12	152	22	0	68
RTOR Reduction (vph)	0	0	0	0	0	228	0	121	0	0	61	0
Lane Group Flow (vph)	151	555	0	0	833	176	71	73	0	0	29	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	4.0	42.9			34.0	34.0	13.5	13.5			8.1	
Effective Green, g (s)	4.5	42.9			34.4	34.4	15.9	15.9			8.1	
Actuated g/C Ratio	0.06	0.54			0.44	0.44	0.20	0.20			0.10	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	101	1924			1543	690	239	542			53	
v/s Ratio Prot	c0.09	0.16			c0.24							
v/s Ratio Perm						0.11	c0.06	0.03			c0.06	
v/c Ratio	1.50	0.29			0.54	0.26	0.30	0.13			0.55	
Uniform Delay, d1	37.2	9.7			16.4	14.1	26.8	25.9			33.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	267.6	0.0			1.4	0.9	0.3	0.0			6.0	
Delay (s)	304.8	9.8			17.8	15.0	27.0	25.9			39.7	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		72.9			16.9			26.2			39.7	
Approach LOS		E			B			C			D	

Intersection Summary				
HCM Average Control Delay	36.0	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	52.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM

33: Washington St & Pacific Highway SB 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.98		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3457		1757	1863		1681	1699	1583			
Flt Permitted		1.00		0.49	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3457		904	1863		1681	1699	1583			
Volume (vph)	0	367	53	270	652	0	283	27	358	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	399	58	293	709	0	308	29	389	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	0	444	0	293	709	0	164	173	348	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		12.7		32.2	32.2		18.3	18.3	31.0			
Effective Green, g (s)		12.7		32.5	32.5		20.5	20.5	33.2			
Actuated g/C Ratio		0.16		0.42	0.42		0.26	0.26	0.43			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		565		378	779		444	448	758			
v/s Ratio Prot		c0.13			c0.38				c0.12			
v/s Ratio Perm				0.32			0.10	0.10	0.10			
v/c Ratio		0.79		0.78	0.91		0.37	0.39	0.46			
Uniform Delay, d1		31.2		19.5	21.2		23.3	23.4	15.9			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		6.6		14.4	16.6		0.2	0.2	0.2			
Delay (s)		37.8		33.8	37.8		23.5	23.6	16.0			
Level of Service		D		C	D		C	C	B			
Approach Delay (s)		37.8			36.7			19.5			0.0	
Approach LOS		D			D			B			A	

Intersection Summary				
HCM Average Control Delay	31.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
34: Sassafras St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.89		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1833		1763	1665		1767	4984		1770	5083	
Flt Permitted	0.69	1.00		0.64	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1278	1833		1182	1665		1767	4984		1770	5083	
Volume (vph)	23	139	15	174	29	72	19	549	84	76	404	1
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	151	16	189	32	78	21	597	91	83	439	1
RTOR Reduction (vph)	0	7	0	0	58	0	0	23	0	0	0	0
Lane Group Flow (vph)	25	160	0	189	52	0	21	665	0	83	440	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	15.3	15.3		14.6	14.6		0.8	24.8		4.1	27.4	
Effective Green, g (s)	15.3	15.3		15.0	15.0		0.8	26.2		1.9	29.5	
Actuated g/C Ratio	0.27	0.27		0.26	0.26		0.01	0.45		0.03	0.51	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	339	487		308	434		25	2267		58	2603	
v/s Ratio Prot		0.09			0.03		0.01	c0.13		c0.05	c0.09	
v/s Ratio Perm	0.02			c0.16								
v/c Ratio	0.07	0.33		0.61	0.12		0.84	0.29		1.43	0.17	
Uniform Delay, d1	15.8	17.0		18.7	16.3		28.3	9.9		27.9	7.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1		3.6	0.1		106.1	0.3		268.4	0.1	
Delay (s)	15.9	17.2		22.4	16.4		134.4	10.2		296.3	7.6	
Level of Service	B	B		C	B		F	B		F	A	
Approach Delay (s)		17.0			20.2			13.9			53.4	
Approach LOS		B			C			B			D	

Intersection Summary				
HCM Average Control Delay	27.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	18.5	
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
35: W Laurel St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Volume (vph)	278	524	64	89	352	89	155	421	51	338	562	150
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	302	570	70	97	383	97	168	458	55	367	611	163
RTOR Reduction (vph)	0	9	0	0	22	0	0	13	0	0	0	134
Lane Group Flow (vph)	302	631	0	97	458	0	168	500	0	367	611	29
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	17.7	27.0		12.3	21.0		13.2	20.9		21.2	28.8	17.7
Effective Green, g (s)	18.1	28.2		12.7	22.8		13.6	21.8		21.6	29.8	18.1
Actuated g/C Ratio	0.18	0.28		0.13	0.23		0.14	0.22		0.22	0.30	0.18
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	319	979		224	778		240	1086		381	1511	280
v/s Ratio Prot	c0.17	c0.18		0.05	0.13		0.09	c0.10		c0.21	0.12	
v/s Ratio Perm												0.02
v/c Ratio	0.95	0.64		0.43	0.59		0.70	0.46		0.96	0.40	0.11
Uniform Delay, d1	40.6	31.6		40.5	34.6		41.4	34.1		39.0	28.2	34.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	35.8	1.6		6.0	1.0		7.0	1.4		36.1	0.8	0.1
Delay (s)	76.5	33.3		46.5	35.6		48.4	35.5		75.1	29.0	34.4
Level of Service	E	C		D	D		D	D		E	C	C
Approach Delay (s)		47.1			37.4			38.7			44.6	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	42.9	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	90.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
36: Rosecrans St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.84	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Volume (vph)	100	685	78	143	257	80	235	206	456	57	97	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	753	86	157	282	88	258	226	501	63	107	57
RTOR Reduction (vph)	0	0	39	0	0	54	0	0	88	0	0	47
Lane Group Flow (vph)	110	753	47	157	282	34	258	226	413	63	107	10
Confl. Peds. (#/hr)	170		27	27		170	23		15	15		23
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	7.2	34.4	46.4	5.8	33.0	33.0	12.0	21.9	27.7	5.8	15.7	15.7
Effective Green, g (s)	7.6	35.3	47.7	6.2	33.9	33.9	12.4	21.3	26.0	6.2	15.2	15.2
Actuated g/C Ratio	0.09	0.41	0.55	0.07	0.39	0.39	0.14	0.25	0.30	0.07	0.18	0.18
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	156	1444	923	246	730	520	254	871	565	127	622	270
v/s Ratio Prot	c0.06	c0.21	0.01	0.05	0.15		c0.15	0.06	c0.04	0.04	0.03	
v/s Ratio Perm			0.02			0.03			0.23			0.01
v/c Ratio	0.71	0.52	0.05	0.64	0.39	0.07	1.02	0.26	0.73	0.50	0.17	0.04
Uniform Delay, d1	38.4	19.2	9.0	39.1	18.8	16.4	37.0	26.2	27.1	38.6	30.3	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	1.3	0.0	4.0	1.5	0.2	60.6	0.3	4.2	1.1	0.2	0.1
Delay (s)	49.6	20.6	9.0	43.0	20.4	16.7	97.6	26.5	31.3	39.8	30.5	29.7
Level of Service	D	C	A	D	C	B	F	C	C	D	C	C
Approach Delay (s)		22.9			26.5			47.6			32.9	
Approach LOS		C			C			D			C	

Intersection Summary				
HCM Average Control Delay	33.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	86.5	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	77.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
37: Old Town St & Moore St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.94			0.95			0.88	
Flt Protected		0.97			1.00			0.99			1.00	
Satd. Flow (prot)		1796			1726			1725			1605	
Flt Permitted		0.62			0.99			0.90			0.99	
Satd. Flow (perm)		1147			1714			1570			1596	
Volume (vph)	406	183	9	5	150	137	71	88	95	1	2	21
Peak-hour factor, PHF	0.98	0.98	0.98	0.86	0.86	0.86	0.89	0.89	0.89	0.67	0.67	0.67
Adj. Flow (vph)	414	187	9	6	174	159	80	99	107	1	3	31
RTOR Reduction (vph)	0	1	0	0	21	0	0	29	0	0	24	0
Lane Group Flow (vph)	0	609	0	0	318	0	0	257	0	0	11	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		49.4			49.4			15.4			15.4	
Effective Green, g (s)		50.3			50.3			16.3			16.3	
Actuated g/C Ratio		0.67			0.67			0.22			0.22	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		773			1156			343			349	
v/s Ratio Prot												
v/s Ratio Perm		c0.53			0.19			c0.16			0.01	
v/c Ratio		0.79			0.27			0.75			0.03	
Uniform Delay, d1		8.4			4.9			27.2			22.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.9			0.6			7.6			0.0	
Delay (s)		13.4			5.4			34.9			22.9	
Level of Service		B			A			C			C	
Approach Delay (s)		13.4			5.4			34.9			22.9	
Approach LOS		B			A			C			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	74.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
38: Taylor St & Congress St 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4770		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4770		1770	3539	1770	1583
Volume (vph)	902	296	132	392	88	157
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.90	0.90
Adj. Flow (vph)	1013	333	148	440	98	174
RTOR Reduction (vph)	67	0	0	0	0	136
Lane Group Flow (vph)	1279	0	148	440	98	38
Confl. Peds. (#/hr)		53	53		46	81
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	33.8		6.3	44.5	14.0	14.0
Effective Green, g (s)	35.7		6.7	44.5	14.9	14.9
Actuated g/C Ratio	0.52		0.10	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2493		174	2306	386	345
v/s Ratio Prot	c0.27		c0.08	0.12	c0.06	0.02
v/s Ratio Perm						
v/c Ratio	0.51		0.85	0.19	0.25	0.11
Uniform Delay, d1	10.6		30.3	4.7	22.1	21.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		29.8	0.2	0.1	0.1
Delay (s)	11.4		60.1	4.9	22.2	21.4
Level of Service	B		E	A	C	C
Approach Delay (s)	11.4			18.8	21.7	
Approach LOS	B			B	C	

Intersection Summary				
HCM Average Control Delay	14.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	55.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

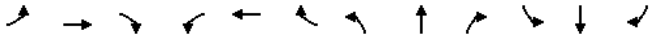
Exisitng PM
39: Twiggs St & Congress St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	2	3	17	5	47	12	106	13	43	136	9
Peak Hour Factor	0.80	0.80	0.80	0.66	0.66	0.66	0.82	0.82	0.82	0.90	0.90	0.90
Hourly flow rate (vph)	10	2	4	26	8	71	15	129	16	48	151	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	105	160	209
Volume Left (vph)	10	26	15	48
Volume Right (vph)	4	71	16	10
Hadj (s)	0.02	-0.33	-0.01	0.05
Departure Headway (s)	4.9	4.4	4.4	4.4
Degree Utilization, x	0.02	0.13	0.20	0.26
Capacity (veh/h)	666	744	783	782
Control Delay (s)	8.0	8.1	8.5	8.9
Approach Delay (s)	8.0	8.1	8.5	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
HCM Level of Service	A			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
40: Harney St & Congress St 4/9/2012

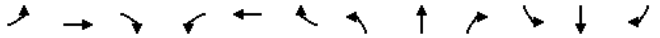


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	10	5	19	29	8	5	102	15	20	96	40
Peak Hour Factor	0.75	0.75	0.75	0.73	0.73	0.73	0.87	0.87	0.87	0.92	0.92	0.92
Hourly flow rate (vph)	28	13	7	26	40	11	6	117	17	22	104	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	48	77	140	170
Volume Left (vph)	28	26	6	22
Volume Right (vph)	7	11	17	43
Hadj (s)	0.07	0.02	-0.03	-0.09
Departure Headway (s)	4.8	4.7	4.4	4.3
Degree Utilization, x	0.06	0.10	0.17	0.20
Capacity (veh/h)	695	712	791	805
Control Delay (s)	8.1	8.2	8.2	8.3
Approach Delay (s)	8.1	8.2	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.3	
HCM Level of Service			A	
Intersection Capacity Utilization			30.3%	ICU Level of Service
Analysis Period (min)			15	A

Exisitng PM
41: Ampudia St & Congress St 4/9/2012

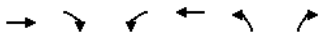


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	5	6	51	18	11	9	99	290	0	107	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	7	5	7	82	29	18	10	106	312	0	120	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								320				
pX, platoon unblocked												
vC, conflicting volume	286	570	123	265	259	120	124			427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	286	570	123	265	259	120	124			427		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	88	95	98	99			100		
cM capacity (veh/h)	619	425	926	662	635	920	1460			1124		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	19	129	116	312	122
Volume Left	7	82	10	0	0
Volume Right	7	18	0	312	2
cSH	608	682	1460	1700	1124
Volume to Capacity	0.03	0.19	0.01	0.18	0.00
Queue Length 95th (ft)	2	17	1	0	0
Control Delay (s)	11.1	11.5	0.7	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.1	11.5	0.2		0.0
Approach LOS	B	B			

Intersection Summary					
Average Delay			2.5		
Intersection Capacity Utilization			38.5%	ICU Level of Service	
Analysis Period (min)			15		A

Exisitng PM
42: Twiggs St & San Diego Ave 4/9/2012

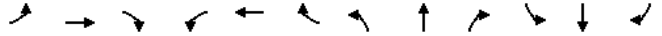


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	30	28	41	35	34	85
Peak Hour Factor	0.89	0.89	0.78	0.78	0.83	0.83
Hourly flow rate (vph)	34	31	53	45	41	102

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	65	97	143
Volume Left (vph)	0	53	41
Volume Right (vph)	31	0	102
Hadj (s)	-0.26	0.14	-0.34
Departure Headway (s)	4.0	4.4	3.9
Degree Utilization, x	0.07	0.12	0.16
Capacity (veh/h)	851	787	877
Control Delay (s)	7.4	8.0	7.6
Approach Delay (s)	7.4	8.0	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay		7.7	
HCM Level of Service		A	
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
43: Harney St & San Diego Ave 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	18	13	40	18	6	30	99	46	3	58	8
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.91	0.91	0.91	0.81	0.81	0.81
Hourly flow rate (vph)	17	22	16	47	21	7	33	109	51	4	72	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	74	192	85
Volume Left (vph)	17	47	33	4
Volume Right (vph)	16	7	51	10
Hadj (s)	-0.08	0.10	-0.09	-0.03
Departure Headway (s)	4.5	4.7	4.2	4.4
Degree Utilization, x	0.07	0.10	0.23	0.10
Capacity (veh/h)	732	713	822	777
Control Delay (s)	7.9	8.2	8.4	7.9
Approach Delay (s)	7.9	8.2	8.4	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
44: Old Town St & San Diego Ave 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.97		1.00	1.00		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1728			1785		1765	1852		1763	1623	
Flt Permitted		0.77			0.95		0.62	1.00		0.66	1.00	
Satd. Flow (perm)		1377			1713		1149	1852		1219	1623	
Volume (vph)	160	28	91	7	45	17	100	121	4	8	48	147
Peak-hour factor, PHF	0.78	0.78	0.78	0.81	0.81	0.81	0.79	0.79	0.79	0.87	0.87	0.87
Adj. Flow (vph)	205	36	117	9	56	21	127	153	5	9	55	169
RTOR Reduction (vph)	0	41	0	0	14	0	0	2	0	0	83	0
Lane Group Flow (vph)	0	317	0	0	72	0	127	156	0	9	141	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Effective Green, g (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.31			0.31		0.51	0.51		0.51	0.51	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		431			536		582	939		618	822	
v/s Ratio Prot								0.08			0.09	
v/s Ratio Perm		c0.23			0.04		c0.11			0.01		
v/c Ratio		0.73			0.13		0.22	0.17		0.01	0.17	
Uniform Delay, d1		13.6			10.9		6.1	5.9		5.4	5.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.5			0.0		0.9	0.4		0.0	0.5	
Delay (s)		19.1			11.0		6.9	6.3		5.5	6.4	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		19.1			11.0			6.6			6.3	
Approach LOS		B			B			A			A	

Intersection Summary				
HCM Average Control Delay	11.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	44.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	55.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

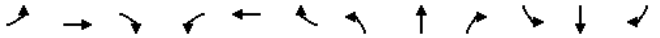
Exisitng PM
45: Taylor St & 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.90			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1764	3473		1769	3530			1640			1742	
Flt Permitted	0.46	1.00		0.14	1.00			0.90			0.73	
Satd. Flow (perm)	856	3473		264	3530			1500			1315	
Volume (vph)	52	909	98	188	454	6	65	2	179	15	2	5
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.95	0.95	0.95	0.79	0.79	0.79
Adj. Flow (vph)	56	977	105	211	510	7	68	2	188	19	3	6
RTOR Reduction (vph)	0	10	0	0	1	0	0	148	0	0	5	0
Lane Group Flow (vph)	56	1072	0	211	516	0	0	110	0	0	23	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.1	25.8		37.3	30.6			10.5			10.5	
Effective Green, g (s)	29.5	26.8		38.2	31.5			11.4			11.4	
Actuated g/C Ratio	0.51	0.47		0.66	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	481	1616		368	1930			297			260	
v/s Ratio Prot	0.01	c0.31		c0.07	0.15							
v/s Ratio Perm	0.05			0.31				c0.07			0.02	
v/c Ratio	0.12	0.66		0.57	0.27			0.37			0.09	
Uniform Delay, d1	7.1	11.9		6.8	6.9			20.0			18.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	2.2		1.3	0.3			0.3			0.1	
Delay (s)	7.1	14.1		8.1	7.3			20.3			18.9	
Level of Service	A	B		A	A			C			B	
Approach Delay (s)		13.7			7.5			20.3			18.9	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	12.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
46: Twiggs St & Juan St 4/9/2012

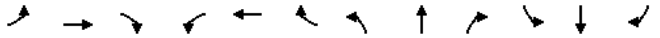


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	98	4	13	0	1	5	4	91	3	6	127	71
Peak Hour Factor	0.93	0.93	0.93	0.50	0.50	0.50	0.87	0.87	0.87	0.96	0.96	0.96
Hourly flow rate (vph)	105	4	14	0	2	10	5	105	3	6	132	74

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	124	12	113	213
Volume Left (vph)	105	0	5	6
Volume Right (vph)	14	10	3	74
Hadj (s)	0.14	-0.47	0.02	-0.17
Departure Headway (s)	4.8	4.3	4.5	4.2
Degree Utilization, x	0.16	0.01	0.14	0.25
Capacity (veh/h)	701	753	765	819
Control Delay (s)	8.7	7.4	8.2	8.6
Approach Delay (s)	8.7	7.4	8.2	8.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.5		
HCM Level of Service		A		
Intersection Capacity Utilization		33.9%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
47: Harney St & Juan St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	22	3	42	0	3	9	21	67	4	4	96	40
Peak Hour Factor	0.90	0.90	0.90	0.50	0.50	0.50	0.92	0.92	0.92	0.88	0.88	0.80
Hourly flow rate (vph)	24	3	47	0	6	18	23	73	4	5	109	50

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	74	24	100	164
Volume Left (vph)	24	0	23	5
Volume Right (vph)	47	18	4	50
Hadj (s)	-0.28	-0.42	0.05	-0.14
Departure Headway (s)	4.2	4.1	4.3	4.1
Degree Utilization, x	0.09	0.03	0.12	0.19
Capacity (veh/h)	790	799	798	858
Control Delay (s)	7.6	7.3	7.9	8.0
Approach Delay (s)	7.6	7.3	7.9	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.9		
HCM Level of Service		A		
Intersection Capacity Utilization		33.2%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
48: Taylor St & Morena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3510		1770	3426				1611	1681	1699	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3510		1770	3426				1611	1681	1699	1561
Volume (vph)	468	606	29	3	448	107	0	0	14	78	7	200
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	498	645	31	3	477	114	0	0	16	88	8	225
RTOR Reduction (vph)	0	3	0	0	21	0	0	0	0	0	0	181
Lane Group Flow (vph)	498	673	0	3	570	0	0	0	16	47	49	44
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	12.0	38.5		0.6	27.1				65.3	11.6	11.6	11.6
Effective Green, g (s)	12.4	39.4		1.0	28.0				65.3	12.9	12.9	12.9
Actuated g/C Ratio	0.19	0.60		0.02	0.43				1.00	0.20	0.20	0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	652	2118		27	1469				1611	332	336	308
v/s Ratio Prot	c0.15	0.19		0.00	c0.17					0.03	c0.03	
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.76	0.32		0.11	0.39				0.01	0.14	0.15	0.14
Uniform Delay, d1	25.1	6.4		31.7	12.8				0.0	21.6	21.6	21.6
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	0.4		0.7	0.8				0.0	0.3	0.3	0.4
Delay (s)	29.8	6.8		32.4	13.6				0.0	22.0	22.0	22.0
Level of Service	C	A		C	B				A	C	C	C
Approach Delay (s)		16.5			13.6			0.0			22.0	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
49: Rosecrans St. & Hugo St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.92			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3420		1671	3423		1644	1575			1736	
Flt Permitted	0.95	1.00		0.95	1.00		0.55	1.00			0.51	
Satd. Flow (perm)	1678	3420		1671	3423		949	1575			900	
Volume (vph)	16	1386	63	32	969	26	105	99	124	24	76	3
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	1540	70	36	1077	29	117	110	138	27	84	3
RTOR Reduction (vph)	0	1	0	0	1	0	0	34	0	0	1	0
Lane Group Flow (vph)	18	1609	0	36	1105	0	117	214	0	0	113	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	105.3		6.8	109.0		23.7	23.7			23.7	
Effective Green, g (s)	3.5	106.2		7.2	109.9		24.6	24.6			24.6	
Actuated g/C Ratio	0.02	0.71		0.05	0.73		0.16	0.16			0.16	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	39	2421		80	2508		156	258			148	
v/s Ratio Prot	0.01	c0.47		c0.02	c0.32			c0.14				
v/s Ratio Perm							0.12				0.13	
v/c Ratio	0.46	0.66		0.45	0.44		0.75	0.83			0.76	
Uniform Delay, d1	72.3	12.1		69.5	7.9		59.8	60.7			59.9	
Progression Factor	1.00	1.00		0.91	0.44		1.00	1.00			1.00	
Incremental Delay, d2	3.1	1.5		1.0	0.4		16.3	18.4			18.8	
Delay (s)	75.4	13.5		64.3	3.8		76.1	79.0			78.7	
Level of Service	E	B		E	A		E	E			E	
Approach Delay (s)		14.2			5.8			78.1			78.7	
Approach LOS		B			A			E			E	

Intersection Summary				
HCM Average Control Delay	20.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	72.2%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
50: Rosecrans St. & Lowell St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Volume (vph)	352	1316	24	165	799	184	18	370	181	287	190	135
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	371	1385	25	174	841	194	19	389	191	302	200	142
RTOR Reduction (vph)	0	1	0	0	13	0	0	0	31	0	85	0
Lane Group Flow (vph)	371	1409	0	174	1022	0	19	389	160	302	257	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	33.0	60.9		16.7	44.1		3.6	24.8	41.5	28.9	50.2	
Effective Green, g (s)	33.4	61.8		17.1	45.5		4.0	25.8	42.9	29.3	51.1	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.03	0.17	0.29	0.20	0.34	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	394	1453		202	1030		47	609	437	346	1084	
v/s Ratio Prot	c0.21	c0.40		0.10	0.30		0.01	c0.11	0.04	c0.17	0.08	
v/s Ratio Perm									0.06			
v/c Ratio	0.94	0.97		0.86	0.99		0.40	0.64	0.37	0.87	0.24	
Uniform Delay, d1	57.3	43.2		65.3	52.1		71.8	57.8	42.7	58.5	35.5	
Progression Factor	1.19	0.83		1.16	0.91		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.0	15.0		26.6	25.0		2.1	2.5	0.2	20.2	0.1	
Delay (s)	94.0	50.7		102.4	72.3		73.9	60.2	42.9	78.8	35.6	
Level of Service	F	D		F	E		E	E	D	E	D	
Approach Delay (s)		59.7			76.7			55.1			55.8	
Approach LOS		E			E			E			E	

Intersection Summary				
HCM Average Control Delay	63.3	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.3%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
51: Rosecrans St. & Laning Rd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (prot)		5045		1770	3539			1775	1552		1787	
Flt Permitted		1.00		0.95	1.00			0.71	1.00		0.70	
Satd. Flow (perm)		5045		1770	3539			1329	1552		1302	
Volume (vph)	0	1855	83	142	1217	1	87	1	203	40	10	1
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1953	87	149	1281	1	92	1	214	42	11	1
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	184	0	1	0
Lane Group Flow (vph)	0	2038	0	149	1282	0	0	93	30	0	53	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		98.8		16.5	119.7			20.1	20.1		20.1	
Effective Green, g (s)		100.1		16.9	121.0			21.0	21.0		21.0	
Actuated g/C Ratio		0.67		0.11	0.81			0.14	0.14		0.14	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		3367		199	2855			186	217		182	
v/s Ratio Prot		c0.40		c0.08	0.36							
v/s Ratio Perm								c0.07	0.02		0.04	
v/c Ratio		0.61		0.75	0.45			0.50	0.14		0.29	
Uniform Delay, d1		13.9		64.5	4.4			59.6	56.6		57.8	
Progression Factor		0.35		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		12.6	0.5			0.8	0.1		0.3	
Delay (s)		5.4		77.1	4.9			60.4	56.7		58.2	
Level of Service		A		E	A			E	E		E	
Approach Delay (s)		5.4			12.4			57.8			58.2	
Approach LOS		A			B			E			E	

Intersection Summary				
HCM Average Control Delay	12.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
52: Hawthorne St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.98	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5031						4958	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5031						4958	
Volume (vph)	0	0	0	197	900	0	0	0	0	0	393	67
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	210	957	0	0	0	0	0	546	93
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	0	0	0	1141	0	0	0	0	0	607	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3527						1041	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.23							
v/c Ratio					0.32						0.58	
Uniform Delay, d1					5.2						32.0	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.2						0.5	
Delay (s)					5.4						32.5	
Level of Service					A						C	
Approach Delay (s)		0.0			5.4			0.0			32.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	15.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

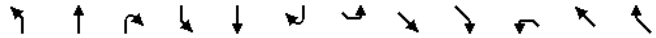
Exisitng PM
53: Grape St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		1.00									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5063									4943	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5063									4943	
Volume (vph)	0	1526	39	0	0	0	0	0	0	240	350	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	1641	42	0	0	0	0	0	0	270	393	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	1681	0	0	0	0	0	0	0	0	655	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		61.8									19.2	
Effective Green, g (s)		61.8									20.2	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3477									1109	
v/s Ratio Prot		c0.33										
v/s Ratio Perm											0.13	
v/c Ratio		0.48									0.59	
Uniform Delay, d1		6.6									31.2	
Progression Factor		0.40									0.72	
Incremental Delay, d2		0.4									0.8	
Delay (s)		3.0									23.3	
Level of Service		A									C	
Approach Delay (s)		3.0			0.0			0.0			23.3	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	8.7	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
54: Seaworld Dr & E Mission Bay Dr 4/9/2012

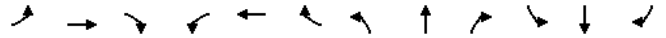


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Volume (vph)	78	1077	116	142	1276	13	59	70	189	102	41	116
Peak-hour factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96	0.82	0.82	0.82	0.74	0.74	0.74
Adj. Flow (vph)	80	1110	120	148	1329	14	72	85	230	138	55	157
RTOR Reduction (vph)	0	0	89	0	0	9	0	0	115	0	0	116
Lane Group Flow (vph)	80	1110	31	148	1329	5	72	85	115	138	55	41
Confl. Peds. (#/hr)	1					1			1	1		
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	3.1	31.6	8.0	8.1	36.7	3.9	3.9	11.8	11.8	8.0	15.0	15.0
Effective Green, g (s)	3.1	33.1	8.0	8.1	38.1	3.9	3.9	12.7	12.7	8.0	16.8	16.8
Actuated g/C Ratio	0.04	0.42	0.10	0.10	0.49	0.05	0.05	0.16	0.16	0.10	0.22	0.22
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	137	1504	163	184	1731	78	172	304	255	182	402	341
v/s Ratio Prot	0.02	0.31		c0.08	c0.38		0.02	0.05		c0.08	0.03	
v/s Ratio Perm			0.02			0.00			c0.07			0.03
v/c Ratio	0.58	0.74	0.19	0.80	0.77	0.07	0.42	0.28	0.45	0.76	0.14	0.12
Uniform Delay, d1	36.8	18.8	32.0	34.1	16.3	35.3	35.9	28.6	29.5	34.0	24.7	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	3.3	0.2	20.8	3.3	0.1	0.6	0.5	1.3	14.8	0.1	0.1
Delay (s)	40.8	22.0	32.2	54.9	19.6	35.4	36.5	29.1	30.7	48.8	24.7	24.7
Level of Service	D	C	C	D	B	D	D	C	C	D	C	C
Approach Delay (s)		24.1			23.3			31.4			34.2	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM Average Control Delay	25.6	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	77.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
55: Hawthorne St & Pacific Highway 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				0.97	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			0.99	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1716	3482		1770	5085			5029	
Flt Permitted				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)				1716	3482		1770	5085			5029	
Volume (vph)	0	0	0	110	775	82	52	375	0	0	258	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.88	0.88	0.88	0.84	0.84	0.84
Adj. Flow (vph)	0	0	0	124	871	92	59	426	0	0	307	21
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	124	954	0	59	426	0	0	318	0
Confl. Peds. (#/hr)				35		10	7					7
Turn Type				Perm			Prot					
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)				40.5	40.5		23.3	39.7			12.0	
Effective Green, g (s)				41.0	39.6		23.3	39.7			11.9	
Actuated g/C Ratio				0.46	0.44		0.26	0.44			0.13	
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	
Lane Grp Cap (vph)				782	1532		458	2243			665	
v/s Ratio Prot					c0.27		0.03	c0.08			c0.06	
v/s Ratio Perm				0.07								
v/c Ratio				0.16	0.62		0.13	0.19			0.48	
Uniform Delay, d1				14.4	19.4		25.6	15.3			36.2	
Progression Factor				1.07	1.09		0.47	0.53			1.00	
Incremental Delay, d2				0.4	1.8		0.5	0.2			0.6	
Delay (s)				15.8	23.1		12.4	8.2			36.8	
Level of Service				B	C		B	A			D	
Approach Delay (s)		0.0			22.3			8.7			36.8	
Approach LOS		A			C			A			D	

Intersection Summary				
HCM Average Control Delay	21.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.44			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.8	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
56: Grape St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5075	1532					4668		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5075	1532					4668		1770	5085	
Volume (vph)	43	1141	24	0	0	0	0	384	332	92	276	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.92	0.92	0.92	0.95	0.95
Adj. Flow (vph)	47	1240	26	0	0	0	0	417	361	100	291	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	119	0	0	0	0
Lane Group Flow (vph)	0	1287	10	0	0	0	0	659	0	100	291	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		34.6	34.6					26.0		15.2	45.6	
Effective Green, g (s)		35.5	35.5					26.0		15.6	45.6	
Actuated g/C Ratio		0.39	0.39					0.29		0.17	0.51	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2002	604					1349		307	2576	
v/s Ratio Prot								c0.14		c0.06	0.06	
v/s Ratio Perm		0.25	0.01									
v/c Ratio		0.64	0.02					0.49		0.33	0.11	
Uniform Delay, d1		22.1	16.6					26.5		32.6	11.6	
Progression Factor		1.00	1.00					1.00		1.77	0.56	
Incremental Delay, d2		1.6	0.1					1.3		2.8	0.1	
Delay (s)		23.7	16.7					27.8		60.3	6.6	
Level of Service		C	B					C		E	A	
Approach Delay (s)		23.6			0.0			27.8			20.4	
Approach LOS		C			A			C			C	

Intersection Summary				
HCM Average Control Delay	24.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

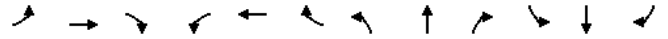
Exisitng PM
57: Seaworld Dr & Friars Rd 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1568	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1568	3433	3539	3433	1418
Volume (vph)	1153	391	270	1297	301	118
Peak-hour factor, PHF	0.96	0.96	0.99	0.99	0.93	0.93
Adj. Flow (vph)	1201	407	273	1310	324	127
RTOR Reduction (vph)	0	7	0	0	0	98
Lane Group Flow (vph)	1201	400	273	1310	324	29
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.8	41.6	7.8	41.8	12.8	12.8
Effective Green, g (s)	31.0	46.0	7.7	43.2	15.0	15.0
Actuated g/C Ratio	0.47	0.69	0.12	0.65	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1657	1184	399	2309	778	321
v/s Ratio Prot	c0.34	0.08	0.08	c0.37	c0.09	
v/s Ratio Perm		0.18				0.02
v/c Ratio	0.72	0.34	0.68	0.57	0.42	0.09
Uniform Delay, d1	14.2	4.0	28.1	6.3	21.9	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	3.8	1.0	0.1	0.0
Delay (s)	17.0	4.1	31.9	7.4	22.0	20.3
Level of Service	B	A	C	A	C	C
Approach Delay (s)	13.7			11.6	21.5	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Existing PM
58: I-5 SB On/I-5 SB Off & Seaworld Dr 12/07/2017

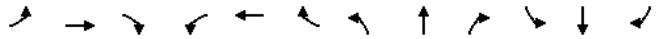


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Future Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.86	0.86	0.86	0.25	0.25	0.25	0.96	0.96	0.96
Adj. Flow (vph)	0	1116	259	340	356	0	0	0	0	347	0	1172
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1116	131	340	356	0	0	0	0	347	0	1172
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		36.8	36.8	9.4	50.4					15.0		75.0
Effective Green, g (s)		37.8	37.8	9.6	51.4					15.6		75.0
Actuated g/C Ratio		0.50	0.50	0.13	0.69					0.21		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1783	786	439	2425					368		1583
v/s Ratio Prot		0.32		0.10	0.10					c0.20		
v/s Ratio Perm			0.08									c0.74
v/c Ratio		0.63	0.17	0.77	0.15					0.94		0.74
Uniform Delay, d1		13.5	10.1	31.7	4.1					29.3		0.0
Progression Factor		1.00	1.00	0.91	1.16					1.00		1.00
Incremental Delay, d2		1.7	0.5	6.7	0.1					32.1		3.2
Delay (s)		15.1	10.5	35.5	4.9					61.3		3.2
Level of Service		B	B	D	A					E		A
Approach Delay (s)		14.3			19.9			0.0			16.4	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
59: Seaworld Dr & I-5 NB On 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3265			1775	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3265			1775	1583			
Volume (vph)	783	566	0	0	432	384	166	3	418	0	0	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.90	0.90	0.90	0.25	0.25	0.25
Adj. Flow (vph)	833	602	0	0	436	388	184	3	464	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	328	0	0	0
Lane Group Flow (vph)	833	602	0	0	622	0	0	187	136	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	19.5	55.7			32.0			9.2	9.2			
Effective Green, g (s)	19.7	56.2			32.5			9.8	9.8			
Actuated g/C Ratio	0.26	0.75			0.43			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	902	2652			1415			232	207			
v/s Ratio Prot	c0.24	0.17			c0.19			c0.11				
v/s Ratio Perm									0.09			
v/c Ratio	0.92	0.23			0.44			0.81	0.66			
Uniform Delay, d1	26.9	2.8			14.9			31.7	31.0			
Progression Factor	1.47	0.76			1.00			1.00	1.00			
Incremental Delay, d2	11.1	0.1			1.0			17.2	5.7			
Delay (s)	50.6	2.3			15.9			48.9	36.7			
Level of Service	D	A			B			D	D			
Approach Delay (s)		30.3			15.9			40.2			0.0	
Approach LOS		C			B			D			A	

Intersection Summary				
HCM Average Control Delay	28.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	87.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Appendix F
Caltrans Freeway Count Worksheets

Dist	Rte		Description	CO		Poast Mile	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak hour	Ahead Peak Month	Ahead AADT	Peak Hour
	11	8	NIMITZ BLVD	SD	T	0.466	740	11,000	10,500	4,050	48,500	46,500	8.7%
	11	8	MIDWAY DRIVE	SD	L	1.213	4,050	48,500	46,500	8,800	113,000	102,000	8.6%
	11	8	JCT RTE 5 LT LANES	SD	L	2.379	8,800	113,000	102,000	11,100	144,000	132,000	8.4%
	11	8	SAN DIEGO, MORENA BLVD	SD	R	0.364	11,100	144,000	132,000	15,700	194,000	191,000	8.2%
	11	5	CLAIREMONT DRIVE	SD	R	22.262	Ahead Peak hour 18,300	Ahead Peak Month 230,000	Ahead AADT 220,000	Back Peak Hour 16,800	Back Peak Month 208,000	Back AADT 203,000	8.3%
	11	5	MISSION BAY/SEA WORLD	SD	R	20.818	16,700	212,000	199,000	18,300	230,000	220,000	8.4%
	11	5	JCT. RTE. 8/CAMINO DEL RIO	SD	R	20.056	16,300	212,000	199,000	16,700	212,000	199,000	8.2%
	11	5	SAN DIEGO, OLD TOWN AVE	SD	R	19.033	15,400	205,000	192,000	16,300	212,000	199,000	8.0%
	11	5	SAN DIEGO, WASHINGTON ST	SD	R	18.283	11,500	152,000	142,000	15,400	205,000	192,000	8.1%
	11	5	SAN DIEGO, SASSAFRAS ST	SD	R	17.77	12,400	157,000	147,000	11,500	152,000	142,000	8.4%
	11	5	PACIFIC HIGHWAY VIADUCT	SD	R	17.53	14,400	200,000	183,000	12,400	157,000	147,000	7.9%

Location (I.D.)	Route	Dir	Period	Cars per green	Fast. rate (cyc./min.)	Slow. rate (cyc./min.)	Rate Delta	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV	Flow/lane			Total Flow
												High	Low	Average	Average
W. Mission Bay Dr (251)	8	EB	1500 - 1900	2	8.3	5.8	0.18	7.2 - 10.4	996 - 694	2	No	996	694	845	1690
Sports Arena Blvd (252)	8	EB	1500 - 1900	2	6.6	4.1	0.18	9.1 - 14.7	396 - 245	3	Lt	396	245	320.5	641
Sea World Dr (97)	5	SB	0530 - 0930	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
Sea World Dr (223)	5	NB	0530 - 0930	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555
			1500 - 1900	2	8.3	5.5	0.20	7.2 - 10.9	996 - 660	2	No	996	660	828	1656
Old Town Ave (187)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	1	No	570	352	461	461
Old Town Ave (188)	5	NB	0530 - 0930	1	9.5	5.6	0.28	6.3 - 10.8	570 - 335	2	No	570	335	452.5	905
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	No	570	318	444	888
Washington St (184)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Washington St (186)	5	NB	0530 - 0930	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Hawthorne St (181)	5	NB	0530 - 0930	2	8.3	4.8	0.25	7.2 - 12.5	996 - 576	2	No	996	576	786	1572
			1500 - 1900	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555

There are 15 separate rates or steps that depend on the mainlane volumes. The Cycles/min. have a definite rate delta whereas the seconds/cycle from one rate to another can vary from 0.1 - 0.4 sec.

RTE	DIST	CNTY	POST MILE	LEG	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
008	11	SD	T.407	A	SAN DIEGO, SUNSET CLIFFS BOULEVARD	10500	105	1	86	8	3	8	82.3	7.4	2.9	7.4	7	78E
008	11	SD	L2.379	B	JCT RTE 5 LT LANES	102000	1224	1.2	1038	87	9	91	84.8	7.1	.7	7.4	77	78V
008	11	SD	L2.379	A	JCT RTE 5 LT LANES	129000	3612	2.8	2416	520	155	520	66.9	14.4	4.3	14.4	335	83V
008	11	SD	2.41	B	SAN DIEGO, JCT. RTE. 163	201000	5427	2.7	4200	586	136	505	77.4	10.8	2.5	9.3	395	83E
008	11	SD	2.41	A	SAN DIEGO, JCT. RTE. 163	205000	5740	2.8	4483	574	138	545	78.1	10	2.4	9.5	418	83E
008	11	SD	4.378	B	SAN DIEGO, JCT. RTE. 805	194000	6208	3.2	4662	615	211	720	75.1	9.9	3.4	11.6	499	83E
008	11	SD	5.638	B	JCT. RTE. 15	241000	7230	3	4230	918	304	1779	58.5	12.7	4.2	24.6	891	83V
008	11	SD	5.638	A	JCT. RTE. 15	214000	7490	3.5	4794	861	337	1498	64	11.5	4.5	20	813	84E
008	11	SD	10.57	B	FLETCHER PARKWAY	190000	7030	3.7	4204	893	246	1687	59.8	12.7	3.5	24	847	84V
008	11	SD	10.57	A	FLETCHER PARKWAY	174000	7656	4.4	4326	1179	390	1761	56.5	15.4	5.1	23	925	78V
008	11	SD	15.8	B	EL CAJON, JCT. RTE. 67 NORTH	166000	7802	4.7	4205	1022	359	2216	53.9	13.1	4.6	28.4	1058	78V
008	11	SD	15.8	A	EL CAJON, JCT. RTE. 67 NORTH	134000	3886	2.9	2153	439	136	1158	55.4	11.3	3.5	29.8	535	78V
008	11	SD	R18.727	A	GREENFIELD DRIVE	80000	5520	6.9	2909	431	132	2048	52.7	7.8	2.4	37.1	867	86V
008	11	SD	R37.831	B	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	24900	2988	12	1174	176	90	1548	39.3	5.9	3	51.8	605	86E
008	11	SD	R37.831	A	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	19300	2625	13.6	853	205	76	1491	32.5	7.8	2.9	56.8	574	00E
008	11	SD	R51.98	B	CAMERON ROAD	15700	2013	12.82	843	94	40	1036	41.89	4.67	1.99	51.46	401	09V

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
005	11	SD	R.09	A	SAN DIEGO, MEXICAN BORDER, TIE OFF	74000	1628	2.2	1014	62	46	506	62.3	3.8	2.8	31.1	223	83E
005	11	SD	R.878	A	SOUTH JCT. RTE. 805	40000	1520	3.8	800	195	15	511	52.6	12.8	1	33.6	224	83V
005	11	SD	4.632	B	JCT. RTE. 75 WEST	117000	4914	4.2	3155	595	147	1017	64.2	12.1	3	20.7	538	78V
005	11	SD	4.632	A	JCT. RTE. 75 WEST	143000	5291	3.7	2974	857	254	1206	56.2	16.2	4.8	22.8	636	83V
005	11	SD	R11.129	B	8TH STREET	168000	8400	5	4259	1344	445	2352	50.7	16	5.3	28	1150	85V
005	11	SD	R12.647	B	JCT. RTE. 15 NORTH	187000	9350	5	4740	1496	496	2618	50.7	16	5.3	28	1280	85E
005	11	SD	R12.647	A	JCT. RTE. 15 NORTH	152000	6232	4.1	3509	897	287	1539	56.3	14.4	4.6	24.7	778	85V
005	11	SD	R14.077	B	SAN DIEGO, JCT. RTE. 75 SOUTH	159000	6519	4.1	3670	939	300	1610	56.3	14.4	4.6	24.7	814	85E
005	11	SD	R14.077	A	SAN DIEGO, JCT. RTE. 75 SOUTH	163000	6520	4	3984	782	254	1500	61.1	12	3.9	23	766	78E
005	11	SD	R15.036	B	SAN DIEGO, JCT. RTE. 94	163000	6194	3.8	3785	743	242	1425	61.1	12	3.9	23	728	78V
005	11	SD	R15.036	A	SAN DIEGO, JCT. RTE. 94	209000	8360	4	5827	920	242	1371	69.7	11	2.9	16.4	797	87V
005	11	SD	R16.069	B	SAN DIEGO, JCT. RTE. 163	209000	7733	3.7	5119	773	286	1554	66.2	10	3.7	20.1	828	78E
005	11	SD	R16.069	A	SAN DIEGO, JCT. RTE. 163	200000	8200	4.1	5150	730	230	2091	62.8	8.9	2.8	25.5	1003	85V
005	11	SD	R20.056	B	JCT. RTE. 8/CAMINO DEL RIO	197000	8077	4.1	5072	719	226	2060	62.8	8.9	2.8	25.5	988	85V
005	11	SD	R20.056	A	JCT. RTE. 8/CAMINO DEL RIO	198000	6732	3.4	4443	673	289	1326	66	10	4.3	19.7	717	84V
005	11	SD	R23.476	B	SAN DIEGO, BALBOA	162000	7290	4.5	4811	729	313	1436	66	10	4.3	19.7	777	84E

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Mainline VDS 1111514 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM T.68 (Abs PM 0.3)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	60.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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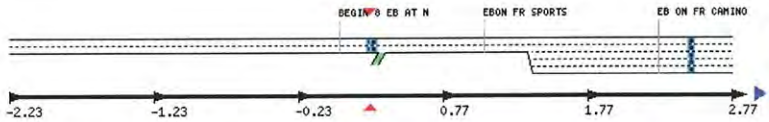
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From Sep 2010 *Max Range:*10 years

To Sep 2011

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,292	23,244		23,357	23,356	23,244	23,255	23,357	67	2,3
10/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,251	23,190		23,335	23,329	23,190	23,200	23,335	68	2,3
11/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,242	23,238		23,349	23,342	23,238	23,247	23,349	71	2,2
12/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,170	23,207		23,295	23,302	23,207	23,212	23,295	75	2,2
01/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,265	23,289		23,346	23,346	23,289	23,295	23,346	74	2,2
02/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,202	23,274		23,343	23,346	23,274	23,281	23,343	75	2,2
03/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,212	23,290		23,333	23,343	23,290	23,297	23,333	76	2,2
04/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,182	23,261		23,312	23,322	23,261	23,268	23,312	76	2,2
05/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,144	23,262		23,301	23,315	23,262	23,269	23,301	76	2,2
06/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,211	23,285		23,343	23,384	23,285	23,292	23,343	79	2,2
07/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,188	23,266		23,343	23,380	23,266	23,273	23,343	78	2,2
08/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,073	23,218		23,312	23,349	23,218	22,994	23,312	73	2,2



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Used for D Factor

$$\frac{23,300}{23,300 + 21,700} = .52$$

(EB) (WB)

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Mainline VDS 1111515 - SUNSET CLIFFS BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM T.54 (Abs PM 0.1)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	40.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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09/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,684	21,626		21,708	21,722	21,626	21,630	21,708	65	2,(
10/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,627	21,547		21,675	21,686	21,547	21,550	21,675	67	2,(
11/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,616	21,598		21,686	21,694	21,598	21,601	21,686	70	2,(
12/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,535	21,566		21,637	21,654	21,566	21,566	21,637	74	2,(
01/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,637	21,649		21,685	21,701	21,649	21,651	21,685	73	2,(
02/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,576	21,631		21,682	21,697	21,631	21,633	21,682	74	2,(
03/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,594	21,658		21,685	21,703	21,658	21,660	21,685	76	2,(
04/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,557	21,624		21,658	21,678	21,624	21,626	21,658	75	2,(
05/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,505	21,606		21,633	21,653	21,606	21,607	21,633	75	2,(
06/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,551	21,610		21,649	21,691	21,610	21,611	21,649	78	2,(
07/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,516	21,589		21,646	21,682	21,589	21,589	21,646	77	2,(
08/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,391	21,548		21,621	21,647	21,548	21,358	21,621	72	2,(



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Mainline VDS 1115528 - E/O MORENA BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM R.589 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10308
LDS	1115522
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	134.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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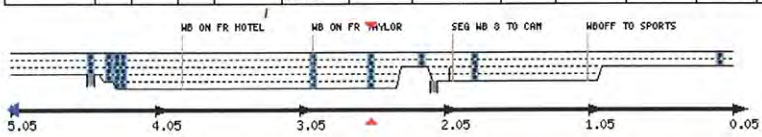
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09/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,314	84,891		85,180	85,215	84,891	84,899	85,180	68
10/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,083	84,566		85,019	85,059	84,566	84,567	85,019	69
11/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,957	84,644		84,970	84,986	84,644	84,643	84,970	72
12/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,605	84,457		84,760	84,820	84,457	84,439	84,760	76
01/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,819	84,729		84,830	84,875	84,729	84,712	84,830	77
02/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,468	84,564		84,723	84,761	84,564	84,547	84,723	78
03/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,364	84,581		84,710	84,748	84,581	84,564	84,710	80
04/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,178	84,392		84,544	84,629	84,392	84,372	84,544	79
05/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,035	84,357		84,470	84,526	84,357	84,336	84,470	79
06/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,277	84,502		84,584	84,727	84,502	84,481	84,584	80
07/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,234	84,471		84,647	84,795	84,471	84,448	84,647	79
08/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	83,631	84,381		84,609	84,681	84,381	83,667	84,609	74



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$$\frac{85{,}000}{85000 + 92{,}000} = .48$$

(WB) (EB)

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Mainline VDS 1115356 - EB 8 E/O Morena

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM R.535 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10307
LDS	1115357
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	150.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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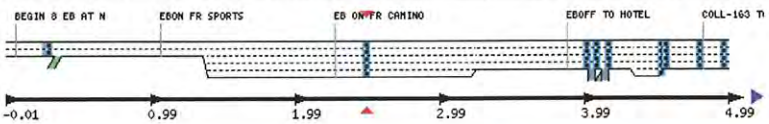
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09/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,802				92,959				45	8,2
10/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
11/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
12/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	93,070				92,984				39	8,2
01/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	94,431				94,074				33	8,2
02/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,379				95,149				28	8,1
03/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	96,142				95,919				22	8,1
04/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,987				95,888				15	8,0
05/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,805				95,761				8	7,9
06/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	98,871				97,707				2	7,1



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Mainline VDS 1108457 - SEA WORLD DR

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R20.719 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 97
LDS	1108113
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	148.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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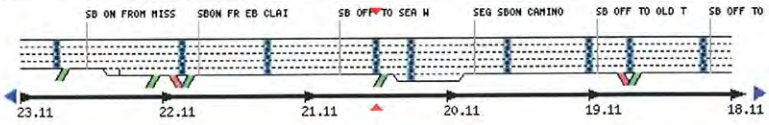
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Dat Use
09/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,407	90,808		89,922	89,853	90,808		89,922	3
10/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,017	90,111		89,788	89,630	90,111		89,788	3
11/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,990	89,582		88,612	89,628	89,582		88,612	3
12/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,517	88,234			89,867	88,234		86,475	2
01/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,253	89,079			90,438	89,079		86,658	2
02/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,388				91,039	89,267		81,735	1
03/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,567				91,403				1
04/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,971				91,538				1
05/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,395				91,660				
06/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,053				92,054				
07/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,811				91,310				
08/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,847				90,103				



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$$\frac{88{,}000}{88{,}000 + 97{,}000} = .48$$

(SB) (NB)

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Mainline VDS 1118496 - 5 NB S/O Sea World

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R20.7 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 16202
LDS	1118490
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	159.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	ISS RTMS	Mainline
2	2	ISS RTMS	Mainline
3	3	ISS RTMS	Mainline
4	4	ISS RTMS	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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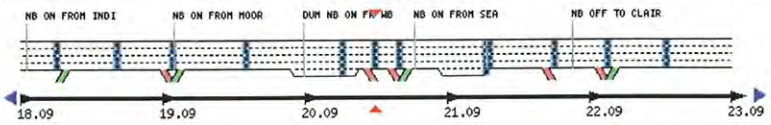
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*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,464	97,291		97,753	97,684	97,291	97,355	97,753	67	8,
10/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,301	97,106		97,606	97,542	97,106	97,167	97,606	68	8,
11/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,304	97,277		97,735	97,653	97,277	97,338	97,735	71	8,
12/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,174	97,282		97,589	97,553	97,282	97,330	97,589	75	8,
01/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,496	97,618		97,746	97,678	97,618	97,669	97,746	76	8,
02/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,533		97,692	97,637	97,533	97,585	97,692	77	8,
03/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,134	97,553		97,694	97,657	97,553	97,603	97,694	79	8,
04/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,079	97,521		97,661	97,638	97,521	97,573	97,661	78	8,
05/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,086	97,619		97,729	97,696	97,619	97,673	97,729	78	8,
06/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,621		97,812	97,873	97,621	97,674	97,812	79	8,
07/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,115	97,517		97,782	97,821	97,517	97,569	97,782	78	8,
08/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	96,570	97,463		97,751	97,682	97,463	96,393	97,751	73	8,



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Mainline VDS 1115355 - SB 5 S/O 8

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From Sep 2010 *Max Range:*10 years

To Sep 2011

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Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10304
LDS	1115349
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	157.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

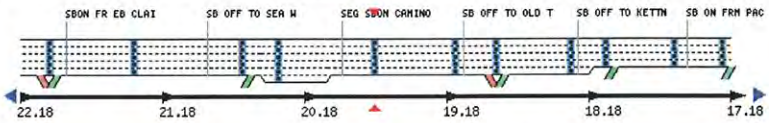
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,377	98,871		99,305	99,501	98,871	98,912	99,305	63
10/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,035	98,563		99,132	99,345	98,563	98,601	99,132	64
11/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,002	98,719		99,174	99,354	98,719	98,756	99,174	67
12/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,709	98,645		98,988	99,215	98,645	98,666	98,988	70
01/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,723	98,892		99,035	99,155	98,892	98,916	99,035	73
02/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,093	98,626		98,807	98,817	98,626	98,648	98,807	75
03/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,842	98,594		98,805	98,822	98,594	98,614	98,805	77
04/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,975	98,466		98,733	98,819	98,466	98,487	98,733	76
05/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,980	98,523		98,700	98,748	98,523	98,545	98,700	76
06/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,259	98,667		98,831	99,000	98,667	98,689	98,831	77
07/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,137	98,572		98,858	99,033	98,572	98,591	98,858	76
08/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,278	98,480		98,805	98,893	98,480	97,276	98,805	71



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$$\frac{99{,}000}{99{,}000 + 64{,}700} = .61$$

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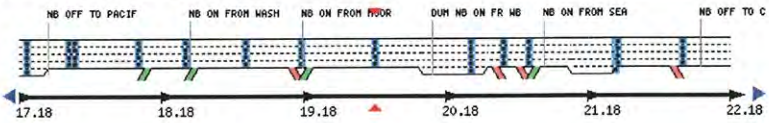
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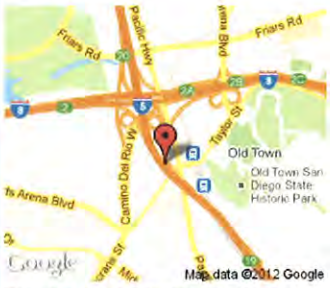
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,282				64,658				50
10/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,182				64,373				46
11/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,245				64,467				42
12/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,053				64,370				43
01/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,160				64,347				45
02/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,760				64,156				48
03/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,710				64,228				50
04/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,727				64,238				49
05/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,742				64,273				48
06/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,135				64,575				50
07/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,355				64,892				51
08/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,704				65,656				54



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10303
LDS	1115262
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	111.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1108615 - OLD TOWN AVE

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R18.931 (Abs PM 18.8)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10411
LDS	1108200
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	145.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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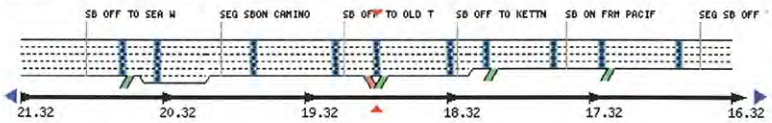
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,546	87,579		88,554	88,360	87,579	86,924	88,554	60
10/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,512				88,153	87,233		88,401	57
11/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,518				88,236	87,295		88,315	54
12/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,164				88,067	87,241		88,120	58
01/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,556				88,195	87,507		88,247	57
02/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,881				88,010	87,329		88,093	59
03/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,902				88,074	87,161		87,935	57
04/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,820				88,010				50
05/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,494				87,789				43
06/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,638				87,966				42
07/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	86,430				86,950				36
08/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	84,971				86,227				32



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$$\frac{88{,}500}{88{,}500 + 91{,}500} = .49$$

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Mainline VDS 1114050 - OLD TOWN AVE

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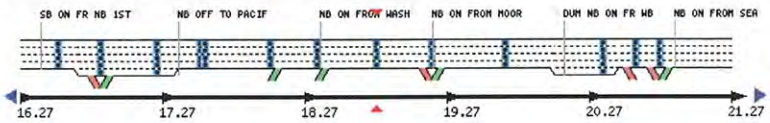
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09/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,821	90,949			91,722	90,949	90,139	91,630	63
10/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,665	90,808			91,614	90,808	89,973	91,529	64
11/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,719	91,038			91,725	91,038	90,243	91,653	67
12/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,472	91,079			91,657	91,079	90,480	91,544	71
01/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,792	91,334			91,789	91,334	90,777	91,687	70
02/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,388	91,213			91,664	91,213	90,607	91,594	71
03/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,447	91,104			91,758	91,104	90,512	91,485	69
04/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,396				91,703	91,018			62
05/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,107				91,505				55
06/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,203				91,623				54
07/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	90,387				90,837				48
08/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	89,232				90,428				44



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R18.874 (Abs PM 18.8)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10412
LDS	1114045
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	138.8 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1117724 - SB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.681 (Abs PM 17.6)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10406
LDS	1117700
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	181.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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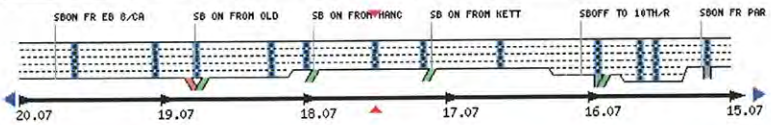
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*Max Range:*10 years

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09/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	147,017	146,263		146,781	146,818	146,263	146,432	146,781	
10/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	146,711	145,795		146,583	146,622	145,795	145,259	146,583	
11/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	144,957	144,852		144,969	144,760	144,852	143,905	144,969	
12/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	136,029	137,637		137,478	136,968	137,637	136,817	137,478	
01/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	127,132	130,565		130,273	129,050	130,565	129,832	130,273	
02/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	119,356	122,914		122,738	121,367	122,914	122,160	122,738	
03/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	111,112	115,457		115,296	113,899	115,457	114,729	115,296	
04/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	101,795	107,589		107,418	105,619	107,589	106,848	107,418	
05/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	94,870	99,619		99,395	98,300	99,619	98,839	99,395	
06/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	86,902	91,837		91,628	90,213	91,837	91,049	91,628	
07/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	80,939	83,787		83,655	82,609	83,787	82,961	83,655	
08/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	71,906	75,617		75,543	73,989	75,617	75,108	75,543	



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{115000}{115{,}000 + 75{,}000} = .62$$

(SB) (NB)

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Mainline VDS 1117717 - NB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.68 (Abs PM 17.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10405
LDS	1117710
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	126.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

Quick Links

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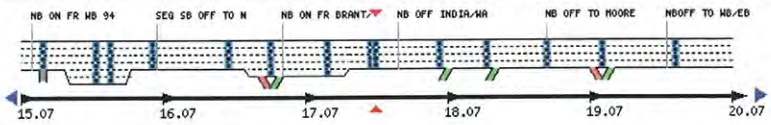
Change Log | Performance | Data Quality | Events

Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,877	75,545		75,830	75,835	75,545	75,539	75,830	68
10/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,720	75,304		75,693	75,713	75,304	75,298	75,693	69
11/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,721	75,474		75,789	75,792	75,474	75,468	75,789	72
12/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,471	75,450		75,664	75,710	75,450	75,434	75,664	76
01/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,717	75,729		75,810	75,840	75,729	75,715	75,810	76
02/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,408	75,604		75,713	75,744	75,604	75,592	75,713	77
03/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,291	75,597		75,693	75,731	75,597	75,584	75,693	79
04/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,190	75,513		75,618	75,678	75,513	75,499	75,618	78
05/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,100	75,523		75,566	75,603	75,523	75,512	75,566	78
06/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,334	75,667		75,686	75,795	75,667	75,657	75,686	80
07/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,248	75,574		75,707	75,808	75,574	75,562	75,707	79
08/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	74,658	75,568		75,701	75,736	75,568	74,731	75,701	74



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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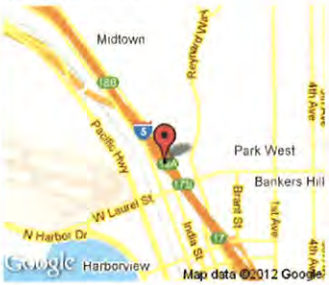
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Mainline VDS 1108605 - KETTNER BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.339 (Abs PM 17.2)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10403
LDS	1108195
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	156.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Performance > Planning Analysis > AADT

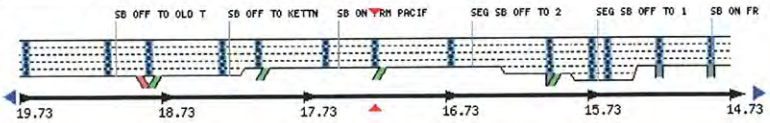
ABOUT THIS REPORT

From Sep 2010 *Max Range:10 years*

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	Da Us
09/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,935	88,657		88,989	88,883	88,657	88,698	88,989	
10/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,770	88,297		88,601	88,560	88,297	88,337	88,601	
11/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,698	88,451		88,643	88,572	88,451	88,491	88,643	
12/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,907	88,734		88,795	88,811	88,734	88,781	88,795	
01/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,772				89,521	89,594	88,303	89,515	
02/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,291				90,119				
03/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,581				90,490				
04/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,757				90,590				
05/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,722				90,572				
06/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,972				90,943				
07/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,255				90,332				
08/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,112				90,024				



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

90,000

90,000 + 86,000
(SB) (NB)

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Mainline VDS 1117835 - NB S/O Pacific

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.34 (Abs PM 17.2)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10404
LDS	1117827
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	160.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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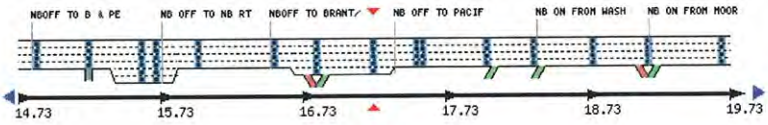
Performance > Planning Analysis > AADT | ABOUT THIS REPORT

From Sep 2010 To Sep 2011
Max Range: 10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,750	94,616		94,964	94,829	94,616	94,624	94,964	67
10/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,691				94,636	94,308	92,994	94,810	64
11/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,479				94,520	93,820		94,105	61
12/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	92,229				92,636	92,158		92,315	65
01/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	90,594				90,959	90,917		90,874	66
02/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	88,426				89,009	89,103		89,084	67
03/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	86,468				87,218	87,380		87,341	69
04/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	84,180				85,145	85,461		85,439	68
05/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	82,279				83,228	83,703		83,640	68
06/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	80,653				81,496	82,041		81,976	69
07/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	78,905				79,563	80,181		80,200	68
08/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	76,079				77,390	78,272		78,313	64

Average = 86,000



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Appendix G
VMT Analysis Worksheet – Preferred Plan

2035j - Alt 5 land uses (no Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,345,570	3,023	-	3,023	4,342,547
CHULA VISTA TOTAL	5,603,533	7,368	-	7,368	5,596,165
CORONADO TOTAL	466,973	1,300	-	1,300	465,673
DEL MAR TOTAL	102,139	58	-	58	102,081
EL CAJON TOTAL	2,446,247	3,782	-	3,782	2,442,465
ENCINITAS TOTAL	2,562,090	3,714	-	3,714	2,558,376
ESCONDIDO TOTAL	3,487,534	1,931	-	1,931	3,485,603
External TOTAL	526,605	404	-	404	526,201
IMPERIAL BEACH TOTAL	131,534	27	-	27	131,507
LA MESA TOTAL	2,097,754	6,029	-	6,029	2,091,725
LEMON GROVE TOTAL	962,976	1,687	-	1,687	961,289
NATIONAL CITY TOTAL	1,964,117	6,237	-	6,237	1,957,880
OCEANSIDE TOTAL	4,091,802	986	-	986	4,090,816
POWAY TOTAL	1,306,461	591	-	591	1,305,870
OLD TOWN TOTAL	47,307,884	272,623	18,219	254,404	47,035,261
SAN MARCOS TOTAL	2,646,761	275	-	275	2,646,486
SANTEE TOTAL	1,349,060	785	-	785	1,348,275
SOLANA BEACH TOTAL	717,102	1,364	-	1,364	715,738
Unincorporated TOTAL	24,638,304	12,475	-	12,475	24,625,829
VISTA TOTAL	2,207,603	106	-	106	2,207,497
REGIONWIDE TOTAL	108,962,049	171,492 496,257	18,219	306,546	108,637,284

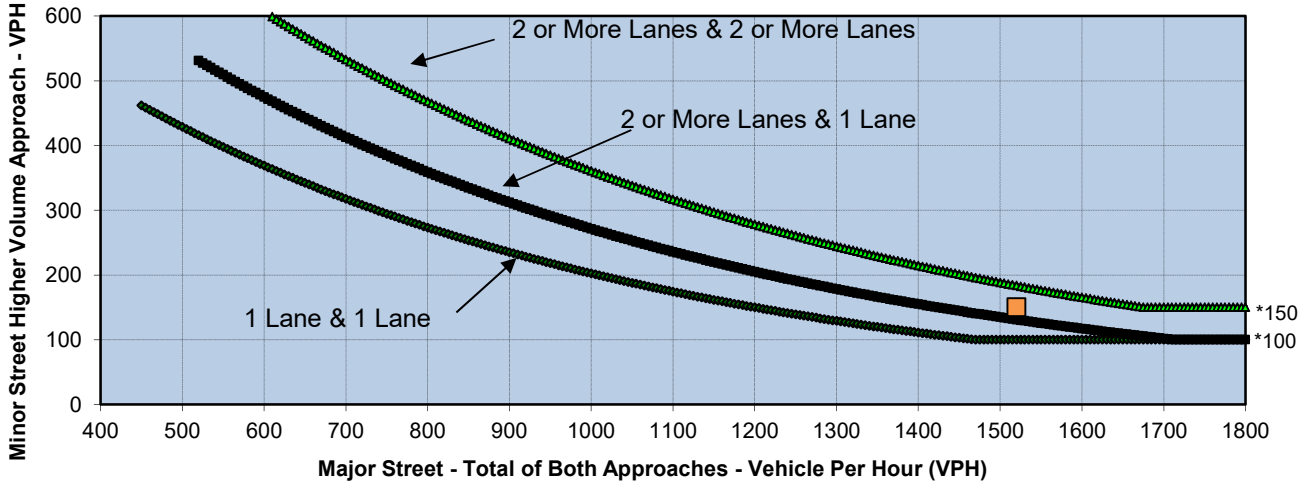
2035j - Alt 5 land uses (no Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,345,570	15,302	-	15,302	4,330,268
CHULA VISTA TOTAL	5,603,533	35,553	-	35,553	5,567,980
CORONADO TOTAL	466,973	6,666	-	6,666	460,307
DEL MAR TOTAL	102,139	251	-	251	101,888
EL CAJON TOTAL	2,446,247	16,762	-	16,762	2,429,485
ENCINITAS TOTAL	2,562,090	17,988	-	17,988	2,544,102
ESCONDIDO TOTAL	3,487,534	9,181	-	9,181	3,478,353
External TOTAL	526,605	2,462	-	2,462	524,143
IMPERIAL BEACH TOTAL	131,534	324	-	324	131,210
LA MESA TOTAL	2,097,754	26,489	-	26,489	2,071,265
LEMON GROVE TOTAL	962,976	8,686	-	8,686	954,290
NATIONAL CITY TOTAL	1,964,117	29,940	-	29,940	1,934,177
OCEANSIDE TOTAL	4,091,802	5,588	-	5,588	4,086,214
POWAY TOTAL	1,306,461	2,762	-	2,762	1,303,699
MIDWAY TOTAL	47,307,884	1,294,667	212,440	1,082,227	46,013,217
SAN MARCOS TOTAL	2,646,761	1,361	-	1,361	2,645,400
SANTEE TOTAL	1,349,060	3,835	-	3,835	1,345,225
SOLANA BEACH TOTAL	717,102	6,482	-	6,482	710,620
Unincorporated TOTAL	24,638,304	65,377	-	65,377	24,572,927
VISTA TOTAL	2,207,603	859	-	859	2,206,744
REGIONWIDE TOTAL	108,962,049	1,550,535 881,487	212,440	1,338,095	107,411,514

Appendix H
Signal Warrant Worksheets

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	150	0	120
Through	600	680	0	0
Right	90	0	0	30
Total	690	830	0	150

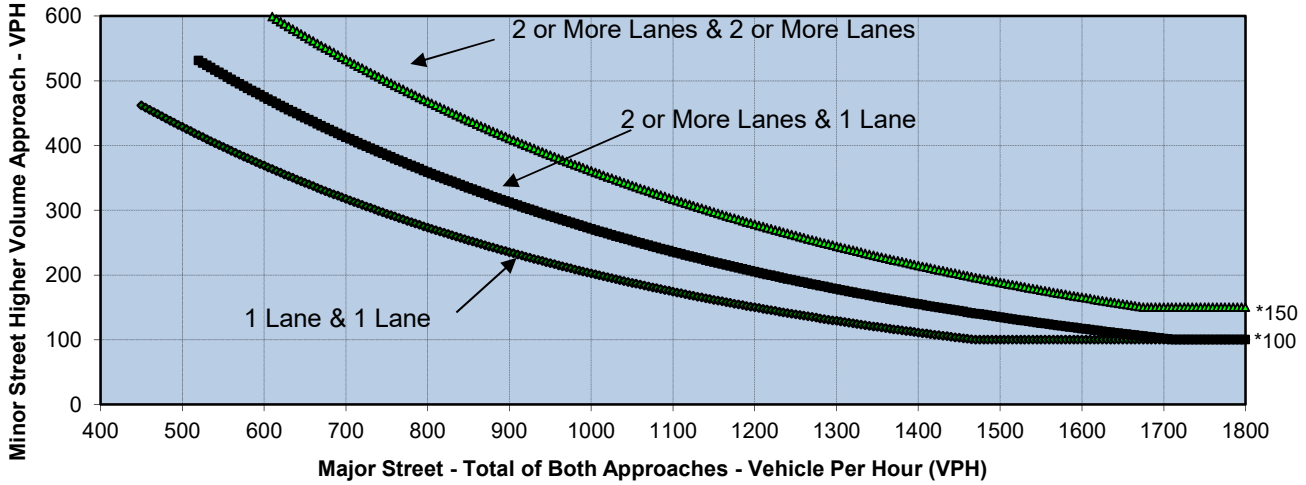
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,520**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	400	0	120
Through	780	850	0	0
Right	120	0	0	300
Total	900	1,250	0	420

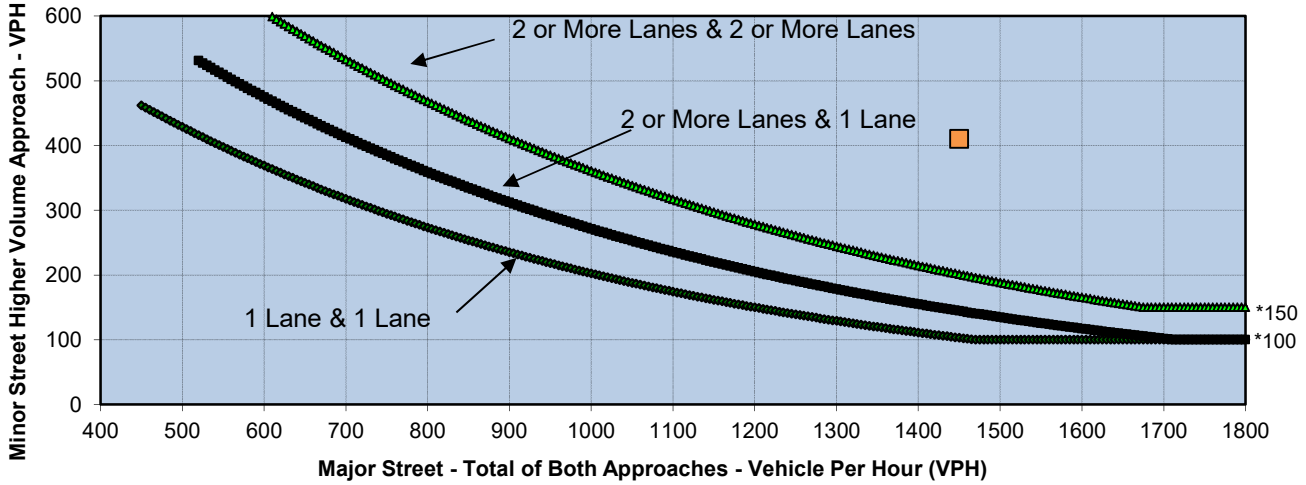
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,150	420	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

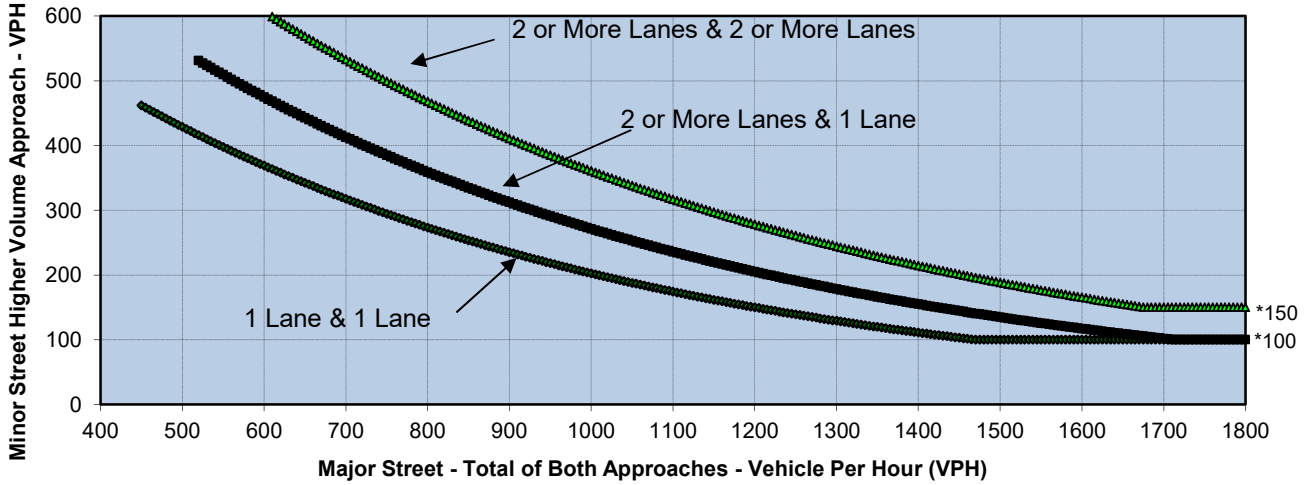
	NB	SB	EB	WB
Left	210	80	90	160
Through	420	540	50	140
Right	90	110	120	110
Total	720	730	260	410

Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,450**	**410**	

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	250	150	90	150
Through	1,130	890	130	40
Right	120	100	160	170
Total	1,500	1,140	380	360

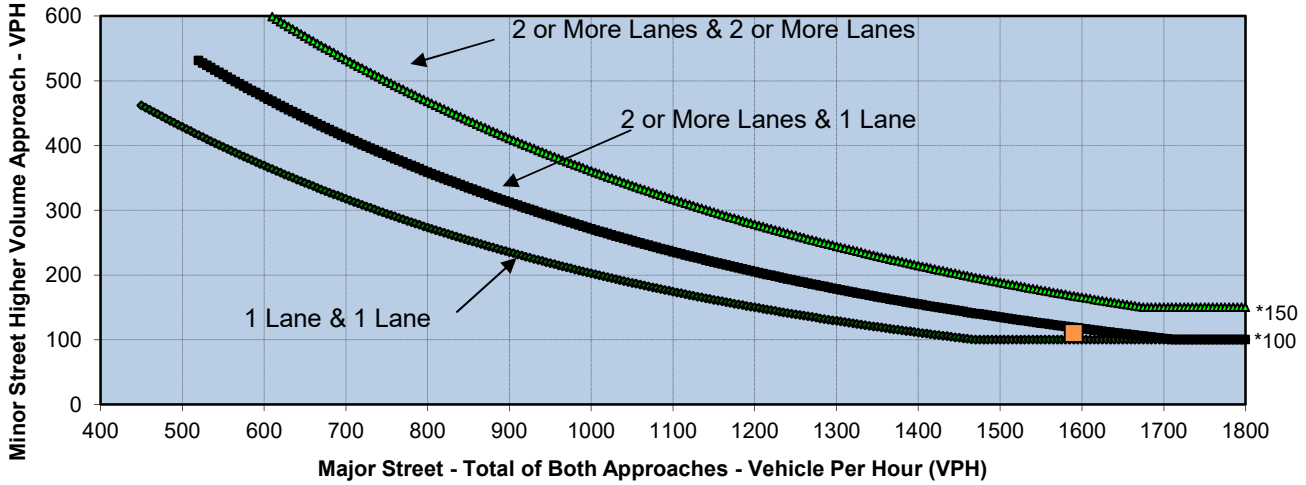
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,640	380	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	30	130	40	40
Through	630	650	20	20
Right	70	80	20	50
Total	730	860	80	110

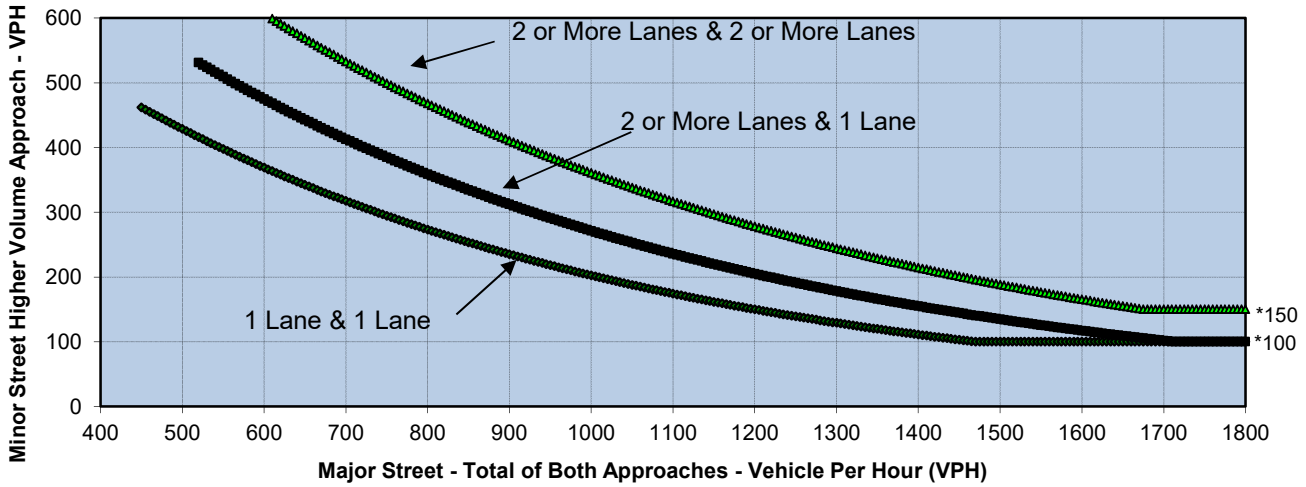
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**1,590**	**110**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	50	120	60	150
Through	1,280	1,110	30	30
Right	70	80	70	140
Total	1,400	1,310	160	320

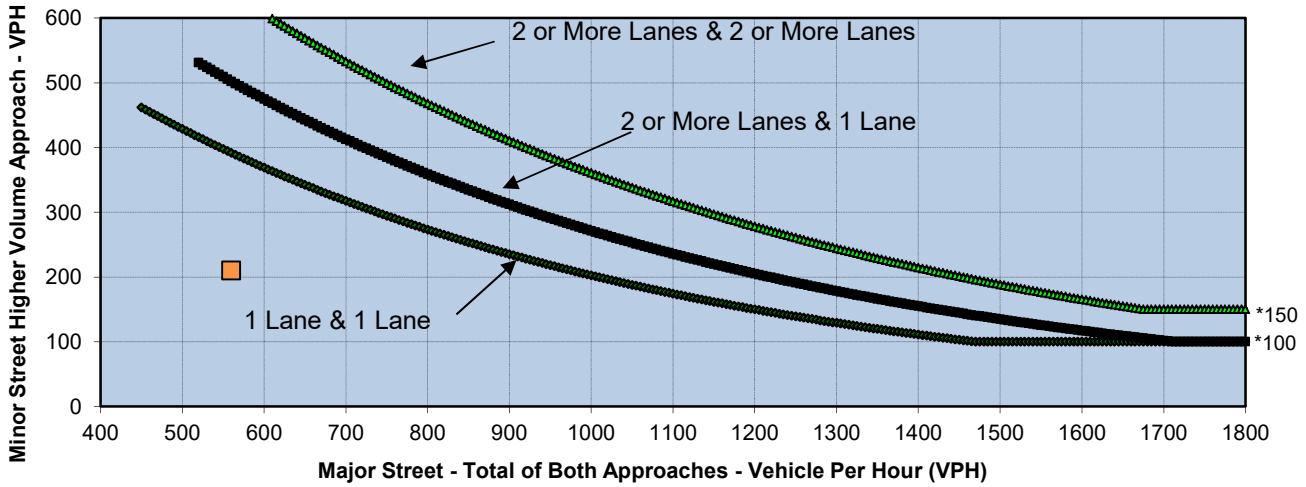
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,710	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	20	50	90
Through	50	80	100	140
Right	90	90	100	80
Total	210	190	250	310

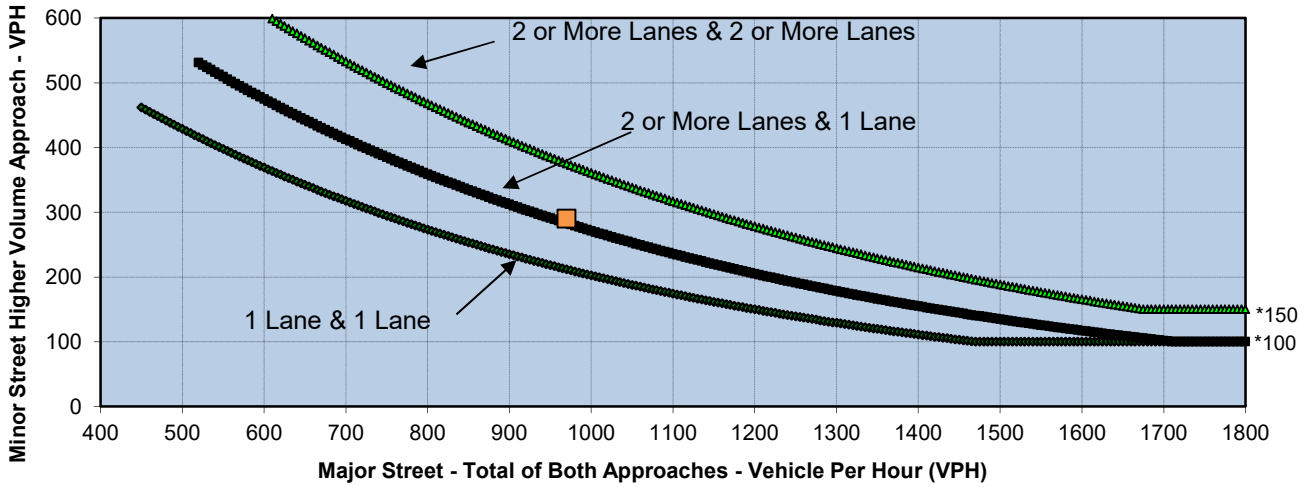
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**560**	**210**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	90	90	130
Through	90	100	120	250
Right	120	100	310	70
Total	280	290	520	450

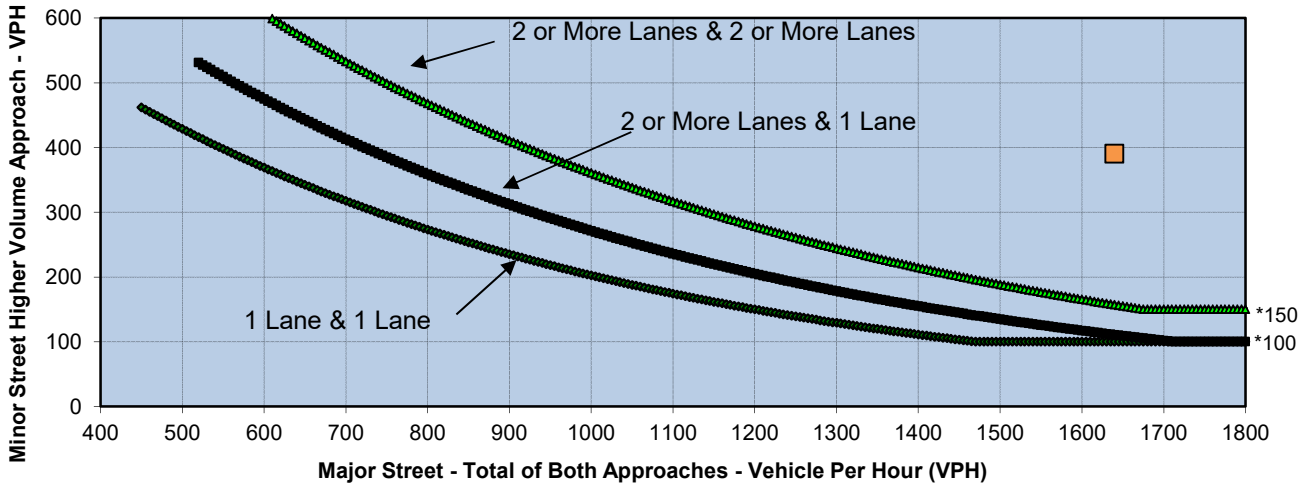
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	970	290	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	300	0	200	0
Through	610	600	0	0
Right	0	130	190	0
Total	910	730	390	0

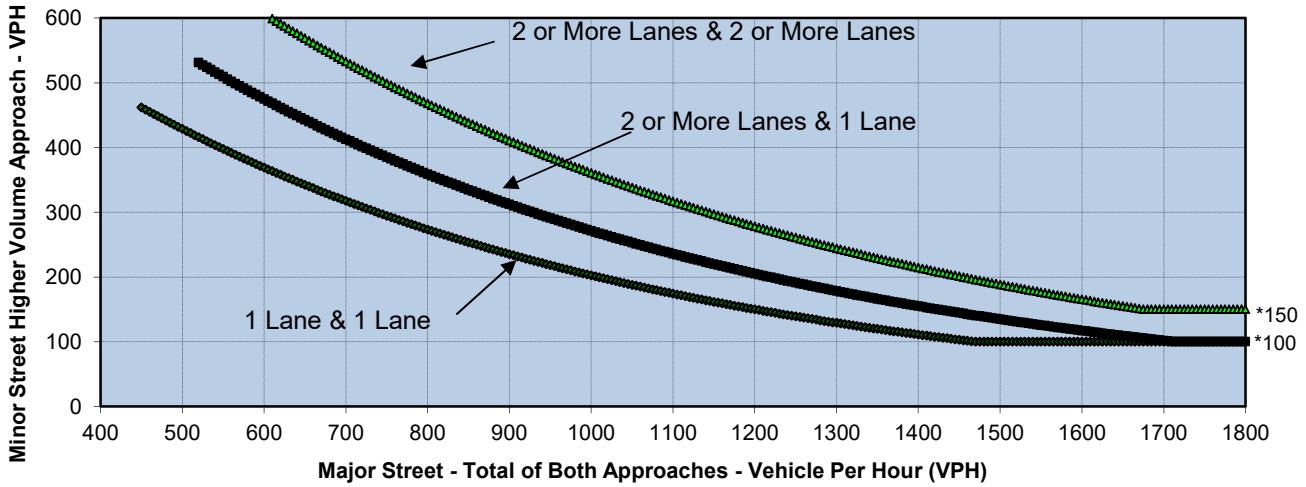
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,640**	**390**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	290	0	50	0
Through	1,320	830	0	0
Right	0	50	480	0
Total	1,610	880	530	0

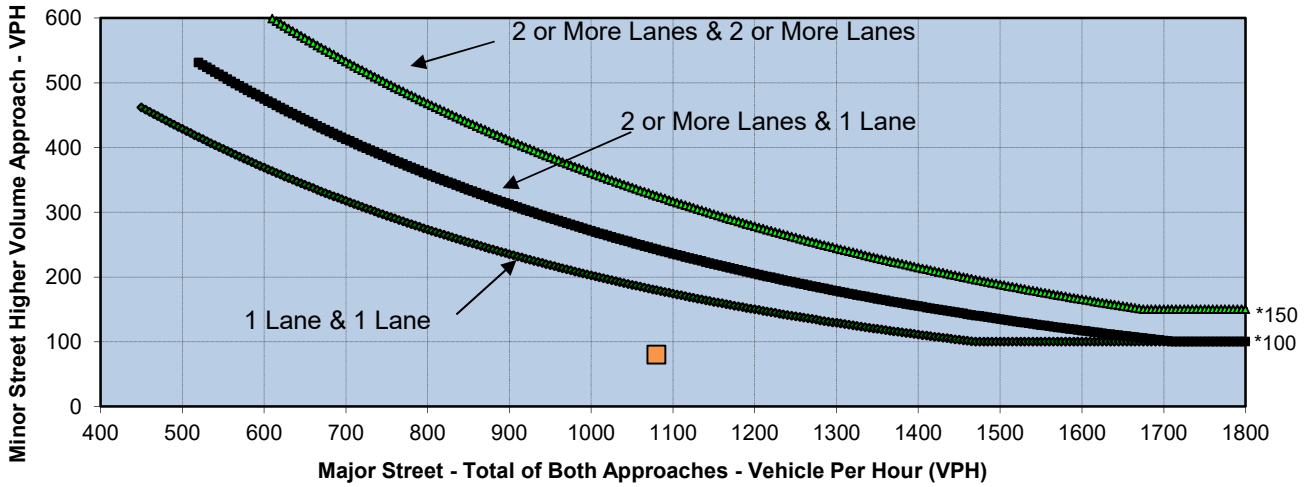
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,490	530	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	2B
Minor Street	Hancock Street	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	30	460
Through	0	70	0	390
Right	0	10	100	100
Total	0	80	130	950

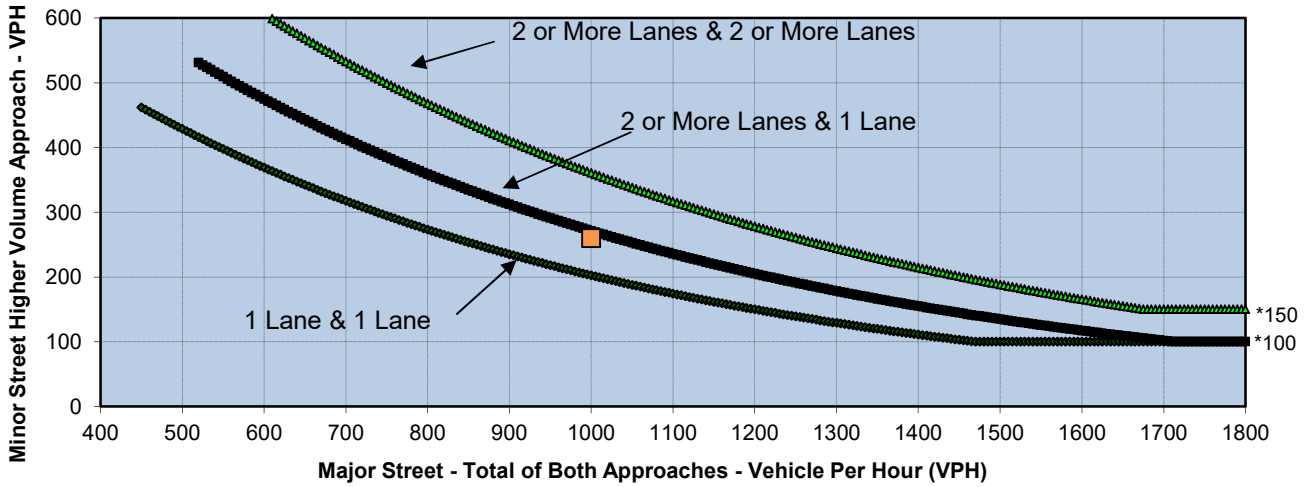
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Hancock Street	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,080**	**80**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	2B
Minor Street	Hancock Street	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	100	300
Through	0	170	0	310
Right	0	90	140	150
Total	0	260	240	760

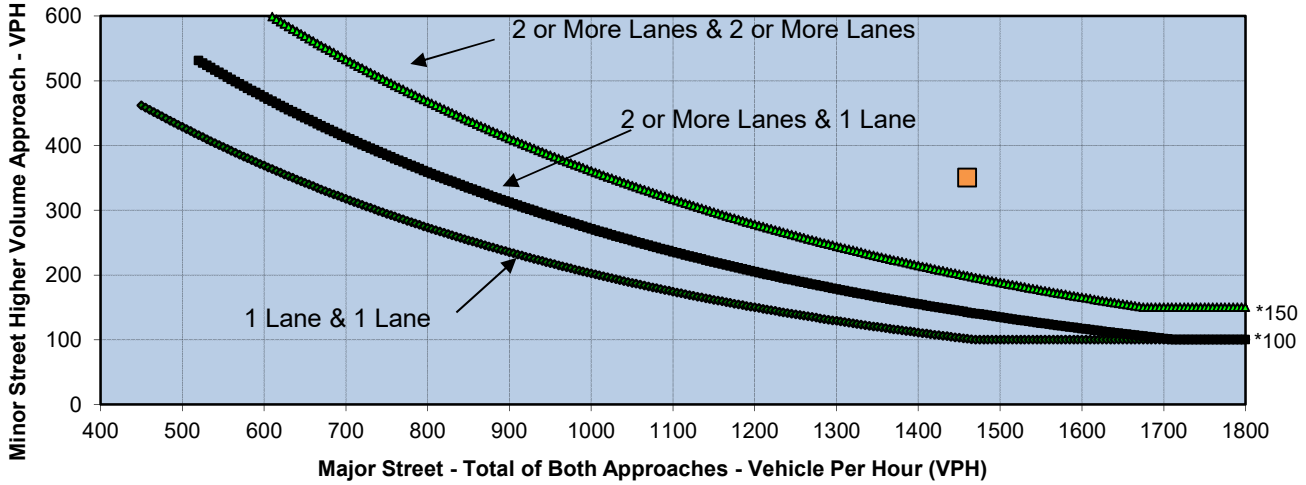
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Hancock Street	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	1,000	260	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	350	0	110	0
Through	460	490	0	0
Right	0	160	240	0
Total	810	650	350	0

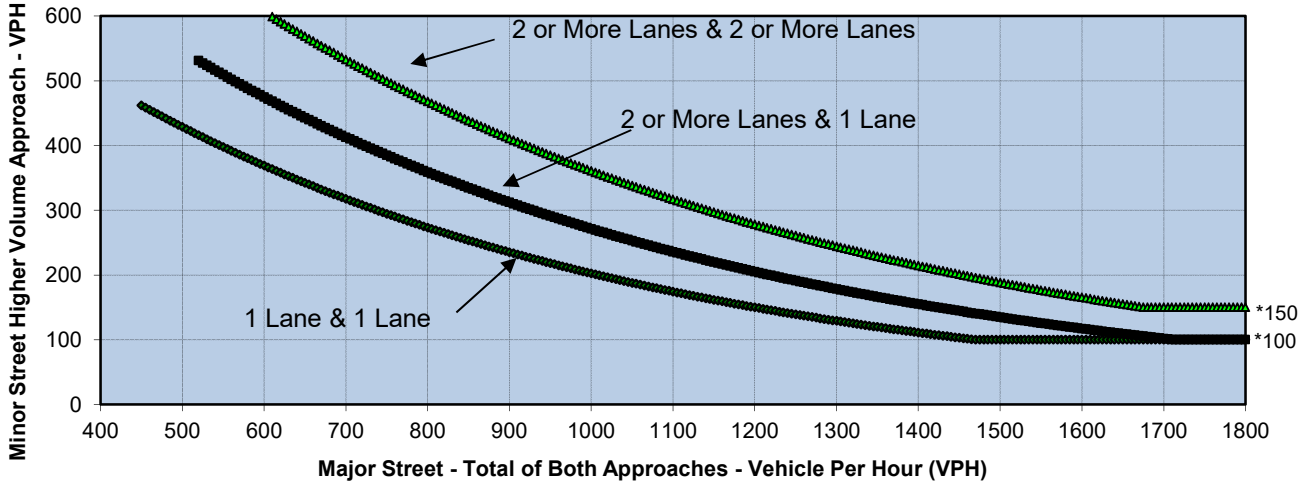
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,460**	**350**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	490	0	230	0
Through	880	430	0	0
Right	0	100	450	0
Total	1,370	530	680	0

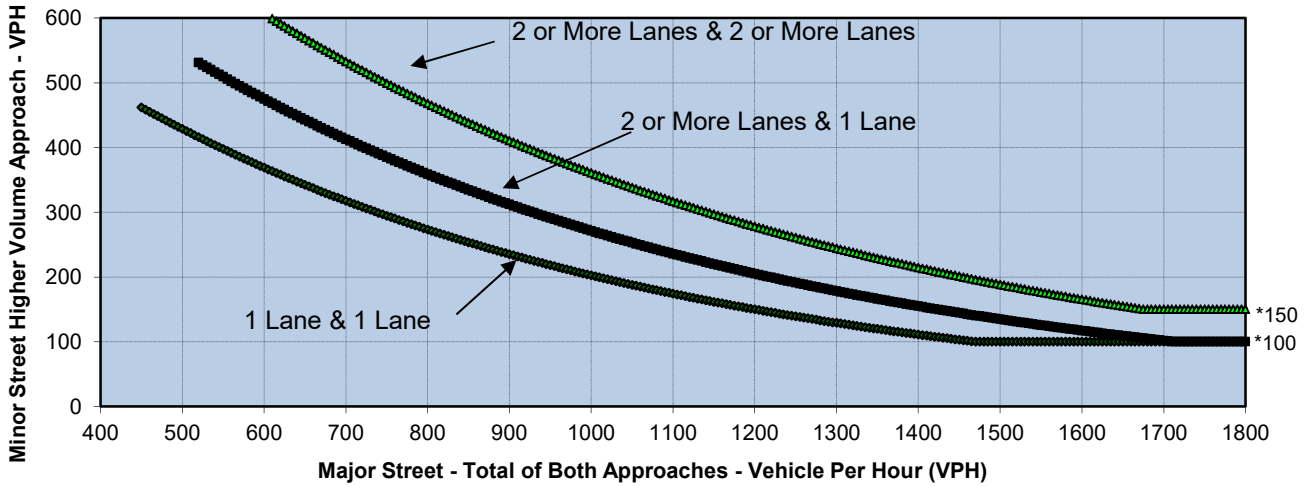
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	1,900	680	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	0	60
Through	0	320	20	90
Right	0	10	140	0
Total	0	370	160	150

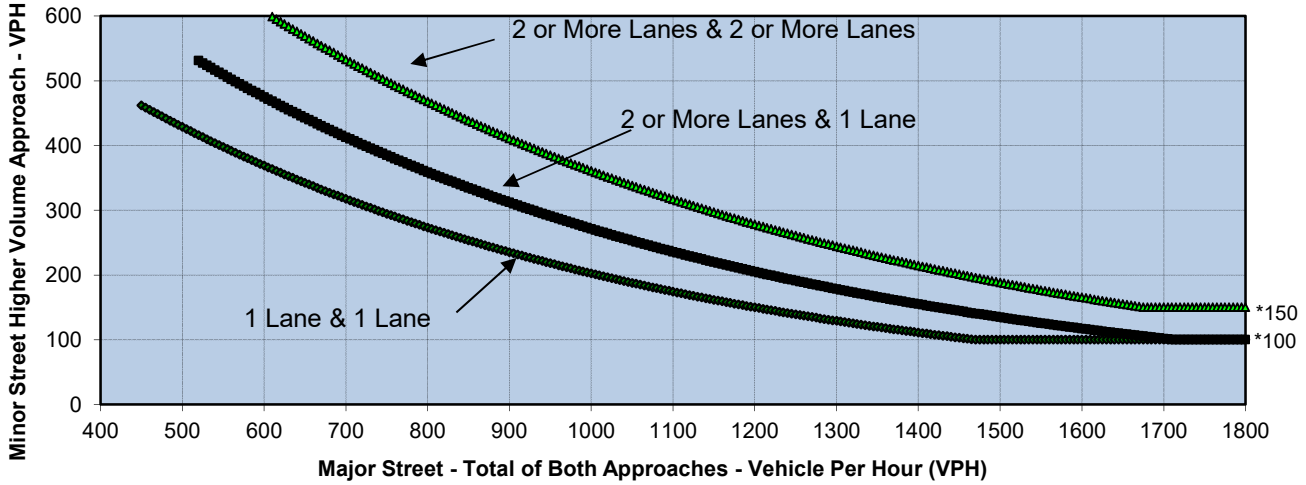
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**370**	**160**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	50	0	350
Through	0	820	30	340
Right	0	70	310	0
Total	0	940	340	690

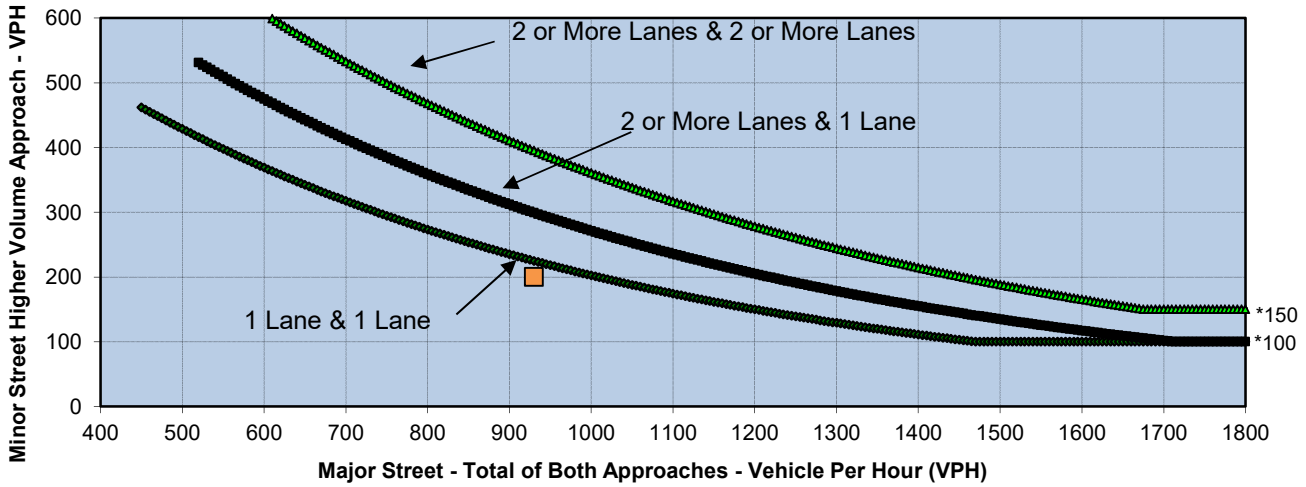
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	940	690	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	170	0	50	0
Through	330	370	0	0
Right	0	60	150	0
Total	500	430	200	0

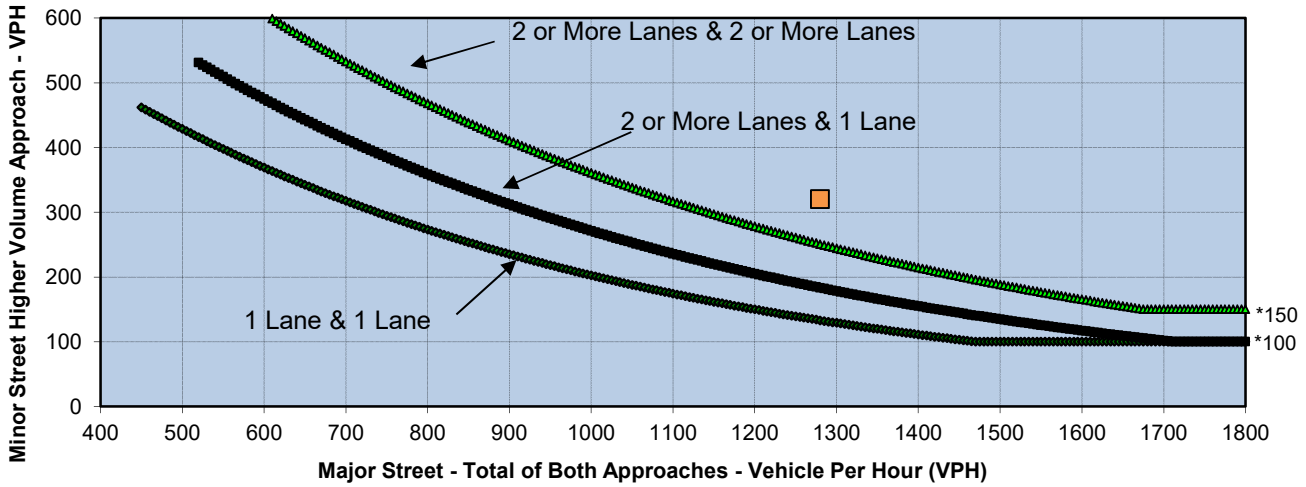
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**930**	**200**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	180	0	120	0
Through	370	480	0	0
Right	0	250	200	0
Total	550	730	320	0

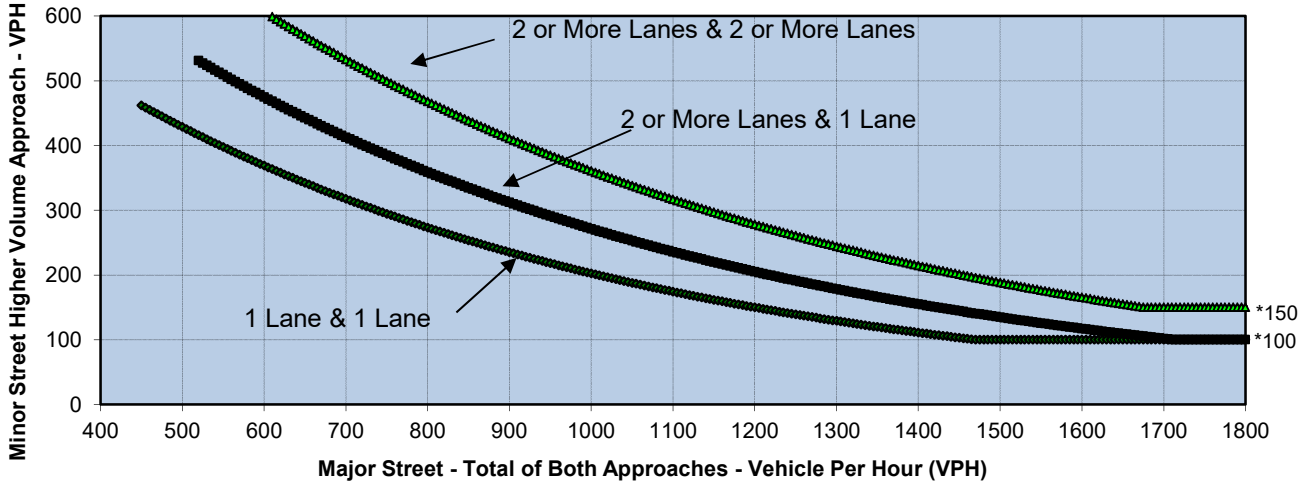
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,280	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	2B
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	50	0
Through	0	150	670	1,420
Right	0	250	0	40
Total	0	400	720	1,460

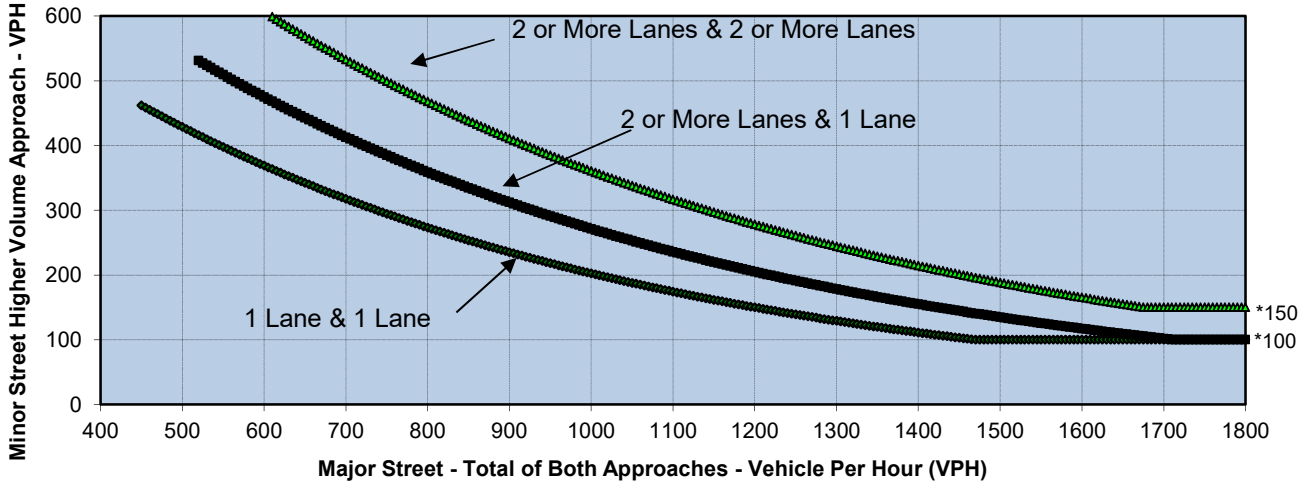
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**2,180**	**400**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	2B
Minor Street	Dutch Flats Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	60	0
Through	0	160	1,090	1,200
Right	0	240	0	70
Total	0	400	1,150	1,270

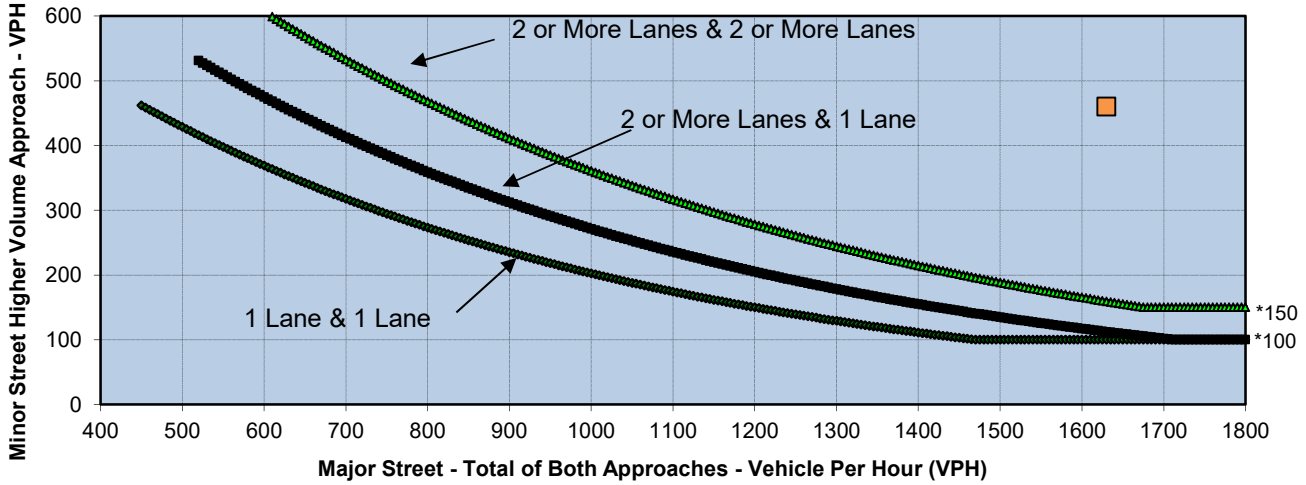
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,420	400	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	200	260	60	40
Through	400	450	10	180
Right	130	190	100	240
Total	730	900	170	460

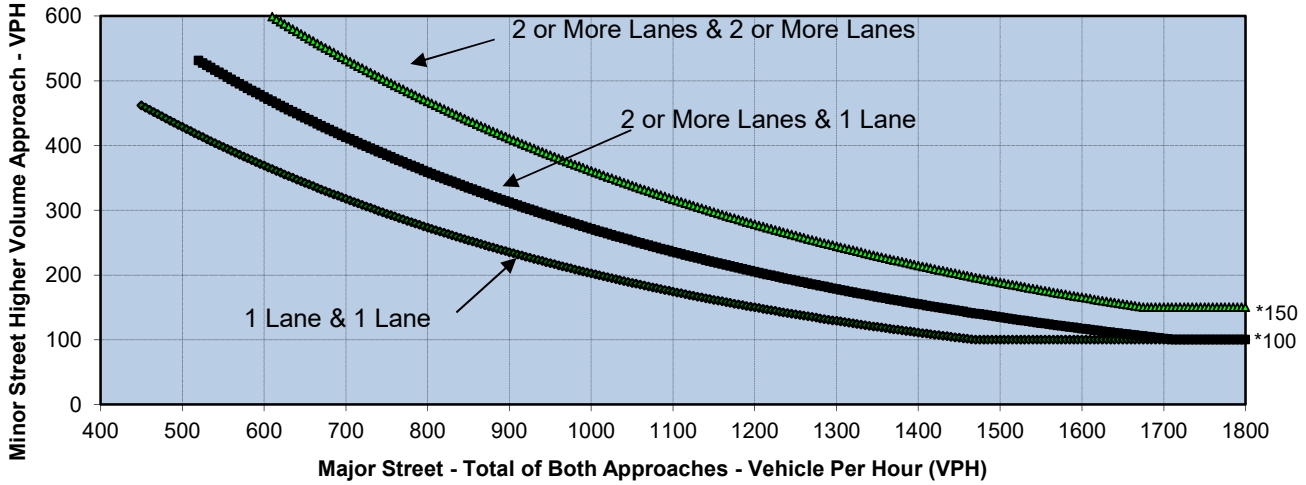
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,630**	**460**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	160	210	110	60
Through	510	520	20	110
Right	370	150	80	280
Total	1,040	880	210	450

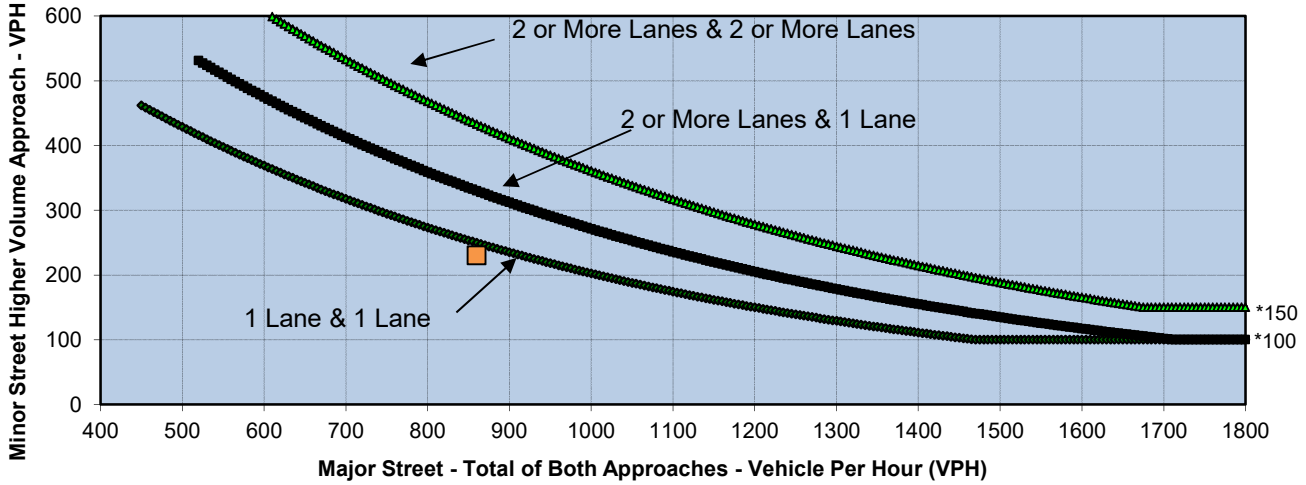
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,920	450	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	370	0	30	0
Through	210	190	0	0
Right	0	90	200	0
Total	580	280	230	0

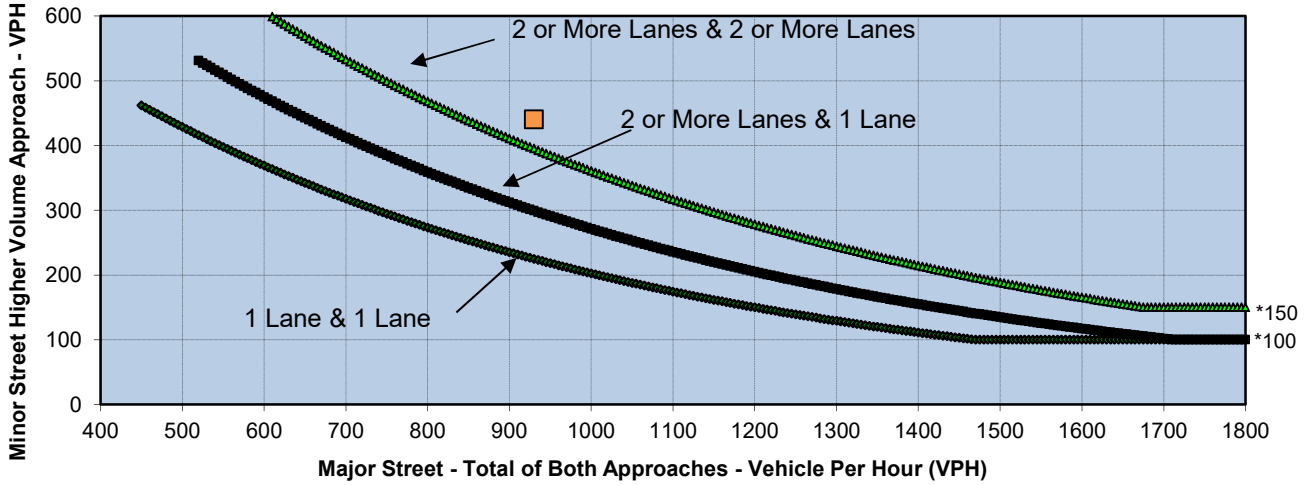
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**860**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	2B
Peak Hour	PM

Turn Movement Volumes

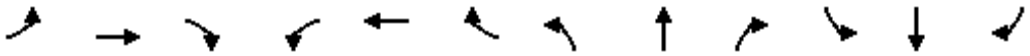
	NB	SB	EB	WB
Left	200	0	180	0
Through	140	270	0	0
Right	0	320	260	0
Total	340	590	440	0

Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	930	440	

Appendix I
Peak Hour Intersection Worksheets – Preferred Plan Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	286	0	0	85	0	0	99	0	12	0
Lane Group Flow (vph)	65	1239	149	174	1446	111	522	435	64	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.0	37.7	37.7	10.8	44.4	44.4	31.4	33.2	33.2	35.8	35.8	
Effective Green, g (s)	4.4	39.0	39.0	11.2	45.8	45.8	31.8	34.0	34.0	34.8	37.0	
Actuated g/C Ratio	0.03	0.29	0.29	0.08	0.34	0.34	0.24	0.25	0.25	0.26	0.27	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	57	1469	451	284	1200	507	808	469	392	456	485	
v/s Ratio Prot	c0.04	0.24		0.05	c0.41		0.15	c0.23		c0.36	0.24	
v/s Ratio Perm			0.10			0.07			0.04			
v/c Ratio	1.14	0.84	0.33	0.61	1.21	0.22	0.65	0.93	0.16	1.38	0.87	
Uniform Delay, d1	65.3	45.1	37.7	59.8	44.6	31.8	46.5	49.3	39.4	50.1	46.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	162.7	6.1	2.0	2.7	100.4	1.0	1.3	24.8	0.3	185.0	14.8	
Delay (s)	228.0	51.2	39.7	62.5	145.0	32.8	47.9	74.1	39.7	235.1	61.5	
Level of Service	F	D	D	E	F	C	D	E	D	F	E	
Approach Delay (s)		54.9			125.0			56.9			164.3	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	97.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

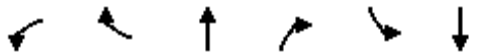
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	550	1190	370	0	0	660
Future Volume (vph)	550	1190	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	1293	402	0	0	717
RTOR Reduction (vph)	0	301	0	0	0	0
Lane Group Flow (vph)	598	992	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	19.7	19.7	13.1			13.1
Effective Green, g (s)	19.7	19.7	13.1			13.1
Actuated g/C Ratio	0.42	0.42	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1445	1173	990			990
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.36				
v/c Ratio	0.41	0.85	0.41			0.72
Uniform Delay, d1	9.5	12.2	13.7			15.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	5.5	0.1			2.3
Delay (s)	9.6	17.7	13.8			17.5
Level of Service	A	B	B			B
Approach Delay (s)	15.1		13.8			17.5
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	46.8	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

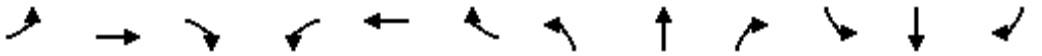
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	130	970	240	0	1210
Future Volume (Veh/h)	0	130	970	240	0	1210
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	141	1054	261	0	1315
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked	0.97	0.97			0.97	
vC, conflicting volume	1623	485			1315	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1489	346			1205	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	111	627			556	

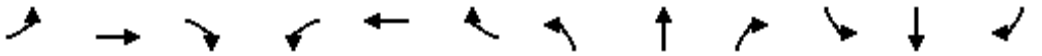
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	141	422	422	472	438	438	438
Volume Left	0	0	0	0	0	0	0
Volume Right	141	0	0	261	0	0	0
cSH	627	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.22	0.25	0.25	0.28	0.26	0.26	0.26
Queue Length 95th (ft)	21	0	0	0	0	0	0
Control Delay (s)	12.4	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	12.4	0.0			0.0		
Approach LOS	B						

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		



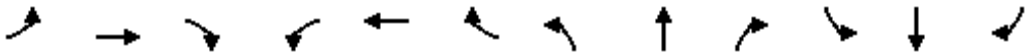
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	300	280	30	140	300	180	460	50	440	520	250
Future Volume (vph)	450	300	280	30	140	300	180	460	50	440	520	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1565	1770	3539	1574	1770	3482		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1565	1770	3539	1574	1770	3482		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	326	304	33	152	326	196	500	54	478	565	272
RTOR Reduction (vph)	0	0	58	0	0	44	0	6	0	0	0	124
Lane Group Flow (vph)	489	326	246	33	152	282	196	548	0	478	565	148
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	30.3	46.1	64.0	3.4	19.1	48.4	17.9	24.2		29.3	35.6	65.9
Effective Green, g (s)	31.2	47.0	65.8	4.4	20.1	48.4	18.8	25.1		30.2	36.5	65.9
Actuated g/C Ratio	0.26	0.39	0.54	0.04	0.17	0.40	0.16	0.21		0.25	0.30	0.55
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	457	724	852	64	588	630	275	723		442	1069	854
v/s Ratio Prot	c0.28	c0.18	0.04	0.02	0.04	0.11	0.11	c0.16		c0.27	0.16	0.04
v/s Ratio Perm			0.11			0.07						0.05
v/c Ratio	1.07	0.45	0.29	0.52	0.26	0.45	0.71	0.76		1.08	0.53	0.17
Uniform Delay, d1	44.8	27.3	14.9	57.2	43.9	26.4	48.4	45.0		45.3	35.0	13.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	62.1	0.2	0.2	6.9	1.0	0.5	8.4	4.6		66.5	1.0	0.1
Delay (s)	106.9	27.5	15.0	64.0	44.9	26.9	56.9	49.6		111.8	36.0	13.9
Level of Service	F	C	B	E	D	C	E	D		F	D	B
Approach Delay (s)		58.8			34.7			51.5			59.0	
Approach LOS		E			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	54.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



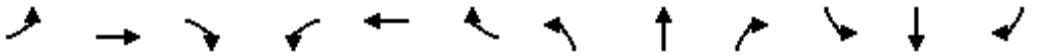
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	110	110	90	110	170	80	320	50	90	410	90
Future Volume (vph)	110	110	110	90	110	170	80	320	50	90	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	120	120	98	120	185	87	348	54	98	446	98
RTOR Reduction (vph)	0	0	96	0	0	158	0	7	0	0	0	48
Lane Group Flow (vph)	120	120	25	98	120	27	87	395	0	98	446	50
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	17.0	17.0	23.7	16.5	16.5	16.5	6.7	55.1		12.3	60.7	60.7
Effective Green, g (s)	17.9	17.9	24.5	17.4	17.4	17.4	7.1	56.0		12.7	61.6	61.6
Actuated g/C Ratio	0.15	0.15	0.20	0.14	0.14	0.14	0.06	0.47		0.11	0.51	0.51
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	250	264	317	256	270	224	203	1614		187	1816	812
v/s Ratio Prot	c0.07	0.07	0.00	0.06	c0.06		0.03	0.11		c0.06	c0.13	
v/s Ratio Perm			0.01			0.02						0.03
v/c Ratio	0.48	0.45	0.08	0.38	0.44	0.12	0.43	0.24		0.52	0.25	0.06
Uniform Delay, d1	46.8	46.6	38.6	46.4	46.9	44.6	54.5	19.3		50.8	16.3	14.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.25	0.71	0.71
Incremental Delay, d2	1.5	1.2	0.0	1.0	1.2	0.2	0.5	0.4		1.0	0.3	0.1
Delay (s)	48.2	47.8	38.6	47.4	48.1	44.9	55.0	19.6		64.6	11.8	10.5
Level of Service	D	D	D	D	D	D	E	B		E	B	B
Approach Delay (s)		44.9			46.4			25.9			19.6	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	10
Future Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.98		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1746			1724		1770	3475		1770	3528	
Flt Permitted		0.84			0.84		0.40	1.00		0.33	1.00	
Satd. Flow (perm)		1506			1482		741	3475		609	3528	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	22	22	33	22	33	65	717	98	33	598	11
RTOR Reduction (vph)	0	19	0	0	28	0	0	13	0	0	1	0
Lane Group Flow (vph)	0	58	0	0	60	0	65	802	0	33	608	0
Confl. Peds. (#/hr)			1			10						3
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.2			5.2		22.6	21.2		20.8	20.3	
Effective Green, g (s)		6.1			6.1		23.4	22.1		21.6	21.2	
Actuated g/C Ratio		0.15			0.15		0.57	0.54		0.53	0.52	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		223			219		466	1868		345	1819	
v/s Ratio Prot							c0.01	c0.23		0.00	0.17	
v/s Ratio Perm		0.04			c0.04		0.07			0.05		
v/c Ratio		0.26			0.27		0.14	0.43		0.10	0.33	
Uniform Delay, d1		15.5			15.5		4.0	5.7		4.7	5.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.2		0.1	0.2		0.0	0.1	
Delay (s)		15.7			15.8		4.0	5.9		4.8	5.9	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		15.7			15.8			5.7			5.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1470	180	340	1820	300	120	330	210	230	280	180
Future Volume (vph)	220	1470	180	340	1820	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4979		3433	5085	1544	1770	3539	1541	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4979		3433	5085	1544	1770	3539	1541	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1598	196	370	1978	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	13	0	0	0	76	0	0	78	0	0	79
Lane Group Flow (vph)	239	1781	0	370	1978	250	130	359	150	250	304	117
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.8	43.2		9.8	44.3	53.5	8.5	24.0	33.8	9.2	24.7	33.5
Effective Green, g (s)	9.2	44.3		10.2	45.3	53.5	8.9	24.9	35.6	9.6	25.6	35.3
Actuated g/C Ratio	0.09	0.42		0.10	0.43	0.51	0.08	0.24	0.34	0.09	0.24	0.34
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	2100		333	2193	786	150	839	573	313	862	522
v/s Ratio Prot	0.07	c0.36		0.11	c0.39	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.80	0.85		1.11	0.90	0.32	0.87	0.43	0.26	0.80	0.35	0.22
Uniform Delay, d1	47.0	27.3		47.4	27.8	15.1	47.5	34.0	25.2	46.8	32.8	25.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	4.5		82.7	6.6	0.1	36.3	0.1	0.1	12.4	0.1	0.1
Delay (s)	59.8	31.8		130.1	34.4	15.2	83.8	34.1	25.3	59.2	32.9	25.1
Level of Service	E	C		F	C	B	F	C	C	E	C	C
Approach Delay (s)		35.1			45.3			40.3			39.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	30	600	90	150	680
Future Volume (vph)	120	30	600	90	150	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1742		3470		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1742		3470		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	33	652	98	163	739
RTOR Reduction (vph)	16	0	14	0	0	0
Lane Group Flow (vph)	147	0	736	0	163	739
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	8.9		30.2		8.8	43.5
Effective Green, g (s)	8.9		30.2		8.8	43.5
Actuated g/C Ratio	0.14		0.49		0.14	0.71
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	252		1706		253	2507
v/s Ratio Prot	c0.08		c0.21		c0.09	0.21
v/s Ratio Perm						
v/c Ratio	0.58		0.43		0.64	0.29
Uniform Delay, d1	24.5		10.1		24.8	3.3
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	3.4		0.8		5.5	0.3
Delay (s)	27.9		10.9		30.4	3.6
Level of Service	C		B		C	A
Approach Delay (s)	27.9		10.9			8.4
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	47.5%	ICU Level of Service	A
Analysis Period (min)	15		

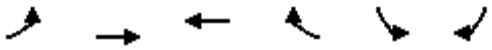
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	180	560	100	0	590
Future Volume (Veh/h)	0	180	560	100	0	590
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	609	109	0	641
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			491
pX, platoon unblocked	0.86					
vC, conflicting volume	986	364			720	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	664	364			720	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	69			100	
cM capacity (veh/h)	339	630			876	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	196	406	312	320	320
Volume Left	0	0	0	0	0
Volume Right	196	0	109	0	0
cSH	630	1700	1700	1700	1700
Volume to Capacity	0.31	0.24	0.18	0.19	0.19
Queue Length 95th (ft)	33	0	0	0	0
Control Delay (s)	13.3	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	13.3	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		



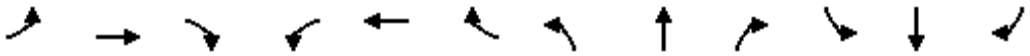
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	820	1290	660	420	170
Future Volume (vph)	0	820	1290	660	420	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	891	1402	717	457	185
RTOR Reduction (vph)	0	0	0	289	0	148
Lane Group Flow (vph)	0	891	1402	428	457	37
Confl. Peds. (#/hr)				8	8	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	8	1	
Permitted Phases						1
Actuated Green, G (s)		31.9	31.9	27.3	12.1	12.1
Effective Green, g (s)		31.9	31.9	26.8	12.1	12.1
Actuated g/C Ratio		0.52	0.52	0.44	0.20	0.20
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	3.0	2.5	2.5
Lane Grp Cap (vph)		1856	1856	1228	683	315
v/s Ratio Prot		0.25	c0.40	0.15	c0.13	
v/s Ratio Perm						0.02
v/c Ratio		0.48	0.76	0.35	0.67	0.12
Uniform Delay, d1		9.2	11.4	11.2	22.5	20.0
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	1.8	0.2	2.2	0.1
Delay (s)		9.4	13.2	11.4	24.7	20.1
Level of Service		A	B	B	C	C
Approach Delay (s)		9.4	12.6		23.4	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.8	Sum of lost time (s)	17.1
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	50	420	80	130	660
Future Volume (vph)	30	50	420	80	130	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.0	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1550	4946		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1550	4946		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	54	457	87	141	717
RTOR Reduction (vph)	0	48	13	0	0	0
Lane Group Flow (vph)	33	6	531	0	141	717
Confl. Peds. (#/hr)	4	11		9	9	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.9	11.9	70.8		13.1	88.3
Effective Green, g (s)	11.9	12.8	70.8		13.1	88.3
Actuated g/C Ratio	0.11	0.12	0.64		0.12	0.80
Clearance Time (s)	4.9	4.9	4.9		4.4	4.9
Vehicle Extension (s)	2.0	2.0	5.0		2.0	3.2
Lane Grp Cap (vph)	191	180	3183		210	4081
v/s Ratio Prot	c0.02		0.11		c0.08	c0.14
v/s Ratio Perm		0.00				
v/c Ratio	0.17	0.03	0.17		0.67	0.18
Uniform Delay, d1	44.6	43.1	7.8		46.4	2.5
Progression Factor	1.00	1.00	2.16		1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1		6.5	0.1
Delay (s)	44.7	43.1	17.0		52.9	2.6
Level of Service	D	D	B		D	A
Approach Delay (s)	43.8		17.0			10.8
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

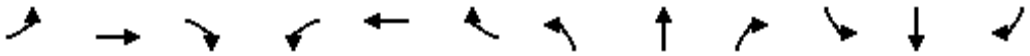


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	50	120	160	140	110	210	420	90	80	540	110
Future Volume (vph)	90	50	120	160	140	110	210	420	90	80	540	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.5	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	0.93		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1665		1770	1739		1770	4793		3433	3449	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1665		1770	1739		1770	4793		3433	3449	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	54	130	174	152	120	228	457	98	87	587	120
RTOR Reduction (vph)	0	95	0	0	25	0	0	27	0	0	14	0
Lane Group Flow (vph)	98	89	0	174	247	0	228	528	0	87	693	0
Confl. Peds. (#/hr)									120			
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	14.3	14.3		18.2	18.2		17.6	33.6		24.3	40.8	
Effective Green, g (s)	15.2	15.2		19.1	19.1		18.0	34.5		24.7	41.7	
Actuated g/C Ratio	0.14	0.14		0.17	0.17		0.16	0.31		0.22	0.38	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		3.9	3.9	
Lane Grp Cap (vph)	244	230		307	301		289	1503		770	1307	
v/s Ratio Prot	c0.06	0.05		0.10	c0.14		c0.13	0.11		0.03	c0.20	
v/s Ratio Perm												
v/c Ratio	0.40	0.39		0.57	0.82		0.79	0.35		0.11	0.53	
Uniform Delay, d1	43.3	43.2		41.7	43.8		44.2	29.1		33.9	26.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.94	0.95	
Incremental Delay, d2	1.1	1.1		1.4	15.6		12.4	0.6		0.1	1.5	
Delay (s)	44.3	44.2		43.1	59.4		56.5	29.8		32.1	26.9	
Level of Service	D	D		D	E		E	C		C	C	
Approach Delay (s)		44.3			53.0			37.6			27.4	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	20	40	20	50	30	630	70	130	650	80
Future Volume (vph)	40	20	20	40	20	50	30	630	70	130	650	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.97		1.00	0.89		1.00	0.99		1.00	0.98	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1749		1770	1664		1770	4996		3433	3468	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1749		1770	1664		1770	4996		3433	3468	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	22	43	22	54	33	685	76	141	707	87
RTOR Reduction (vph)	0	10	0	0	50	0	0	8	0	0	6	0
Lane Group Flow (vph)	0	77	0	43	26	0	33	753	0	141	788	0
Confl. Peds. (#/hr)			7	7			9		4	4		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		9.0		5.4	5.4		2.1	20.1		13.4	31.9	
Effective Green, g (s)		9.0		5.4	5.4		2.1	20.1		13.4	31.9	
Actuated g/C Ratio		0.13		0.08	0.08		0.03	0.30		0.20	0.47	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		233		141	133		55	1487		681	1638	
v/s Ratio Prot		c0.04		c0.02	0.02		c0.02	0.15		0.04	c0.23	
v/s Ratio Perm												
v/c Ratio		0.33		0.30	0.20		0.60	0.51		0.21	0.48	
Uniform Delay, d1		26.5		29.3	29.0		32.3	19.6		22.6	12.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.4	0.3		11.2	0.1		0.1	0.1	
Delay (s)		26.8		29.7	29.3		43.5	19.7		22.7	12.2	
Level of Service		C		C	C		D	B		C	B	
Approach Delay (s)		26.8			29.4			20.7			13.8	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	67.5	Sum of lost time (s)	19.6
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	50	10	10	60	60	640	70	40	680	40
Future Volume (vph)	30	10	50	10	10	60	60	640	70	40	680	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.9	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1795	1583		1817	1583	1770	5010		1770	5043	
Flt Permitted		0.77	1.00		0.84	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1440	1583		1562	1583	1770	5010		1770	5043	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	54	11	11	65	65	696	76	43	739	43
RTOR Reduction (vph)	0	0	47	0	0	56	0	16	0	0	8	0
Lane Group Flow (vph)	0	44	7	0	22	9	65	756	0	43	774	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		8						
Actuated Green, G (s)		7.4	7.4		7.4	7.4	4.4	33.1		2.5	31.2	
Effective Green, g (s)		7.4	7.4		6.5	7.4	4.4	33.1		2.5	31.2	
Actuated g/C Ratio		0.13	0.13		0.12	0.13	0.08	0.60		0.05	0.57	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		193	212		184	212	141	3015		80	2860	
v/s Ratio Prot							c0.04	0.15		c0.02	c0.15	
v/s Ratio Perm		c0.03	0.00		0.01	0.01						
v/c Ratio		0.23	0.03		0.12	0.04	0.46	0.25		0.54	0.27	
Uniform Delay, d1		21.2	20.7		21.7	20.7	24.2	5.1		25.7	6.1	
Progression Factor		1.00	1.00		1.00	1.00	0.81	0.61		1.00	1.00	
Incremental Delay, d2		0.6	0.1		0.3	0.1	2.0	0.2		6.8	0.2	
Delay (s)		21.9	20.8		22.0	20.8	21.7	3.3		32.5	6.3	
Level of Service		C	C		C	C	C	A		C	A	
Approach Delay (s)		21.3			21.1			4.7			7.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	220	1360	150	180	2190	380	100	270	180	110	70	200
Future Volume (vph)	220	1360	150	180	2190	380	100	270	180	110	70	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	7.8	5.9	5.9	5.9	5.9	5.9	5.9
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (prot)	3433	4726		1362	5085	1583	1611	1681	1610	1658	1399	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (perm)	3433	4726		1362	5085	1583	1611	1681	1610	1658	1399	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1478	163	196	2380	413	109	293	196	120	76	217
RTOR Reduction (vph)	0	1	0	75	0	34	74	0	0	0	65	0
Lane Group Flow (vph)	239	1660	0	101	2380	379	35	179	212	218	11	217
Confl. Peds. (#/hr)								9			45	18
Confl. Bikes (#/hr)											10	
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	8.2	63.1		63.1	51.1	67.0	34.9	15.9	15.9	15.9	15.9	13.1
Effective Green, g (s)	9.6	65.2		63.1	53.0	63.2	34.9	15.9	15.9	15.9	15.9	13.1
Actuated g/C Ratio	0.09	0.59		0.57	0.48	0.57	0.32	0.14	0.14	0.14	0.14	0.12
Clearance Time (s)	4.0	6.1		6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Vehicle Extension (s)	3.0	2.8		2.8	3.2	2.9	4.1	2.9	2.9	2.9	2.9	2.9
Lane Grp Cap (vph)	299	2801		781	2450	909	511	242	232	239	202	210
v/s Ratio Prot	c0.07	0.35			c0.47	0.05		0.11	c0.13	0.13		c0.12
v/s Ratio Perm				0.07		0.19	0.02				0.01	
v/c Ratio	0.80	0.59		0.13	0.97	0.42	0.07	0.74	0.91	0.91	0.05	1.03
Uniform Delay, d1	49.3	14.1		10.8	27.8	13.1	26.2	45.1	46.4	46.4	40.6	48.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.86	0.87	0.87	5.56	1.00
Incremental Delay, d2	13.8	0.9		0.3	12.6	0.3	0.1	11.0	36.0	35.0	0.1	71.1
Delay (s)	63.1	15.0		11.1	40.4	13.4	26.3	49.6	76.2	75.2	225.5	119.5
Level of Service	E	B		B	D	B	C	D	E	E	F	F
Approach Delay (s)		20.2			36.4					85.5		82.1
Approach LOS		C			D					F		F

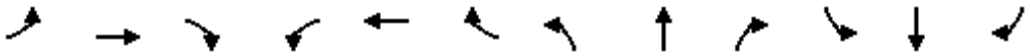
Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	170	30
Future Volume (vph)	170	30
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.9	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	185	33
RTOR Reduction (vph)	114	0
Lane Group Flow (vph)	104	0
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		1
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	13.1	
Effective Green, g (s)	13.1	
Actuated g/C Ratio	0.12	
Clearance Time (s)	5.9	
Vehicle Extension (s)	2.9	
Lane Grp Cap (vph)	331	
v/s Ratio Prot	0.04	
v/s Ratio Perm		
v/c Ratio	0.32	
Uniform Delay, d1	44.3	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	44.9	
Level of Service	D	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	100	100	90	140	80	70	50	90	20	80	90
Future Volume (vph)	50	100	100	90	140	80	70	50	90	20	80	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.95			0.97			0.94			0.94	
Flt Protected		0.99			0.99			0.98			0.99	
Satd. Flow (prot)		1745			1772			1726			1734	
Flt Permitted		0.88			0.82			0.85			0.96	
Satd. Flow (perm)		1558			1469			1498			1681	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	109	109	98	152	87	76	54	98	22	87	98
RTOR Reduction (vph)	0	47	0	0	24	0	0	34	0	0	40	0
Lane Group Flow (vph)	0	225	0	0	313	0	0	194	0	0	167	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		15.6			15.6			26.8			27.3	
Effective Green, g (s)		15.6			15.6			26.8			27.3	
Actuated g/C Ratio		0.30			0.30			0.52			0.53	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		472			445			781			892	
v/s Ratio Prot												
v/s Ratio Perm		0.14			c0.21			c0.13			0.10	
v/c Ratio		0.48			0.70			0.25			0.19	
Uniform Delay, d1		14.6			15.8			6.8			6.3	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			5.0			0.8			0.1	
Delay (s)		15.3			20.8			7.5			6.4	
Level of Service		B			C			A			A	
Approach Delay (s)		15.3			20.8			7.5			6.4	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

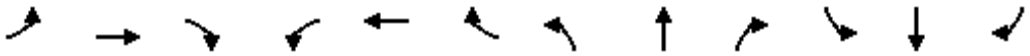
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	300	610	600	130	200	190
Future Volume (vph)	300	610	600	130	200	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	4950		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	4950		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	663	652	141	217	207
RTOR Reduction (vph)	0	0	19	0	0	172
Lane Group Flow (vph)	326	663	774	0	217	35
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	27.5	91.7	60.2		20.3	20.3
Effective Green, g (s)	27.5	91.7	60.2		20.3	20.3
Actuated g/C Ratio	0.23	0.76	0.50		0.17	0.17
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	405	3885	2483		299	267
v/s Ratio Prot	c0.18	0.13	c0.16		c0.12	
v/s Ratio Perm						0.02
v/c Ratio	0.80	0.17	0.31		0.73	0.13
Uniform Delay, d1	43.7	3.8	17.7		47.2	42.4
Progression Factor	1.14	0.17	0.96		1.00	1.00
Incremental Delay, d2	10.9	0.1	0.3		8.5	0.2
Delay (s)	60.8	0.7	17.3		55.7	42.6
Level of Service	E	A	B		E	D
Approach Delay (s)		20.5	17.3		49.3	
Approach LOS		C	B		D	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

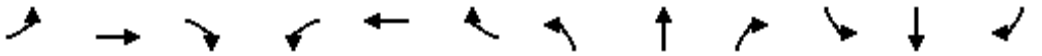
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Future Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.97						0.98	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1806						1831	
Flt Permitted	0.53		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	980		1583	1770	1806						1831	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	0	109	500	424	109	0	0	0	0	76	11
RTOR Reduction (vph)	0	0	91	292	12	0	0	0	0	0	9	0
Lane Group Flow (vph)	33	0	18	208	521	0	0	0	0	0	78	0
Turn Type	Perm		Perm	Split	NA						NA	
Protected Phases				8	8						6	
Permitted Phases	4		4									
Actuated Green, G (s)	7.6		7.6	19.4	19.4						7.6	
Effective Green, g (s)	7.6		7.6	19.4	19.4						7.6	
Actuated g/C Ratio	0.16		0.16	0.42	0.42						0.16	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	159		258	736	751						298	
v/s Ratio Prot				0.12	c0.29						c0.04	
v/s Ratio Perm	c0.03		0.01									
v/c Ratio	0.21		0.07	0.28	0.69						0.26	
Uniform Delay, d1	16.9		16.5	9.0	11.2						17.0	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.7		0.1	0.2	2.8						0.5	
Delay (s)	17.5		16.6	9.2	14.0						17.5	
Level of Service	B		B	A	B						B	
Approach Delay (s)		16.8			11.7			0.0			17.5	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	46.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

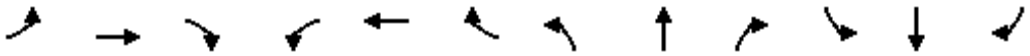
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1650	10	410	2420	0	0	0	0	390	290	150
Future Volume (vph)	0	1650	10	410	2420	0	0	0	0	390	290	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frt		1.00		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		5081		1770	6408					1681	1753	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		5081		1770	6408					1681	1753	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1793	11	446	2630	0	0	0	0	424	315	163
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	39
Lane Group Flow (vph)	0	1803	0	446	2630	0	0	0	0	352	387	124
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		52.1		33.5	90.3					34.9	34.9	34.9
Effective Green, g (s)		53.3		33.9	91.2					35.8	35.8	35.8
Actuated g/C Ratio		0.39		0.25	0.68					0.27	0.27	0.27
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2006		444	4328					445	464	419
v/s Ratio Prot		c0.35		c0.25	0.41							
v/s Ratio Perm										0.21	0.22	0.08
v/c Ratio		0.90		1.00	0.61					0.79	0.83	0.30
Uniform Delay, d1		38.3		50.5	12.1					46.1	46.8	39.6
Progression Factor		1.00		1.09	0.08					1.00	1.00	1.00
Incremental Delay, d2		6.9		13.9	0.1					8.7	11.7	0.1
Delay (s)		45.3		69.2	1.1					54.8	58.5	39.7
Level of Service		D		E	A					D	E	D
Approach Delay (s)		45.3			10.9			0.0			53.7	
Approach LOS		D			B			A			D	

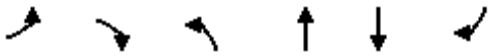
Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



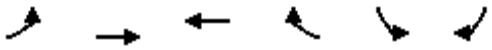
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	100	130	270	0	120	0	160	170	220	10
Future Volume (vph)	0	330	100	130	270	0	120	0	160	170	220	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3329		1749	3539		1770		1548	1770	1849	
Flt Permitted		1.00		0.41	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3329		756	3539		1770		1548	1770	1849	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	359	109	141	293	0	130	0	174	185	239	11
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	87	0	2	0
Lane Group Flow (vph)	0	453	0	141	293	0	130	0	87	185	248	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		64.0		77.7	77.7		14.9		64.0	23.2	23.2	
Effective Green, g (s)		64.9		78.1	78.6		15.3		64.9	24.1	24.1	
Actuated g/C Ratio		0.50		0.60	0.60		0.12		0.50	0.19	0.19	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1661		528	2139		208		772	328	342	
v/s Ratio Prot		0.14		c0.02	0.08		c0.07			0.10	c0.13	
v/s Ratio Perm				c0.14					0.06			
v/c Ratio		0.27		0.27	0.14		0.62		0.11	0.56	0.73	
Uniform Delay, d1		18.9		11.8	11.1		54.6		17.3	48.2	49.8	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		0.4		0.1	0.1		5.7		0.3	2.2	7.5	
Delay (s)		19.3		11.9	11.2		60.4		17.6	50.4	57.3	
Level of Service		B		B	B		E		B	D	E	
Approach Delay (s)		19.3			11.4			35.9			54.4	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	110	240	350	460	490	160
Future Volume (vph)	110	240	350	460	490	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.96	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1646		1770	5085	4898	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1646		1770	5085	4898	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	261	380	500	533	174
RTOR Reduction (vph)	70	0	0	0	36	0
Lane Group Flow (vph)	311	0	380	500	671	0
Confl. Peds. (#/hr)		2				
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	26.6		32.2	85.4	49.2	
Effective Green, g (s)	26.6		31.8	85.4	48.3	
Actuated g/C Ratio	0.22		0.27	0.71	0.40	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	364		469	3618	1971	
v/s Ratio Prot	c0.19		c0.21	0.10	c0.14	
v/s Ratio Perm						
v/c Ratio	0.85		0.81	0.14	0.34	
Uniform Delay, d1	44.8		41.3	5.5	24.8	
Progression Factor	1.00		1.03	1.44	1.00	
Incremental Delay, d2	17.4		10.1	0.1	0.5	
Delay (s)	62.2		52.4	8.0	25.3	
Level of Service	E		D	A	C	
Approach Delay (s)	62.2			27.2	25.3	
Approach LOS	E			C	C	

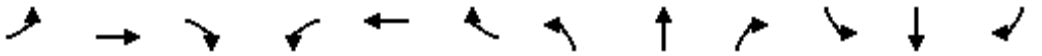
Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	140	80	40	30	40
Future Volume (Veh/h)	50	140	80	40	30	40
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	152	87	43	33	43
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1157	644			
pX, platoon unblocked						
vC, conflicting volume	130				368	108
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130				368	108
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				95	95
cM capacity (veh/h)	1455				608	945

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	54	152	130	76
Volume Left	54	0	0	33
Volume Right	0	0	43	43
cSH	1455	1700	1700	762
Volume to Capacity	0.04	0.09	0.08	0.10
Queue Length 95th (ft)	3	0	0	8
Control Delay (s)	7.6	0.0	0.0	10.2
Lane LOS	A			B
Approach Delay (s)	2.0		0.0	10.2
Approach LOS				B

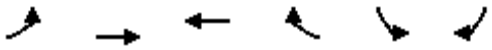
Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	20.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1980	0	0	2740	740	90	410	110	0	0	0
Future Volume (vph)	60	1980	0	0	2740	740	90	410	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frt	1.00	1.00			1.00	0.85		0.97				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1583		3418				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1583		3418				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	2152	0	0	2978	804	98	446	120	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	116	0	6	0	0	0	0
Lane Group Flow (vph)	65	2152	0	0	2978	688	0	658	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	10.9	88.3			73.0	73.0		36.9				
Effective Green, g (s)	11.3	89.2			73.9	73.9		37.8				
Actuated g/C Ratio	0.08	0.66			0.55	0.55		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	148	3359			2783	866		957				
v/s Ratio Prot	0.04	c0.42			c0.59			c0.19				
v/s Ratio Perm						0.43						
v/c Ratio	0.44	0.64			1.07	0.79		0.69				
Uniform Delay, d1	58.8	13.5			30.5	24.5		43.3				
Progression Factor	0.80	0.89			1.00	1.00		1.00				
Incremental Delay, d2	0.4	0.5			39.4	7.4		1.7				
Delay (s)	47.7	12.5			70.0	31.9		45.0				
Level of Service	D	B			E	C		D				
Approach Delay (s)		13.5			61.9			45.0			0.0	
Approach LOS		B			E			D			A	

Intersection Summary			
HCM 2000 Control Delay	44.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	650	400	350	0	0
Future Volume (Veh/h)	10	650	400	350	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	707	435	380	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		480	811			
pX, platoon unblocked	0.93				0.96	0.93
vC, conflicting volume	815				1000	408
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	652				665	214
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	100
cM capacity (veh/h)	866				371	736

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	11	354	354	290	525
Volume Left	11	0	0	0	0
Volume Right	0	0	0	0	380
cSH	866	1700	1700	1700	1700
Volume to Capacity	0.01	0.21	0.21	0.17	0.31
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.2	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.1			0.0	
Approach LOS					

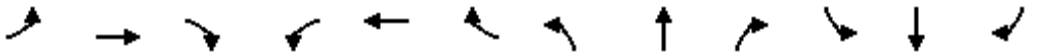
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	25.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	170	0	0	130	300	570
Future Volume (vph)	170	0	0	130	300	570
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	185	0	0	141	326	620

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	185	141	326	620
Volume Left (vph)	185	0	326	0
Volume Right (vph)	0	141	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.2	5.0	5.8	5.3
Degree Utilization, x	0.32	0.19	0.53	0.91
Capacity (veh/h)	567	702	611	675
Control Delay (s)	12.0	9.1	13.8	38.0
Approach Delay (s)	12.0	9.1	29.7	
Approach LOS	B	A	D	

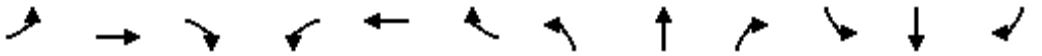
Intersection Summary			
Delay	24.8		
Level of Service	C		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Future Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	109	22	54	43	22	11	22	33	22	22	250	533

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	120	65	76	77	272	533
Volume Left (vph)	109	0	43	22	22	0
Volume Right (vph)	0	54	11	22	0	533
Hadj (s)	0.49	-0.55	0.06	-0.08	0.07	-0.67
Departure Headway (s)	7.1	6.1	6.7	6.1	5.5	4.8
Degree Utilization, x	0.24	0.11	0.14	0.13	0.42	0.71
Capacity (veh/h)	473	547	493	553	632	729
Control Delay (s)	11.1	8.6	10.9	10.1	11.3	17.5
Approach Delay (s)	10.2		10.9	10.1	15.4	
Approach LOS	B		B	B	C	

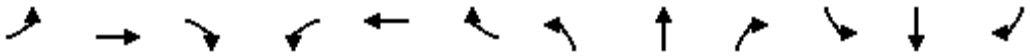
Intersection Summary				
Delay	13.9			
Level of Service	B			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	190	530	510	0	0	0	0	300	380	420
Future Volume (vph)	0	330	190	530	510	0	0	0	0	300	380	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3358	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3358	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	359	207	576	554	0	0	0	0	326	413	457
RTOR Reduction (vph)	0	0	83	0	0	0	0	0	0	0	0	231
Lane Group Flow (vph)	0	359	124	576	554	0	0	0	0	228	511	226
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		30.0	30.0	15.8	50.2					20.0	20.0	20.0
Effective Green, g (s)		30.9	30.9	16.2	51.1					20.9	20.9	20.9
Actuated g/C Ratio		0.39	0.39	0.20	0.64					0.26	0.26	0.26
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1366	611	695	2260					420	877	413
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.08							0.14	0.15	0.14
v/c Ratio		0.26	0.20	0.83	0.25					0.54	0.58	0.55
Uniform Delay, d1		16.8	16.3	30.6	6.2					25.4	25.7	25.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	7.7	0.3					0.8	0.6	0.8
Delay (s)		17.2	17.1	38.3	6.4					26.2	26.4	26.3
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.2			22.7			0.0			26.3	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

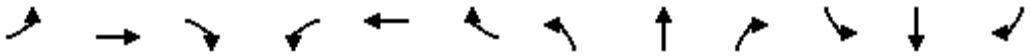
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	40	40	0	0	0	0	0	0	1480	160
Future Volume (Veh/h)	0	0	40	40	0	0	0	0	0	0	1480	160
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	43	43	0	0	0	0	0	0	1609	174
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1696	1696	623	579	1783	0	1783			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1696	1696	623	579	1783	0	1783			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	90	88	100	100	100			100		
cM capacity (veh/h)	60	92	429	358	81	1084	344			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	43	43	644	644	496
Volume Left	0	43	0	0	0
Volume Right	43	0	0	0	174
cSH	429	358	1700	1700	1700
Volume to Capacity	0.10	0.12	0.38	0.38	0.29
Queue Length 95th (ft)	8	10	0	0	0
Control Delay (s)	14.3	16.4	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	14.3	16.4	0.0		
Approach LOS	B	C			

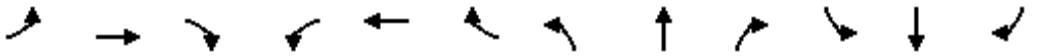
Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	50.7%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	190	160	200	390	0	0	0	0	480	1270	350
Future Volume (vph)	0	190	160	200	390	0	0	0	0	480	1270	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3480					1770	4921	
Flt Permitted		1.00	1.00		0.76					0.95	1.00	
Satd. Flow (perm)		1863	1583		2675					1770	4921	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	207	174	217	424	0	0	0	0	522	1380	380
RTOR Reduction (vph)	0	0	35	0	0	0	0	0	0	0	76	0
Lane Group Flow (vph)	0	207	139	0	641	0	0	0	0	522	1684	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		21.3	21.3		21.3					30.7	30.7	
Effective Green, g (s)		24.0	24.0		24.0					33.0	33.0	
Actuated g/C Ratio		0.37	0.37		0.37					0.51	0.51	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		687	584		987					898	2498	
v/s Ratio Prot		0.11									c0.34	
v/s Ratio Perm			0.09		c0.24					0.29		
v/c Ratio		0.30	0.24		0.65					0.58	0.67	
Uniform Delay, d1		14.5	14.2		17.0					11.2	12.0	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		1.1	1.0		3.3					2.7	1.5	
Delay (s)		15.7	15.1		20.3					13.9	13.4	
Level of Service		B	B		C					B	B	
Approach Delay (s)		15.4			20.3			0.0			13.6	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

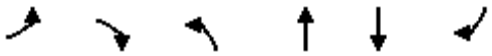


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	690	90	40	500	0	0	0	0	540	330	520
Future Volume (vph)	0	690	90	40	500	0	0	0	0	540	330	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3478		1770	3539						4661	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3478		1770	3539						4661	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	750	98	43	543	0	0	0	0	587	359	565
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	0	124
Lane Group Flow (vph)	0	833	0	43	543	0	0	0	0	0	946	441
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.4		2.8	27.9						25.1	25.1
Effective Green, g (s)		20.6		3.2	27.8						24.2	26.5
Actuated g/C Ratio		0.32		0.05	0.43						0.37	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1102		87	1513						1735	555
v/s Ratio Prot		c0.24		0.02	c0.15							
v/s Ratio Perm											0.20	c0.32
v/c Ratio		0.76		0.49	0.36						0.94dl	0.79
Uniform Delay, d1		19.9		30.1	12.6						16.1	16.9
Progression Factor		1.00		1.34	0.84						1.00	1.00
Incremental Delay, d2		4.8		1.5	0.6						0.2	7.2
Delay (s)		24.8		42.0	11.1						16.3	24.1
Level of Service		C		D	B						B	C
Approach Delay (s)		24.8			13.4			0.0			19.2	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



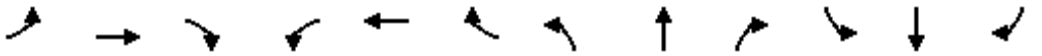
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	1120	1810	790	650	140
Future Volume (vph)	120	1120	1810	790	650	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2766	3433	5085	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2766	3433	5085	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	1217	1967	859	707	152
RTOR Reduction (vph)	0	19	0	0	0	1
Lane Group Flow (vph)	130	1198	1967	859	707	151
Confl. Peds. (#/hr)	129	61	34			
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	14.1	76.0	61.9	97.9	32.0	46.1
Effective Green, g (s)	14.1	76.0	61.9	97.9	32.0	46.1
Actuated g/C Ratio	0.12	0.63	0.52	0.82	0.27	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	1844	1770	4148	1356	660
v/s Ratio Prot	0.07	c0.34	c0.57	0.17	c0.14	0.03
v/s Ratio Perm		0.10				0.07
v/c Ratio	0.63	0.65	1.11	0.21	0.52	0.23
Uniform Delay, d1	50.5	13.7	29.1	2.4	37.5	24.9
Progression Factor	1.00	1.00	0.41	0.57	0.77	0.89
Incremental Delay, d2	5.8	0.8	53.4	0.0	1.4	0.2
Delay (s)	56.3	14.5	65.3	1.4	30.4	22.4
Level of Service	E	B	E	A	C	C
Approach Delay (s)	18.5			45.9	28.9	
Approach LOS	B			D	C	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	100	280	0	0	610	320	60	0	60	250	20	180
Future Volume (vph)	100	280	0	0	610	320	60	0	60	250	20	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.95	0.95	1.00
Frt	1.00	1.00			1.00	0.85		0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539			3539	1583		1695		1681	1697	1583
Flt Permitted	0.95	1.00			1.00	1.00		0.76		0.50	0.54	1.00
Satd. Flow (perm)	1770	3539			3539	1583		1326		893	964	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	304	0	0	663	348	65	0	65	272	22	196
RTOR Reduction (vph)	0	0	0	0	0	232	0	118	0	0	0	151
Lane Group Flow (vph)	109	304	0	0	663	116	0	12	0	147	147	45
Turn Type	Prot	NA			NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		7
Actuated Green, G (s)	4.6	28.4			19.8	19.8		5.3		13.7	13.7	13.7
Effective Green, g (s)	4.6	28.4			19.8	19.8		5.3		13.7	13.7	13.7
Actuated g/C Ratio	0.08	0.48			0.33	0.33		0.09		0.23	0.23	0.23
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	137	1692			1179	527		118		205	222	365
v/s Ratio Prot	c0.06	0.09			c0.19							
v/s Ratio Perm						0.07		c0.01		c0.16	0.15	0.03
v/c Ratio	0.80	0.18			0.56	0.22		0.10		0.72	0.66	0.12
Uniform Delay, d1	26.9	8.8			16.2	14.2		24.9		21.1	20.7	18.1
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	26.5	0.2			1.9	1.0		0.4		11.3	7.2	0.2
Delay (s)	53.4	9.1			18.2	15.2		25.2		32.4	28.0	18.3
Level of Service	D	A			B	B		C		C	C	B
Approach Delay (s)		20.8			17.2			25.2			25.4	
Approach LOS		C			B			C			C	

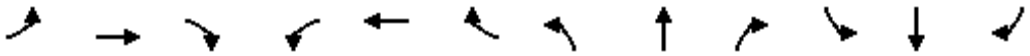
Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	59.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



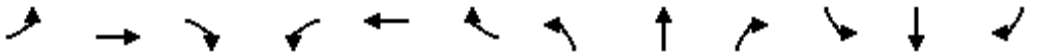
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	60	310	610	0	0	0	0	170	30	240
Future Volume (vph)	0	210	60	310	610	0	0	0	0	170	30	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3408		1763	1863					1681	1708	1583
Flt Permitted		1.00		0.57	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3408		1063	1863					1681	1708	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	228	65	337	663	0	0	0	0	185	33	261
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	77
Lane Group Flow (vph)	0	259	0	337	663	0	0	0	0	100	118	184
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Perm	NA					Perm	NA	custom
Protected Phases		7			8						6	7
Permitted Phases				8						6		6
Actuated Green, G (s)		11.1		26.1	26.1					10.0	10.0	21.1
Effective Green, g (s)		11.1		26.4	26.4					12.2	12.2	25.5
Actuated g/C Ratio		0.18		0.43	0.43					0.20	0.20	0.42
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		616		457	801					334	339	703
v/s Ratio Prot		c0.08			c0.36							0.06
v/s Ratio Perm				0.32						0.06	0.07	0.06
v/c Ratio		0.42		0.74	0.83					0.30	0.35	0.26
Uniform Delay, d1		22.3		14.6	15.5					21.0	21.2	11.8
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5		5.3	6.7					0.5	0.6	0.2
Delay (s)		22.8		19.9	22.2					21.5	21.8	12.0
Level of Service		C		B	C					C	C	B
Approach Delay (s)		22.8			21.4			0.0			16.4	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	11.7
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



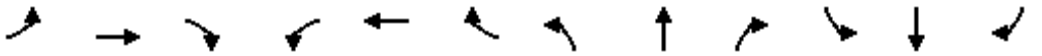
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1310	200	120	720	130
Future Volume (vph)	20	30	30	440	110	160	40	1310	200	120	720	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1697		1770	4984		1770	4952	
Flt Permitted	0.46	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	866	1710		1326	1697		1770	4984		1770	4952	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1424	217	130	783	141
RTOR Reduction (vph)	0	21	0	0	59	0	0	22	0	0	27	0
Lane Group Flow (vph)	22	45	0	478	235	0	43	1619	0	130	897	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	33.8	33.8		33.1	33.1		3.5	33.2		9.1	38.6	
Effective Green, g (s)	33.8	33.8		33.5	33.5		3.5	34.6		9.6	40.7	
Actuated g/C Ratio	0.38	0.38		0.37	0.37		0.04	0.38		0.11	0.45	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	325	642		493	631		68	1916		188	2239	
v/s Ratio Prot		0.03			0.14		0.02	c0.32		c0.07	0.18	
v/s Ratio Perm	0.03			c0.36								
v/c Ratio	0.07	0.07		0.97	0.37		0.63	0.84		0.69	0.40	
Uniform Delay, d1	18.0	18.0		27.7	20.6		42.6	25.3		38.8	16.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		32.4	0.4		13.2	4.8		10.5	0.5	
Delay (s)	18.0	18.0		60.1	21.0		55.9	30.0		49.2	17.0	
Level of Service	B	B		E	C		E	C		D	B	
Approach Delay (s)		18.0			45.2			30.7			21.0	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	30.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	660	570	150	140	720	160	300	690	110	100	700	240
Future Volume (vph)	660	570	150	140	720	160	300	690	110	100	700	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3429		1770	3432		1770	4971		1770	5085	1571
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3429		1770	3432		1770	4971		1770	5085	1571
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	717	620	163	152	783	174	326	750	120	109	761	261
RTOR Reduction (vph)	0	17	0	0	15	0	0	17	0	0	0	51
Lane Group Flow (vph)	717	766	0	152	942	0	326	853	0	109	761	210
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	40.6	57.2		15.0	31.0		18.6	29.8		9.1	20.2	60.8
Effective Green, g (s)	41.0	58.4		15.4	32.8		19.0	30.7		9.5	21.2	61.6
Actuated g/C Ratio	0.32	0.45		0.12	0.25		0.15	0.24		0.07	0.16	0.47
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	558	1540		209	865		258	1173		129	829	744
v/s Ratio Prot	c0.41	0.22		0.09	c0.27		c0.18	0.17		0.06	c0.15	0.09
v/s Ratio Perm												0.04
v/c Ratio	1.28	0.50		0.73	1.09		1.26	0.73		0.84	0.92	0.28
Uniform Delay, d1	44.5	25.4		55.3	48.6		55.5	45.8		59.5	53.5	20.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	141.4	0.3		10.2	57.7		145.8	4.0		35.8	16.7	0.1
Delay (s)	185.9	25.7		65.5	106.3		201.3	49.8		95.3	70.3	20.8
Level of Service	F	C		E	F		F	D		F	E	C
Approach Delay (s)		102.3			100.7			91.1			61.3	
Approach LOS		F			F			F			E	

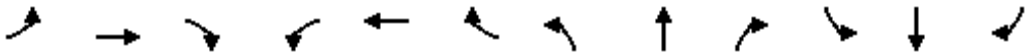
Intersection Summary			
HCM 2000 Control Delay	89.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	360	170	330	410	110	240	120	210	80	150	100
Future Volume (vph)	120	360	170	330	410	110	240	120	210	80	150	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	391	185	359	446	120	261	130	228	87	163	109
RTOR Reduction (vph)	0	0	101	0	0	74	0	0	154	0	0	85
Lane Group Flow (vph)	130	391	84	359	446	46	261	130	74	87	163	24
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.6	32.8	40.4	10.9	34.1	34.1	7.6	20.8	31.7	7.3	20.5	20.5
Effective Green, g (s)	10.0	33.7	41.2	11.3	35.0	35.0	8.0	20.2	29.5	7.7	20.0	20.0
Actuated g/C Ratio	0.11	0.37	0.46	0.12	0.39	0.39	0.09	0.22	0.33	0.09	0.22	0.22
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	195	1319	1270	429	1370	612	303	416	516	150	1125	350
v/s Ratio Prot	0.07	0.11	0.01	c0.10	c0.13		c0.08	c0.07	0.02	0.05	0.03	
v/s Ratio Perm			0.02			0.03			0.03			0.02
v/c Ratio	0.67	0.30	0.07	0.84	0.33	0.08	0.86	0.31	0.14	0.58	0.14	0.07
Uniform Delay, d1	38.6	20.0	13.8	38.6	19.4	17.5	40.7	29.3	21.5	39.8	28.3	27.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.5	0.6	0.0	12.7	0.6	0.2	20.7	0.7	0.0	3.4	0.1	0.1
Delay (s)	45.1	20.6	13.8	51.4	20.1	17.7	61.4	30.0	21.6	43.1	28.4	28.0
Level of Service	D	C	B	D	C	B	E	C	C	D	C	C
Approach Delay (s)		23.3			31.9			40.1			31.9	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	230	70	20	140	220	50	180	250	20	20	30
Future Volume (vph)	140	230	70	20	140	220	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.92			0.93			0.94	
Flt Protected		0.98			1.00			0.99			0.99	
Satd. Flow (prot)		1787			1712			1691			1728	
Flt Permitted		0.77			0.97			0.96			0.80	
Satd. Flow (perm)		1403			1663			1634			1398	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	239	54	196	272	22	22	33
RTOR Reduction (vph)	0	10	0	0	42	0	0	57	0	0	23	0
Lane Group Flow (vph)	0	468	0	0	371	0	0	465	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		39.1			39.1			20.3			20.3	
Effective Green, g (s)		40.0			40.0			21.2			21.2	
Actuated g/C Ratio		0.58			0.58			0.31			0.31	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		810			961			500			428	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.22			c0.28			0.04	
v/c Ratio		0.58			0.39			0.93			0.13	
Uniform Delay, d1		9.3			7.9			23.3			17.3	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			1.2			23.8			0.0	
Delay (s)		9.9			9.1			47.1			17.4	
Level of Service		A			A			D			B	
Approach Delay (s)		9.9			9.1			47.1			17.4	
Approach LOS		A			A			D			B	

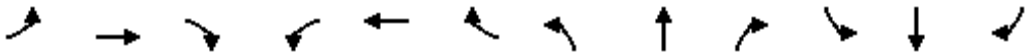
Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	440	160	240	680	160	160
Future Volume (vph)	440	160	240	680	160	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4843		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4843		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	174	261	739	174	174
RTOR Reduction (vph)	85	0	0	0	0	132
Lane Group Flow (vph)	567	0	261	739	174	42
Confl. Peds. (#/hr)		7	7		30	15
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	21.5		10.8	36.7	13.6	13.6
Effective Green, g (s)	23.4		11.2	36.7	14.5	14.5
Actuated g/C Ratio	0.39		0.19	0.61	0.24	0.24
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1885		329	2161	427	381
v/s Ratio Prot	0.12		c0.15	c0.21	c0.10	0.03
v/s Ratio Perm						
v/c Ratio	0.30		0.79	0.34	0.41	0.11
Uniform Delay, d1	12.7		23.3	5.8	19.2	17.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4		11.6	0.4	0.2	0.0
Delay (s)	13.1		34.9	6.2	19.4	17.8
Level of Service	B		C	A	B	B
Approach Delay (s)	13.1			13.7	18.6	
Approach LOS	B			B	B	

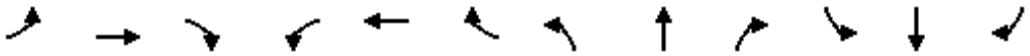
Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	60.1	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	10	20	40	10	40	30	150	30	50	180	40
Future Volume (vph)	20	10	20	40	10	40	30	150	30	50	180	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	11	22	43	11	43	33	163	33	54	196	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	97	229	293
Volume Left (vph)	22	43	33	54
Volume Right (vph)	22	43	33	43
Hadj (s)	-0.13	-0.14	-0.02	-0.02
Departure Headway (s)	5.1	5.1	4.6	4.6
Degree Utilization, x	0.08	0.14	0.29	0.37
Capacity (veh/h)	619	637	744	756
Control Delay (s)	8.6	8.9	9.5	10.2
Approach Delay (s)	8.6	8.9	9.5	10.2
Approach LOS	A	A	A	B

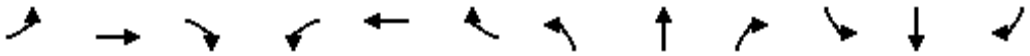
Intersection Summary			
Delay	9.7		
Level of Service	A		
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Future Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	22	22	33	22	33	152	33	43	130	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	77	77	218	238
Volume Left (vph)	33	22	33	43
Volume Right (vph)	22	22	33	65
Hadj (s)	-0.05	-0.08	-0.03	-0.09
Departure Headway (s)	5.0	5.0	4.5	4.5
Degree Utilization, x	0.11	0.11	0.28	0.30
Capacity (veh/h)	646	649	757	768
Control Delay (s)	8.6	8.6	9.3	9.3
Approach Delay (s)	8.6	8.6	9.3	9.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.1			
Level of Service	A			
Intersection Capacity Utilization	31.3%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	100	20	20	30	280	290	10	100	20
Future Volume (vph)	20	20	20	100	20	20	30	280	290	10	100	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	109	22	22	33	304	315	11	109	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	153	337	315	142
Volume Left (vph)	22	109	33	0	11
Volume Right (vph)	22	22	0	315	22
Hadj (s)	-0.10	0.09	0.08	-0.67	-0.04
Departure Headway (s)	5.8	5.8	5.4	4.7	5.3
Degree Utilization, x	0.11	0.25	0.51	0.41	0.21
Capacity (veh/h)	560	575	651	753	637
Control Delay (s)	9.5	10.6	12.6	9.6	9.7
Approach Delay (s)	9.5	10.6	11.2		9.7
Approach LOS	A	B	B		A

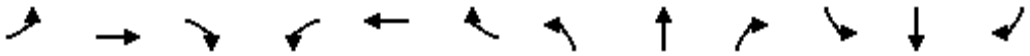
Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	44.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	30	20	40	40	40	150
Future Volume (vph)	30	20	40	40	40	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	43	43	43	163

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	55	86	206
Volume Left (vph)	0	43	43
Volume Right (vph)	22	0	163
Hadj (s)	-0.21	0.13	-0.40
Departure Headway (s)	4.2	4.5	3.8
Degree Utilization, x	0.06	0.11	0.22
Capacity (veh/h)	807	750	907
Control Delay (s)	7.5	8.1	7.9
Approach Delay (s)	7.5	8.1	7.9
Approach LOS	A	A	A

Intersection Summary			
Delay	7.9		
Level of Service	A		
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		



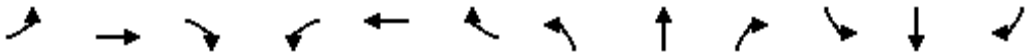
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Future Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	54	33	33	22	152	109	22	43	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	283	87
Volume Left (vph)	22	54	22	22
Volume Right (vph)	22	33	109	22
Hadj (s)	-0.10	-0.04	-0.18	-0.07
Departure Headway (s)	4.8	4.8	4.3	4.6
Degree Utilization, x	0.09	0.16	0.34	0.11
Capacity (veh/h)	679	691	806	728
Control Delay (s)	8.3	8.7	9.5	8.2
Approach Delay (s)	8.3	8.7	9.5	8.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	38.2%	ICU Level of Service	A	
Analysis Period (min)	15			

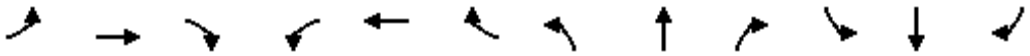
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	110	90	10	40	20	260	270	40	20	50	80
Future Volume (vph)	300	110	90	10	40	20	260	270	40	20	50	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.96		1.00	0.98		1.00	0.91	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1760			1769		1763	1821		1764	1665	
Flt Permitted		0.77			0.93		0.67	1.00		0.48	1.00	
Satd. Flow (perm)		1401			1659		1238	1821		883	1665	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	120	98	11	43	22	283	293	43	22	54	87
RTOR Reduction (vph)	0	14	0	0	12	0	0	7	0	0	50	0
Lane Group Flow (vph)	0	530	0	0	64	0	283	329	0	22	91	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		
Actuated Green, G (s)		25.2			25.2		24.4	24.4		24.4	24.4	
Effective Green, g (s)		25.2			25.2		24.4	24.4		24.4	24.4	
Actuated g/C Ratio		0.44			0.44		0.42	0.42		0.42	0.42	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		4.4	4.4		2.1	2.1	
Lane Grp Cap (vph)		612			725		524	771		374	705	
v/s Ratio Prot								0.18			0.05	
v/s Ratio Perm		c0.38			0.04		c0.23			0.02		
v/c Ratio		0.87			0.09		0.54	0.43		0.06	0.13	
Uniform Delay, d1		14.7			9.5		12.4	11.7		9.8	10.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.9			0.0		4.0	1.7		0.3	0.4	
Delay (s)		26.5			9.5		16.4	13.4		10.1	10.5	
Level of Service		C			A		B	B		B	B	
Approach Delay (s)		26.5			9.5			14.8			10.4	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	440	160	230	720	90	110	20	270	20	10	30
Future Volume (vph)	50	440	160	230	720	90	110	20	270	20	10	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.96		1.00	0.98			0.91			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1769	4882		1770	3471			1646			1706	
Flt Permitted	0.32	1.00		0.30	1.00			0.89			0.82	
Satd. Flow (perm)	587	4882		563	3471			1478			1424	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	478	174	250	783	98	120	22	293	22	11	33
RTOR Reduction (vph)	0	80	0	0	12	0	0	127	0	0	24	0
Lane Group Flow (vph)	54	572	0	250	869	0	0	308	0	0	42	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	22.5	20.3		33.3	26.7			15.5			15.5	
Effective Green, g (s)	23.3	21.3		33.7	27.6			16.4			16.4	
Actuated g/C Ratio	0.40	0.36		0.58	0.47			0.28			0.28	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	285	1774		507	1634			413			398	
v/s Ratio Prot	0.01	0.12		c0.07	c0.25							
v/s Ratio Perm	0.07			0.21				c0.21			0.03	
v/c Ratio	0.19	0.32		0.49	0.53			0.74			0.11	
Uniform Delay, d1	11.0	13.4		6.6	10.9			19.2			15.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.5		0.3	1.2			6.3			0.0	
Delay (s)	11.1	13.9		6.9	12.2			25.5			15.7	
Level of Service	B	B		A	B			C			B	
Approach Delay (s)		13.7			11.0			25.5			15.7	
Approach LOS		B			B			C			B	

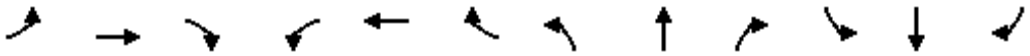
Intersection Summary			
HCM 2000 Control Delay	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	58.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Future Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	22	22	22	22	22	22	174	43	65	130	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	120	66	239	271
Volume Left (vph)	76	22	22	65
Volume Right (vph)	22	22	43	76
Hadj (s)	0.05	-0.10	-0.06	-0.09
Departure Headway (s)	5.3	5.2	4.7	4.6
Degree Utilization, x	0.18	0.10	0.31	0.35
Capacity (veh/h)	618	611	732	741
Control Delay (s)	9.4	8.7	9.8	10.1
Approach Delay (s)	9.4	8.7	9.8	10.1
Approach LOS	A	A	A	B

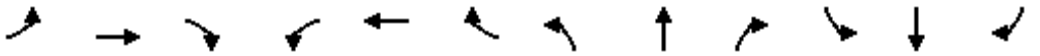
Intersection Summary			
Delay	9.7		
Level of Service	A		
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Future Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	43	11	11	22	65	163	11	33	98	54

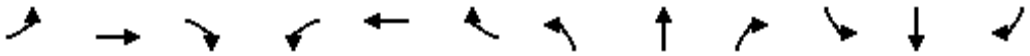
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	44	239	185
Volume Left (vph)	43	11	65	33
Volume Right (vph)	43	22	11	54
Hadj (s)	-0.13	-0.22	0.06	-0.11
Departure Headway (s)	4.8	4.8	4.6	4.5
Degree Utilization, x	0.14	0.06	0.30	0.23
Capacity (veh/h)	680	667	759	766
Control Delay (s)	8.6	8.1	9.5	8.8
Approach Delay (s)	8.6	8.1	9.5	8.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	35.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Future Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3478		1770	3387				1590	1681	1736	1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3478		1770	3387				1590	1681	1736	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	293	33	11	707	283	0	0	22	217	163	348
RTOR Reduction (vph)	0	8	0	0	46	0	0	0	0	0	0	214
Lane Group Flow (vph)	435	318	0	11	944	0	0	0	22	113	267	134
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	11.2	38.3		0.7	27.8				71.2	17.6	17.6	17.6
Effective Green, g (s)	11.6	39.2		1.1	28.7				71.2	18.9	18.9	18.9
Actuated g/C Ratio	0.16	0.55		0.02	0.40				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	559	1914		27	1365				1590	446	460	420
v/s Ratio Prot	c0.13	0.09		0.01	c0.28					0.07	c0.15	
v/s Ratio Perm									0.01			0.08
v/c Ratio	0.78	0.17		0.41	0.69				0.01	0.25	0.58	0.32
Uniform Delay, d1	28.6	7.9		34.7	17.6				0.0	20.6	22.7	21.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.2		3.6	2.9				0.0	0.5	2.5	0.7
Delay (s)	34.7	8.1		38.3	20.5				0.0	21.1	25.2	21.7
Level of Service	C	A		D	C				A	C	C	C
Approach Delay (s)		23.3			20.7			0.0			22.9	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	700	90	70	1410	60	230	30	70	70	50	20
Future Volume (vph)	30	700	90	70	1410	60	230	30	70	70	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.98		1.00	0.99		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1678	3363		1671	3411		1635	1527			1669	
Flt Permitted	0.95	1.00		0.95	1.00		0.63	1.00			0.80	
Satd. Flow (perm)	1678	3363		1671	3411		1078	1527			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	761	98	76	1533	65	250	33	76	76	54	22
RTOR Reduction (vph)	0	7	0	0	2	0	0	56	0	0	5	0
Lane Group Flow (vph)	33	852	0	76	1596	0	250	53	0	0	147	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	67.0		8.0	71.9		30.8	30.8			30.8	
Effective Green, g (s)	3.5	67.9		8.4	72.8		31.7	31.7			31.7	
Actuated g/C Ratio	0.03	0.57		0.07	0.61		0.26	0.26			0.26	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	48	1902		116	2069		284	403			362	
v/s Ratio Prot	0.02	0.25		c0.05	c0.47			0.03				
v/s Ratio Perm							c0.23				0.11	
v/c Ratio	0.69	0.45		0.66	0.77		0.88	0.13			0.41	
Uniform Delay, d1	57.7	15.1		54.4	17.4		42.3	33.7			36.4	
Progression Factor	1.00	1.00		0.84	1.51		1.00	1.00			1.00	
Incremental Delay, d2	27.8	0.8		2.8	0.8		25.0	0.1			0.3	
Delay (s)	85.5	15.9		48.7	27.1		67.3	33.7			36.7	
Level of Service	F	B		D	C		E	C			D	
Approach Delay (s)		18.5			28.1			57.1			36.7	
Approach LOS		B			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	650	80	170	1240	70	60	130	100	260	380	250
Future Volume (vph)	180	650	80	170	1240	70	60	130	100	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3461		1770	3501		1770	3539	1550	1770	3267	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3461		1770	3501		1770	3539	1550	1770	3267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	707	87	185	1348	76	65	141	109	283	413	272
RTOR Reduction (vph)	0	7	0	0	3	0	0	0	45	0	92	0
Lane Group Flow (vph)	196	787	0	185	1421	0	65	141	64	283	593	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	13.9	41.0		16.3	42.9		7.0	21.4	37.7	22.6	37.1	
Effective Green, g (s)	14.3	41.9		16.7	44.3		7.4	22.4	38.5	23.0	38.0	
Actuated g/C Ratio	0.12	0.35		0.14	0.37		0.06	0.19	0.32	0.19	0.32	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	210	1208		246	1292		109	660	497	339	1034	
v/s Ratio Prot	c0.11	0.23		0.10	c0.41		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.02			
v/c Ratio	0.93	0.65		0.75	1.10		0.60	0.21	0.13	0.83	0.57	
Uniform Delay, d1	52.4	32.9		49.7	37.9		54.8	41.3	28.9	46.7	34.2	
Progression Factor	1.20	0.78		1.04	0.85		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	41.4	2.6		9.2	55.3		5.7	0.2	0.0	15.4	0.7	
Delay (s)	104.2	28.3		60.8	87.4		60.6	41.6	28.9	62.1	34.9	
Level of Service	F	C		E	F		E	D	C	E	C	
Approach Delay (s)		43.3			84.3			41.1			42.9	
Approach LOS		D			F			D			D	

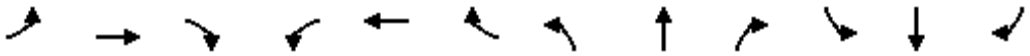
Intersection Summary			
HCM 2000 Control Delay	60.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	980	80	320	1370	50	70	20	150	70	20	20
Future Volume (vph)	10	980	80	320	1370	50	70	20	150	70	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5014		1770	3518			1792	1552		1750	
Flt Permitted	0.95	1.00		0.95	1.00			0.70	1.00		0.70	
Satd. Flow (perm)	1770	5014		1770	3518			1309	1552		1267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1065	87	348	1489	54	76	22	163	76	22	22
RTOR Reduction (vph)	0	6	0	0	2	0	0	0	135	0	7	0
Lane Group Flow (vph)	11	1146	0	348	1541	0	0	98	28	0	113	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	0.8	57.1		28.3	84.6			20.0	20.0		20.0	
Effective Green, g (s)	1.2	58.4		28.7	85.9			20.9	20.9		20.9	
Actuated g/C Ratio	0.01	0.49		0.24	0.72			0.17	0.17		0.17	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	17	2440		423	2518			227	270		220	
v/s Ratio Prot	0.01	0.23		c0.20	c0.44							
v/s Ratio Perm								0.07	0.02		c0.09	
v/c Ratio	0.65	0.47		0.82	0.61			0.43	0.11		0.51	
Uniform Delay, d1	59.2	20.5		43.2	8.6			44.2	41.7		44.9	
Progression Factor	0.83	1.50		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	40.4	0.5		11.6	1.1			0.5	0.1		0.8	
Delay (s)	89.3	31.3		54.9	9.7			44.7	41.7		45.8	
Level of Service	F	C		D	A			D	D		D	
Approach Delay (s)		31.9			18.1			42.9			45.8	
Approach LOS		C			B			D			D	

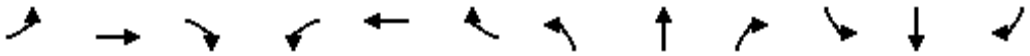
Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



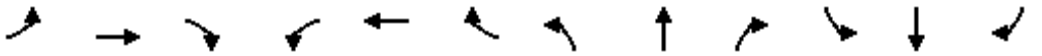
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	280	3130	0	0	0	0	0	150	150
Future Volume (vph)	0	0	0	280	3130	0	0	0	0	0	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.93	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5061						4651	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5061						4651	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	304	3402	0	0	0	0	0	163	163
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3697	0	0	0	0	0	326	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3548						976	
v/s Ratio Prot											c0.07	
v/s Ratio Perm					0.73							
v/c Ratio					1.04						0.33	
Uniform Delay, d1					13.4						30.2	
Progression Factor					1.00						1.00	
Incremental Delay, d2					27.5						0.1	
Delay (s)					41.0						30.3	
Level of Service					D						C	
Approach Delay (s)		0.0			41.0			0.0			30.3	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



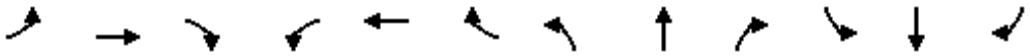
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	900	100	0	0	0	0	0	0	160	330	0
Future Volume (vph)	0	900	100	0	0	0	0	0	0	160	330	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.98									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		4997									4977	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		4997									4977	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	978	109	0	0	0	0	0	0	174	359	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	1072	0	0	0	0	0	0	0	0	463	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		47.0									19.0	
Effective Green, g (s)		47.0									20.0	
Actuated g/C Ratio		0.63									0.27	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3131									1327	
v/s Ratio Prot		c0.21										
v/s Ratio Perm											0.09	
v/c Ratio		0.34									0.35	
Uniform Delay, d1		6.7									22.2	
Progression Factor		0.58									1.00	
Incremental Delay, d2		0.3									0.2	
Delay (s)		4.1									22.4	
Level of Service		A									C	
Approach Delay (s)		4.1			0.0			0.0			22.4	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1080	40	120	780	190	50	40	90	80	80	210
Future Volume (vph)	230	1080	40	120	780	190	50	40	90	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3520		1770	3539	1583	1770	1863	1583	3433	1863	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1174	43	130	848	207	54	43	98	87	87	228
RTOR Reduction (vph)	0	3	0	0	0	192	0	0	84	0	0	187
Lane Group Flow (vph)	250	1214	0	130	848	15	54	43	14	87	87	41
Confl. Peds. (#/hr)	2											2
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	8.5	34.2		7.1	32.9	5.5	2.8	8.9	8.9	5.5	12.5	12.5
Effective Green, g (s)	8.5	35.7		7.1	34.3	5.5	2.8	10.7	10.7	5.5	13.4	13.4
Actuated g/C Ratio	0.11	0.48		0.09	0.46	0.07	0.04	0.14	0.14	0.07	0.18	0.18
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	389	1675		167	1618	116	66	265	225	251	332	279
v/s Ratio Prot	0.07	c0.34		c0.07	0.24		c0.03	0.02		0.03	c0.05	
v/s Ratio Perm						0.01			0.01			0.03
v/c Ratio	0.64	0.73		0.78	0.52	0.13	0.82	0.16	0.06	0.35	0.26	0.15
Uniform Delay, d1	31.8	15.7		33.2	14.5	32.5	35.8	28.2	27.8	33.0	26.5	26.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	2.8		18.5	1.2	0.2	50.1	0.1	0.0	0.3	0.4	0.2
Delay (s)	34.5	18.5		51.7	15.7	32.7	85.9	28.3	27.9	33.3	27.0	26.2
Level of Service	C	B		D	B	C	F	C	C	C	C	C
Approach Delay (s)		21.2			22.7			44.0			27.9	
Approach LOS		C			C			D			C	

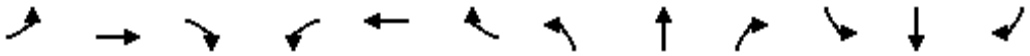
Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	550	2550	170	300	290	0	0	220	90
Future Volume (vph)	0	0	0	550	2550	170	300	290	0	0	220	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			0.99	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6272		1770	3539			3367	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6272		1770	3539			3367	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	579	2684	179	316	305	0	0	232	95
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	27	0
Lane Group Flow (vph)	0	0	0	0	3435	0	316	305	0	0	300	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					62.5		20.6	37.7			12.2	
Effective Green, g (s)					62.5		20.6	37.7			12.2	
Actuated g/C Ratio					0.57		0.19	0.34			0.11	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					3563		331	1212			373	
v/s Ratio Prot							c0.18	0.09			c0.09	
v/s Ratio Perm					0.55							
v/c Ratio					0.96		0.95	0.25			0.81	
Uniform Delay, d1					22.7		44.2	26.0			47.7	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					8.8		37.3	0.1			11.6	
Delay (s)					31.5		81.5	26.1			59.3	
Level of Service					C		F	C			E	
Approach Delay (s)		0.0			31.5			54.3			59.3	
Approach LOS		A			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



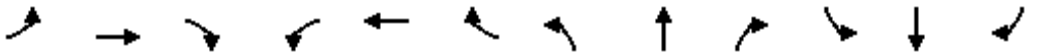
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	700	60	0	0	0	0	510	230	70	680	0
Future Volume (vph)	80	700	60	0	0	0	0	510	230	70	680	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5058	1551					4809		1770	5085	
Flt Permitted		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5058	1551					4809		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	761	65	0	0	0	0	554	250	76	739	0
RTOR Reduction (vph)	0	0	36	0	0	0	0	106	0	0	0	0
Lane Group Flow (vph)	0	848	29	0	0	0	0	698	0	76	739	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		32.2	32.2					22.0		6.6	33.0	
Effective Green, g (s)		33.1	33.1					22.0		7.0	33.0	
Actuated g/C Ratio		0.44	0.44					0.29		0.09	0.44	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2232	684					1410		165	2237	
v/s Ratio Prot								c0.15		c0.04	0.15	
v/s Ratio Perm		0.17	0.02									
v/c Ratio		0.38	0.04					0.50		0.46	0.33	
Uniform Delay, d1		14.1	11.9					21.9		32.2	13.8	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1					1.2		9.0	0.4	
Delay (s)		14.6	12.0					23.2		41.2	14.2	
Level of Service		B	B					C		D	B	
Approach Delay (s)		14.4			0.0			23.2			16.7	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1180	530	280	890	310	200
Future Volume (vph)	1180	530	280	890	310	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.98	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3377	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3377	1421
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1283	576	304	967	337	217
RTOR Reduction (vph)	0	5	0	0	24	116
Lane Group Flow (vph)	1283	571	304	967	378	36
Confl. Peds. (#/hr)						2
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.6	42.3	8.0	41.8	13.7	13.7
Effective Green, g (s)	30.8	46.7	7.9	43.2	15.9	15.9
Actuated g/C Ratio	0.46	0.70	0.12	0.64	0.24	0.24
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1624	1196	404	2278	800	336
v/s Ratio Prot	c0.36	c0.11	c0.09	0.27	0.11	
v/s Ratio Perm		0.25				0.03
v/c Ratio	0.79	0.48	0.75	0.42	0.47	0.11
Uniform Delay, d1	15.4	4.6	28.7	5.9	22.0	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.1	6.9	0.6	0.2	0.1
Delay (s)	19.4	4.8	35.5	6.4	22.2	20.1
Level of Service	B	A	D	A	C	C
Approach Delay (s)	14.9			13.4	21.6	
Approach LOS	B			B	C	

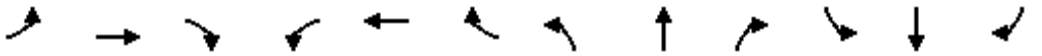
Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	67.1	Sum of lost time (s)	12.5
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1060	140	380	330	0	0	0	0	340	0	670
Future Volume (vph)	0	1060	140	380	330	0	0	0	0	340	0	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1152	152	413	359	0	0	0	0	370	0	728
RTOR Reduction (vph)	0	0	87	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1152	65	413	359	0	0	0	0	370	0	728
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		25.9	25.9	9.0	39.1					14.5		63.2
Effective Green, g (s)		26.9	26.9	9.2	40.1					15.1		63.2
Actuated g/C Ratio		0.43	0.43	0.15	0.63					0.24		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1506	664	499	2245					422		1583
v/s Ratio Prot		c0.33		c0.12	0.10					c0.21		
v/s Ratio Perm			0.04									0.46
v/c Ratio		0.76	0.10	0.83	0.16					0.88		0.46
Uniform Delay, d1		15.5	10.9	26.2	4.7					23.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.8	0.3	10.3	0.2					17.6		1.0
Delay (s)		19.2	11.2	36.6	4.9					40.8		1.0
Level of Service		B	B	D	A					D		A
Approach Delay (s)		18.3			21.8			0.0			14.4	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

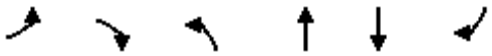
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	890	650	0	0	620	590	190	0	300	0	0	0
Future Volume (vph)	890	650	0	0	620	590	190	0	300	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3280			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3280			1770	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	967	707	0	0	674	641	207	0	326	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	277	0	0	0
Lane Group Flow (vph)	967	707	0	0	1113	0	0	207	49	0	0	0
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	23.6	59.3			31.5			10.0	10.0			
Effective Green, g (s)	23.8	59.8			32.0			10.6	10.6			
Actuated g/C Ratio	0.30	0.75			0.40			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1029	2665			1321			236	211			
v/s Ratio Prot	c0.28	0.20			c0.34			c0.12				
v/s Ratio Perm									0.03			
v/c Ratio	0.94	0.27			0.84			0.88	0.23			
Uniform Delay, d1	27.1	3.0			21.4			33.8	30.8			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	15.3	0.2			6.7			27.8	0.2			
Delay (s)	42.4	3.3			28.1			61.5	31.0			
Level of Service	D	A			C			E	C			
Approach Delay (s)		25.8			28.1			42.8			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	13.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

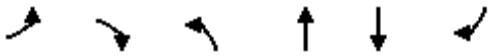
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	210	210	110	500	700	110
Future Volume (vph)	210	210	110	500	700	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.93		1.00	1.00	0.98	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1695		1770	3539	3467	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1695		1770	3539	3467	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	228	120	543	761	120
RTOR Reduction (vph)	35	0	0	0	9	0
Lane Group Flow (vph)	421	0	120	543	872	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	35.5		13.1	76.5	59.4	
Effective Green, g (s)	35.5		13.1	76.5	59.4	
Actuated g/C Ratio	0.30		0.11	0.64	0.49	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	501		193	2256	1716	
v/s Ratio Prot	c0.25		c0.07	0.15	c0.25	
v/s Ratio Perm						
v/c Ratio	0.84		0.62	0.24	0.51	
Uniform Delay, d1	39.6		51.1	9.3	20.4	
Progression Factor	1.00		1.00	0.91	1.00	
Incremental Delay, d2	11.8		6.0	0.2	1.1	
Delay (s)	51.4		57.1	8.8	21.5	
Level of Service	D		E	A	C	
Approach Delay (s)	51.4			17.5	21.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

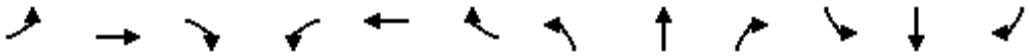
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	250	0	0	200	30
Future Volume (Veh/h)	0	250	0	0	200	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	272	0	0	217	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				973	1298	
pX, platoon unblocked						
vC, conflicting volume	234	125	250			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	234	125	250			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	70	100			
cM capacity (veh/h)	734	902	1313			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	272	145	105
Volume Left	0	0	0
Volume Right	272	0	33
cSH	902	1700	1700
Volume to Capacity	0.30	0.09	0.06
Queue Length 95th (ft)	32	0	0
Control Delay (s)	10.7	0.0	0.0
Lane LOS	B		
Approach Delay (s)	10.7	0.0	
Approach LOS	B		

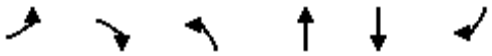
Intersection Summary			
Average Delay	5.6		
Intersection Capacity Utilization	28.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	140	60	90	0	0	0	0	40	320	10
Future Volume (vph)	0	20	140	60	90	0	0	0	0	40	320	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.88			1.00						1.00	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		1643			1826						3506	
Flt Permitted		1.00			0.84						0.99	
Satd. Flow (perm)		1643			1572						3506	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	22	152	65	98	0	0	0	0	43	348	11
RTOR Reduction (vph)	0	78	0	0	0	0	0	0	0	0	3	0
Lane Group Flow (vph)	0	96	0	0	163	0	0	0	0	0	399	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases				6						4		
Actuated Green, G (s)		31.5			31.5						24.5	
Effective Green, g (s)		31.5			31.5						24.5	
Actuated g/C Ratio		0.48			0.48						0.38	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		796			761						1321	
v/s Ratio Prot		0.06										
v/s Ratio Perm					c0.10						0.11	
v/c Ratio		0.12			0.21						0.30	
Uniform Delay, d1		9.2			9.6						14.2	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			0.6						0.6	
Delay (s)		9.2			10.3						14.8	
Level of Service		A			B						B	
Approach Delay (s)		9.2			10.3			0.0			14.8	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	39.3%	ICU Level of Service	A
Analysis Period (min)	15		

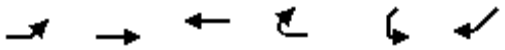
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	150	170	330	370	60
Future Volume (vph)	50	150	170	330	370	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.90			1.00	0.98	
Flt Protected	0.99			0.98	1.00	
Satd. Flow (prot)	1653			1832	1828	
Flt Permitted	0.99			0.73	1.00	
Satd. Flow (perm)	1653			1359	1828	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	163	185	359	402	65
RTOR Reduction (vph)	141	0	0	0	6	0
Lane Group Flow (vph)	76	0	0	544	461	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.3			45.5	45.5	
Effective Green, g (s)	8.3			45.5	45.5	
Actuated g/C Ratio	0.13			0.74	0.74	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	222			1000	1345	
v/s Ratio Prot	c0.05				0.25	
v/s Ratio Perm				c0.40		
v/c Ratio	0.34			0.54	0.34	
Uniform Delay, d1	24.3			3.6	2.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.9			2.1	0.7	
Delay (s)	25.2			5.7	3.6	
Level of Service	C			A	A	
Approach Delay (s)	25.2			5.7	3.6	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.9%	ICU Level of Service	C
Analysis Period (min)	15		

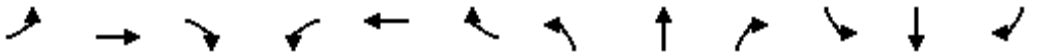
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	50	670	1420	40	150	250
Future Volume (vph)	50	670	1420	40	150	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3525		1674	
Flt Permitted	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	3525		1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	728	1543	43	163	272
RTOR Reduction (vph)	0	0	3	0	74	0
Lane Group Flow (vph)	54	728	1583	0	361	0
Turn Type	Prot	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases						
Actuated Green, G (s)	3.5	46.0	38.0		23.6	
Effective Green, g (s)	3.5	46.0	38.0		23.6	
Actuated g/C Ratio	0.04	0.59	0.48		0.30	
Clearance Time (s)	4.5	4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	78	2071	1704		502	
v/s Ratio Prot	c0.03	0.21	c0.45		c0.22	
v/s Ratio Perm						
v/c Ratio	0.69	0.35	0.93		0.72	
Uniform Delay, d1	37.0	8.5	19.0		24.5	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	23.3	0.1	9.4		8.6	
Delay (s)	60.3	8.6	28.4		33.1	
Level of Service	E	A	C		C	
Approach Delay (s)		12.2	28.4		33.1	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

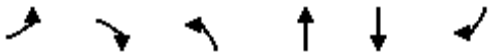
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	10	100	40	180	240	200	400	130	260	450	190
Future Volume (vph)	60	10	100	40	180	240	200	400	130	260	450	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.92			0.93		1.00	0.96		1.00	0.96	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1685			1724		1770	3409		1770	3381	
Flt Permitted		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1685			1724		1770	3409		1770	3381	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	11	109	43	196	261	217	435	141	283	489	207
RTOR Reduction (vph)	0	62	0	0	42	0	0	35	0	0	51	0
Lane Group Flow (vph)	0	123	0	0	458	0	217	541	0	283	645	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		11.0			21.6		11.6	15.9		15.4	19.7	
Effective Green, g (s)		11.0			21.6		11.6	15.9		15.4	19.7	
Actuated g/C Ratio		0.13			0.26		0.14	0.19		0.19	0.24	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		226			454		250	661		332	813	
v/s Ratio Prot		c0.07			c0.27		0.12	0.16		c0.16	c0.19	
v/s Ratio Perm												
v/c Ratio		0.54			1.01		0.87	0.82		0.85	0.79	
Uniform Delay, d1		33.1			30.2		34.4	31.6		32.2	29.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.7			44.5		25.7	7.8		18.6	5.4	
Delay (s)		35.8			74.6		60.1	39.4		50.7	34.5	
Level of Service		D			E		E	D		D	C	
Approach Delay (s)		35.8			74.6			45.1			39.2	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	48.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

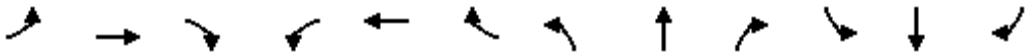
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	200	370	210	190	90
Future Volume (vph)	30	200	370	210	190	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			4.5	4.5	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.88			1.00	0.96	
Flt Protected	0.99			0.97	1.00	
Satd. Flow (prot)	1634			1805	1782	
Flt Permitted	0.99			0.64	1.00	
Satd. Flow (perm)	1634			1187	1782	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	217	402	228	207	98
RTOR Reduction (vph)	188	0	0	0	19	0
Lane Group Flow (vph)	62	0	0	630	286	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.1			43.5	43.5	
Effective Green, g (s)	8.1			43.5	43.5	
Actuated g/C Ratio	0.13			0.72	0.72	
Clearance Time (s)	4.5			4.5	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	218			852	1279	
v/s Ratio Prot	c0.04				0.16	
v/s Ratio Perm				c0.53		
v/c Ratio	0.28			0.74	0.22	
Uniform Delay, d1	23.6			5.1	2.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.7			5.7	0.4	
Delay (s)	24.4			10.9	3.3	
Level of Service	C			B	A	
Approach Delay (s)	24.4			10.9	3.3	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	11.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	60.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

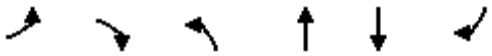
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	50	200	180	150	70	2400	70	80	1640	50
Future Volume (vph)	50	20	50	200	180	150	70	2400	70	80	1640	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.89		1.00	0.93		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3162		1770	3298		1770	5064		1770	5063	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3162		1770	3298		1770	5064		1770	5063	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	54	217	196	163	76	2609	76	87	1783	54
RTOR Reduction (vph)	0	46	0	0	122	0	0	2	0	0	2	0
Lane Group Flow (vph)	54	30	0	217	237	0	76	2683	0	87	1835	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Effective Green, g (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Actuated g/C Ratio	0.06	0.14		0.12	0.21		0.07	0.54		0.07	0.53	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	101	442		221	684		122	2713		116	2696	
v/s Ratio Prot	0.03	0.01		c0.12	c0.07		0.04	c0.53		c0.05	0.36	
v/s Ratio Perm												
v/c Ratio	0.53	0.07		0.98	0.35		0.62	0.99		0.75	0.68	
Uniform Delay, d1	55.0	44.8		52.4	40.6		54.3	27.5		55.1	20.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.82	0.94	
Incremental Delay, d2	5.4	0.3		55.1	1.4		9.5	14.9		18.9	1.1	
Delay (s)	60.3	45.1		107.5	42.0		63.8	42.3		63.9	20.4	
Level of Service	E	D		F	D		E	D		E	C	
Approach Delay (s)		51.4			66.7			42.9			22.4	
Approach LOS		D			E			D			C	

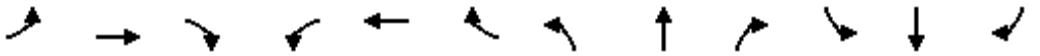
Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	110	0	300	910	0	0
Future Volume (vph)	110	0	300	910	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	0	326	989	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	120	0	326	989	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.07			c0.28		
v/s Ratio Perm			0.18			
v/c Ratio	0.17		0.46	0.70		
Uniform Delay, d1	7.7		8.8	10.0		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		2.2	2.9		
Delay (s)	8.2		11.0	12.9		
Level of Service	A		B	B		
Approach Delay (s)	8.2			12.4	0.0	
Approach LOS	A			B	A	

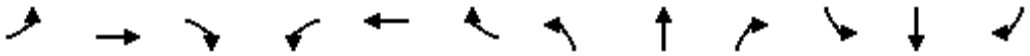
Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	410	820	0	0	390	200	150	200	20	0	0	0
Future Volume (vph)	410	820	0	0	390	200	150	200	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.95			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (prot)	3433	1863			3359			3465	1583			
Flt Permitted	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (perm)	3433	1863			3359			3465	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	891	0	0	424	217	163	217	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	92	0	0	0	18	0	0	0
Lane Group Flow (vph)	446	891	0	0	549	0	0	380	4	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	14.4	43.5			24.7			11.7	11.7			
Effective Green, g (s)	14.4	43.5			24.7			11.7	11.7			
Actuated g/C Ratio	0.22	0.67			0.38			0.18	0.18			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	760	1246			1276			623	284			
v/s Ratio Prot	0.13	c0.48			0.16							
v/s Ratio Perm								0.11	0.00			
v/c Ratio	0.59	0.72			0.43			0.61	0.01			
Uniform Delay, d1	22.6	6.8			14.9			24.5	21.9			
Progression Factor	0.99	1.20			1.00			1.00	1.00			
Incremental Delay, d2	0.9	2.8			1.1			1.2	0.0			
Delay (s)	23.4	11.0			16.0			25.7	21.9			
Level of Service	C	B			B			C	C			
Approach Delay (s)		15.1			16.0			25.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1815	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	240	0	0	159	0	0	95	0	4	0
Lane Group Flow (vph)	98	1815	369	130	1261	232	500	380	101	326	322	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.6	59.7	59.7	10.0	61.0	61.0	23.0	32.9	32.9	29.9	38.0	
Effective Green, g (s)	9.0	61.0	61.0	10.4	62.4	62.4	23.4	33.7	33.7	28.9	39.2	
Actuated g/C Ratio	0.06	0.41	0.41	0.07	0.42	0.42	0.16	0.22	0.22	0.19	0.26	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	106	2067	634	238	1472	626	535	418	348	341	476	
v/s Ratio Prot	c0.06	c0.36		0.04	0.36		0.15	c0.20		c0.18	0.18	
v/s Ratio Perm			0.24			0.15			0.06			
v/c Ratio	0.92	0.88	0.58	0.55	0.86	0.37	0.93	0.91	0.29	0.96	0.68	
Uniform Delay, d1	70.2	41.1	34.6	67.5	39.7	30.2	62.5	56.7	48.2	59.9	49.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	62.6	5.7	3.9	1.4	6.6	1.7	23.4	23.5	0.6	36.6	3.0	
Delay (s)	132.8	46.8	38.5	68.9	46.4	31.9	85.9	80.2	48.8	96.5	52.7	
Level of Service	F	D	D	E	D	C	F	F	D	F	D	
Approach Delay (s)		48.1			44.8			77.1			74.6	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1790	930	0	0	880
Future Volume (vph)	830	1790	930	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1946	1011	0	0	957
RTOR Reduction (vph)	0	5	0	0	0	0
Lane Group Flow (vph)	902	1941	1011	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	94.0	94.0	42.0			42.0
Effective Green, g (s)	94.0	94.0	42.0			42.0
Actuated g/C Ratio	0.63	0.63	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	2151	1746	990			990
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.70				
v/c Ratio	0.42	1.11	1.02			0.97
Uniform Delay, d1	14.2	28.0	54.0			53.3
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.0	59.0	34.1			20.6
Delay (s)	14.2	87.0	88.1			73.9
Level of Service	B	F	F			E
Approach Delay (s)	64.0		88.1			73.9
Approach LOS	E		F			E

Intersection Summary			
HCM 2000 Control Delay	71.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	290	1460	130	0	1510
Future Volume (Veh/h)	0	290	1460	130	0	1510
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	315	1587	141	0	1641
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.83					
vC, conflicting volume	2204	602			1728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1723	602			1728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	29			100	
cM capacity (veh/h)	66	441			361	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	315	635	635	458	547	547	547
Volume Left	0	0	0	0	0	0	0
Volume Right	315	0	0	141	0	0	0
cSH	441	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.71	0.37	0.37	0.27	0.32	0.32	0.32
Queue Length 95th (ft)	138	0	0	0	0	0	0
Control Delay (s)	31.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D						
Approach Delay (s)	31.0	0.0			0.0		
Approach LOS	D						

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	430	320	80	540	700	420	510	120	400	710	400
Future Volume (vph)	380	430	320	80	540	700	420	510	120	400	710	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1568	1770	3539	1568	1770	3438		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1568	1770	3539	1568	1770	3438		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	467	348	87	587	761	457	554	130	435	772	435
RTOR Reduction (vph)	0	0	31	0	0	32	0	14	0	0	0	50
Lane Group Flow (vph)	413	467	317	87	587	729	457	670	0	435	772	385
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	29.1	50.2	84.3	11.0	32.1	68.5	34.1	32.7		36.4	35.0	64.1
Effective Green, g (s)	30.0	51.1	86.1	12.0	33.1	68.5	35.0	33.6		37.3	35.9	64.1
Actuated g/C Ratio	0.20	0.34	0.57	0.08	0.22	0.46	0.23	0.22		0.25	0.24	0.43
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	354	634	941	141	780	767	413	770		440	847	669
v/s Ratio Prot	c0.23	0.25	0.08	0.05	0.17	c0.23	c0.26	0.19		0.25	0.22	0.11
v/s Ratio Perm			0.12			0.23						0.13
v/c Ratio	1.17	0.74	0.34	0.62	0.75	0.95	1.11	0.87		0.99	0.91	0.58
Uniform Delay, d1	60.0	43.5	16.9	66.8	54.6	39.1	57.5	56.1		56.1	55.5	32.6
Progression Factor	1.00	1.00	1.00	1.21	0.69	1.20	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	101.3	7.5	0.2	16.5	6.3	21.1	76.4	10.6		39.8	14.8	0.7
Delay (s)	161.3	51.0	17.1	97.2	44.1	67.9	133.9	66.7		96.0	70.3	33.4
Level of Service	F	D	B	F	D	E	F	E		F	E	C
Approach Delay (s)		78.5			60.0			93.6			67.3	
Approach LOS		E			E			F			E	

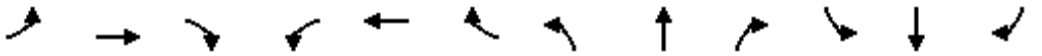
Intersection Summary			
HCM 2000 Control Delay	73.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	104.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	140	170	80	170	100	240	640	70	160	730	170
Future Volume (vph)	200	140	170	80	170	100	240	640	70	160	730	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	152	185	87	185	109	261	696	76	174	793	185
RTOR Reduction (vph)	0	0	132	0	0	89	0	5	0	0	0	106
Lane Group Flow (vph)	174	195	53	87	185	20	261	767	0	174	793	79
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	36.2	22.8	22.8	22.8	12.3	49.0		15.2	51.9	51.9
Effective Green, g (s)	24.8	24.8	37.0	23.7	23.7	23.7	12.7	49.9		15.6	52.8	52.8
Actuated g/C Ratio	0.19	0.19	0.28	0.18	0.18	0.18	0.10	0.38		0.12	0.41	0.41
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	320	333	443	322	339	282	335	1334		212	1437	621
v/s Ratio Prot	0.10	c0.11	0.01	0.05	c0.10		0.08	0.22		c0.10	c0.22	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.54	0.59	0.12	0.27	0.55	0.07	0.78	0.58		0.82	0.55	0.13
Uniform Delay, d1	47.5	47.9	34.4	45.7	48.3	44.0	57.3	31.7		55.8	29.5	24.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.41	0.66	0.41
Incremental Delay, d2	1.9	2.6	0.0	0.5	1.8	0.1	10.0	1.8		15.2	1.1	0.3
Delay (s)	49.4	50.5	34.5	46.2	50.1	44.1	67.3	33.5		93.8	20.5	10.2
Level of Service	D	D	C	D	D	D	E	C		F	C	B
Approach Delay (s)		44.8			47.5			42.0			29.9	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Future Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.97		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.94		1.00	0.98		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1696			1659		1770	3435		1770	3523	
Flt Permitted		0.78			0.71		0.22	1.00		0.16	1.00	
Satd. Flow (perm)		1351			1208		414	3435		296	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	54	87	22	76	98	1141	217	65	1043	33
RTOR Reduction (vph)	0	22	0	0	18	0	0	7	0	0	1	0
Lane Group Flow (vph)	0	97	0	0	167	0	98	1351	0	65	1075	0
Confl. Peds. (#/hr)	33					33			3	3		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		23.6			23.6		113.9	107.3		110.5	105.6	
Effective Green, g (s)		24.5			24.5		114.7	108.2		111.3	106.5	
Actuated g/C Ratio		0.16			0.16		0.76	0.72		0.74	0.71	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		220			197		379	2477		271	2501	
v/s Ratio Prot							c0.01	c0.39		0.01	0.31	
v/s Ratio Perm		0.07			c0.14		0.19			0.17		
v/c Ratio		0.44			0.85		0.26	0.55		0.24	0.43	
Uniform Delay, d1		56.6			60.9		5.7	9.6		7.1	9.1	
Progression Factor		1.00			1.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			24.3		0.1	0.9		0.2	0.5	
Delay (s)		57.1			101.2		5.8	10.5		7.3	9.6	
Level of Service		E			F		A	B		A	A	
Approach Delay (s)		57.1			101.2			10.2			9.5	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	210	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	210	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4948		3433	5085	1464	1770	3539	1521	3433	3539	1516
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4948		3433	5085	1464	1770	3539	1521	3433	3539	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2033	228	554	1685	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	9	0	0	0	39	0	0	55	0	0	55
Lane Group Flow (vph)	413	2252	0	554	1685	385	250	696	391	380	576	260
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.7	58.7		19.9	59.0	75.9	16.2	30.7	50.6	16.9	31.4	51.1
Effective Green, g (s)	20.1	59.8		20.3	60.0	75.9	16.6	31.6	52.4	17.3	32.3	52.9
Actuated g/C Ratio	0.14	0.41		0.14	0.41	0.52	0.11	0.22	0.36	0.12	0.22	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	475	2040		480	2104	766	202	771	586	409	788	553
v/s Ratio Prot	0.12	c0.46		c0.16	0.33	0.06	c0.14	c0.20	0.10	c0.11	0.16	0.07
v/s Ratio Perm						0.20			0.16			0.10
v/c Ratio	0.87	1.10		1.15	0.80	0.50	1.24	0.90	0.67	0.93	0.73	0.47
Uniform Delay, d1	61.2	42.6		62.4	37.3	22.4	64.2	55.2	39.0	63.2	52.3	35.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.0	54.7		90.8	2.4	0.2	141.9	13.6	2.2	26.8	3.0	0.2
Delay (s)	76.2	97.3		153.2	39.6	22.5	206.1	68.8	41.2	90.1	55.3	35.5
Level of Service	E	F		F	D	C	F	E	D	F	E	D
Approach Delay (s)		94.0			60.5			84.6			60.8	
Approach LOS		F			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	76.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	300	780	120	400	850
Future Volume (vph)	120	300	780	120	400	850
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.90		0.98		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1659		3469		1770	3539
Flt Permitted	0.99		1.00		0.95	1.00
Satd. Flow (perm)	1659		3469		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	326	848	130	435	924
RTOR Reduction (vph)	130	0	17	0	0	0
Lane Group Flow (vph)	326	0	961	0	435	924
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	15.2		21.7		18.8	45.0
Effective Green, g (s)	15.2		21.7		18.8	45.0
Actuated g/C Ratio	0.22		0.31		0.27	0.65
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	364		1087		480	2301
v/s Ratio Prot	c0.20		c0.28		c0.25	0.26
v/s Ratio Perm						
v/c Ratio	0.89		0.88		0.91	0.40
Uniform Delay, d1	26.2		22.6		24.3	5.7
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	23.2		10.5		20.5	0.5
Delay (s)	49.5		33.1		44.8	6.3
Level of Service	D		C		D	A
Approach Delay (s)	49.5		33.1			18.6
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

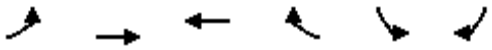
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	350	690	170	0	660
Future Volume (Veh/h)	0	350	690	170	0	660
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	380	750	185	0	717
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			407
pX, platoon unblocked	0.83					
vC, conflicting volume	1203	472			937	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	838	472			937	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	29			100	
cM capacity (veh/h)	253	536			726	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	380	500	435	358	358
Volume Left	0	0	0	0	0
Volume Right	380	0	185	0	0
cSH	536	1700	1700	1700	1700
Volume to Capacity	0.71	0.29	0.26	0.21	0.21
Queue Length 95th (ft)	142	0	0	0	0
Control Delay (s)	26.5	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	26.5	0.0		0.0	
Approach LOS	D				

Intersection Summary				
Average Delay	4.9			
Intersection Capacity Utilization	53.2%	ICU Level of Service		A
Analysis Period (min)	15			



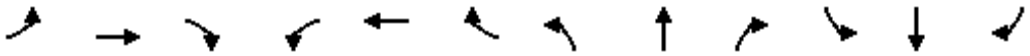
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1250	970	860	360	300
Future Volume (vph)	0	1250	970	860	360	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1359	1054	935	391	326
RTOR Reduction (vph)	0	0	0	429	0	267
Lane Group Flow (vph)	0	1359	1054	506	391	59
Confl. Peds. (#/hr)				6	3	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	2	1	
Permitted Phases				8		1
Actuated Green, G (s)		34.2	34.2	34.2	11.2	11.2
Effective Green, g (s)		34.2	34.2	33.7	11.2	11.2
Actuated g/C Ratio		0.55	0.55	0.54	0.18	0.18
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	2.9	2.5	2.5
Lane Grp Cap (vph)		1942	1942	1507	617	284
v/s Ratio Prot		c0.38	0.30	0.18	c0.11	
v/s Ratio Perm						0.04
v/c Ratio		0.70	0.54	0.34	0.63	0.21
Uniform Delay, d1		10.3	9.0	8.0	23.7	21.8
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1	0.3	0.1	1.9	0.3
Delay (s)		11.4	9.3	8.1	25.5	22.0
Level of Service		B	A	A	C	C
Approach Delay (s)		11.4	8.8		23.9	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	16.6
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	80	230	1090	130	130	970
Future Volume (vph)	80	230	1090	130	130	970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.1	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.94	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1495	4984		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1495	4984		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	250	1185	141	141	1054
RTOR Reduction (vph)	0	227	5	0	0	0
Lane Group Flow (vph)	87	23	1321	0	141	1054
Confl. Peds. (#/hr)		16		18	18	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	12.7	12.7	107.7		16.3	128.4
Effective Green, g (s)	12.7	13.6	107.7		16.3	128.4
Actuated g/C Ratio	0.08	0.09	0.72		0.11	0.86
Clearance Time (s)	4.0	4.0	4.9		4.4	4.9
Vehicle Extension (s)	3.0	3.0	5.0		2.0	3.2
Lane Grp Cap (vph)	149	135	3578		192	4352
v/s Ratio Prot	c0.05		c0.26		c0.08	0.21
v/s Ratio Perm		0.02				
v/c Ratio	0.58	0.17	0.37		0.73	0.24
Uniform Delay, d1	66.1	63.0	8.1		64.8	2.0
Progression Factor	1.00	1.00	1.69		1.13	1.24
Incremental Delay, d2	5.7	0.6	0.2		8.0	0.1
Delay (s)	71.8	63.6	13.9		81.4	2.5
Level of Service	E	E	B		F	A
Approach Delay (s)	65.7		13.9			11.8
Approach LOS	E		B			B

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	130	160	150	40	170	250	1130	120	150	890	100
Future Volume (vph)	90	130	160	150	40	170	250	1130	120	150	890	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.88		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1685		1770	1610		1770	4994		3433	3472	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1685		1770	1610		1770	4994		3433	3472	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	141	174	163	43	185	272	1228	130	163	967	109
RTOR Reduction (vph)	0	30	0	0	104	0	0	9	0	0	5	0
Lane Group Flow (vph)	98	285	0	163	124	0	272	1349	0	163	1071	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.8	28.8		16.2	16.2		25.4	65.4		20.5	60.5	
Effective Green, g (s)	29.7	29.7		17.1	17.1		25.8	66.3		20.9	61.4	
Actuated g/C Ratio	0.20	0.20		0.11	0.11		0.17	0.44		0.14	0.41	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		2.0	3.9	
Lane Grp Cap (vph)	350	333		201	183		304	2207		478	1421	
v/s Ratio Prot	0.06	c0.17		c0.09	0.08		c0.15	0.27		0.05	c0.31	
v/s Ratio Perm												
v/c Ratio	0.28	0.85		0.81	0.68		0.89	0.61		0.34	0.75	
Uniform Delay, d1	51.1	58.1		64.9	63.8		60.8	32.0		58.3	37.8	
Progression Factor	1.00	1.00		1.00	1.00		1.06	0.56		0.92	1.22	
Incremental Delay, d2	0.4	18.7		20.4	7.6		23.3	1.1		0.2	3.7	
Delay (s)	51.5	76.8		85.3	71.5		87.9	19.0		54.0	49.9	
Level of Service	D	E		F	E		F	B		D	D	
Approach Delay (s)		70.8			77.2			30.5			50.5	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	46.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	30	70	150	30	140	50	1280	70	120	1110	80
Future Volume (vph)	60	30	70	150	30	140	50	1280	70	120	1110	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.94		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1706		1770	1633		1770	5026		3433	3494	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1706		1770	1633		1770	5026		3433	3494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	33	76	163	33	152	54	1391	76	130	1207	87
RTOR Reduction (vph)	0	22	0	0	115	0	0	3	0	0	3	0
Lane Group Flow (vph)	0	152	0	163	70	0	54	1464	0	130	1291	0
Confl. Peds. (#/hr)			6	6			7		18	18		7
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		19.9		17.6	17.6		7.1	79.3		14.1	86.3	
Effective Green, g (s)		19.9		17.6	17.6		7.1	79.3		14.1	86.3	
Actuated g/C Ratio		0.13		0.12	0.12		0.05	0.53		0.09	0.58	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		226		207	191		83	2657		322	2010	
v/s Ratio Prot		c0.09		c0.09	0.04		0.03	c0.29		0.04	c0.37	
v/s Ratio Perm												
v/c Ratio		0.67		0.79	0.37		0.65	0.55		0.40	0.64	
Uniform Delay, d1		62.0		64.4	61.1		70.2	23.5		64.0	21.5	
Progression Factor		1.00		1.00	1.00		1.10	0.92		0.64	0.40	
Incremental Delay, d2		6.1		16.5	0.4		12.6	0.8		0.2	1.1	
Delay (s)		68.1		80.9	61.5		89.9	22.5		40.9	9.8	
Level of Service		E		F	E		F	C		D	A	
Approach Delay (s)		68.1			70.6			24.9			12.6	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.1
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	70	30	110	220	140	1130	30	50	1160	120
Future Volume (vph)	50	20	70	30	110	220	140	1130	30	50	1160	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		5.8	4.0	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.99		1.00	1.00	1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1799	1562		1842	1583	1770	5055		1770	4968	
Flt Permitted		0.45	1.00		0.90	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		840	1562		1669	1583	1770	5055		1770	4968	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	76	33	120	239	152	1228	33	54	1261	130
RTOR Reduction (vph)	0	0	67	0	0	0	0	1	0	0	6	0
Lane Group Flow (vph)	0	76	9	0	153	239	152	1260	0	54	1385	0
Confl. Peds. (#/hr)			1	1			19		19	19		19
Turn Type	Perm	NA	Perm	Perm	NA	Free	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		Free						
Actuated Green, G (s)		18.5	18.5		18.5	150.0	31.5	109.3		8.0	85.8	
Effective Green, g (s)		18.5	18.5		17.6	150.0	31.5	109.3		8.0	85.8	
Actuated g/C Ratio		0.12	0.12		0.12	1.00	0.21	0.73		0.05	0.57	
Clearance Time (s)		4.9	4.9		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.9		2.0	3.9	
Lane Grp Cap (vph)		103	192		195	1583	371	3683		94	2841	
v/s Ratio Prot							c0.09	0.25		0.03	c0.28	
v/s Ratio Perm		0.09	0.01		c0.09	0.15						
v/c Ratio		0.74	0.05		0.78	0.15	0.41	0.34		0.57	0.49	
Uniform Delay, d1		63.4	58.0		64.4	0.0	51.2	7.4		69.3	19.0	
Progression Factor		1.24	2.62		1.00	1.00	0.90	0.85		0.94	1.48	
Incremental Delay, d2		19.2	0.0		17.1	0.2	0.1	0.1		4.1	0.5	
Delay (s)		97.9	152.0		81.5	0.2	46.0	6.4		69.2	28.7	
Level of Service		F	F		F	A	D	A		E	C	
Approach Delay (s)		125.0			31.9			10.6			30.3	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

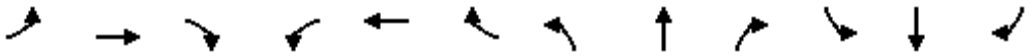
Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	300	1660	470	200	2030	680	150	350	400	150	220	200
Future Volume (vph)	300	1660	470	200	2030	680	150	350	400	150	220	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	5.9	5.9	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.94	1.00	1.00	1.00	1.00	0.81	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (prot)	3433	4582		1362	5085	1486	1611	1681	1610	1649	1289	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (perm)	3433	4582		1362	5085	1486	1611	1681	1610	1649	1289	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	1804	511	217	2207	739	163	380	435	163	239	217
RTOR Reduction (vph)	0	0	0	58	0	14	104	0	0	0	155	0
Lane Group Flow (vph)	326	2337	0	137	2207	725	59	243	363	372	84	217
Confl. Peds. (#/hr)	29		31			29		10			63	63
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	15.8	83.9		83.9	64.3	97.3	54.1	33.0	33.0	33.0	33.0	19.0
Effective Green, g (s)	17.2	86.0		83.9	66.2	93.5	54.1	33.0	33.0	33.0	33.0	19.0
Actuated g/C Ratio	0.11	0.57		0.56	0.44	0.62	0.36	0.22	0.22	0.22	0.22	0.13
Clearance Time (s)	4.0	6.1		6.1	5.9	4.0	5.9	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	2.8		2.8	3.2	3.0	4.1	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	393	2627		761	2244	926	581	369	354	362	283	224
v/s Ratio Prot	0.09	c0.51			c0.43	0.16		0.14	0.23	c0.23		c0.12
v/s Ratio Perm				0.10		0.33	0.04				0.06	
v/c Ratio	0.83	0.89		0.18	0.98	0.78	0.10	0.66	1.03	1.03	0.30	0.97
Uniform Delay, d1	65.0	27.9		16.2	41.4	20.8	31.8	53.4	58.5	58.5	48.8	65.2
Progression Factor	1.00	1.00		1.00	1.03	1.39	1.00	0.78	0.79	0.78	0.90	1.00
Incremental Delay, d2	13.5	5.0		0.5	12.9	3.3	0.1	3.8	52.0	52.2	0.5	50.7
Delay (s)	78.5	32.9		16.7	55.6	32.1	31.9	45.7	98.0	98.0	44.2	115.9
Level of Service	E	C		B	E	C	C	D	F	F	D	F
Approach Delay (s)		37.0			49.7					77.0		103.0
Approach LOS		D			D					E		F

Intersection Summary			
HCM 2000 Control Delay	53.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	90.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	330	50
Future Volume (vph)	330	50
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	359	54
RTOR Reduction (vph)	83	0
Lane Group Flow (vph)	330	0
Confl. Peds. (#/hr)		31
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	19.0	
Effective Green, g (s)	19.0	
Actuated g/C Ratio	0.13	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	353	
v/s Ratio Prot	0.12	
v/s Ratio Perm		
v/c Ratio	0.93	
Uniform Delay, d1	64.9	
Progression Factor	1.00	
Incremental Delay, d2	31.4	
Delay (s)	96.3	
Level of Service	F	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	120	310	130	250	70	70	90	120	90	100	100
Future Volume (vph)	90	120	310	130	250	70	70	90	120	90	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.92			0.98			0.94			0.95	
Flt Protected		0.99			0.99			0.99			0.98	
Satd. Flow (prot)		1698			1798			1734			1749	
Flt Permitted		0.85			0.70			0.86			0.84	
Satd. Flow (perm)		1464			1272			1518			1484	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	130	337	141	272	76	76	98	130	98	109	109
RTOR Reduction (vph)	0	98	0	0	12	0	0	37	0	0	26	0
Lane Group Flow (vph)	0	467	0	0	477	0	0	267	0	0	290	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.9			23.9			21.9			22.4	
Effective Green, g (s)		23.9			23.9			21.9			22.4	
Actuated g/C Ratio		0.44			0.44			0.40			0.41	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		638			554			606			606	
v/s Ratio Prot												
v/s Ratio Perm		0.32			c0.37			0.18			c0.20	
v/c Ratio		0.73			0.86			0.44			0.48	
Uniform Delay, d1		12.8			13.9			12.0			11.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.3			12.9			2.3			0.6	
Delay (s)		17.1			26.8			14.3			12.5	
Level of Service		B			C			B			B	
Approach Delay (s)		17.1			26.8			14.3			12.5	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM 2000 Control Delay	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	54.8	Sum of lost time (s)	9.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

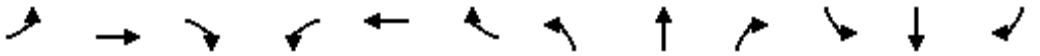
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	290	1320	830	50	50	480
Future Volume (vph)	290	1320	830	50	50	480
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5042		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5042		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	1435	902	54	54	522
RTOR Reduction (vph)	0	0	3	0	0	468
Lane Group Flow (vph)	315	1435	953	0	54	54
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.6	99.6	69.0		12.4	12.4
Effective Green, g (s)	26.6	99.6	69.0		12.4	12.4
Actuated g/C Ratio	0.22	0.83	0.58		0.10	0.10
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	392	4220	2899		182	163
v/s Ratio Prot	c0.18	c0.28	0.19		0.03	
v/s Ratio Perm						c0.03
v/c Ratio	0.80	0.34	0.33		0.30	0.33
Uniform Delay, d1	44.2	2.4	13.4		49.8	49.9
Progression Factor	1.00	1.00	0.60		1.00	1.00
Incremental Delay, d2	11.3	0.2	0.2		0.9	1.2
Delay (s)	55.5	2.6	8.2		50.7	51.1
Level of Service	E	A	A		D	D
Approach Delay (s)		12.2	8.2		51.1	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

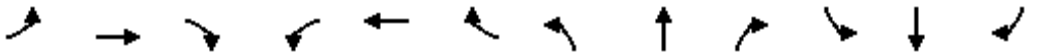


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	0	140	300	310	150	0	0	0	0	70	90
Future Volume (vph)	100	0	140	300	310	150	0	0	0	0	70	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.95						0.92	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1772						1721	
Flt Permitted	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1770		1583	1770	1772						1721	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	152	326	337	163	0	0	0	0	76	98
RTOR Reduction (vph)	0	0	135	192	23	0	0	0	0	0	78	0
Lane Group Flow (vph)	109	0	17	134	477	0	0	0	0	0	96	0
Turn Type	Prot		Perm	Split	NA						NA	
Protected Phases	2!			8	8						6!	
Permitted Phases			4									
Actuated Green, G (s)	8.5		4.9	17.8	17.8						8.5	
Effective Green, g (s)	8.5		4.9	17.8	17.8						8.5	
Actuated g/C Ratio	0.20		0.11	0.41	0.41						0.20	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	348		179	729	730						338	
v/s Ratio Prot	c0.06			0.08	c0.27						0.06	
v/s Ratio Perm			c0.01									
v/c Ratio	0.31		0.10	0.18	0.65						0.28	
Uniform Delay, d1	14.9		17.2	8.1	10.2						14.8	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.5		0.2	0.1	2.1						0.5	
Delay (s)	15.4		17.4	8.2	12.3						15.2	
Level of Service	B		B	A	B						B	
Approach Delay (s)		16.6			10.7			0.0			15.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	43.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

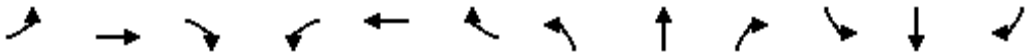
! Phase conflict between lane groups.

c Critical Lane Group



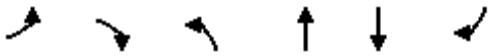
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1890	170	290	2390	0	0	0	0	790	270	320
Future Volume (vph)	0	1890	170	290	2390	0	0	0	0	790	270	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.98	0.99	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		5022		1770	6408					1656	1724	1559
Flt Permitted		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (perm)		5022		1770	6408					1656	1724	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2054	185	315	2598	0	0	0	0	859	293	348
RTOR Reduction (vph)	0	7	0	0	0	0	0	0	0	0	0	31
Lane Group Flow (vph)	0	2232	0	315	2598	0	0	0	0	661	491	317
Confl. Peds. (#/hr)				13						14		3
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		60.8		23.6	89.1					51.1	51.1	51.1
Effective Green, g (s)		62.0		24.0	90.0					52.0	52.0	52.0
Actuated g/C Ratio		0.41		0.16	0.60					0.35	0.35	0.35
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2075		283	3844					574	597	540
v/s Ratio Prot		c0.44		c0.18	0.41							
v/s Ratio Perm										c0.40	0.28	0.20
v/c Ratio		1.08		1.11	0.68					1.15	0.82	0.59
Uniform Delay, d1		44.0		63.0	20.2					49.0	44.8	40.2
Progression Factor		1.00		1.30	0.05					1.00	1.00	1.00
Incremental Delay, d2		39.0		56.0	0.1					86.9	8.5	1.1
Delay (s)		83.1		137.8	1.2					135.9	53.3	41.2
Level of Service		F		F	A					F	D	D
Approach Delay (s)		83.1			15.9			0.0			86.9	
Approach LOS		F			B			A			F	

Intersection Summary			
HCM 2000 Control Delay	54.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



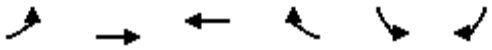
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	800	220	180	390	0	180	0	300	380	370	10
Future Volume (vph)	0	800	220	180	390	0	180	0	300	380	370	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3317		1770	3539		1770		1556	1770	1854	
Flt Permitted		1.00		0.11	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3317		204	3539		1770		1556	1770	1854	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	870	239	196	424	0	196	0	326	413	402	11
RTOR Reduction (vph)	0	28	0	0	0	0	0	0	206	0	1	0
Lane Group Flow (vph)	0	1081	0	196	424	0	196	0	120	413	412	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		32.2		42.9	42.9		11.9		32.2	21.0	21.0	
Effective Green, g (s)		33.1		43.3	43.8		12.3		33.1	21.9	21.9	
Actuated g/C Ratio		0.37		0.48	0.49		0.14		0.37	0.24	0.24	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1219		214	1722		241		572	430	451	
v/s Ratio Prot		0.33		c0.07	0.12		c0.11			c0.23	0.22	
v/s Ratio Perm				c0.37					0.08			
v/c Ratio		0.89		0.92	0.25		0.81		0.21	0.96	0.91	
Uniform Delay, d1		26.7		19.1	13.5		37.7		19.5	33.6	33.1	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		9.7		38.2	0.3		18.5		0.8	33.2	22.8	
Delay (s)		36.4		57.3	13.8		56.3		20.3	66.8	56.0	
Level of Service		D		E	B		E		C	E	E	
Approach Delay (s)		36.4			27.6			33.8			61.4	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	40.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	450	490	880	430	100
Future Volume (vph)	230	450	490	880	430	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	1.00		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.97	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1668		1770	5085	4915	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1668		1770	5085	4915	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	489	533	957	467	109
RTOR Reduction (vph)	59	0	0	0	32	0
Lane Group Flow (vph)	680	0	533	957	544	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	49.0		37.0	63.0	22.0	
Effective Green, g (s)	49.0		36.6	63.0	21.1	
Actuated g/C Ratio	0.41		0.31	0.52	0.18	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	681		539	2669	864	
v/s Ratio Prot	c0.41		c0.30	0.19	c0.11	
v/s Ratio Perm						
v/c Ratio	1.00		0.99	0.36	0.63	
Uniform Delay, d1	35.5		41.5	16.7	45.8	
Progression Factor	1.00		1.05	1.21	1.00	
Incremental Delay, d2	34.0		34.7	0.4	3.5	
Delay (s)	69.5		78.1	20.5	49.3	
Level of Service	E		E	C	D	
Approach Delay (s)	69.5			41.1	49.3	
Approach LOS	E			D	D	

Intersection Summary			
HCM 2000 Control Delay	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



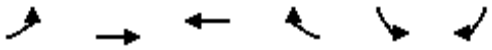
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	90	170	80	110	170
Future Volume (Veh/h)	70	90	170	80	110	170
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	98	185	87	120	185
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1226	738			
pX, platoon unblocked						
vC, conflicting volume	272				478	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				478	228
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				77	77
cM capacity (veh/h)	1291				514	811

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	76	98	272	305
Volume Left	76	0	0	120
Volume Right	0	0	87	185
cSH	1291	1700	1700	660
Volume to Capacity	0.06	0.06	0.16	0.46
Queue Length 95th (ft)	5	0	0	61
Control Delay (s)	8.0	0.0	0.0	15.0
Lane LOS	A			C
Approach Delay (s)	3.5		0.0	15.0
Approach LOS				C

Intersection Summary			
Average Delay	6.9		
Intersection Capacity Utilization	44.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	2550	0	0	2550	690	130	360	250	0	0	0
Future Volume (vph)	130	2550	0	0	2550	690	130	360	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frpb, ped/bikes	1.00	1.00			1.00	0.96		0.99				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1519		3294				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1519		3294				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	2772	0	0	2772	750	141	391	272	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	98	0	2	0	0	0	0
Lane Group Flow (vph)	141	2772	0	0	2772	652	0	802	0	0	0	0
Confl. Peds. (#/hr)	15		2			15	1		20			
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	19.8	99.3			75.1	75.1		40.9				
Effective Green, g (s)	20.2	100.2			76.0	76.0		41.8				
Actuated g/C Ratio	0.13	0.67			0.51	0.51		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	238	3396			2576	769		917				
v/s Ratio Prot	0.08	c0.55			c0.55			c0.24				
v/s Ratio Perm						0.43						
v/c Ratio	0.59	0.82			1.08	0.85		0.87				
Uniform Delay, d1	61.0	18.2			37.0	32.0		51.6				
Progression Factor	0.74	0.56			1.00	1.00		1.00				
Incremental Delay, d2	0.2	0.2			42.2	11.2		9.0				
Delay (s)	45.2	10.4			79.2	43.2		60.6				
Level of Service	D	B			E	D		E				
Approach Delay (s)		12.1			71.6			60.6			0.0	
Approach LOS		B			E			E			A	

Intersection Summary			
HCM 2000 Control Delay	46.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	1350	570	150	0	0
Future Volume (Veh/h)	130	1350	570	150	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	1467	620	163	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		345	945			
pX, platoon unblocked	0.94				0.75	0.94
vC, conflicting volume	783				1717	392
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	652				953	238
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	84				100	100
cM capacity (veh/h)	878				162	721

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	141	734	734	413	370
Volume Left	141	0	0	0	0
Volume Right	0	0	0	0	163
cSH	878	1700	1700	1700	1700
Volume to Capacity	0.16	0.43	0.43	0.24	0.22
Queue Length 95th (ft)	14	0	0	0	0
Control Delay (s)	9.9	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.9			0.0	
Approach LOS					

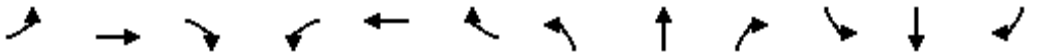
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	130	0	0	590	360	280
Future Volume (vph)	130	0	0	590	360	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	0	0	641	391	304

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	141	641	391	304
Volume Left (vph)	141	0	391	0
Volume Right (vph)	0	641	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.9	4.7	6.2	5.7
Degree Utilization, x	0.27	0.84	0.67	0.48
Capacity (veh/h)	499	751	565	624
Control Delay (s)	12.4	27.4	19.7	12.6
Approach Delay (s)	12.4	27.4	16.6	
Approach LOS	B	D	C	

Intersection Summary			
Delay	20.9		
Level of Service	C		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	440	50	150	20	20	30	60	130	10	20	200	190
Future Volume (vph)	440	50	150	20	20	30	60	130	10	20	200	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	478	54	163	22	22	33	65	141	11	22	217	207

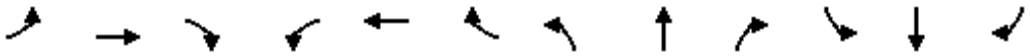
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	505	190	77	217	239	207
Volume Left (vph)	478	0	22	65	22	0
Volume Right (vph)	0	163	33	11	0	207
Hadj (s)	0.51	-0.57	-0.17	0.06	0.08	-0.67
Departure Headway (s)	7.3	6.2	7.8	7.5	7.4	6.6
Degree Utilization, x	1.03	0.33	0.17	0.45	0.49	0.38
Capacity (veh/h)	485	567	432	457	478	531
Control Delay (s)	73.1	11.0	12.3	16.7	16.1	12.5
Approach Delay (s)	56.2		12.3	16.7	14.4	
Approach LOS	F		B	C	B	

Intersection Summary				
Delay	34.9			
Level of Service	D			
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	700	270	420	460	0	0	0	0	430	580	1080
Future Volume (vph)	0	700	270	420	460	0	0	0	0	430	580	1080
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	761	293	457	500	0	0	0	0	467	630	1174
RTOR Reduction (vph)	0	0	152	0	0	0	0	0	0	0	0	94
Lane Group Flow (vph)	0	761	141	457	500	0	0	0	0	467	630	1080
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.7	26.7	15.0	46.1					64.1	64.1	64.1
Effective Green, g (s)		27.6	27.6	15.4	47.0					65.0	65.0	65.0
Actuated g/C Ratio		0.23	0.23	0.13	0.39					0.54	0.54	0.54
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		813	364	440	1386					872	1836	857
v/s Ratio Prot		c0.22		c0.13	0.14							
v/s Ratio Perm			0.09							0.29	0.19	c0.68
v/c Ratio		0.94	0.39	1.04	0.36					0.54	0.34	1.26
Uniform Delay, d1		45.3	39.1	52.3	25.9					17.8	15.5	27.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		19.4	3.1	53.3	0.7					0.3	0.0	126.5
Delay (s)		64.7	42.2	105.6	26.6					18.1	15.5	154.0
Level of Service		E	D	F	C					B	B	F
Approach Delay (s)		58.4			64.3			0.0			87.6	
Approach LOS		E			E			A			F	

Intersection Summary			
HCM 2000 Control Delay	75.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		

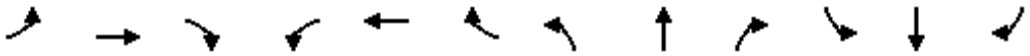
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	60	50	0	0	0	0	0	0	1620	150
Future Volume (Veh/h)	0	0	60	50	0	0	0	0	0	0	1620	150
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	65	54	0	0	0	0	0	0	1761	163
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1842	1842	668	652	1924	0	1924			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1842	1842	668	652	1924	0	1924			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	84	82	100	100	100			100		
cM capacity (veh/h)	47	74	400	296	66	1084	303			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	65	54	704	704	515
Volume Left	0	54	0	0	0
Volume Right	65	0	0	0	163
cSH	400	296	1700	1700	1700
Volume to Capacity	0.16	0.18	0.41	0.41	0.30
Queue Length 95th (ft)	14	16	0	0	0
Control Delay (s)	15.7	19.9	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	15.7	19.9	0.0		
Approach LOS	C	C			

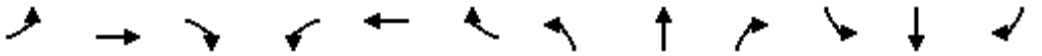
Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	53.5%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	440	250	110	170	0	0	0	0	410	860	480
Future Volume (vph)	0	440	250	110	170	0	0	0	0	410	860	480
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.95	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3471					1770	4812	
Flt Permitted		1.00	1.00		0.62					0.95	1.00	
Satd. Flow (perm)		1863	1583		2177					1770	4812	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	478	272	120	185	0	0	0	0	446	935	522
RTOR Reduction (vph)	0	0	38	0	0	0	0	0	0	0	155	0
Lane Group Flow (vph)	0	478	234	0	305	0	0	0	0	446	1302	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		25.3	25.3		25.3					26.7	26.7	
Effective Green, g (s)		28.0	28.0		28.0					29.0	29.0	
Actuated g/C Ratio		0.43	0.43		0.43					0.45	0.45	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		802	681		937					789	2146	
v/s Ratio Prot		c0.26									c0.27	
v/s Ratio Perm			0.15		0.14					0.25		
v/c Ratio		0.60	0.34		0.33					0.57	0.61	
Uniform Delay, d1		14.2	12.4		12.2					13.3	13.7	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		3.3	1.4		0.9					2.9	1.3	
Delay (s)		17.4	13.7		13.2					16.3	15.0	
Level of Service		B	B		B					B	B	
Approach Delay (s)		16.1			13.2			0.0			15.3	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

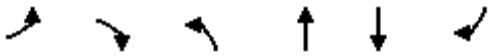


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1110	370	50	700	0	0	0	0	730	1100	660
Future Volume (vph)	0	1110	370	50	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3407		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3407		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1207	402	54	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	1576	0	54	761	0	0	0	0	0	1989	665
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		31.5		3.4	37.6						40.4	40.4
Effective Green, g (s)		29.7		3.8	37.5						39.5	41.8
Actuated g/C Ratio		0.33		0.04	0.42						0.44	0.46
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1124		74	1474						2068	632
v/s Ratio Prot		c0.46		c0.03	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		1.40		0.73	0.52						1.08dl	1.05
Uniform Delay, d1		30.1		42.6	19.5						24.5	24.1
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		186.2		26.0	1.3						12.0	50.3
Delay (s)		216.3		68.6	20.8						36.5	74.4
Level of Service		F		E	C						D	E
Approach Delay (s)		216.3			24.0			0.0			46.6	
Approach LOS		F			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	96.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	94.3%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



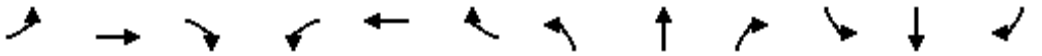
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	340	1270	1700	1270	1180	130
Future Volume (vph)	340	1270	1700	1270	1180	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2787	3433	5085	5085	1566
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2787	3433	5085	5085	1566
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.92
Adj. Flow (vph)	370	1337	1789	1337	1283	141
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	370	1337	1789	1337	1283	136
Confl. Peds. (#/hr)			3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	23.0	88.0	65.0	99.0	30.0	53.0
Effective Green, g (s)	23.0	88.0	65.0	99.0	30.0	53.0
Actuated g/C Ratio	0.18	0.68	0.50	0.76	0.23	0.41
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	1972	1716	3872	1173	686
v/s Ratio Prot	c0.21	0.34	c0.52	0.26	c0.25	0.04
v/s Ratio Perm		0.14				0.05
v/c Ratio	1.18	0.68	1.04	0.35	1.09	0.20
Uniform Delay, d1	53.5	12.5	32.5	5.0	50.0	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	109.8	0.9	33.7	0.2	55.7	0.1
Delay (s)	163.3	13.5	66.2	5.3	105.7	25.0
Level of Service	F	B	E	A	F	C
Approach Delay (s)	46.0			40.2	97.7	
Approach LOS	D			D	F	

Intersection Summary			
HCM 2000 Control Delay	54.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	250	510	0	0	900	640	40	0	120	250	30	420
Future Volume (vph)	250	510	0	0	900	640	40	0	120	250	30	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.91	0.91	
Frt	1.00	1.00			1.00	0.85		0.90		1.00	0.87	
Flt Protected	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	3539			3539	1583		1653		1610	2933	
Flt Permitted	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	3539			3539	1583		1653		1610	2933	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	272	554	0	0	978	696	43	0	130	272	33	457
RTOR Reduction (vph)	0	0	0	0	0	427	0	111	0	0	399	0
Lane Group Flow (vph)	272	554	0	0	978	269	0	62	0	245	118	0
Turn Type	Prot	NA			NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6						
Actuated Green, G (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Effective Green, g (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Actuated g/C Ratio	0.12	0.56			0.39	0.39		0.14		0.13	0.13	
Clearance Time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5		2.0		2.0	2.0	
Lane Grp Cap (vph)	214	1994			1366	611		238		204	372	
v/s Ratio Prot	c0.15	0.16			c0.28			c0.04		c0.15	0.04	
v/s Ratio Perm						0.17						
v/c Ratio	1.27	0.28			0.72	0.44		0.26		1.20	0.32	
Uniform Delay, d1	38.4	9.9			22.7	19.8		33.2		38.1	34.7	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	153.3	0.3			3.2	2.3		0.2		127.8	0.2	
Delay (s)	191.7	10.2			26.0	22.1		33.4		165.9	34.8	
Level of Service	F	B			C	C		C		F	C	
Approach Delay (s)		70.0			24.4			33.4			77.0	
Approach LOS		E			C			C			E	

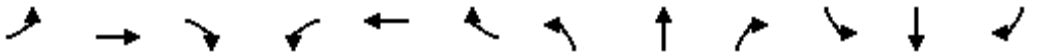
Intersection Summary			
HCM 2000 Control Delay	47.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.3	Sum of lost time (s)	19.3
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	410	70	600	670	0	0	0	0	350	40	370
Future Volume (vph)	0	410	70	600	670	0	0	0	0	350	40	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3453		1770	1863					1681	1701	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3453		1770	1863					1681	1701	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	446	76	652	728	0	0	0	0	380	43	402
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	0	71
Lane Group Flow (vph)	0	504	0	652	728	0	0	0	0	201	222	331
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Split	NA					Split	NA	custom
Protected Phases		7		8	8					6	6	6
Permitted Phases												7
Actuated Green, G (s)		14.2		29.7	29.7					10.7	10.7	24.9
Effective Green, g (s)		14.2		30.0	30.0					12.9	12.9	29.3
Actuated g/C Ratio		0.21		0.44	0.44					0.19	0.19	0.43
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		712		771	812					315	318	715
v/s Ratio Prot		c0.15		0.37	c0.39					0.12	c0.13	0.09
v/s Ratio Perm												0.12
v/c Ratio		0.71		0.85	0.90					0.64	0.70	0.46
Uniform Delay, d1		25.4		17.3	18.0					25.8	26.1	14.1
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2		8.2	12.2					4.2	6.5	0.5
Delay (s)		28.6		25.5	30.2					30.0	32.7	14.6
Level of Service		C		C	C					C	C	B
Approach Delay (s)		28.6			28.0			0.0			23.2	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	68.8	Sum of lost time (s)	11.7
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

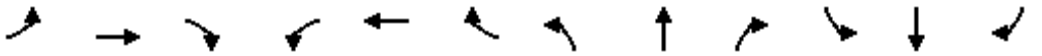


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	220	30	1570	340	220	500	20
Future Volume (vph)	40	150	30	380	40	220	30	1570	340	220	500	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1626		1770	4949		1770	5050	
Flt Permitted	0.45	1.00		0.55	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	831	1809		1020	1626		1770	4949		1770	5050	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	239	33	1707	370	239	543	22
RTOR Reduction (vph)	0	6	0	0	155	0	0	28	0	0	3	0
Lane Group Flow (vph)	43	190	0	413	127	0	33	2049	0	239	562	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.1	43.1		42.4	42.4		3.6	46.1		18.9	60.7	
Effective Green, g (s)	43.1	43.1		42.8	42.8		3.6	47.5		16.7	62.8	
Actuated g/C Ratio	0.35	0.35		0.35	0.35		0.03	0.39		0.14	0.52	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	294	641		359	572		52	1934		243	2610	
v/s Ratio Prot		0.11			0.08		0.02	c0.41		c0.14	0.11	
v/s Ratio Perm	0.05			c0.40								
v/c Ratio	0.15	0.30		1.15	0.22		0.63	1.06		0.98	0.22	
Uniform Delay, d1	26.7	28.3		39.4	27.7		58.3	37.0		52.3	16.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		95.0	0.2		17.1	38.3		52.6	0.2	
Delay (s)	26.8	28.4		134.4	27.9		75.4	75.3		104.9	16.1	
Level of Service	C	C		F	C		E	E		F	B	
Approach Delay (s)		28.1			91.1			75.3			42.5	
Approach LOS		C			F			E			D	

Intersection Summary			
HCM 2000 Control Delay	68.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	121.5	Sum of lost time (s)	14.5
Intersection Capacity Utilization	100.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	1070	300	250	950	160	460	1050	240	170	670	300
Future Volume (vph)	620	1070	300	250	950	160	460	1050	240	170	670	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3423		1770	3454		1770	4930		1770	5085	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3423		1770	3454		1770	4930		1770	5085	1569
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	1163	326	272	1033	174	500	1141	261	185	728	326
RTOR Reduction (vph)	0	17	0	0	9	0	0	25	0	0	0	50
Lane Group Flow (vph)	674	1472	0	272	1198	0	500	1377	0	185	728	276
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	38.6	58.2		22.2	41.2		28.6	42.1		8.6	22.0	60.6
Effective Green, g (s)	39.0	59.4		22.6	43.0		29.0	43.0		9.0	23.0	61.4
Actuated g/C Ratio	0.26	0.40		0.15	0.29		0.19	0.29		0.06	0.15	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	460	1355		266	990		342	1413		106	779	642
v/s Ratio Prot	c0.38	0.43		0.15	c0.35		c0.28	c0.28		c0.10	0.14	0.11
v/s Ratio Perm												0.06
v/c Ratio	1.47	1.09		1.02	1.21		1.46	0.97		1.75	0.93	0.43
Uniform Delay, d1	55.5	45.3		63.7	53.5		60.5	53.0		70.5	62.8	31.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	221.0	51.5		61.1	103.9		223.4	18.6		371.3	19.7	0.2
Delay (s)	276.5	96.8		124.8	157.4		283.9	71.6		441.8	82.5	31.9
Level of Service	F	F		F	F		F	E		F	F	C
Approach Delay (s)		152.8			151.4			127.4			122.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	139.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	119.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	860	330	220	370	90	280	240	630	70	110	70
Future Volume (vph)	160	860	330	220	370	90	280	240	630	70	110	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.71	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	935	359	239	402	98	304	261	685	76	120	76
RTOR Reduction (vph)	0	0	196	0	0	63	0	0	59	0	0	58
Lane Group Flow (vph)	174	935	163	239	402	35	304	261	626	76	120	18
Confl. Peds. (#/hr)			27	27		170	23		15	15		23
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.0	33.2	41.1	10.1	32.3	32.3	7.9	24.0	34.1	6.6	22.7	22.7
Effective Green, g (s)	11.4	34.1	41.9	10.5	33.2	33.2	8.3	23.4	31.9	7.0	22.2	22.2
Actuated g/C Ratio	0.12	0.37	0.45	0.11	0.36	0.36	0.09	0.25	0.34	0.08	0.24	0.24
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	218	1304	1227	389	1270	405	308	471	536	133	1220	368
v/s Ratio Prot	0.10	c0.26	0.01	0.07	0.11		c0.09	0.14	c0.11	0.04	0.02	
v/s Ratio Perm			0.05			0.03			0.29			0.01
v/c Ratio	0.80	0.72	0.13	0.61	0.32	0.09	0.99	0.55	1.17	0.57	0.10	0.05
Uniform Delay, d1	39.4	25.1	14.7	39.1	21.4	19.6	42.0	30.0	30.3	41.3	27.4	27.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.0	3.4	0.0	2.0	0.7	0.4	47.2	2.1	94.3	3.6	0.1	0.1
Delay (s)	56.5	28.5	14.7	41.1	22.1	20.0	89.2	32.1	124.6	44.9	27.4	27.1
Level of Service	E	C	B	D	C	C	F	C	F	D	C	C
Approach Delay (s)		28.4			28.0			96.7			32.2	
Approach LOS		C			C			F			C	

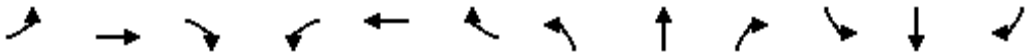
Intersection Summary			
HCM 2000 Control Delay	51.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	92.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	170	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	170	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.94			0.95			0.93	
Flt Protected		0.97			1.00			0.99			0.99	
Satd. Flow (prot)		1784			1731			1722			1698	
Flt Permitted		0.62			0.92			0.86			0.79	
Satd. Flow (perm)		1136			1599			1495			1365	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	185	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	3	0	0	16	0	0	19	0	0	32	0
Lane Group Flow (vph)	0	1029	0	0	354	0	0	308	0	0	55	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		79.2			79.2			21.0			21.0	
Effective Green, g (s)		80.1			80.1			21.9			21.9	
Actuated g/C Ratio		0.73			0.73			0.20			0.20	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		827			1164			297			271	
v/s Ratio Prot												
v/s Ratio Perm		c0.91			0.22			c0.21			0.04	
v/c Ratio		1.24			0.30			1.04			0.20	
Uniform Delay, d1		15.0			5.2			44.0			36.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		120.2			0.7			62.0			0.1	
Delay (s)		135.2			5.9			106.0			36.9	
Level of Service		F			A			F			D	
Approach Delay (s)		135.2			5.9			106.0			36.9	
Approach LOS		F			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	98.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1090	470	240	500	180	280
Future Volume (vph)	1090	470	240	500	180	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.95		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4697		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4697		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1185	511	261	543	196	304
RTOR Reduction (vph)	87	0	0	0	0	237
Lane Group Flow (vph)	1609	0	261	543	196	67
Confl. Peds. (#/hr)		53	53		46	81
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.3		12.9	46.6	14.8	14.8
Effective Green, g (s)	31.2		13.3	46.6	15.7	15.7
Actuated g/C Ratio	0.44		0.19	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2058		330	2316	390	349
v/s Ratio Prot	c0.34		c0.15	0.15	c0.11	0.04
v/s Ratio Perm						
v/c Ratio	0.78		0.79	0.23	0.50	0.19
Uniform Delay, d1	17.1		27.6	5.0	24.3	22.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0		11.4	0.2	0.4	0.1
Delay (s)	20.1		39.0	5.3	24.7	22.7
Level of Service	C		D	A	C	C
Approach Delay (s)	20.1			16.2	23.5	
Approach LOS	C			B	C	

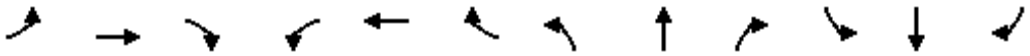
Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	11.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	30	20	60	40	140	40	90	190	60
Future Volume (vph)	20	20	20	30	20	60	40	140	40	90	190	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	33	22	65	43	152	43	98	207	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	238	370
Volume Left (vph)	22	33	43	98
Volume Right (vph)	22	65	43	65
Hadj (s)	-0.10	-0.24	-0.04	-0.02
Departure Headway (s)	5.5	5.2	4.8	4.7
Degree Utilization, x	0.10	0.17	0.32	0.48
Capacity (veh/h)	572	610	707	735
Control Delay (s)	9.1	9.3	10.1	12.0
Approach Delay (s)	9.1	9.3	10.1	12.0
Approach LOS	A	A	B	B

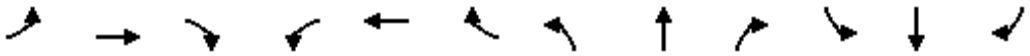
Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	48.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	20	30	40	20	30	130	30	40	130	70
Future Volume (vph)	40	20	20	30	40	20	30	130	30	40	130	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	22	33	43	22	33	141	33	43	141	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	87	98	207	260
Volume Left (vph)	43	33	33	43
Volume Right (vph)	22	22	33	76
Hadj (s)	-0.02	-0.03	-0.03	-0.11
Departure Headway (s)	5.1	5.1	4.7	4.5
Degree Utilization, x	0.12	0.14	0.27	0.33
Capacity (veh/h)	630	635	732	753
Control Delay (s)	8.9	8.9	9.4	9.7
Approach Delay (s)	8.9	8.9	9.4	9.7
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.4			
Level of Service	A			
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	70	30	30	20	230	390	10	160	20
Future Volume (vph)	20	20	20	70	30	30	20	230	390	10	160	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	76	33	33	22	250	424	11	174	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	142	272	424	207
Volume Left (vph)	22	76	22	0	11
Volume Right (vph)	22	33	0	424	22
Hadj (s)	-0.10	0.00	0.07	-0.67	-0.02
Departure Headway (s)	6.0	5.9	5.5	4.7	5.4
Degree Utilization, x	0.11	0.23	0.41	0.56	0.31
Capacity (veh/h)	532	556	645	747	639
Control Delay (s)	9.7	10.7	11.1	12.2	10.7
Approach Delay (s)	9.7	10.7	11.8		10.7
Approach LOS	A	B	B		B

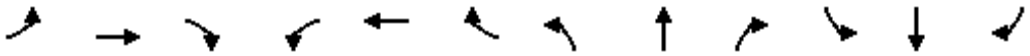
Intersection Summary				
Delay	11.3			
Level of Service	B			
Intersection Capacity Utilization	48.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	40	40	60	50	60	110
Future Volume (vph)	40	40	60	50	60	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	43	65	54	65	120

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	86	119	185
Volume Left (vph)	0	65	65
Volume Right (vph)	43	0	120
Hadj (s)	-0.27	0.14	-0.28
Departure Headway (s)	4.2	4.5	4.1
Degree Utilization, x	0.10	0.15	0.21
Capacity (veh/h)	818	751	840
Control Delay (s)	7.6	8.3	8.2
Approach Delay (s)	7.6	8.3	8.2
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		



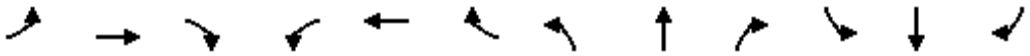
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	30	30	50	30	20	80	160	140	20	70	20
Future Volume (vph)	30	30	30	50	30	20	80	160	140	20	70	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	33	33	54	33	22	87	174	152	22	76	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	99	109	413	120
Volume Left (vph)	33	54	87	22
Volume Right (vph)	33	22	152	22
Hadj (s)	-0.10	0.01	-0.14	-0.04
Departure Headway (s)	5.2	5.3	4.5	4.9
Degree Utilization, x	0.14	0.16	0.51	0.16
Capacity (veh/h)	612	605	776	676
Control Delay (s)	9.1	9.3	12.1	8.9
Approach Delay (s)	9.1	9.3	12.1	8.9
Approach LOS	A	A	B	A

Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	50.7%	ICU Level of Service	A	
Analysis Period (min)	15			

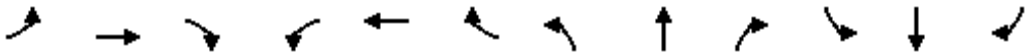
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	40	110	20	60	50	130	300	30	20	70	170
Future Volume (vph)	280	40	110	20	60	50	130	300	30	20	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.97			0.95		1.00	0.99		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1738			1742		1765	1833		1764	1637	
Flt Permitted		0.75			0.92		0.57	1.00		0.47	1.00	
Satd. Flow (perm)		1353			1607		1064	1833		867	1637	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	43	120	22	65	54	141	326	33	22	76	185
RTOR Reduction (vph)	0	25	0	0	32	0	0	5	0	0	104	0
Lane Group Flow (vph)	0	442	0	0	109	0	141	354	0	22	157	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		21.2			21.2		22.5	22.5		22.5	22.5	
Effective Green, g (s)		21.2			21.2		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.41			0.41		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		554			658		463	797		377	712	
v/s Ratio Prot								c0.19			0.10	
v/s Ratio Perm		c0.33			0.07		0.13			0.03		
v/c Ratio		0.80			0.17		0.30	0.44		0.06	0.22	
Uniform Delay, d1		13.4			9.7		9.5	10.2		8.5	9.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		7.4			0.0		1.7	1.8		0.3	0.7	
Delay (s)		20.7			9.7		11.2	12.0		8.8	9.8	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		20.7			9.7			11.8			9.7	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	51.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1070	230	310	600	20	120	20	220	30	20	20
Future Volume (vph)	70	1070	230	310	600	20	120	20	220	30	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	1.00			0.92			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1765	4911		1770	3518			1665			1745	
Flt Permitted	0.40	1.00		0.15	1.00			0.87			0.76	
Satd. Flow (perm)	735	4911		284	3518			1474			1357	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1163	250	337	652	22	130	22	239	33	22	22
RTOR Reduction (vph)	0	43	0	0	3	0	0	92	0	0	16	0
Lane Group Flow (vph)	76	1370	0	337	671	0	0	299	0	0	61	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	24.4	21.7		36.6	29.5			15.7			15.7	
Effective Green, g (s)	25.2	22.7		37.0	30.4			16.6			16.6	
Actuated g/C Ratio	0.41	0.37		0.60	0.49			0.27			0.27	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	349	1795		427	1722			394			362	
v/s Ratio Prot	0.01	0.28		c0.14	0.19							
v/s Ratio Perm	0.08			c0.33				c0.20			0.04	
v/c Ratio	0.22	0.76		0.79	0.39			0.76			0.17	
Uniform Delay, d1	11.5	17.3		12.0	10.0			20.9			17.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	3.1		8.7	0.7			7.2			0.1	
Delay (s)	11.6	20.5		20.7	10.7			28.2			17.5	
Level of Service	B	C		C	B			C			B	
Approach Delay (s)		20.0			14.0			28.2			17.5	
Approach LOS		C			B			C			B	

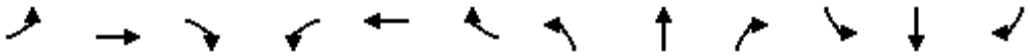
Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	62.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Future Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	22	33	11	22	22	22	120	33	43	174	98

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	175	55	175	315
Volume Left (vph)	120	11	22	43
Volume Right (vph)	33	22	33	98
Hadj (s)	0.06	-0.17	-0.05	-0.13
Departure Headway (s)	5.2	5.2	4.9	4.6
Degree Utilization, x	0.25	0.08	0.24	0.40
Capacity (veh/h)	631	608	692	739
Control Delay (s)	10.0	8.6	9.4	10.7
Approach Delay (s)	10.0	8.6	9.4	10.7
Approach LOS	A	A	A	B

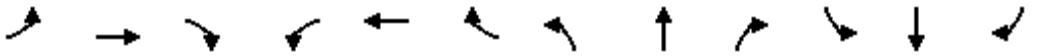
Intersection Summary			
Delay	10.1		
Level of Service	B		
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	60	10	20	20	40	100	20	20	150	50
Future Volume (vph)	40	20	60	10	20	20	40	100	20	20	150	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	65	11	22	22	43	109	22	22	163	54

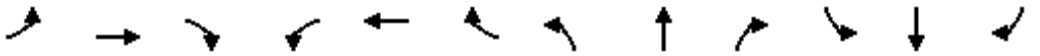
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	130	55	174	239
Volume Left (vph)	43	11	43	22
Volume Right (vph)	65	22	22	54
Hadj (s)	-0.20	-0.17	0.01	-0.08
Departure Headway (s)	4.7	4.9	4.7	4.5
Degree Utilization, x	0.17	0.07	0.22	0.30
Capacity (veh/h)	692	660	734	761
Control Delay (s)	8.7	8.3	9.0	9.4
Approach Delay (s)	8.7	8.3	9.0	9.4
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	37.0%	ICU Level of Service	A	
Analysis Period (min)	15			



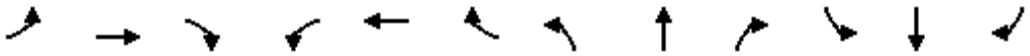
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	590	670	60	30	580	160	0	0	30	220	160	350
Future Volume (vph)	590	670	60	30	580	160	0	0	30	220	160	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3487		1770	3412				1611	1681	1736	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3487		1770	3412				1611	1681	1736	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	641	728	65	33	630	174	0	0	33	239	174	380
RTOR Reduction (vph)	0	7	0	0	28	0	0	0	0	0	0	258
Lane Group Flow (vph)	641	786	0	33	776	0	0	0	33	127	286	122
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	13.5	36.5		2.0	25.0				71.4	18.3	18.3	18.3
Effective Green, g (s)	13.9	37.4		2.4	25.9				71.4	19.6	19.6	19.6
Actuated g/C Ratio	0.19	0.52		0.03	0.36				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	668	1826		59	1237				1611	461	476	428
v/s Ratio Prot	c0.19	0.23		0.02	c0.23					0.08	c0.16	
v/s Ratio Perm									0.02			0.08
v/c Ratio	0.96	0.43		0.56	0.63				0.02	0.28	0.60	0.29
Uniform Delay, d1	28.5	10.5		34.0	18.8				0.0	20.3	22.5	20.4
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	24.7	0.7		6.4	2.4				0.0	0.5	2.7	0.6
Delay (s)	53.2	11.2		40.4	21.2				0.0	20.9	25.2	21.0
Level of Service	D	B		D	C				A	C	C	C
Approach Delay (s)		30.0			21.9			0.0			22.5	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	71.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1430	100	70	1010	70	120	110	140	40	90	20
Future Volume (vph)	60	1430	100	70	1010	70	120	110	140	40	90	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3406		1671	3399		1646	1575			1704	
Flt Permitted	0.95	1.00		0.95	1.00		0.49	1.00			0.44	
Satd. Flow (perm)	1678	3406		1671	3399		852	1575			764	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1554	109	76	1098	76	130	120	152	43	98	22
RTOR Reduction (vph)	0	3	0	0	3	0	0	34	0	0	4	0
Lane Group Flow (vph)	65	1660	0	76	1171	0	130	238	0	0	159	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	9.3	94.7		10.0	95.4		26.1	26.1			26.1	
Effective Green, g (s)	9.7	95.6		10.4	96.3		27.0	27.0			27.0	
Actuated g/C Ratio	0.07	0.66		0.07	0.66		0.19	0.19			0.19	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	112	2245		119	2257		158	293			142	
v/s Ratio Prot	0.04	c0.49		c0.05	0.34			0.15				
v/s Ratio Perm							0.15				c0.21	
v/c Ratio	0.58	0.74		0.64	0.52		0.82	0.81			1.12	
Uniform Delay, d1	65.7	16.4		65.5	12.5		56.7	56.6			59.0	
Progression Factor	1.00	1.00		1.00	0.85		1.00	1.00			1.00	
Incremental Delay, d2	4.9	2.2		3.3	0.3		26.8	14.8			111.1	
Delay (s)	70.5	18.7		68.7	11.0		83.5	71.4			170.1	
Level of Service	E	B		E	B		F	E			F	
Approach Delay (s)		20.6			14.5			75.3			170.1	
Approach LOS		C			B			E			F	

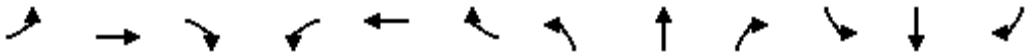
Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	430	1400	140	210	840	220	90	430	240	310	220	160
Future Volume (vph)	430	1400	140	210	840	220	90	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3472		1770	3380		1770	3539	1526	1770	3180	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3472		1770	3380		1770	3539	1526	1770	3180	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	467	1522	152	228	913	239	98	467	261	337	239	174
RTOR Reduction (vph)	0	5	0	0	16	0	0	0	62	0	89	0
Lane Group Flow (vph)	467	1669	0	228	1136	0	98	467	199	337	324	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	31.6	59.1		15.6	42.6		11.9	25.9	41.5	25.7	39.8	
Effective Green, g (s)	32.0	60.0		16.0	44.0		12.3	26.9	42.3	26.1	40.7	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.08	0.19	0.29	0.18	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	390	1436		195	1025		150	656	445	318	892	
v/s Ratio Prot	c0.26	c0.48		0.13	0.34		0.06	c0.13	0.05	c0.19	0.10	
v/s Ratio Perm									0.08			
v/c Ratio	1.20	1.16		1.17	1.11		0.65	0.71	0.45	1.06	0.36	
Uniform Delay, d1	56.5	42.5		64.5	50.5		64.3	55.4	41.8	59.5	41.8	
Progression Factor	1.07	0.95		1.09	0.93		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	107.4	79.5		113.1	61.0		7.5	3.9	0.3	67.1	0.2	
Delay (s)	168.0	119.9		183.5	108.0		71.8	59.3	42.1	126.6	42.0	
Level of Service	F	F		F	F		E	E	D	F	D	
Approach Delay (s)		130.4			120.5			55.4			80.0	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	108.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

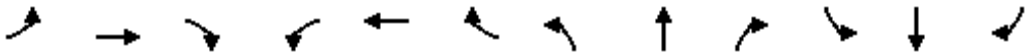
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1910	100	160	1260	50	100	20	220	50	20	20
Future Volume (vph)	10	1910	100	160	1260	50	100	20	220	50	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5038		1770	3516			1788	1553		1742	
Flt Permitted	0.95	1.00		0.95	1.00			0.67	1.00		0.63	
Satd. Flow (perm)	1770	5038		1770	3516			1248	1553		1126	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	2076	109	174	1370	54	109	22	239	54	22	22
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	202	0	8	0
Lane Group Flow (vph)	11	2182	0	174	1422	0	0	131	37	0	90	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	2.0	90.1		18.6	106.7			21.7	21.7		21.7	
Effective Green, g (s)	2.4	91.4		19.0	108.0			22.6	22.6		22.6	
Actuated g/C Ratio	0.02	0.63		0.13	0.74			0.16	0.16		0.16	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	29	3175		231	2618			194	242		175	
v/s Ratio Prot	0.01	c0.43		c0.10	0.40							
v/s Ratio Perm								c0.10	0.02		0.08	
v/c Ratio	0.38	0.69		0.75	0.54			0.68	0.15		0.52	
Uniform Delay, d1	70.6	17.5		60.7	7.9			57.7	52.9		56.2	
Progression Factor	0.86	1.22		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.3	0.1		11.6	0.8			7.1	0.1		1.1	
Delay (s)	60.9	21.4		72.4	8.7			64.8	53.0		57.3	
Level of Service	E	C		E	A			E	D		E	
Approach Delay (s)		21.6			15.7			57.2			57.3	
Approach LOS		C			B			E			E	

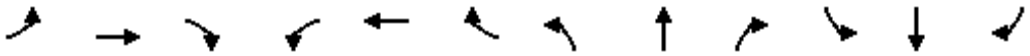
Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



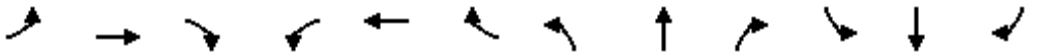
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	380	2040	0	0	0	0	0	350	190
Future Volume (vph)	0	0	0	380	2040	0	0	0	0	0	350	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.95	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5038						4778	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5038						4778	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	413	2217	0	0	0	0	0	380	207
RTOR Reduction (vph)	0	0	0	0	13	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2617	0	0	0	0	0	587	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3532						1003	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.52							
v/c Ratio					0.74						0.59	
Uniform Delay, d1					8.4						32.0	
Progression Factor					1.00						0.93	
Incremental Delay, d2					1.4						0.1	
Delay (s)					9.8						29.9	
Level of Service					A						C	
Approach Delay (s)		0.0			9.8			0.0			29.9	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



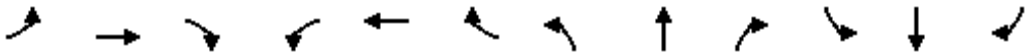
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1630	140	0	0	0	0	0	0	310	430	0
Future Volume (vph)	0	1630	140	0	0	0	0	0	0	310	430	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5015									4939	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5015									4939	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1772	152	0	0	0	0	0	0	337	467	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	0	0	16	0
Lane Group Flow (vph)	0	1914	0	0	0	0	0	0	0	0	788	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		58.9									22.1	
Effective Green, g (s)		58.9									23.1	
Actuated g/C Ratio		0.65									0.26	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3282									1267	
v/s Ratio Prot		c0.38										
v/s Ratio Perm											0.16	
v/c Ratio		0.58									0.62	
Uniform Delay, d1		8.7									29.6	
Progression Factor		0.38									0.77	
Incremental Delay, d2		0.5									0.9	
Delay (s)		3.8									23.7	
Level of Service		A									C	
Approach Delay (s)		3.8			0.0			0.0			23.7	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1270	120	150	1420	120	120	50	130	80	80	210
Future Volume (vph)	240	1270	120	150	1420	120	120	50	130	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1380	130	163	1543	130	130	54	141	87	87	228
RTOR Reduction (vph)	0	6	0	0	0	121	0	0	118	0	0	136
Lane Group Flow (vph)	261	1504	0	163	1543	9	130	54	23	87	87	92
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	7.0	40.8		9.0	42.9	5.7	7.0	12.2	12.2	5.7	11.8	11.8
Effective Green, g (s)	7.0	42.3		9.0	44.3	5.7	7.0	14.0	14.0	5.7	12.7	12.7
Actuated g/C Ratio	0.08	0.49		0.10	0.51	0.07	0.08	0.16	0.16	0.07	0.15	0.15
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	276	1698		183	1802	102	142	299	254	224	271	228
v/s Ratio Prot	0.08	0.43		c0.09	c0.44		c0.07	0.03		0.03	0.05	
v/s Ratio Perm						0.01			0.01			c0.06
v/c Ratio	0.95	0.89		0.89	0.86	0.08	0.92	0.18	0.09	0.39	0.32	0.40
Uniform Delay, d1	39.8	20.2		38.5	18.6	38.2	39.7	31.5	31.1	39.0	33.3	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	39.0	7.2		36.8	5.5	0.1	49.8	0.1	0.1	0.4	0.7	1.2
Delay (s)	78.8	27.4		75.3	24.1	38.3	89.5	31.6	31.1	39.4	34.0	34.9
Level of Service	E	C		E	C	D	F	C	C	D	C	C
Approach Delay (s)		35.0			29.6			54.6			35.7	
Approach LOS		C			C			D			D	

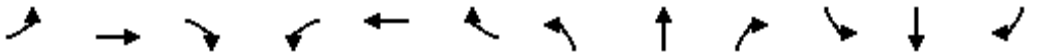
Intersection Summary			
HCM 2000 Control Delay	34.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	200	1800	220	330	570	0	0	350	120
Future Volume (vph)	0	0	0	200	1800	220	330	570	0	0	350	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6258		1770	3539			3389	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6258		1770	3539			3389	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	211	1895	232	347	600	0	0	368	126
RTOR Reduction (vph)	0	0	0	0	16	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	0	0	0	2322	0	347	600	0	0	463	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					51.8		25.3	48.4			18.2	
Effective Green, g (s)					51.8		25.3	48.4			18.2	
Actuated g/C Ratio					0.47		0.23	0.44			0.17	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					2946		407	1557			560	
v/s Ratio Prot							c0.20	0.17			c0.14	
v/s Ratio Perm					0.37							
v/c Ratio					0.79		0.85	0.39			0.83	
Uniform Delay, d1					24.5		40.6	20.8			44.4	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					2.2		15.7	0.2			9.5	
Delay (s)					26.7		56.3	20.9			53.9	
Level of Service					C		E	C			D	
Approach Delay (s)		0.0			26.7			33.9			53.9	
Approach LOS		A			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1200	90	0	0	0	0	800	420	130	320	0
Future Volume (vph)	110	1200	90	0	0	0	0	800	420	130	320	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5062	1532					4775		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5062	1532					4775		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1304	98	0	0	0	0	870	457	141	348	0
RTOR Reduction (vph)	0	0	59	0	0	0	0	92	0	0	0	0
Lane Group Flow (vph)	0	1424	39	0	0	0	0	1235	0	141	348	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		35.1	35.1					25.1		15.6	45.1	
Effective Green, g (s)		36.0	36.0					25.1		16.0	45.1	
Actuated g/C Ratio		0.40	0.40					0.28		0.18	0.50	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2024	612					1331		314	2548	
v/s Ratio Prot								c0.26		c0.08	0.07	
v/s Ratio Perm		0.28	0.03									
v/c Ratio		0.70	0.06					0.93		0.45	0.14	
Uniform Delay, d1		22.5	16.6					31.6		33.1	12.0	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		2.1	0.2					12.6		4.6	0.1	
Delay (s)		24.6	16.8					44.2		37.6	12.1	
Level of Service		C	B					D		D	B	
Approach Delay (s)		24.1			0.0			44.2			19.5	
Approach LOS		C			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

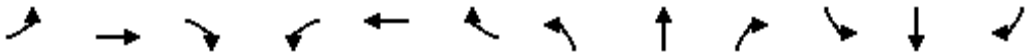
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1430	760	500	1490	460	260
Future Volume (vph)	1430	760	500	1490	460	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1569	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1569	3433	3539	3433	1418
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1554	826	543	1620	500	283
RTOR Reduction (vph)	0	3	0	0	0	217
Lane Group Flow (vph)	1554	823	543	1620	500	66
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	40.6	60.1	15.8	61.6	19.5	19.5
Effective Green, g (s)	42.8	64.5	15.7	63.0	21.7	21.7
Actuated g/C Ratio	0.46	0.70	0.17	0.68	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1633	1159	581	2405	803	331
v/s Ratio Prot	c0.44	c0.17	c0.16	0.46	0.15	
v/s Ratio Perm		0.36				0.05
v/c Ratio	0.95	0.71	0.93	0.67	0.62	0.20
Uniform Delay, d1	24.0	8.5	38.0	8.8	31.8	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.4	1.7	22.1	1.5	1.1	0.1
Delay (s)	37.4	10.2	60.1	10.3	32.9	28.6
Level of Service	D	B	E	B	C	C
Approach Delay (s)	27.9			22.8	31.4	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	92.7	Sum of lost time (s)	12.5
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

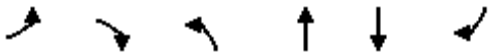
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1080	330	360	350	0	0	0	0	390	0	1180
Future Volume (vph)	0	1080	330	360	350	0	0	0	0	390	0	1180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1174	359	391	380	0	0	0	0	424	0	1283
RTOR Reduction (vph)	0	0	229	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1174	130	391	380	0	0	0	0	424	0	1283
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		26.2	26.2	13.6	44.0					21.4		75.0
Effective Green, g (s)		27.2	27.2	13.8	45.0					22.0		75.0
Actuated g/C Ratio		0.36	0.36	0.18	0.60					0.29		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1283	565	631	2123					519		1583
v/s Ratio Prot		0.33		0.11	0.11					0.24		
v/s Ratio Perm			0.08									c0.81
v/c Ratio		0.92	0.23	0.62	0.18					0.82		0.81
Uniform Delay, d1		22.8	16.6	28.2	6.7					24.6		0.0
Progression Factor		1.00	1.00	0.87	1.39					1.00		1.00
Incremental Delay, d2		11.6	1.0	0.7	0.1					9.2		4.6
Delay (s)		34.4	17.6	25.1	9.4					33.8		4.6
Level of Service		C	B	C	A					C		A
Approach Delay (s)		30.5			17.4			0.0			11.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	880	720	0	0	590	500	190	20	450	0	0	0
Future Volume (vph)	880	720	0	0	590	500	190	20	450	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (prot)	3433	3539			3272			1782	1583			
Flt Permitted	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (perm)	3433	3539			3272			1782	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	957	783	0	0	641	543	207	22	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	184	0	0	0	231	0	0	0
Lane Group Flow (vph)	957	783	0	0	1000	0	0	229	258	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	20.8	54.5			29.5			10.4	10.4			
Effective Green, g (s)	21.0	55.0			30.0			11.0	11.0			
Actuated g/C Ratio	0.28	0.73			0.40			0.15	0.15			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	961	2595			1308			261	232			
v/s Ratio Prot	c0.28	0.22			c0.31			0.13				
v/s Ratio Perm									c0.16			
v/c Ratio	1.00	0.30			0.76			0.88	1.11			
Uniform Delay, d1	27.0	3.4			19.4			31.3	32.0			
Progression Factor	1.38	0.64			1.00			1.00	1.00			
Incremental Delay, d2	21.9	0.2			4.3			25.8	92.1			
Delay (s)	59.2	2.4			23.7			57.1	124.1			
Level of Service	E	A			C			E	F			
Approach Delay (s)		33.7			23.7			102.7			0.0	
Approach LOS		C			C			F			A	

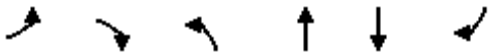
Intersection Summary			
HCM 2000 Control Delay	44.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	200	150	870	890	180
Future Volume (vph)	230	200	150	870	890	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1700		1770	3539	3450	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1700		1770	3539	3450	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	217	163	946	967	196
RTOR Reduction (vph)	26	0	0	0	11	0
Lane Group Flow (vph)	441	0	163	946	1152	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	37.9		16.0	83.1	62.6	
Effective Green, g (s)	37.9		16.0	83.1	62.6	
Actuated g/C Ratio	0.29		0.12	0.64	0.48	
Clearance Time (s)	4.5		4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	495		217	2262	1661	
v/s Ratio Prot	c0.26		c0.09	0.27	c0.33	
v/s Ratio Perm						
v/c Ratio	0.89		0.75	0.42	0.69	
Uniform Delay, d1	44.1		55.1	11.5	26.2	
Progression Factor	1.00		1.03	1.26	1.00	
Incremental Delay, d2	18.0		12.4	0.5	2.4	
Delay (s)	62.1		69.3	15.0	28.6	
Level of Service	E		E	B	C	
Approach Delay (s)	62.1			23.0	28.6	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

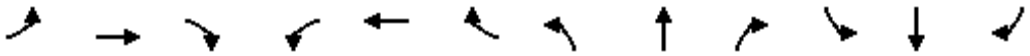
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	480	0	0	410	160
Future Volume (Veh/h)	0	480	0	0	410	160
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	522	0	0	446	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				897	1285	
pX, platoon unblocked						
vC, conflicting volume	533	310	620			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	533	310	620			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	24	100			
cM capacity (veh/h)	477	686	956			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	522	297	323
Volume Left	0	0	0
Volume Right	522	0	174
cSH	686	1700	1700
Volume to Capacity	0.76	0.17	0.19
Queue Length 95th (ft)	177	0	0
Control Delay (s)	25.0	0.0	0.0
Lane LOS	C		
Approach Delay (s)	25.0	0.0	
Approach LOS	C		

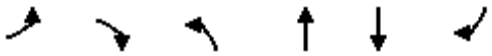
Intersection Summary			
Average Delay	11.4		
Intersection Capacity Utilization	52.8%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	30	310	350	340	0	0	0	0	50	820	70
Future Volume (vph)	0	30	310	350	340	0	0	0	0	50	820	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.88		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1634		1770	1863						3490	
Flt Permitted		1.00		0.46	1.00						1.00	
Satd. Flow (perm)		1634		858	1863						3490	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	33	337	380	370	0	0	0	0	54	891	76
RTOR Reduction (vph)	0	20	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	350	0	380	370	0	0	0	0	0	1013	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		31.1		31.1	31.1						25.4	
Effective Green, g (s)		31.1		31.1	31.1						25.4	
Actuated g/C Ratio		0.48		0.48	0.48						0.39	
Clearance Time (s)		4.0		4.0	4.0						4.0	
Vehicle Extension (s)		3.0		3.0	3.0						3.0	
Lane Grp Cap (vph)		787		413	898						1374	
v/s Ratio Prot		0.21			0.20							
v/s Ratio Perm				c0.44							0.29	
v/c Ratio		0.45		0.92	0.41						0.74	
Uniform Delay, d1		11.0		15.5	10.8						16.7	
Progression Factor		1.00		1.00	1.00						1.00	
Incremental Delay, d2		0.4		25.6	0.3						3.6	
Delay (s)		11.4		41.1	11.1						20.3	
Level of Service		B		D	B						C	
Approach Delay (s)		11.4			26.3			0.0			20.3	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	64.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

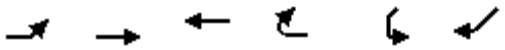
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	200	180	370	480	250
Future Volume (vph)	120	200	180	370	480	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.95	
Flt Protected	0.98			0.98	1.00	
Satd. Flow (prot)	1674			1833	1777	
Flt Permitted	0.98			0.48	1.00	
Satd. Flow (perm)	1674			897	1777	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	217	196	402	522	272
RTOR Reduction (vph)	89	0	0	0	25	0
Lane Group Flow (vph)	258	0	0	598	769	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	13.9			47.0	47.0	
Effective Green, g (s)	13.9			47.0	47.0	
Actuated g/C Ratio	0.20			0.68	0.68	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	337			611	1212	
v/s Ratio Prot	c0.15				0.43	
v/s Ratio Perm				c0.67		
v/c Ratio	0.77			0.98	0.63	
Uniform Delay, d1	26.0			10.5	6.1	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	10.0			31.6	2.5	
Delay (s)	36.0			42.0	8.7	
Level of Service	D			D	A	
Approach Delay (s)	36.0			42.0	8.7	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	68.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	60	1090	1200	70	160	240
Future Volume (vph)	60	1090	1200	70	160	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	0.99		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3510		1678	
Flt Permitted	0.13	1.00	1.00		0.98	
Satd. Flow (perm)	237	3539	3510		1678	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1185	1304	76	174	261
RTOR Reduction (vph)	0	0	7	0	27	0
Lane Group Flow (vph)	65	1185	1373	0	408	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)	31.5	31.5	31.5		22.1	
Effective Green, g (s)	31.5	31.5	31.5		22.1	
Actuated g/C Ratio	0.51	0.51	0.51		0.36	
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	121	1809	1794		602	
v/s Ratio Prot		0.33	c0.39		c0.24	
v/s Ratio Perm	0.27					
v/c Ratio	0.54	0.66	0.77		0.68	
Uniform Delay, d1	10.1	11.1	12.1		16.7	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.5	0.9	2.0		6.0	
Delay (s)	14.7	11.9	14.1		22.8	
Level of Service	B	B	B		C	
Approach Delay (s)		12.1	14.1		22.8	
Approach LOS		B	B		C	

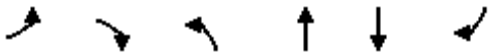
Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	20	80	60	110	280	160	510	370	210	520	150
Future Volume (vph)	110	20	80	60	110	280	160	510	370	210	520	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.95			0.92		1.00	0.94		1.00	0.97	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1722			1695		1770	3316		1770	3420	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1722			1695		1770	3316		1770	3420	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	22	87	65	120	304	174	554	402	228	565	163
RTOR Reduction (vph)	0	22	0	0	59	0	0	131	0	0	26	0
Lane Group Flow (vph)	0	207	0	0	430	0	174	825	0	228	702	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		14.7			25.5		12.8	26.4		13.9	27.5	
Effective Green, g (s)		14.7			25.5		12.8	26.4		13.9	27.5	
Actuated g/C Ratio		0.15			0.26		0.13	0.27		0.14	0.28	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		256			438		230	888		249	954	
v/s Ratio Prot		c0.12			c0.25		0.10	c0.25		c0.13	0.21	
v/s Ratio Perm												
v/c Ratio		0.81			0.98		0.76	0.93		0.92	0.74	
Uniform Delay, d1		40.5			36.3		41.3	35.1		41.7	32.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		16.8			38.2		13.2	15.6		35.0	3.0	
Delay (s)		57.4			74.5		54.6	50.7		76.7	35.2	
Level of Service		E			E		D	D		E	D	
Approach Delay (s)		57.4			74.5			51.3			45.1	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	98.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

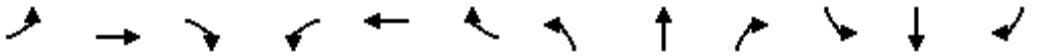
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	180	260	200	140	270	320
Future Volume (vph)	180	260	200	140	270	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.93	
Flt Protected	0.98			0.97	1.00	
Satd. Flow (prot)	1680			1810	1726	
Flt Permitted	0.98			0.40	1.00	
Satd. Flow (perm)	1680			754	1726	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	283	217	152	293	348
RTOR Reduction (vph)	82	0	0	0	63	0
Lane Group Flow (vph)	397	0	0	369	578	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	17.4			38.1	38.1	
Effective Green, g (s)	17.4			38.1	38.1	
Actuated g/C Ratio	0.27			0.60	0.60	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	460			452	1035	
v/s Ratio Prot	c0.24				0.33	
v/s Ratio Perm				c0.49		
v/c Ratio	0.86			0.82	0.56	
Uniform Delay, d1	21.9			10.0	7.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	15.3			15.0	2.2	
Delay (s)	37.2			24.9	9.8	
Level of Service	D			C	A	
Approach Delay (s)	37.2			24.9	9.8	
Approach LOS	D			C	A	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	63.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

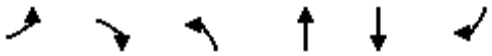
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	200	100	100	100	80	100	2790	240	200	2200	50
Future Volume (vph)	100	200	100	100	100	80	100	2790	240	200	2200	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.93		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3362		1770	3304		1770	5025		1770	5068	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3362		1770	3304		1770	5025		1770	5068	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	217	109	109	109	87	109	3033	261	217	2391	54
RTOR Reduction (vph)	0	41	0	0	78	0	0	7	0	0	1	0
Lane Group Flow (vph)	109	285	0	109	118	0	109	3287	0	217	2444	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Effective Green, g (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Actuated g/C Ratio	0.06	0.11		0.06	0.11		0.08	0.63		0.09	0.64	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	358		106	352		149	3182		165	3253	
v/s Ratio Prot	c0.06	c0.08		0.06	0.04		0.06	c0.65		c0.12	0.48	
v/s Ratio Perm												
v/c Ratio	1.03	0.80		1.03	0.34		0.73	1.03		1.32	0.75	
Uniform Delay, d1	70.5	65.4		70.5	62.1		67.0	27.5		68.0	18.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	95.2	16.6		95.2	2.6		16.8	25.3		178.1	1.6	
Delay (s)	165.7	82.0		165.7	64.6		83.8	52.8		246.1	20.2	
Level of Service	F	F		F	E		F	D		F	C	
Approach Delay (s)		103.0			100.8			53.8			38.6	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

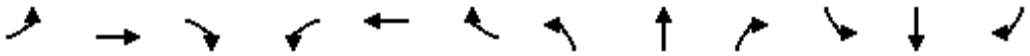
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	0	470	710	0	0
Future Volume (vph)	100	0	470	710	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	511	772	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	109	0	511	772	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.06			0.22		
v/s Ratio Perm			c0.29			
v/c Ratio	0.15		0.72	0.55		
Uniform Delay, d1	7.7		10.1	9.2		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		6.3	1.5		
Delay (s)	8.1		16.4	10.7		
Level of Service	A		B	B		
Approach Delay (s)	8.1			13.0	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Peak Hour Intersection Calculation Worksheets - Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1572	3433	5085	1544	3433	1863	1564	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1572	3433	5085	1544	3433	1863	1564	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	159	0	0	93	0	0	47	0	17	0
Lane Group Flow (vph)	65	1239	276	174	1446	103	522	435	116	630	417	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.0	26.6	47.9	4.9	27.4	49.6	21.3	28.8	33.7	22.2	27.9	
Effective Green, g (s)	4.4	27.9	50.5	5.3	28.8	52.4	21.7	29.6	35.3	21.2	29.1	
Actuated g/C Ratio	0.04	0.28	0.50	0.05	0.29	0.52	0.22	0.30	0.35	0.21	0.29	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	77	1418	842	181	1464	833	744	551	608	727	515	
v/s Ratio Prot	0.04	0.24	0.07	c0.05	c0.28	0.03	0.15	0.23	0.01	c0.18	c0.24	
v/s Ratio Perm			0.10			0.04			0.06			
v/c Ratio	0.84	0.87	0.33	0.96	0.99	0.12	0.70	0.79	0.19	0.87	0.81	
Uniform Delay, d1	47.5	34.4	14.7	47.2	35.4	12.1	36.2	32.3	22.4	38.0	32.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	51.8	7.7	0.1	55.1	20.8	0.0	2.5	7.7	0.1	10.3	8.6	
Delay (s)	99.3	42.1	14.8	102.3	56.2	12.1	38.6	40.1	22.5	48.3	41.5	
Level of Service	F	D	B	F	E	B	D	D	C	D	D	
Approach Delay (s)		37.4			55.9			36.8			45.5	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	44.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

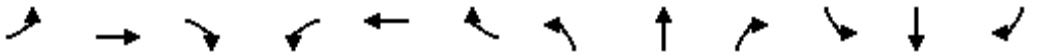
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	550	1190	370	0	0	660
Future Volume (vph)	550	1190	370	0	0	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	1293	402	0	0	717
RTOR Reduction (vph)	0	547	0	0	0	0
Lane Group Flow (vph)	598	746	402	0	0	717
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	9.9	9.9	12.2			12.2
Effective Green, g (s)	9.9	9.9	12.2			12.2
Actuated g/C Ratio	0.27	0.27	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	941	990	1196			1196
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.21				
v/c Ratio	0.64	0.75	0.34			0.60
Uniform Delay, d1	11.5	12.0	8.9			9.9
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	1.0	2.9	0.1			0.5
Delay (s)	12.6	14.9	9.0			10.5
Level of Service	B	B	A			B
Approach Delay (s)	14.2		9.0			10.5
Approach LOS	B		A			B

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	36.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

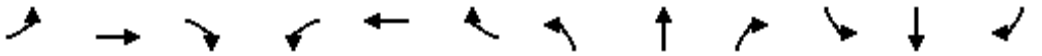
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	300	280	30	140	300	180	460	50	440	520	250
Future Volume (vph)	450	300	280	30	140	300	180	460	50	440	520	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1565	1770	3539	1569	3433	3482		3433	3539	1565
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1565	1770	3539	1569	3433	3482		3433	3539	1565
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	326	304	33	152	326	196	500	54	478	565	272
RTOR Reduction (vph)	0	0	99	0	0	86	0	9	0	0	0	158
Lane Group Flow (vph)	489	326	205	33	152	240	196	545	0	478	565	114
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	10.4	27.2	34.5	1.8	18.5	28.9	7.3	18.0		10.4	21.1	31.5
Effective Green, g (s)	11.3	28.1	36.3	2.8	19.5	28.9	8.2	18.9		11.3	22.0	31.5
Actuated g/C Ratio	0.15	0.37	0.48	0.04	0.26	0.38	0.11	0.25		0.15	0.29	0.42
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	515	696	755	65	917	602	374	875		515	1035	655
v/s Ratio Prot	c0.14	c0.18	0.03	0.02	0.04	0.06	0.06	c0.16		c0.14	c0.16	0.02
v/s Ratio Perm			0.10			0.10						0.05
v/c Ratio	0.95	0.47	0.27	0.51	0.17	0.40	0.52	0.62		0.93	0.55	0.17
Uniform Delay, d1	31.7	17.9	11.6	35.5	21.6	16.8	31.7	25.0		31.5	22.4	13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	27.1	0.2	0.2	6.1	0.4	0.4	1.3	1.4		23.0	1.2	0.1
Delay (s)	58.8	18.1	11.8	41.6	21.9	17.3	33.0	26.4		54.6	23.6	13.8
Level of Service	E	B	B	D	C	B	C	C		D	C	B
Approach Delay (s)		34.1			20.2			28.1			32.8	
Approach LOS		C			C			C			C	

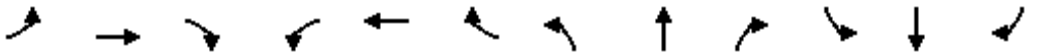
Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	75.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1470	180	340	1820	300	120	330	210	230	280	180
Future Volume (vph)	220	1470	180	340	1820	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6276		3433	6408	1547	1770	3539	1545	3433	3539	1555
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6276		3433	6408	1547	1770	3539	1545	3433	3539	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1598	196	370	1978	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	20	0	0	0	98	0	0	81	0	0	84
Lane Group Flow (vph)	239	1774	0	370	1978	228	130	359	147	250	304	112
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.1	33.5		10.6	36.1	44.5	7.6	23.7	34.3	8.4	24.5	32.6
Effective Green, g (s)	8.5	34.6		11.0	37.1	44.5	8.0	24.6	36.1	8.8	25.4	34.4
Actuated g/C Ratio	0.09	0.36		0.12	0.39	0.47	0.08	0.26	0.38	0.09	0.27	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	307	2285		397	2502	724	149	916	644	318	946	563
v/s Ratio Prot	0.07	c0.28		0.11	c0.31	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.12			0.07			0.05
v/c Ratio	0.78	0.78		0.93	0.79	0.31	0.87	0.39	0.23	0.79	0.32	0.20
Uniform Delay, d1	42.3	26.8		41.6	25.5	15.7	43.0	29.0	20.0	42.2	27.9	20.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.8	2.7		28.2	2.6	0.1	38.1	0.1	0.1	11.2	0.1	0.1
Delay (s)	53.1	29.4		69.9	28.2	15.8	81.1	29.1	20.1	53.4	28.0	20.9
Level of Service	D	C		E	C	B	F	C	C	D	C	C
Approach Delay (s)		32.2			32.4			35.7			34.6	
Approach LOS		C			C			D			C	

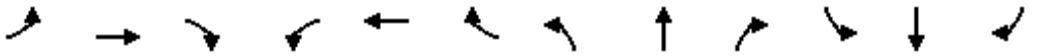
Intersection Summary			
HCM 2000 Control Delay	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	95.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	190	530	510	0	0	0	0	300	380	420
Future Volume (vph)	0	330	190	530	510	0	0	0	0	300	380	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3358	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3358	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	359	207	576	554	0	0	0	0	326	413	457
RTOR Reduction (vph)	0	0	84	0	0	0	0	0	0	0	0	338
Lane Group Flow (vph)	0	359	123	576	554	0	0	0	0	228	511	119
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		29.9	29.9	15.9	50.2					20.0	20.0	20.0
Effective Green, g (s)		30.8	30.8	16.3	51.1					20.9	20.9	20.9
Actuated g/C Ratio		0.39	0.39	0.20	0.64					0.26	0.26	0.26
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1362	609	699	2260					420	877	728
v/s Ratio Prot		c0.10		c0.17	0.16							
v/s Ratio Perm			0.08							0.14	0.15	0.04
v/c Ratio		0.26	0.20	0.82	0.25					0.54	0.58	0.16
Uniform Delay, d1		16.8	16.4	30.5	6.2					25.4	25.7	22.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	7.5	0.3					0.8	0.6	0.0
Delay (s)		17.3	17.2	37.9	6.4					26.2	26.4	22.8
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.3			22.5			0.0			25.0	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

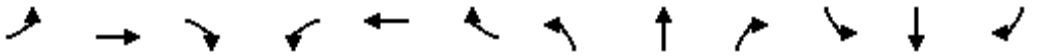


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	690	90	40	500	0	0	0	0	540	330	520
Future Volume (vph)	0	690	90	40	500	0	0	0	0	540	330	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		4997		1770	3539						4661	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		4997		1770	3539						4661	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	750	98	43	543	0	0	0	0	587	359	565
RTOR Reduction (vph)	0	25	0	0	0	0	0	0	0	0	0	114
Lane Group Flow (vph)	0	823	0	43	543	0	0	0	0	0	946	451
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.1		2.4	27.2						25.8	25.8
Effective Green, g (s)		20.3		2.8	27.1						24.9	27.2
Actuated g/C Ratio		0.31		0.04	0.42						0.38	0.42
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1560		76	1475						1785	569
v/s Ratio Prot		c0.16		0.02	c0.15							
v/s Ratio Perm											0.20	c0.33
v/c Ratio		0.53		0.57	0.37						0.91dl	0.79
Uniform Delay, d1		18.4		30.5	13.1						15.5	16.4
Progression Factor		1.00		1.35	0.83						1.00	1.00
Incremental Delay, d2		1.3		5.2	0.7						0.1	7.0
Delay (s)		19.7		46.4	11.4						15.7	23.4
Level of Service		B		D	B						B	C
Approach Delay (s)		19.7			14.0			0.0			18.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		

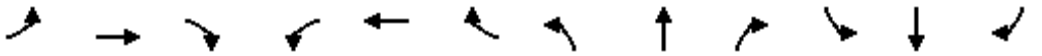
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



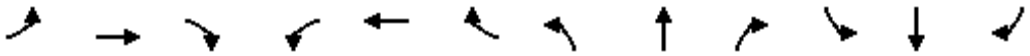
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1310	200	120	720	130
Future Volume (vph)	20	30	30	440	110	160	40	1310	200	120	720	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1765	1697		1770	4984		3433	4952	
Flt Permitted	0.49	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	904	1710		1326	1697		1770	4984		3433	4952	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1424	217	130	783	141
RTOR Reduction (vph)	0	20	0	0	69	0	0	24	0	0	30	0
Lane Group Flow (vph)	22	46	0	478	225	0	43	1617	0	130	894	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	31.1	31.1		30.4	30.4		3.5	29.6		4.3	30.2	
Effective Green, g (s)	31.1	31.1		30.8	30.8		3.5	31.0		4.8	32.3	
Actuated g/C Ratio	0.39	0.39		0.39	0.39		0.04	0.39		0.06	0.41	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	356	674		517	662		78	1958		208	2027	
v/s Ratio Prot		0.03			0.13		0.02	c0.32		c0.04	0.18	
v/s Ratio Perm	0.02			c0.36								
v/c Ratio	0.06	0.07		0.92	0.34		0.55	0.83		0.62	0.44	
Uniform Delay, d1	14.8	14.9		22.9	16.9		36.9	21.5		36.2	16.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		22.4	0.3		4.7	4.1		5.7	0.7	
Delay (s)	14.9	14.9		45.4	17.2		41.6	25.7		41.9	17.5	
Level of Service	B	B		D	B		D	C		D	B	
Approach Delay (s)		14.9			34.6			26.1			20.5	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	12.3
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



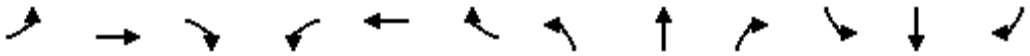
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	660	570	150	140	720	160	300	690	110	100	700	240
Future Volume (vph)	660	570	150	140	720	160	300	690	110	100	700	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.94	0.91		0.97	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	4990	4927		3433	4933		3433	5085	1562	1770	5085	1565
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	4990	4927		3433	4933		3433	5085	1562	1770	5085	1565
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	717	620	163	152	783	174	326	750	120	109	761	261
RTOR Reduction (vph)	0	56	0	0	43	0	0	0	86	0	0	52
Lane Group Flow (vph)	717	727	0	152	914	0	326	750	34	109	761	209
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	11.7	28.3		7.2	23.2		7.6	23.4	23.4	4.6	20.3	32.0
Effective Green, g (s)	12.1	29.5		7.6	25.0		8.0	24.3	23.4	5.0	21.3	32.8
Actuated g/C Ratio	0.15	0.36		0.09	0.30		0.10	0.29	0.28	0.06	0.26	0.40
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	732	1763		316	1496		333	1499	443	107	1314	622
v/s Ratio Prot	c0.14	0.15		0.04	c0.19		c0.09	c0.15		0.06	c0.15	0.05
v/s Ratio Perm									0.02			0.08
v/c Ratio	0.98	0.41		0.48	0.61		0.98	0.50	0.08	1.02	0.58	0.34
Uniform Delay, d1	35.0	19.9		35.5	24.5		37.1	24.0	21.6	38.7	26.6	17.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.7	0.2		0.4	0.7		43.0	1.2	0.3	92.1	1.9	0.1
Delay (s)	62.8	20.1		35.9	25.2		80.1	25.2	21.9	130.8	28.5	17.3
Level of Service	E	C		D	C		F	C	C	F	C	B
Approach Delay (s)		40.5			26.7			39.8			35.8	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	82.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	230	70	20	140	220	50	180	250	20	20	30
Future Volume (vph)	140	230	70	20	140	220	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.91			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1787		1770	1692			1690			1728	
Flt Permitted	0.95	1.00		0.95	1.00			0.96			0.81	
Satd. Flow (perm)	1770	1787		1770	1692			1633			1412	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	239	54	196	272	22	22	33
RTOR Reduction (vph)	0	13	0	0	69	0	0	53	0	0	23	0
Lane Group Flow (vph)	152	313	0	22	322	0	0	469	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.5	36.4		1.5	26.0			22.4			22.4	
Effective Green, g (s)	11.9	37.3		2.4	26.9			23.3			23.3	
Actuated g/C Ratio	0.16	0.50		0.03	0.36			0.31			0.31	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	284	899		57	614			513			443	
v/s Ratio Prot	c0.09	0.17		0.01	c0.19							
v/s Ratio Perm								c0.29			0.04	
v/c Ratio	0.54	0.35		0.39	0.52			0.91			0.12	
Uniform Delay, d1	28.6	11.1		35.1	18.6			24.4			18.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.1		4.3	3.2			20.4			0.0	
Delay (s)	29.5	12.1		39.4	21.8			44.8			18.2	
Level of Service	C	B		D	C			D			B	
Approach Delay (s)		17.7			22.7			44.8			18.2	
Approach LOS		B			C			D			B	

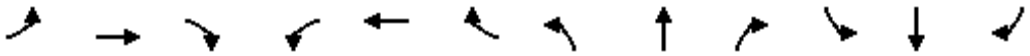
Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	74.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	650	80	170	1240	70	60	130	100	260	380	250
Future Volume (vph)	180	650	80	170	1240	70	60	130	100	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4978		1770	5033		1770	3539	1555	3433	3278	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4978		1770	5033		1770	3539	1555	3433	3278	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	707	87	185	1348	76	65	141	109	283	413	272
RTOR Reduction (vph)	0	18	0	0	6	0	0	0	59	0	143	0
Lane Group Flow (vph)	196	776	0	185	1418	0	65	141	50	283	542	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	7.9	24.3		13.0	28.9		6.1	17.6	30.6	11.4	23.0	
Effective Green, g (s)	8.3	25.2		13.4	30.3		6.5	18.6	31.4	11.8	23.9	
Actuated g/C Ratio	0.10	0.30		0.16	0.36		0.08	0.22	0.37	0.14	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	335	1475		279	1794		135	774	574	476	921	
v/s Ratio Prot	0.06	0.16		c0.10	c0.28		c0.04	0.04	0.01	0.08	c0.17	
v/s Ratio Perm									0.02			
v/c Ratio	0.59	0.53		0.66	0.79		0.48	0.18	0.09	0.59	0.59	
Uniform Delay, d1	36.7	24.9		33.7	24.5		37.6	27.0	17.5	34.4	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.3		4.5	3.6		1.0	0.2	0.0	1.3	0.8	
Delay (s)	38.4	26.3		38.2	28.1		38.6	27.2	17.5	35.7	27.1	
Level of Service	D	C		D	C		D	C	B	D	C	
Approach Delay (s)		28.7			29.3			26.2			29.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	4.0	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	5085	1515	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	5085	1515	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1815	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	139	0	0	247	0	0	50	0	5	0
Lane Group Flow (vph)	98	1815	470	130	1261	144	500	380	146	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.3	41.9	57.2	5.7	39.2	39.2	15.3	29.9	35.6	15.0	27.8	
Effective Green, g (s)	8.7	43.2	59.8	6.1	40.6	40.6	15.7	30.7	37.2	14.0	29.0	
Actuated g/C Ratio	0.08	0.39	0.54	0.06	0.37	0.37	0.14	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	5.4	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	4.4	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	139	1997	852	190	1876	559	489	519	527	436	480	
v/s Ratio Prot	c0.06	c0.36	0.08	0.04	0.25		c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.22			0.10			0.08			
v/c Ratio	0.71	0.91	0.55	0.68	0.67	0.26	1.02	0.73	0.28	0.75	0.67	
Uniform Delay, d1	49.4	31.5	16.4	51.0	29.1	24.2	47.1	35.9	26.6	46.3	36.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	7.6	0.4	7.9	1.9	1.1	46.5	5.6	0.1	6.0	2.7	
Delay (s)	61.8	39.1	16.8	58.9	31.1	25.3	93.7	41.5	26.7	52.3	38.9	
Level of Service	E	D	B	E	C	C	F	D	C	D	D	
Approach Delay (s)		34.6			31.8			63.0			45.6	
Approach LOS		C			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

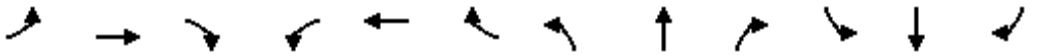
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1790	930	0	0	880
Future Volume (vph)	830	1790	930	0	0	880
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1946	1011	0	0	957
RTOR Reduction (vph)	0	13	0	0	0	0
Lane Group Flow (vph)	902	1933	1011	0	0	957
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	48.0	48.0	26.6			26.6
Effective Green, g (s)	48.0	48.0	26.6			26.6
Actuated g/C Ratio	0.54	0.54	0.30			0.30
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1859	1955	1062			1062
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.54				
v/c Ratio	0.49	0.99	0.95			0.90
Uniform Delay, d1	12.6	20.0	30.4			29.7
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	17.5	17.1			10.3
Delay (s)	12.7	37.5	47.5			40.0
Level of Service	B	D	D			D
Approach Delay (s)	29.6		47.5			40.0
Approach LOS	C		D			D

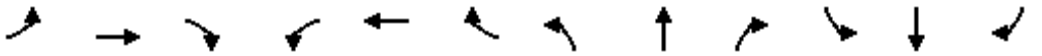
Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	88.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	430	320	80	540	700	420	510	120	400	710	400
Future Volume (vph)	380	430	320	80	540	700	420	510	120	400	710	400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1567	1770	3539	1567	3433	3438		3433	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1567	1770	3539	1567	3433	3438		3433	3539	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	467	348	87	587	761	457	554	130	435	772	435
RTOR Reduction (vph)	0	0	56	0	0	54	0	18	0	0	0	63
Lane Group Flow (vph)	413	467	292	87	587	707	457	666	0	435	772	372
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	13.3	37.0	55.1	8.0	31.7	58.4	18.1	28.6		26.7	37.2	50.5
Effective Green, g (s)	14.2	37.9	56.9	9.0	32.7	58.4	19.0	29.5		27.6	38.1	50.5
Actuated g/C Ratio	0.12	0.32	0.47	0.08	0.27	0.49	0.16	0.25		0.23	0.32	0.42
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	406	588	795	132	964	826	543	845		789	1123	657
v/s Ratio Prot	c0.12	0.25	0.06	0.05	0.17	c0.19	0.13	c0.19		0.13	0.22	0.06
v/s Ratio Perm			0.13			0.26						0.18
v/c Ratio	1.02	0.79	0.37	0.66	0.61	0.86	0.84	0.79		0.55	0.69	0.57
Uniform Delay, d1	52.9	37.5	20.1	54.0	38.1	27.1	49.0	42.3		40.7	35.8	26.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	49.1	10.6	0.3	22.5	2.9	9.7	11.4	4.9		1.6	2.5	0.7
Delay (s)	102.0	48.1	20.4	76.5	40.9	36.7	60.4	47.3		42.4	38.2	27.1
Level of Service	F	D	C	E	D	D	E	D		D	D	C
Approach Delay (s)		58.4			40.9			52.5			36.4	
Approach LOS		E			D			D			D	

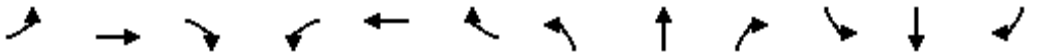
Intersection Summary			
HCM 2000 Control Delay	45.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	210	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	210	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.93	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6240		3433	6408	1475	1770	3539	1526	3433	3539	1522
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6240		3433	6408	1475	1770	3539	1526	3433	3539	1522
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2033	228	554	1685	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	14	0	0	0	44	0	0	56	0	0	59
Lane Group Flow (vph)	413	2247	0	554	1685	380	250	696	390	380	576	256
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.3	48.4		20.6	49.8	66.6	18.6	30.4	51.0	16.8	28.6	47.9
Effective Green, g (s)	19.7	49.5		21.0	50.8	66.6	19.0	31.3	52.8	17.2	29.5	49.7
Actuated g/C Ratio	0.15	0.37		0.16	0.38	0.49	0.14	0.23	0.39	0.13	0.22	0.37
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	500	2288		534	2411	727	249	820	636	437	773	560
v/s Ratio Prot	0.12	c0.36		c0.16	0.26	0.07	c0.14	c0.20	0.10	c0.11	0.16	0.07
v/s Ratio Perm						0.19			0.16			0.10
v/c Ratio	0.83	0.98		1.04	0.70	0.52	1.00	0.85	0.61	0.87	0.75	0.46
Uniform Delay, d1	56.0	42.3		57.0	35.6	23.4	58.0	49.6	32.9	57.8	49.2	32.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.2	15.1		49.0	1.0	0.3	58.1	7.9	1.2	16.1	3.4	0.2
Delay (s)	66.2	57.4		106.0	36.6	23.7	116.1	57.5	34.2	73.9	52.7	32.6
Level of Service	E	E		F	D	C	F	E	C	E	D	C
Approach Delay (s)		58.7			49.0			60.5			54.1	
Approach LOS		E			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	55.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

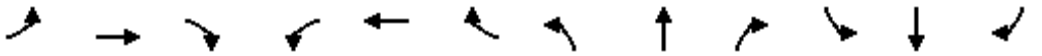
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	700	270	420	460	0	0	0	0	430	580	1080
Future Volume (vph)	0	700	270	420	460	0	0	0	0	430	580	1080
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	761	293	457	500	0	0	0	0	467	630	1174
RTOR Reduction (vph)	0	0	63	0	0	0	0	0	0	0	0	380
Lane Group Flow (vph)	0	761	230	457	500	0	0	0	0	467	630	794
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		25.0	25.0	13.1	42.5					27.7	27.7	27.7
Effective Green, g (s)		25.9	25.9	13.5	43.4					28.6	28.6	28.6
Actuated g/C Ratio		0.32	0.32	0.17	0.54					0.36	0.36	0.36
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1145	512	579	1919					575	1211	996
v/s Ratio Prot		c0.22		c0.13	0.14							
v/s Ratio Perm			0.15							c0.29	0.19	0.29
v/c Ratio		0.66	0.45	0.79	0.26					0.81	0.52	0.80
Uniform Delay, d1		23.3	21.4	31.9	9.8					23.3	20.3	23.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.1	2.8	6.5	0.3					8.1	0.2	4.2
Delay (s)		26.4	24.2	38.4	10.1					31.4	20.5	27.3
Level of Service		C	C	D	B					C	C	C
Approach Delay (s)		25.8			23.6			0.0			26.3	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

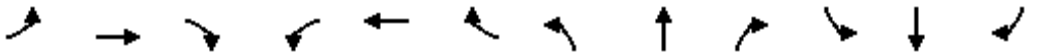


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1110	370	50	700	0	0	0	0	730	1100	660
Future Volume (vph)	0	1110	370	50	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		4895		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		4895		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1207	402	54	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	0	0	0	47
Lane Group Flow (vph)	0	1577	0	54	761	0	0	0	0	0	1989	670
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		38.5		3.4	44.6						53.4	53.4
Effective Green, g (s)		36.7		3.8	44.5						52.5	54.8
Actuated g/C Ratio		0.33		0.03	0.40						0.48	0.50
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1633		61	1431						2248	678
v/s Ratio Prot		c0.32		c0.03	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		0.97		0.89	0.53						0.99dl	0.99
Uniform Delay, d1		36.0		52.9	24.8						26.0	27.3
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		15.5		73.6	1.4						4.4	31.1
Delay (s)		51.5		126.5	26.3						30.5	58.4
Level of Service		D		F	C						C	E
Approach Delay (s)		51.5			32.9			0.0			37.9	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

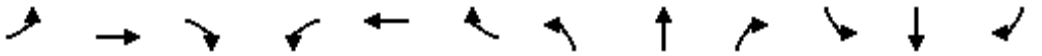
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



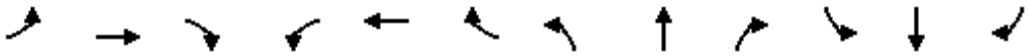
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	220	30	1570	340	220	500	20
Future Volume (vph)	40	150	30	380	40	220	30	1570	340	220	500	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1626		1770	4949		3433	5050	
Flt Permitted	0.47	1.00		0.56	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	869	1809		1045	1626		1770	4949		3433	5050	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	239	33	1707	370	239	543	22
RTOR Reduction (vph)	0	6	0	0	87	0	0	28	0	0	4	0
Lane Group Flow (vph)	43	190	0	413	195	0	33	2049	0	239	561	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	47.0	47.0		46.3	46.3		3.6	50.2		11.0	56.9	
Effective Green, g (s)	47.0	47.0		46.7	46.7		3.6	51.6		8.8	59.0	
Actuated g/C Ratio	0.39	0.39		0.38	0.38		0.03	0.42		0.07	0.49	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	335	699		401	624		52	2100		248	2450	
v/s Ratio Prot		0.10			0.12		0.02	c0.41		c0.07	0.11	
v/s Ratio Perm	0.05			c0.40								
v/c Ratio	0.13	0.27		1.03	0.31		0.63	0.98		0.96	0.23	
Uniform Delay, d1	24.1	25.6		37.4	26.2		58.3	34.4		56.2	18.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		52.8	0.3		17.1	14.7		46.5	0.2	
Delay (s)	24.1	25.6		90.3	26.5		75.4	49.1		102.7	18.3	
Level of Service	C	C		F	C		E	D		F	B	
Approach Delay (s)		25.4			64.4			49.5			43.4	
Approach LOS		C			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	49.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



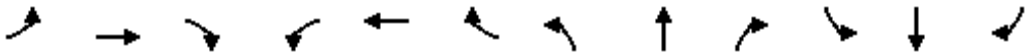
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	1070	300	250	950	160	460	1050	240	170	670	300
Future Volume (vph)	620	1070	300	250	950	160	460	1050	240	170	670	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.94	0.91		0.97	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	4990	4918		3433	4964		3433	5085	1562	1770	5085	1562
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	4990	4918		3433	4964		3433	5085	1562	1770	5085	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	1163	326	272	1033	174	500	1141	261	185	728	326
RTOR Reduction (vph)	0	46	0	0	21	0	0	0	181	0	0	71
Lane Group Flow (vph)	674	1443	0	272	1186	0	500	1141	80	185	728	255
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	15.0	34.8		10.8	30.0		18.2	32.7	32.7	11.8	26.2	41.2
Effective Green, g (s)	15.4	36.0		11.2	31.8		18.6	33.6	32.7	12.2	27.2	42.0
Actuated g/C Ratio	0.14	0.33		0.10	0.29		0.17	0.31	0.30	0.11	0.25	0.39
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	705	1624		352	1448		585	1567	468	198	1268	601
v/s Ratio Prot	c0.14	c0.29		0.08	0.24		c0.15	c0.22		0.10	0.14	0.06
v/s Ratio Perm									0.05			0.10
v/c Ratio	0.96	0.89		0.77	0.82		0.85	0.73	0.17	0.93	0.57	0.42
Uniform Delay, d1	46.5	34.6		47.7	35.9		43.9	33.6	28.2	48.0	35.8	24.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	23.2	6.5		9.2	3.7		11.3	3.0	0.8	44.9	1.9	0.2
Delay (s)	69.7	41.1		56.9	39.6		55.2	36.6	29.0	92.9	37.7	24.8
Level of Service	E	D		E	D		E	D	C	F	D	C
Approach Delay (s)		50.0			42.8			40.4			42.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	44.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	109.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	170	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	170	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.93			0.95			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1800		1770	1714			1724			1696	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.84	
Satd. Flow (perm)	1770	1800		1770	1714			1537			1436	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	185	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	8	0	0	33	0	0	24	0	0	33	0
Lane Group Flow (vph)	630	394	0	22	315	0	0	303	0	0	54	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	31.9	54.3		1.5	23.5			18.8			18.8	
Effective Green, g (s)	32.3	55.2		2.4	24.4			19.7			19.7	
Actuated g/C Ratio	0.37	0.62		0.03	0.28			0.22			0.22	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	646	1123		48	473			342			320	
v/s Ratio Prot	c0.36	0.22		0.01	c0.18							
v/s Ratio Perm								c0.20			0.04	
v/c Ratio	0.98	0.35		0.46	0.67			0.89			0.17	
Uniform Delay, d1	27.7	8.0		42.4	28.4			33.3			27.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	28.9	0.9		6.8	7.2			22.3			0.1	
Delay (s)	56.5	8.8		49.2	35.6			55.6			27.8	
Level of Service	E	A		D	D			E			C	
Approach Delay (s)		38.0			36.4			55.6			27.8	
Approach LOS		D			D			E			C	

Intersection Summary			
HCM 2000 Control Delay	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

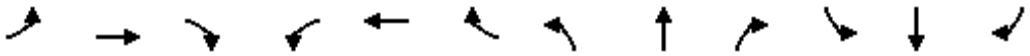


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	430	1400	140	210	840	220	90	430	240	310	220	160
Future Volume (vph)	430	1400	140	210	840	220	90	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.97	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4994		1770	4872		1770	3539	1539	3433	3210	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4994		1770	4872		1770	3539	1539	3433	3210	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	467	1522	152	228	913	239	98	467	261	337	239	174
RTOR Reduction (vph)	0	11	0	0	43	0	0	0	47	0	125	0
Lane Group Flow (vph)	467	1663	0	228	1109	0	98	467	214	337	288	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	16.6	34.4		15.1	32.4		8.5	24.1	39.2	12.7	28.4	
Effective Green, g (s)	17.0	35.3		15.5	33.8		8.9	25.1	40.0	13.1	29.3	
Actuated g/C Ratio	0.16	0.34		0.15	0.32		0.08	0.24	0.38	0.12	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	555	1678		261	1568		150	845	586	428	895	
v/s Ratio Prot	c0.14	c0.33		0.13	0.23		c0.06	c0.13	0.05	c0.10	0.09	
v/s Ratio Perm									0.09			
v/c Ratio	0.84	0.99		0.87	0.71		0.65	0.55	0.37	0.79	0.32	
Uniform Delay, d1	42.7	34.7		43.8	31.3		46.6	35.0	23.4	44.6	30.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.7	19.9		25.3	2.7		7.5	1.0	0.1	8.6	0.2	
Delay (s)	53.4	54.6		69.1	34.0		54.1	36.0	23.5	53.2	30.1	
Level of Service	D	D		E	C		D	D	C	D	C	
Approach Delay (s)		54.3			39.8			34.2			40.5	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	45.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

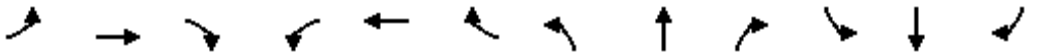
Peak Hour Intersection Calculation Worksheets - Partial Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	118	0	0	42	0	0	31	0	11	0
Lane Group Flow (vph)	65	1239	317	174	1446	154	522	435	132	630	423	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	5.6	41.0	65.1	20.5	55.8	83.2	24.1	33.6	54.1	27.4	35.1	
Effective Green, g (s)	6.0	42.3	67.7	20.9	57.2	86.0	24.5	34.4	55.7	26.4	36.3	
Actuated g/C Ratio	0.04	0.30	0.48	0.15	0.41	0.61	0.18	0.25	0.40	0.19	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	75	1536	794	512	1445	955	600	457	664	647	459	
v/s Ratio Prot	c0.04	0.24	0.07	0.05	c0.41	0.03	0.15	0.23	0.03	c0.18	c0.24	
v/s Ratio Perm			0.13			0.07			0.05			
v/c Ratio	0.87	0.81	0.40	0.34	1.00	0.16	0.87	0.95	0.20	0.97	0.92	
Uniform Delay, d1	66.6	45.1	23.1	53.4	41.4	11.6	56.2	52.0	27.6	56.5	50.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	58.9	4.6	0.1	0.1	23.8	0.0	12.4	30.2	0.1	28.6	23.6	
Delay (s)	125.5	49.7	23.3	53.5	65.2	11.6	68.6	82.2	27.6	85.0	74.1	
Level of Service	F	D	C	D	E	B	E	F	C	F	E	
Approach Delay (s)		45.9			58.3			67.9			80.5	
Approach LOS		D			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	60.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	4.0	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	3539	1515	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	3539	1515	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1815	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	139	0	0	194	0	0	50	0	5	0
Lane Group Flow (vph)	98	1815	470	130	1261	197	500	380	146	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.3	41.9	57.2	5.7	39.2	39.2	15.3	29.9	35.6	15.0	27.8	
Effective Green, g (s)	8.7	43.2	59.8	6.1	40.6	40.6	15.7	30.7	37.2	14.0	29.0	
Actuated g/C Ratio	0.08	0.39	0.54	0.06	0.37	0.37	0.14	0.28	0.34	0.13	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	5.4	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	4.4	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	139	1997	852	190	1306	559	489	519	527	436	480	
v/s Ratio Prot	c0.06	c0.36	0.08	0.04	c0.36		c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.22			0.13			0.08			
v/c Ratio	0.71	0.91	0.55	0.68	0.97	0.35	1.02	0.73	0.28	0.75	0.67	
Uniform Delay, d1	49.4	31.5	16.4	51.0	34.0	25.2	47.1	35.9	26.6	46.3	36.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.5	7.6	0.4	7.9	17.9	1.7	46.5	5.6	0.1	6.0	2.7	
Delay (s)	61.8	39.1	16.8	58.9	51.9	26.9	93.7	41.5	26.7	52.3	38.9	
Level of Service	E	D	B	E	D	C	F	D	C	D	D	
Approach Delay (s)		34.6			46.9			63.0			45.6	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	44.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix J
VMT Analysis Worksheet – Adopted Plan

2035a - Adopted GP - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	3,087	-	3,087	4,336,442
CHULA VISTA TOTAL	5,601,350	7,698	-	7,698	5,593,652
CORONADO TOTAL	466,994	1,344	-	1,344	465,650
DEL MAR TOTAL	101,376	60	-	60	101,316
EL CAJON TOTAL	2,442,502	3,987	-	3,987	2,438,515
ENCINITAS TOTAL	2,556,112	3,788	-	3,788	2,552,324
ESCONDIDO TOTAL	3,482,331	1,991	-	1,991	3,480,340
External TOTAL	526,485	428	-	428	526,057
IMPERIAL BEACH TOTAL	131,328	26	-	26	131,302
LA MESA TOTAL	2,089,142	6,352	-	6,352	2,082,790
LEMON GROVE TOTAL	959,602	1,726	-	1,726	957,876
NATIONAL CITY TOTAL	1,962,160	6,474	-	6,474	1,955,686
OCEANSIDE TOTAL	4,088,716	1,017	-	1,017	4,087,699
POWAY TOTAL	1,304,035	615	-	615	1,303,420
SAN DIEGO TOTAL	47,221,594	277,444	18,009	259,435	46,944,150
SAN MARCOS TOTAL	2,642,965	296	-	296	2,642,669
SANTEE TOTAL	1,347,654	846	-	846	1,346,808
SOLANA BEACH TOTAL	715,186	1,390	-	1,390	713,796
Unincorporated TOTAL	24,605,963	12,944	-	12,944	24,593,019
VISTA TOTAL	1,899,984	104	-	104	1,899,880
REGIONWIDE TOTAL	108,485,008	331,617	18,009	313,608	108,153,391

2035a - Adopted GP - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	13,654	-	13,654	4,325,875
CHULA VISTA TOTAL	5,601,350	32,436	-	32,436	5,568,914
CORONADO TOTAL	466,994	6,103	-	6,103	460,891
DEL MAR TOTAL	101,376	232	-	232	101,144
EL CAJON TOTAL	2,442,502	15,077	-	15,077	2,427,425
ENCINITAS TOTAL	2,556,112	16,034	-	16,034	2,540,078
ESCONDIDO TOTAL	3,482,331	8,349	-	8,349	3,473,982
External TOTAL	526,485	2,332	-	2,332	524,153
IMPERIAL BEACH TOTAL	131,328	293	-	293	131,035
LA MESA TOTAL	2,089,142	23,565	-	23,565	2,065,577
LEMON GROVE TOTAL	959,602	7,337	-	7,337	952,265
NATIONAL CITY TOTAL	1,962,160	27,348	-	27,348	1,934,812
OCEANSIDE TOTAL	4,088,716	5,026	-	5,026	4,083,690
POWAY TOTAL	1,304,035	2,464	-	2,464	1,301,571
SAN DIEGO TOTAL	47,221,594	1,228,648	204,475	1,024,173	45,992,946
SAN MARCOS TOTAL	2,642,965	1,173	-	1,173	2,641,792
SANTEE TOTAL	1,347,654	3,470	-	3,470	1,344,184
SOLANA BEACH TOTAL	715,186	5,763	-	5,763	709,423
Unincorporated TOTAL	24,605,963	59,614	-	59,614	24,546,349
VISTA TOTAL	1,899,984	657	-	657	1,899,327
REGIONWIDE TOTAL	108,485,008	832,025 2,291,600	204,475	1,255,100	107,025,433

Midway-Pacific Highway & Old Town Mobility Element Updates

Transportation Impact Study

Midway-Pacific Highway: Proposed Project with Sports Arena
Old Town: Proposed Project

Draft Report

December 2017

Prepared for:

The City of SAN DIEGO

Prepared by:

CHEN RYAN
3900 Fifth Avenue, Suite 210
San Diego, CA 92103

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1.0 Introduction

1.1 Purpose of the Report

This Transportation Impact Study (TIS) serves to identify and document potential traffic impacts related to the buildout of the Preferred Plan alternative of the Midway-Pacific Highway and Old Town Community Plan Updates, as well as to recommend improvements/mitigation measures for any identified roadway, intersection and/or freeway impacts. This technical report also provides vehicle miles traveled (VMT) for the Existing conditions and buildout of the Community Plan Updates and compares these to the projected 2035 VMT per person and average trip length for the entire Region.

Figure 1-1 displays the project study area for both the Midway-Pacific Highway Corridor and Old Town communities. This report identifies significant traffic impacts and potential mitigation measures associated with the implementation of the Preferred Plan for the Midway-Pacific Highway and Old Town Community Plan Updates and is intended to support the Environmental Impact Report (EIR).

Study Scenarios

Two (2) scenarios were evaluated for this Mobility Element Update transportation impact study, including:

- Existing Conditions – utilized to establish the existing base line traffic operations within the project study area.
- Preferred Plan – represents the preferred land use plan and proposed roadway network. Improvements resulting in the preferred plan roadway network were developed in collaboration between community members, City staff, and the project consultant team. Initially, the mobility issues and needs identified in the Existing Conditions Report were compared to the mobility issues and needs identified in other on-going or recent planning efforts. The Preferred Plan was modeled using the calibrated SANDAG Series 12 Regional Model. This customized model assumed buildout of the Preferred Plan Community Plan land uses and adopted Year 2035 land uses outside of the study communities for regional growth.

1.2 Report Organization

Following this introductory chapter, the report is organized into the following chapters:

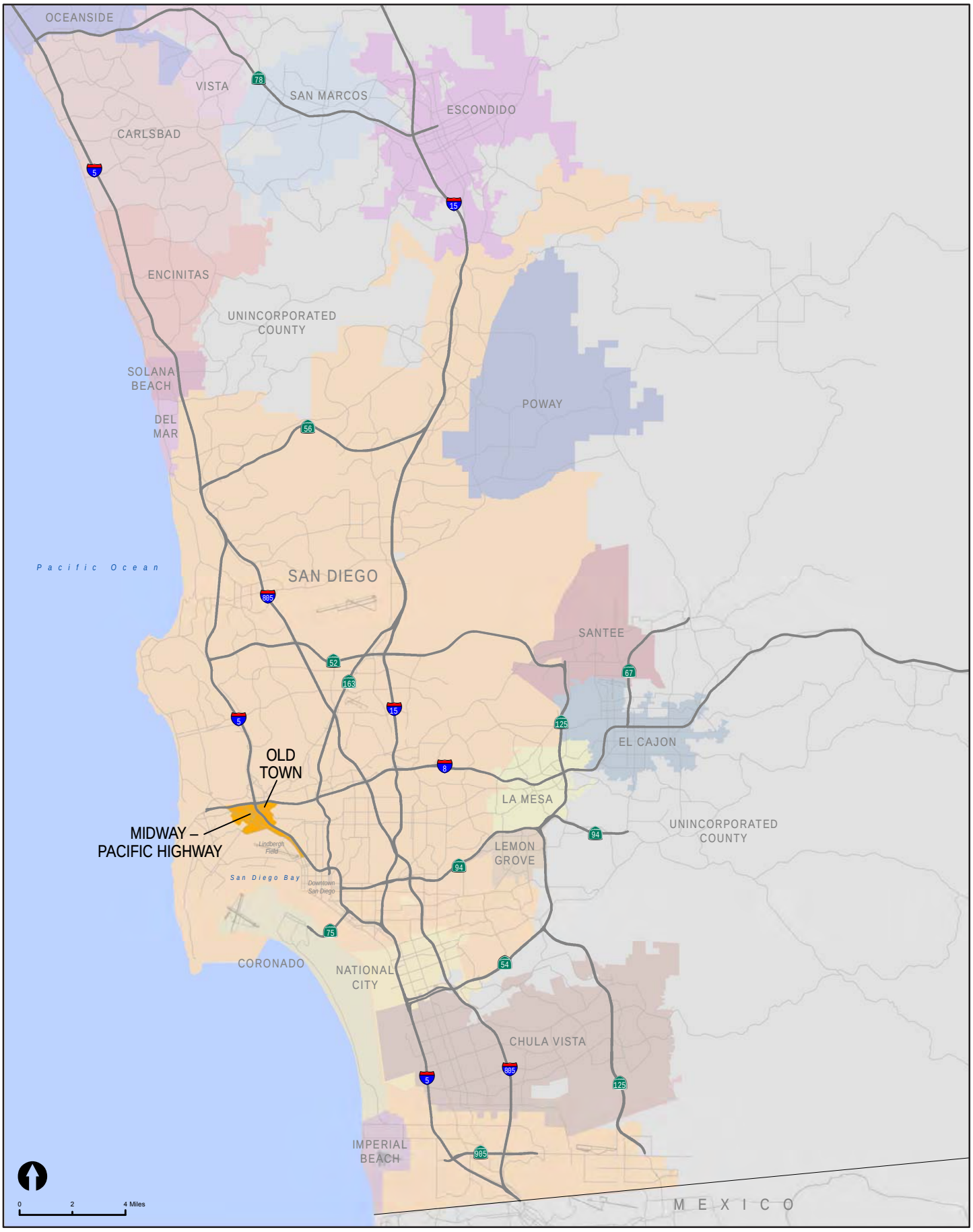
2.0 *Analysis Methodology* – This chapter describes the methodologies and standards utilized to analyze roadway, intersection, and freeway segment and freeway ramp meter traffic conditions.

3.0 *Existing Conditions* - This chapter describes the existing traffic network within the study area and provides analysis results for existing traffic conditions.

4.0 *Preferred Plan* – This chapter assesses the potential traffic impacts of the Preferred Plan by comparing the Preferred Plan to the Existing Conditions. Trip generation, VMT, roadway segments and intersection peak hour operations, as well as freeway segments and ramp meters were evaluated. Mitigation measures for significant impacts identified, if feasible.

5.0 *Adopted Plan* – This chapter is included for informational purposes and includes a description and high-level analysis of the currently adopted plan for both the Midway-Pacific Highway Corridor and Old Town communities. No impact analyses were conducted for this scenario.

6.0 *Summary* – This chapter summarizes the analysis and impact findings outlined in chapters three through five.



Midway-Pacific Highway and Old Town Community Plan Update

CHEN RYAN

Figure 1-1
Midway-Pacific Highway and Old Town within the Region

2.0 Analysis Methodology

This chapter describes the various methodologies utilized to analyze the mobility network within the Midway-Pacific Highway and Old Town communities. Analysis of the vehicular systems – roadways, intersections and freeways – were prepared for this study in accordance with the *City of San Diego Traffic Impact Study Guidelines,* SANTEC/ITE Guidelines, and the enhanced California Environmental Quality Act (CEQA) project review process.

2.1 Selection of the Study Area

This section describes the process used to identify roadway segments and intersections for analysis.

2.1.1 Roadway Segments

Roadway segments were evaluated if one or more of the following circumstances applied:

- The roadway segment is an existing or planned circulation element roadway as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The roadway segment provides freeway access to/from the Midway-Pacific Highway or Old Town communities.
- The roadway segment is located outside of either study community; however, it may influence or impact the flow of transportation within either of the communities.

2.1.2 Intersections

Intersections were evaluated if one or more of the following circumstances applied:

- The intersection is comprised of a circulation element roadway intersecting with another circulation element roadway. This includes existing and future/planned circulation element roadways as identified in the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan (1991), or the Old Town San Diego Community Plan (1987).
- The intersection is at a freeway ramp interchange located within the Midway-Pacific Highway or Old Town communities or is a major gateway to either community.
- The intersection is a major intersection located outside of either community, however, it may influence or impact the flow of transportation within the communities.
- The intersection meets criteria used in previous studies, whereby both streets meet one of the following:
    - 4 lanes or greater
    - 3 lanes and carries over 15,000 ADT
    - 2 lanes and carries over 10,000 ADT
- Intersections at freeway access ramps.
- Significant intersections where travel time analysis is performed.

A total of 59 intersections were identified based on the criteria listed above, which include 11 intersections located outside the study communities. These intersections were added to the study area because of their proximity to the communities, and the likelihood that changes within the communities could directly affect traffic in/out of the communities. Figure 2-1 displays the location of the 59 study intersections and roadway segments.

2.2 Level of Service Definition

Vehicular level of service (LOS) is a quantitative measure that represents quality of service for the driver. These conditions are generally described in terms of such factors as speed, travel time, freedom to maneuver, comfort, convenience, and safety. LOS A represents the best operating conditions from a driver's perspective, while LOS F represents the worst. Table 2-1 describes generalized definitions of auto LOS A through F.

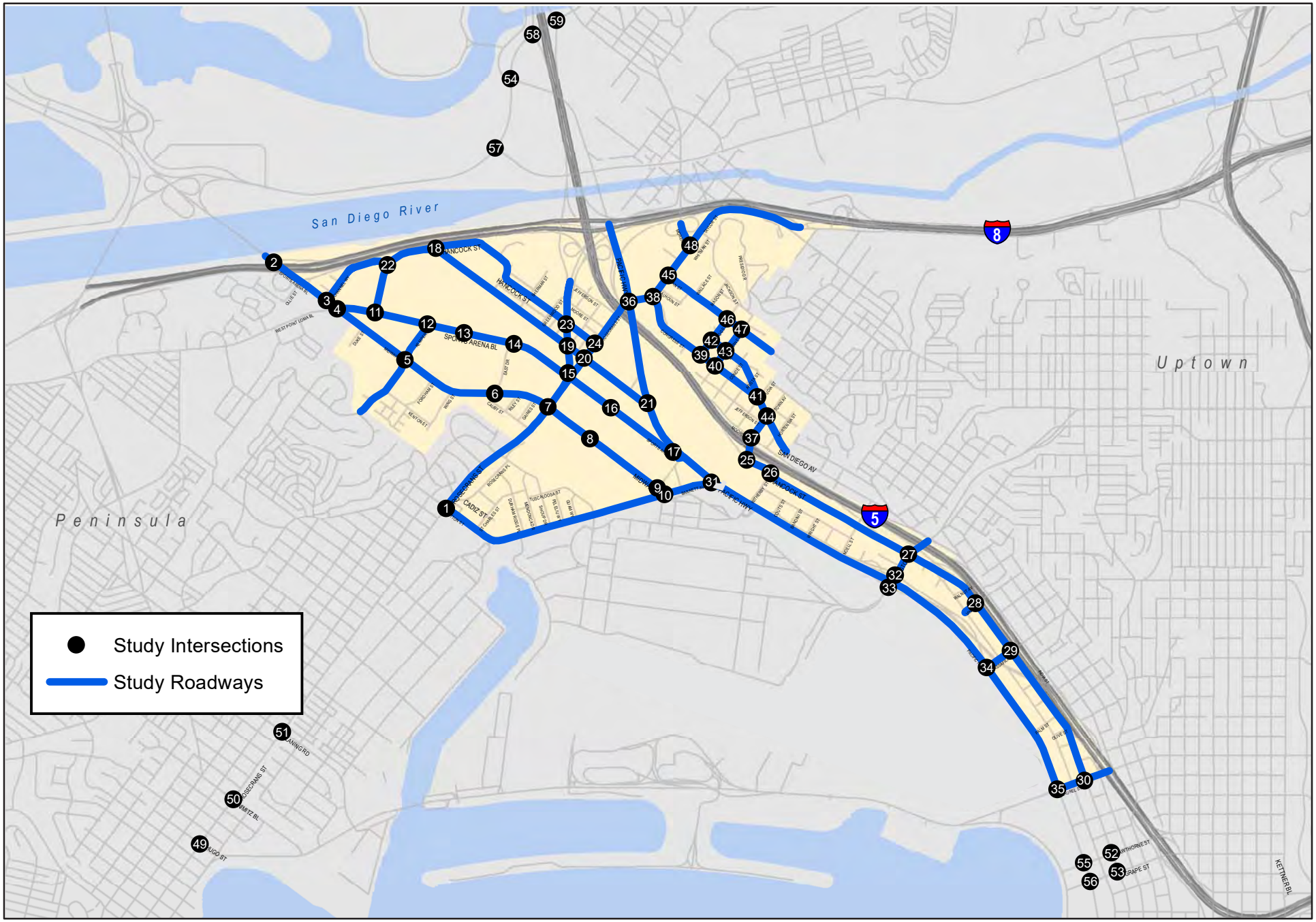
Table 2-1 Vehicular Level of Service Definitions

LOS	Characteristics
A	Primarily free-flow operation. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Controlled delay at the boundary intersections is minimal. The travel speed exceeds 85% of the base free-flow speed.
B	Reasonably unimpeded operation. The ability to maneuver within the traffic stream is only slightly restricted and control delay at the boundary intersections is not significant. The travel speed is between 67% and 85% of the base free-flow speed.
C	Stable operation. The ability to maneuver and change lanes at mid-segment locations may be more restricted than at LOS B. Longer queues at the boundary intersections may contribute to lower travel speeds. The travel speed is between 50% and 67% of the base free-flow speed.
D	Less stable condition in which small increases in flow may cause substantial increases in delay and decreases in travel speed. This operation may be due to adverse signal progression, high volume, or inappropriate signal timing at the boundary intersections. The travel speed is between 40% and 50% of the base free-flow speed.
E	Unstable operation and significant delay. Such operations may be due to some combination of adverse signal progression, high volume, and inappropriate signal timing at the boundary intersections. The travel speed is between 30% and 40% of the base free-flow speed.
F	Flow at extremely low speed. Congestion is likely occurring at the boundary intersections, as indicated by high delay and extensive queuing. The travel speed is 30% or less of the base free-flow speed. Also, LOS F is assigned to the subject direction of travel if the through movement at one or more boundary intersections has a volume-to-capacity ratio greater than 1.0.

Source: Highway Capacity Manual (2010)

2.2.1 Roadway Segment Level of Service Standards and Thresholds

Roadway segment level of service standards and thresholds provide the basis for analysis of arterial roadway segment performance. The analysis of roadway segment level of service is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecasted Average Daily Traffic (ADT) volumes. Table 2-2 presents the roadway segment capacity and LOS standards utilized to analyze roadways in this report.



Midway-Pacific Highway and
Old Town Community Plan Update

CHEN RYAN

Figure 2-1
Project Study Area

Table 2-2 City of San Diego Roadway Segment Daily Capacity and Level of Service Standards

Roadway Functional Classification	Lanes	Level of Service				
		A	B	C	D	E
Freeway	8	60,000	84,000	120,000	140,000	150,000
Freeway	6	45,000	63,000	90,000	110,000	120,000
Freeway	4	30,000	42,000	60,000	70,000	80,000
Expressway	6	30,000	42,000	60,000	70,000	80,000
Prime Arterial	8	35,000	50,000	70,000	75,000	80,000
Prime Arterial	6	25,000	35,000	50,000	55,000	60,000
Major Arterial	7	22,500	31,500	45,000	50,000	55,000
Major Arterial	6	20,000	28,000	40,000	45,000	50,000
Major Arterial	5	17,500	24,500	35,000	40,000	45,000
Major Arterial	4	15,000	21,000	30,000	35,000	40,000
Major Arterial	3	11,250	15,750	22,500	26,250	30,000
Major Arterial	2	7,500	10,500	15,000	17,500	20,000
Major Arterial (one-way)	3	12,500	16,500	22,500	25,000	27,500
Major Arterial (one-way)	2	10,000	13,000	17,500	20,000	22,500
Collector (w/ two-way left turn lane)	4	10,000	14,000	20,000	25,000	30,000
Collector (w/ two-way left turn lane)	3	7,500	10,500	15,000	18,750	22,500
Collector (w/ two-way left turn lane)	2	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	4	5,000	7,000	10,000	13,000	15,000
Collector (w/o two-way left turn lane)	3	4,000	5,000	7,500	10,000	11,000
Collector (w/o two-way left turn lane)	2	2,500	3,500	5,000	6,500	8,000
Collector (w/o two-way left turn lane) – no fronting property	2	4,000	5,500	7,500	9,000	10,000
Collector (one-way)	3	11,000	14,000	19,000	22,500	26,000
Collector (one-way)	2	7,500	9,500	12,500	15,000	17,500
Collector (one-way)	1	2,500	3,500	5,000	6,500	7,500
Sub-Collector (single-family)	2	-	-	2,200	-	-

Source: City of San Diego Traffic Impact Study Manual (1998);
Updated with input from City of San Diego Planning Department Mobility Staff (2017)

These standards are generally used as long-range planning guidelines to determine the functional classification of roadways. The actual capacity of a roadway facility varies according to its physical and operational attributes. LOS D is considered acceptable for Mobility Element roadway segments in the City of San Diego. Often, a roadway segment that is analyzed to be LOS E or F based on theoretical capacity is found to operate acceptably in practice. In such cases, HCM arterial analysis may be conducted and utilized (or intersection analysis, if arterial analysis is not applicable) to provide a more accurate indication of LOS.

2.2.2 Peak Hour Intersection Level of Service Standards and Thresholds

This section presents the methodologies used to perform peak hour intersection capacity analysis, for both signalized and unsignalized intersections. The following assumptions were utilized in conducting all intersection level of service analyses:

- Pedestrian Calls per Hour: Based on existing pedestrian counts.
- Heavy Vehicle Factor: A 2% heavy vehicle factor was assumed for all study area.
- Peak Hour Factor: Based on existing peak hour counts.
- Existing Conditions Signal Timing: Based on existing signal timing plans (as of November 2012).

Signalized Intersection Analysis

The signalized intersection analysis utilized in this study conforms to the operational analysis methodology outlined in *2000 Highway Capacity Manual (HCM), Transportation Research Board Special Report 209*. This method defines LOS in terms of delay, or more specifically, average control delay per vehicle (sec/veh).

The *2000 HCM* methodology sets 1,900 passenger-cars per hour per lane (pcphpl) as the ideal saturation flow rate at signalized intersections, based upon the minimum headway that can be sustained between departing vehicles at a signalized intersection. The service saturation flow rate, which reflects the saturation flow rate specific to the study facility, is determined by adjusting the ideal saturation flow rate for lane width, on-street parking, bus stops, pedestrian volume, traffic composition (or percentage of heavy vehicles), and shared lane movements (e.g. through and right-turn movements sharing the same lane). The level of service criteria used for this technique is described in Table 2-3. The computerized analysis of intersection operations was performed utilizing the *Synchro 9.0 (2000 HCM methodology)* traffic analysis software (by Trafficware, 2011).

Table 2-3 Signalized Intersection Level of Service Highway Capacity Manual Operational Analysis Method

Average Control Delay Per Vehicle (seconds)	Level of Service (LOS) Characteristics
≤10.0	*LOS A* occurs when the volume-to-capacity ratio is low and either progression is exceptionally favorable or the cycle length is very short. If it is due to favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
10.1 – 20.0	*LOS B* occurs when the volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.
20.1 – 35.0	*LOS C* occurs when progression is favorable or the cycle length is moderate. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
35.1 – 55.0	*LOS D* occurs when the volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
55.1 – 80.0	*LOS E* occurs when the volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
>80.0	*LOS F* occurs when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: Highway Capacity Manual, Transportation Research Board Special Report 209 (2000)

Unsignalized Intersection Analysis

Unsignalized intersections, including two-way and all-way stop controlled intersections, were analyzed using the *2000 HCM* unsignalized intersection analysis methodology. The Synchro 8.0 software supports this methodology and was utilized to produce LOS results. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The LOS for an all-way stop controlled (AWSC) intersection is determined by the computed or

measured average control delay of all movements. Table 2-4 summarizes the level of service criteria for unsignalized intersections.

Table 2-4 Level of Service Criteria for Stop Controlled Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service (LOS)
≤10.0	A
10.1 – 15.0	B
15.1 – 25.0	C
25.1 – 35.0	D
35.1 – 50.0	E
>50.0	F

Source: Highway Capacity Manual (2000)

The City of San Diego considers LOS D or better during the AM and PM peak hours to be acceptable intersection LOS.

2.2.3 Freeway/State Highway Level of Service Standards and Thresholds

Freeway LOS analysis is based upon procedures developed by Caltrans District 11. The procedure for calculating freeway LOS involves estimating a peak hour volume to capacity (V/C) ratio. Peak hour volumes are estimated from the application of design hour ("K"), directional ("D") and truck ("T") factors to Average Daily Traffic (ADT) volumes. The base capacities were assumed to be 2,350 passenger-cars per hour per main lane (pc/h/ln) and 1,410 pc/h/ln for auxiliary lanes. A 0.95 peak-hour factor (PHF) is utilized for this analysis.

The resulting V/C ratio is then compared to acceptable ranges of V/C values corresponding to the various levels of service for each facility classification, as shown in Table 2-5. The corresponding level of service represents an approximation of existing or anticipated future freeway operating conditions in the peak direction of travel during the peak hour. LOS D or better is used in this study as the threshold for acceptable freeway operations based upon Caltrans and the SANDAG Regional Growth Management Strategy (RGMS) requirements.

2.2.4 Ramp Metering Analysis

Ramp metering is a means of controlling the volume of traffic entering the freeway with the goal of improving freeway main lane traffic operations and flow. Freeway ramp meter analyses estimate peak hour queues and delays at freeway ramps by comparing existing volumes to the meter rate at the given location.

Meter rates, which represent the amount of vehicles permitted through the signal, onto the ramp and freeway, were obtained from Caltrans for use in the analysis. Ramp metering analyses to calculate delays at study area freeway ramps were conducted following the procedures outlined in the *City of San Diego Traffic Impact Study Manual (1998)*.

Table 2-5 Caltrans District 11 Freeway Segment Level of Service Definitions

LOS	V/C	Congestion/Delay	Traffic Description
Used for freeways, expressways and conventional highways			
"A"	<0.41	None	Free flow.
"B"	0.42-0.62	None	Free to stable flow, light to moderate volumes.
"C"	0.63-0.79	None to minimal	Stable flow, moderate volumes, freedom to maneuver noticeably restricted.
"D"	0.80-0.92	Minimal to substantial	Approaches unstable flow, heavy volumes, very limited freedom to maneuver.
"E"	0.93-1.00	Significant	Extremely unstable flow, maneuverability and psychological comfort extremely poor.
Used for conventional highways			
"F"	>1.00	Considerable	Forced or breakdown flow. Delay measured in average travel speed (MPH). Signalized segments experience delays >60.0 seconds/vehicle.
Used for freeways and expressways			
"F0"	1.01–1.25	Considerable (0-1 hour delay)	Forced flow, heavy congestion, long queues form behind breakdown points, stop and go.
"F1"	1.26-1.35	Severe (1-2 hour delay)	Very heavy congestion, very long queues.
"F2"	1.36-1.45	Very severe (2-3 hour delay)	Extremely heavy congestion, longer queues, more numerous breakdown points, longer stop periods.
"F3"	>1.46	Extremely severe (3+ hours of delay)	Gridlock.

Source: SANTEC/ITE Guidelines for TIS in the San Diego Region.

2.2.5 Determination of Significant Impacts

This section outlines the thresholds for determining significant project-related impacts to roadways, intersections, and freeways in the City of San Diego. Generally, a significant impact is identified when the addition of project traffic results in a level of service dropping from LOS D or better to substandard LOS E or F. Table 2-6 summarizes the significant impact thresholds for facilities operating at a substandard level of service with and without the project. These thresholds, as applied to roadway segments, are based upon an acceptable increase in the (V/C) ratio.

Table 2-6 City of San Diego Measures of Significant Project Traffic Impacts

LOS with Project	Allowable Change Due to Impact					
	Freeways		Roadway Segments		Intersections	Ramp Metering*
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec)	Delay (min)
E	0.01	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Source: CEQA Significance Determination Thresholds, City of San Diego Development Services Department (2007)

Note:
* For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

3.0 Existing Conditions

This section describes study area intersections, roadways and freeway segments, as well as existing peak hour intersection traffic volumes, and daily roadway and freeway traffic volumes. A Vehicle Miles Traveled (VMT) comparison is also presented. Level of service analysis results for all study area facilities under Existing Conditions are presented separately below.

3.1 Vehicle Miles Traveled

The VMT generated within the communities were estimated using the SANDAG Series 12 Base Year 2008 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to/from and within the community. Table 3-1 displays the total VMT generated within the Midway-Pacific Highway and Old Town communities and the average trip length under both the Base Year conditions. VMT calculations for the Midway-Pacific Highway and Old Town communities are included as Appendix A.

As shown, the Midway-Pacific Highway community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.6 miles vs. 5.2 miles; VMT of 156 miles vs. 27 miles, respectively).

The Old Town community, when compared to the San Diego Region, has shorter average trip length, but a much greater daily VMT by population rate under the Base Year condition (Average Trip Length of 2.6 miles vs. 5.2 miles; VMT of 181 miles vs. 27 miles, respectively).

Table 3-1 Vehicle Miles Traveled (VMT) Comparison Existing Conditions

Measure	Midway-Pacific Highway	Old Town	San Diego Region
	Base Year	Base Year	Base Year
Total VMT (miles)	730,121	151,300	85,182,063
Total # of Auto Trips	294,796	57,989	16,458,692
Average Trip Length[1] (miles)	2.5	2.6	5.2
Population	4,672	834	3,130,717
Daily VMT by Population (miles)	156	181	27

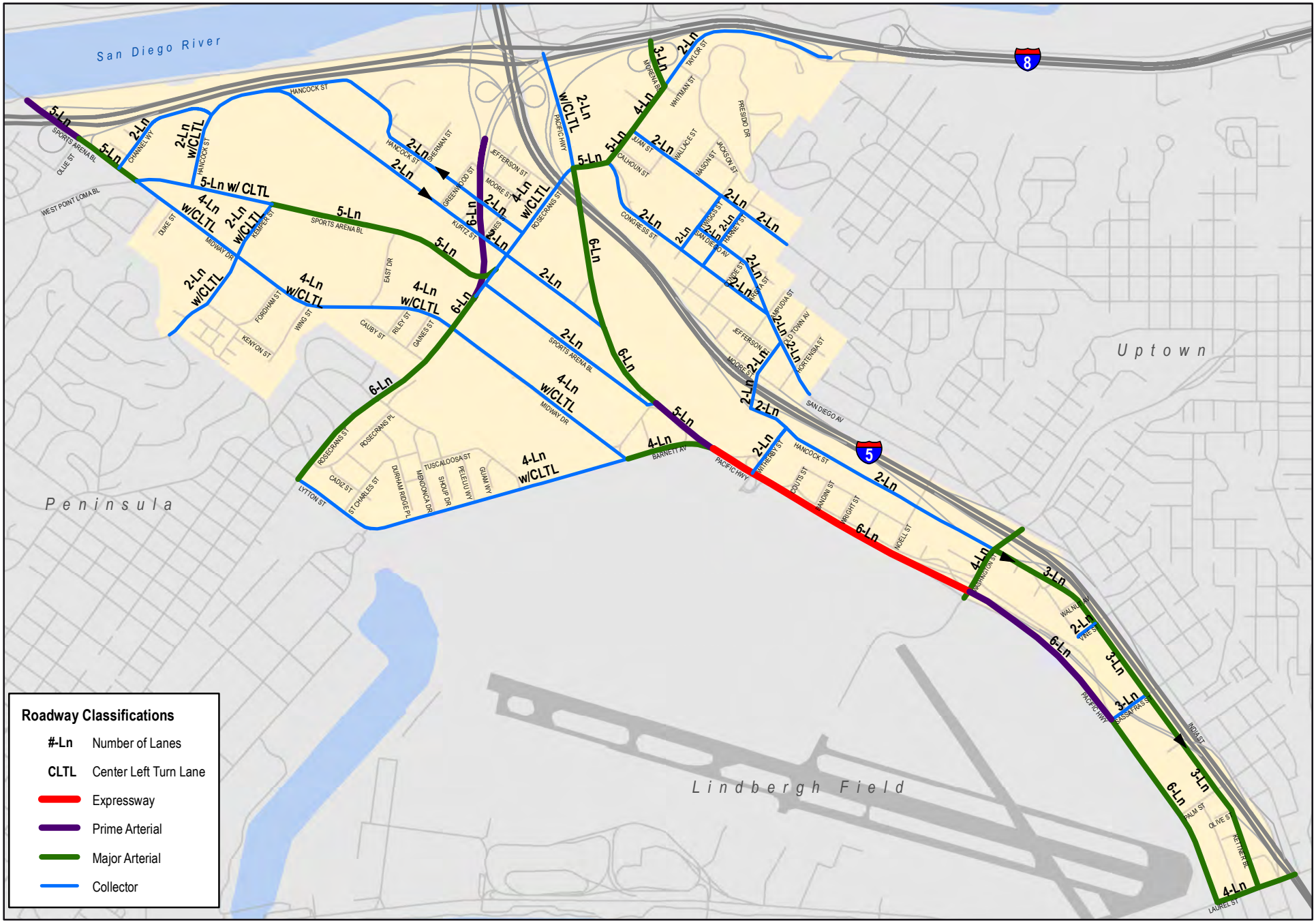
Source: SANDAG (2017); Chen Ryan Associates (2017)

Note:

[1]Average trip length is estimated by dividing the total VMT by the total # of auto trips.

3.2 Roadway Segment Analysis

Chapter 2 documents the selection of study area roadway segments and study intersections. The roadway network is comprised of regional facilities such as I-5 and I-8, as well as numerous arterials and local streets. Roadways outside the boundary of the Midway-Pacific Highway and Old Town communities were included in this assessment due to their location within the sphere of influence and will be required for the environmental studies. Figure 3-1 displays the functional classification for study area roadway segments. Table 3-2 provides a description of the study area roadway segments.



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Figure 3-1
Existing Roadway Classifications

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
North-South									
Midway/Pacific Highway Corridor									
Lytton St / Barnett Ave	Rosecrans St	Midway Dr	4-Lane Collector w/ CLTL	Commercial & Military Use	None	40	Yes	Class II	76'/86'
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76
	Kemper St	East Dr	4-Lane Collector w/ CLTL	Commercial	None	35	Yes	None	60'/76'
	East Dr	Rosecrans St	4-Lane Collector w/ CLTL	Commercial	Parallel (NE Side)	35	Yes	None	60'/80'
	Rosecrans St	Barnett Ave	4-Lane Collector w/ CLTL	Commercial & Industrial	None	35	Yes	None	56'/72'
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	None	None	35	Yes	Class III	72'/84
	I-8 EB Ramps	W. Point Loma Blvd/ Sports Arena Blvd	6-Lane Major Arterial	Commercial & Multi-Family Residential	Parallel (SW Side)	35	Yes	Class III	76'/88'
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector w/ CLTL	Commercial & Multi-Family Residential	Parallel (Both)	35	Yes	None	96'/106'
	Kemper St	East Dr	5-Lane Major Arterial	Commercial & Private Recreation	Parallel (SW Side)	35	Yes	None	96'/106'
	East Dr	Rosecrans St	5-Lane Major Arterial	Commercial	None	35	Yes	None	82'/92'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	35	Intermittent	None	52'/82'
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	Commercial & Industrial	Parallel (Both)	30	Yes	None	40'/48'
	Rosecrans St	Pacific Hwy	2-Lane Collector	Commercial & Industrial	Parallel (Both)	30	Gutter Only	None	48'/48'
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector w/ CLTL	Industrial	Parallel (Both)	30	Only on south side	None	62'/78'
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	Industrial	Parallel (Both)	30	Yes	None	40'/50'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Hancock St	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	Industrial	None	30	Yes	None	40'/50'
	Old Town Ave	Witherby St	2-Lane Collector	Industrial	None	30	Curb Only	None	44'/44'
	Witherby St	Washington St	2-Lane Collector	Industrial	Parallel (North) Diagonal (south)	30	Yes	None	60'/70'
Kettner Blvd	Washington St	Vine St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	None	40	Sidewalk on SW Side	None	42'/58'
	Vine St	Sassafras St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Sidewalk on SW Side	None	52'/58'
	Sassafras St	Laurel St	3-Lane Major Arterial (One-Way)	Commercial & Industrial	Parallel (Both)	40	Yes	None	52'/68'
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector w/ CLTL	Transportation Related Utilities	Parallel (Both)	45	Yes	Class II	86'/108'
	Taylor St	Kurtz St	6-Lane Major Arterial	Institutional & Industrial	None	45	Yes	Class II	88'/110'
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	Industrial	None	45	Yes	Class II	88'/110'
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	Commercial & Industrial	None	45	Sidewalk on NE Side	Class III	92'/110'
	Barnett Ave	Washington St	Expressway	Commercial & Industrial	None	55	None	Class II	118'/118'
	Washington St	Sassafras St	6-Lane Prime Arterial	Commercial & Industrial	None	45	None	Class III	42' SB / 46' NB
	Sassafras St	Laurel St	6-Lane Major Arterial	Commercial & Industrial	None	45	Yes	Class III	98'/110'
Old Town									
Congress St	Taylor St	Twiggs St	2-Lane Collector	Commercial & Transit Station	Parallel (Both)	25	Yes	Class III	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	Class III	36'/48'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Congress St	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	Commercial, Single Family Residential & School	Parallel (Both)	25	Yes	Class III	36'/48'
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	52'/70'
	Harney St	Ampudia St	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	None	40'/52'
	Ampudia St	Old Town Ave	2-Lane Collector	Commercial	Parallel (Both)	25	Yes	Class III	42'/54'
	Old Town Ave	Hortensia St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	Class III	40'/56'
Juan St	Taylor St	Twiggs St	2-Lane Collector	Institutional, Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Twiggs St	Harney St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	30	Yes	None	36'/48'
	Harney St	San Juan Rd	2-Lane Collector	Commercial & Park	Parallel (Both)	30	Yes	None	36'/48'
Morena Boulevard	I-8 EB Ramps	Taylor Street	3-Lane Major	Commercial	None	Not Posted	Yes	None	56'/68'
East-West									
Midway/Pacific Highway Corridor									
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	Commercial & Multi-Family Residential	Parallel (Both)	25	Yes	None	40'/50'
Kemper St	Kenyon St	Midway Dr	2-Lane Collector w/ CLTL	Commercial & Industrial	Parallel (NW Side)	25	NW side only	None	62'/76'
	Midway Dr	Sports Arena Blvd	2-Lane Collector w/ CLTL	Commercial	Parallel (Both)	25	Yes	None	50'/60'
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	Commercial	None	35	Yes	None	106'/120'
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	Commercial, Multi-Family Residential & Industrial	None	35	Yes	None	106'/120'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	Commercial	None	35	Yes	None	106'/120'
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector w/ CLTL	Commercial & Institutional	Parallel (Both)	35	NW side only	None	82'/100'
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	Commercial & Industrial	None	40	Yes	Class III	92'/108'
Washington St	Frontage Rd	Pacific Hwy	4-Lane Major Arterial	None	None	25	Yes	None	62'/70'
	Pacific Hwy	Hancock St	4-Lane Major Arterial	Commercial	Parallel (SE Side)	25	Yes	None	60'/74'
Vine St	California St	Kettner Blvd	2-Lane Collector	Industrial	Diagonal (SE Side)	25	Yes	None	50'/78'
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	Institutional	None	25	Yes	None	52'/74'
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	Commercial	None	25	Yes	Class III	54'/70'
Old Town									
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	Transit Station	None	35	Yes	None	94'/118'
	Congress St	Juan St	5-Lane Major Arterial	Institutional	None	35	Yes	None	80'/98'
	Juan St	Morena Blvd	4-Lane Major Arterial	Commercial & Park	None	35	Yes	None	80'/100'
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	Commercial & Park	None	35	Curb Only	Class II	42'/42'
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	30'/42'
	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (Both)	25	Yes	None	30'/50'
Harney St	Congress St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	Parallel (Both)	25	Yes	None	30/42'

Table 3-2 Existing Roadway Characteristics

Roadway	From	To	Existing Functional Classification	Abutting Land Use	On-Street Parking	Speed Limit (mph)	Curbs & Sidewalks	Bicycle Facilities	Pavement Width / Right-of-Way Width
Harney St	San Diego Ave	Juan St	2-Lane Collector	Commercial & Institutional	Parallel (SE Side)	25	Yes	None	30'/46'
Old Town Ave	Hancock St	Moore St	2-Lane Collector	None	None	25	SE Side Only	None	28'/36'
	Moore St	San Diego Ave	2-Lane Collector	Commercial & Single Family Residential	None	25	Yes	None	38'/48'

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Figure 3-2 displays existing average daily traffic volumes for the study roadway segments, along with the current LOS. Table 3-3 displays existing roadway segment ADT and LOS for the Midway-Pacific Highway and Old Town San Diego communities. Appendix B contains the average daily traffic counts utilized in this report.

It should be noted that the existing conditions report was completed in November 2012; therefore, the traffic counts conducted to evaluate Existing conditions were collected in year 2012 as well. To ensure the counts used to evaluate existing conditions are still relevant to current conditions, a sampling of the 2012 counts were validated with recently conducted counts (collected in 2015 and 2016). Through the validation process limited growth was observed in the traffic volumes between year 2012 and year 2015/2016 conditions. Therefore, the counts used to evaluate existing conditions would still be considered valid.

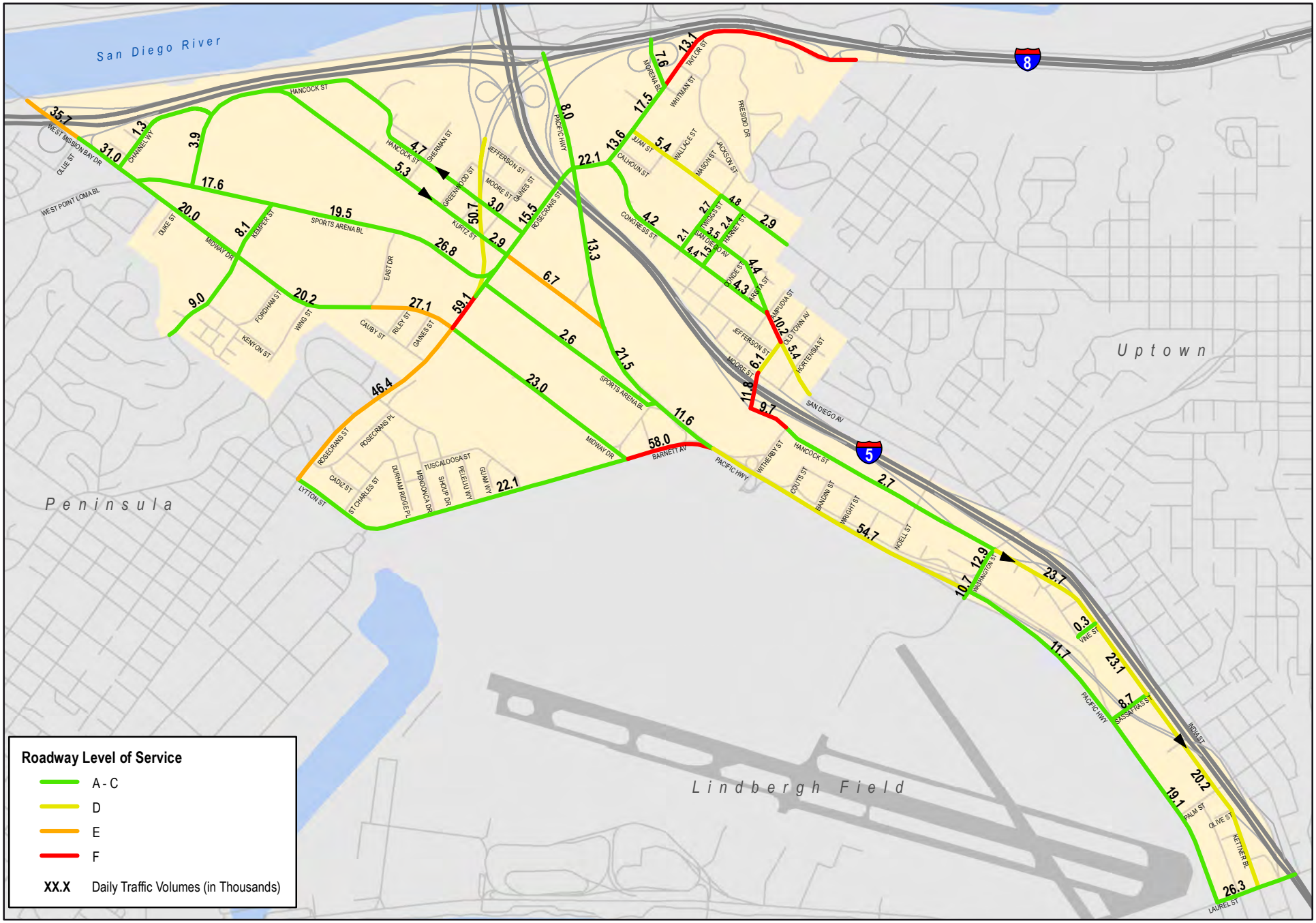
As shown in Table 3-2, the following nine (9) roadway segments operate at LOS E or F under Existing Conditions:

Midway/Pacific Highway Corridor

- Midway Drive, between East Drive and Rosecrans Street (LOS E)
- Kurtz Street, between Rosecrans Street and Pacific Highway (LOS E)
- Hancock Street, between Old Town Avenue and Witherby Street (LOS F)
- Rosecrans Street between Lytton Street and Midway Drive (LOS E)
- Rosecrans Street, between Midway Drive and Sports Arena Boulevard (LOS F)
- Barnett Avenue, between Midway Drive and Pacific Highway (LOS F)

Old Town

- San Diego Avenue, between Ampudia Street and Old Town Avenue (LOS F)
- Taylor Street, between Morena Blvd and I-8 EB Ramps (LOS F)
- Old Town Avenue, Hancock Street to Moore Street (LOS F)



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Figure 3-2
Existing Roadway Segment Traffic Volumes and Level of Service

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
North-South							
Midway/Pacific Highway Corridor							
Lytton Street/ Barnett Avenue	Rosecrans St	Midway Dr	4-Lane Collector (CLTL)	30,000	22,070	0.74	D
Midway Dr	W. Point Loma Blvd/Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	19,960	0.67	C
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,240	0.67	D
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	27,600	0.92	**E**
	Rosecrans St	Barnett Ave	4-Lane Collector (CLTL)	30,000	23,000	0.77	D
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	5-Lane Prime Arterial	50,000	35,670	0.71	C
	I-8 EB Ramps	W. Point Loma Blvd/Sports Arena Blvd	6-Lane Major Arterial	50,000	31,010	0.62	C
	W. Point Loma Blvd/Midway Dr	Kemper St	5-Lane Collector (CLTL)	37,500	17,600	0.47	B
	Kemper St	East Dr	5-Lane Major Arterial	45,000	19,520	0.43	B
	East Dr	Rosecrans St	5-Lane Major Arterial	45,000	26,800	0.6	C
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	2,600	0.33	B
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	5,340	0.31	A
	Rosecrans St	Pacific Hwy	2-Lane Collector	8,000	6,690	0.84	**E**
Hancock St	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	3,930	0.26	A
	Kurtz St	Camino Del Rio West	2-Lane Collector (One-Way)	17,500	4,710	0.27	A
	Camino Del Rio West	Rosecrans St	2-Lane Collector (One-Way)	17,500	2,990	0.17	A
	Old Town Ave	Witherby St	2-Lane Collector	8,000	9,680	1.21	**F**
	Witherby St	Washington St	2-Lane Collector	8,000	2,740	0.34	B
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	23,720	0.86	D
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	23,080	0.84	D
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	20,150	0.73	C
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	7,460	0.50	C
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	13,300	0.27	A
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	21,470	0.43	B
	Sports Arena Blvd	Barnett Ave	5-Lane Prime Arterial	50,000	11,600	0.23	A
	Barnett Ave	Washington St	Expressway	80,000	54,690	0.68	C
	Washington St	Sassafras St	6-Lane Prime Arterial	60,000	11,650	0.19	A

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Pacific Hwy	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	19,160	0.38	B
Old Town							
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	4,230	0.53	C
	Twiggs St	Harney St	2-Lane Collector	8,000	4,380	0.55	C
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	4,280	0.54	C
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	3,540	0.44	C
	Conde St	Arista Ave	2-Lane Collector	8,000	4,350	0.54	C
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	10,160	1.27	**F**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	5,400	0.68	D
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	5,430	0.68	D
	Twiggs St	Harney St	2-Lane Collector	8,000	4,810	0.60	C
	Harney St	San Juan Rd	2-Lane Collector	8,000	4,230	0.53	C
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	7,585	0.25	A
East-West							
Midway/Pacific Highway Corridor							
Channel Wy	W. Mission Bay Dr	Hancock St	2-Lane Collector	8,000	1,280	0.16	A
Kemper St	Kenyon St	Midway Dr	2-Lane Collector (CLTL)	15,000	9,010	0.60	C
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,120	0.54	C
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	50,700	0.85	D
Rosecrans St	Lytton St	Midway Dr	6-Lane Major Arterial	50,000	46,400	0.93	**E**
	Midway Dr	Sports Arena Blvd	6-Lane Major Arterial	50,000	59,100	1.18	**F**
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Collector (CLTL)	30,000	15,500	0.52	C
Barnett Ave	Midway Dr	Pacific Hwy	4-Lane Major Arterial	40,000	57,954	1.45	**F**
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	10,680	0.27	A
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	12,870	0.32	A
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	250	0.03	A
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	8,700	0.79	D
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	26,290	0.66	C
Old Town							
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	22,100	0.55	C
	Congress St	Juan St	5-Lane Major Arterial	45,000	13,560	0.30	A
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	17,530	0.44	B
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	13,140	1.64	**F**
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,080	0.26	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,670	0.33	B

Table 3-3 Roadway Level of Service Existing Conditions

Roadway	From	To	Existing Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,520	0.19	A
	San Diego Ave	Juan St	2-Lane Collector	8,000	2,350	0.29	A
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	11,750	1.47	**F**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,120	0.77	D

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

3.3 Intersection Analysis

As described in Chapter 2, a total of fifty-nine (59) study intersections were analyzed as part of the Existing Conditions assessment, including thirty-five (35) intersections located within Midway-Pacific Highway, thirteen (13) intersections located within Old Town, and eleven (11) intersections in adjacent communities.

Figure 3-3 displays current intersection geometries, while Figure 3-4 shows existing AM and PM peak period turning movements. The study area intersection traffic counts are provided in Appendix D.

Table 3-4 displays the existing AM and PM peak hour LOS analysis results for the key study area intersections. LOS analyses were conducted using the methodologies described in Chapter 2.0. Intersection LOS calculation worksheets for Existing Conditions are provided in Appendix E. As shown, the following four (4) study intersections currently operate at LOS E or F:

Midway-Pacific Highway

- Lytton Street & Rosecrans Street (LOS E – AM peak hour)
- West Mission Bay Drive & I-8 WB Off-Ramp (LOS E – PM peak hour)

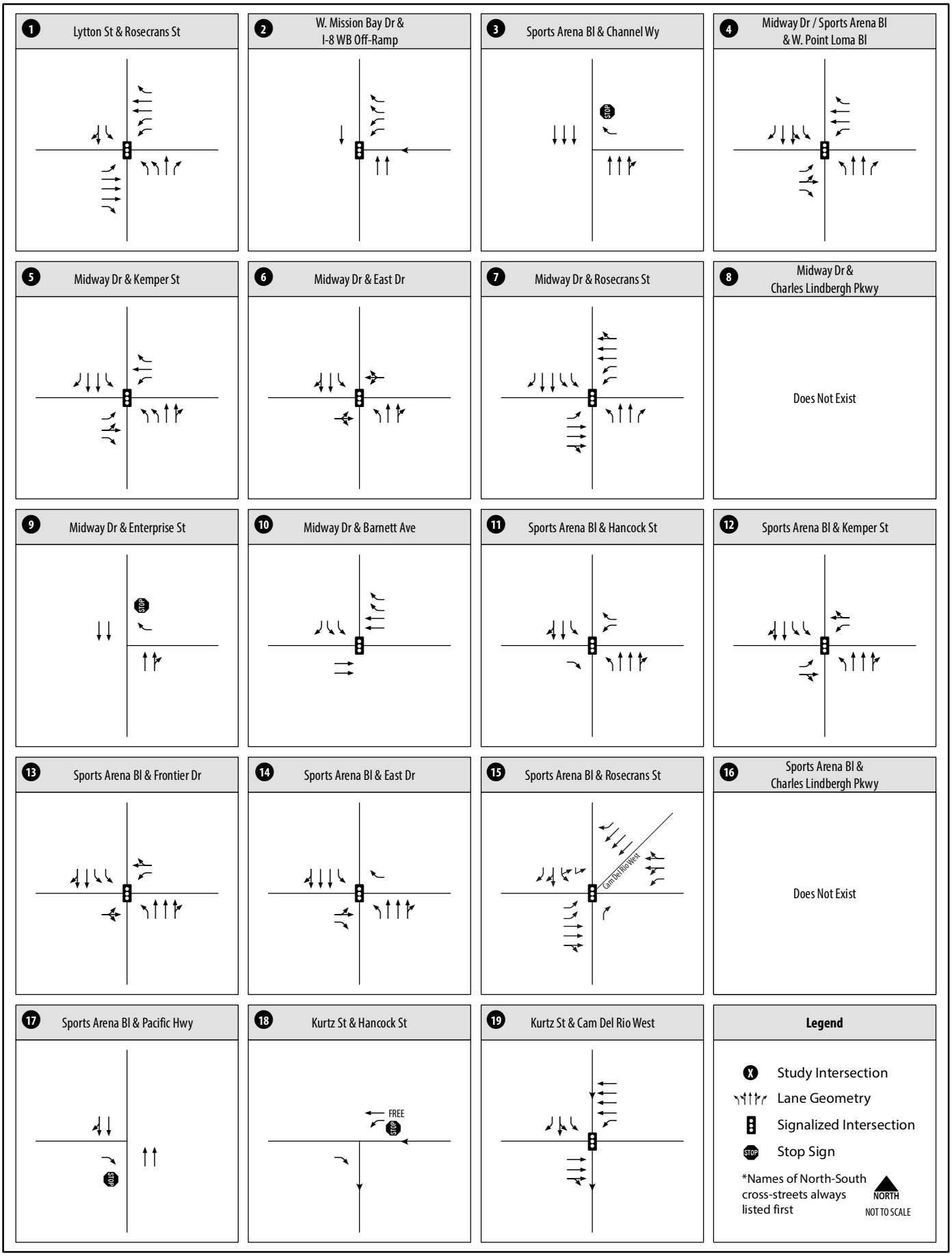
Old Town

- Pacific Highway & Taylor Street (LOS E – AM peak hour)

Intersections Outside of Study Communities

- Lowell Street/Nimitz Boulevard & Rosecrans Street (LOS E – PM peak hour)

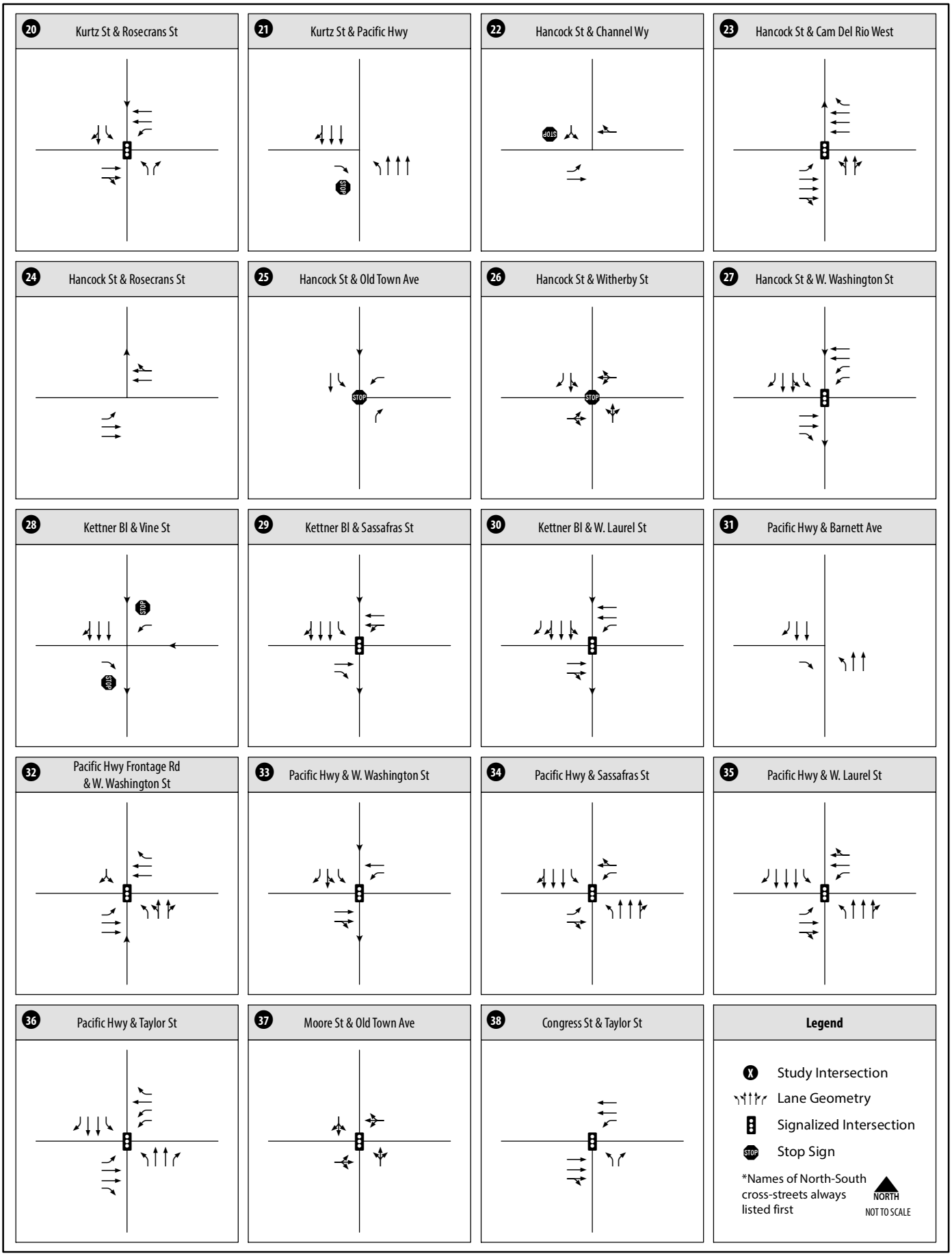
Figure 3-5 graphically displays the existing AM and PM peak hour intersection LOS results.



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Figure 3-3
Existing Intersection Geometrics (Intersections 1-19)



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Figure 3-3
Existing Intersection Geometrics (Intersections 20-38)

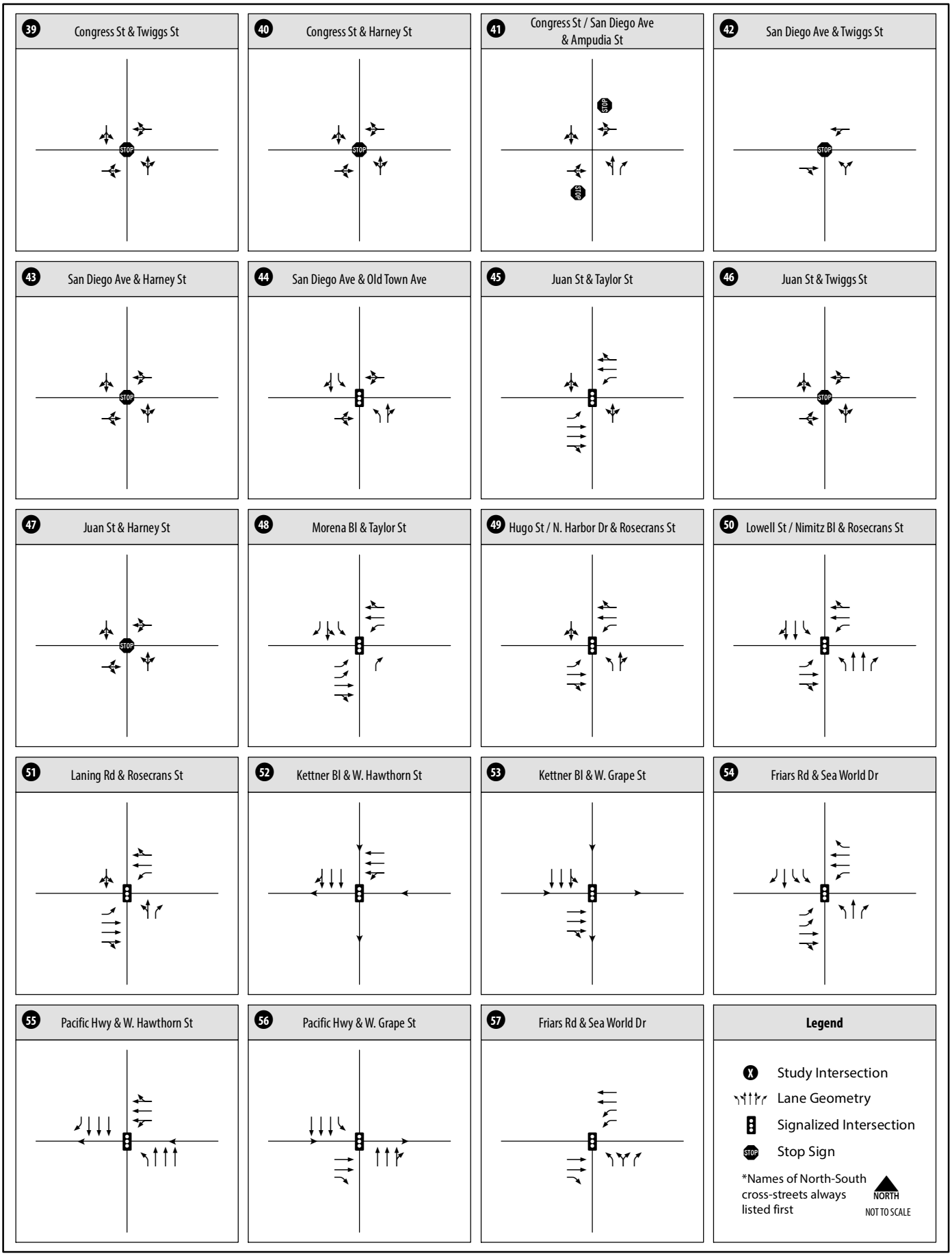
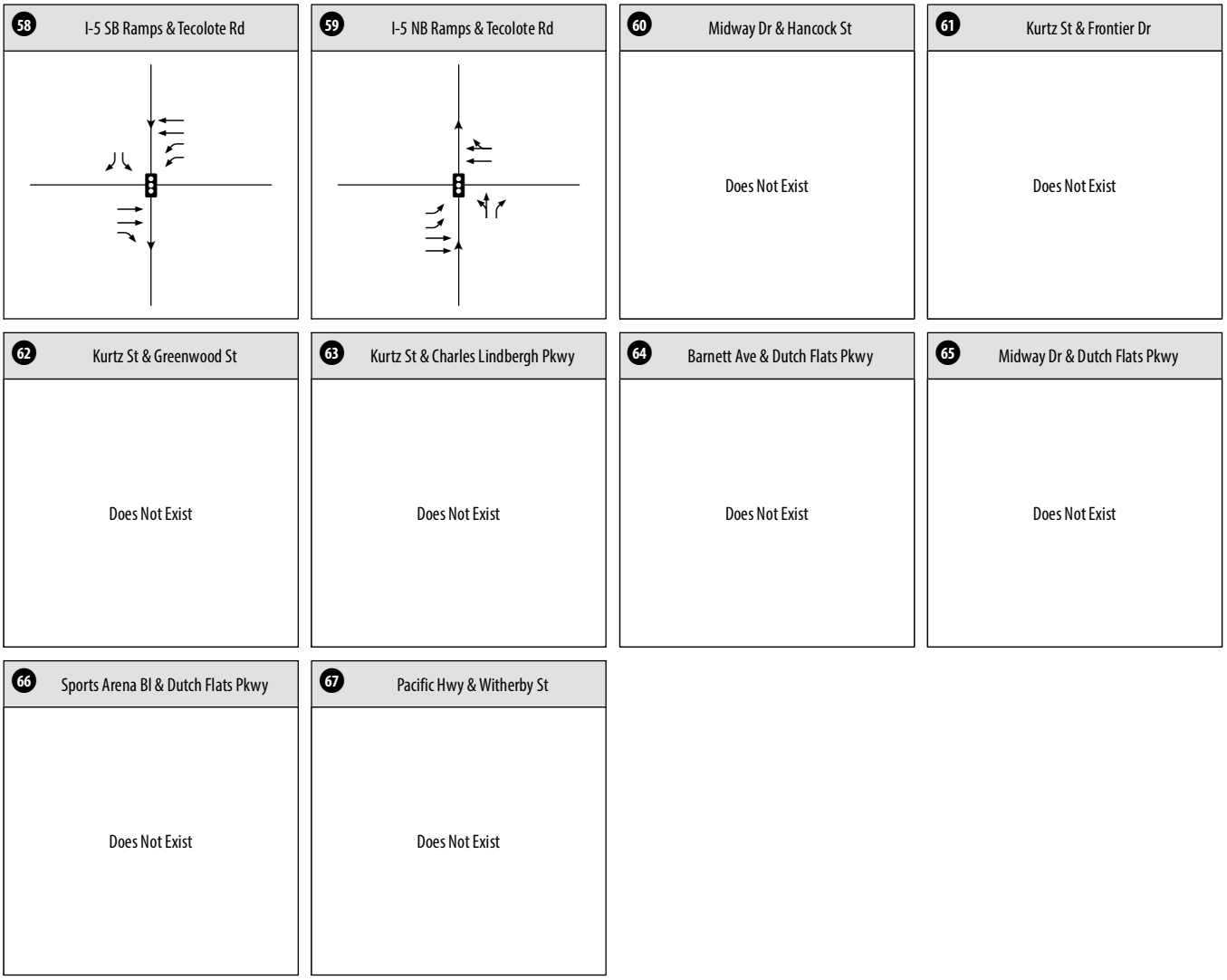


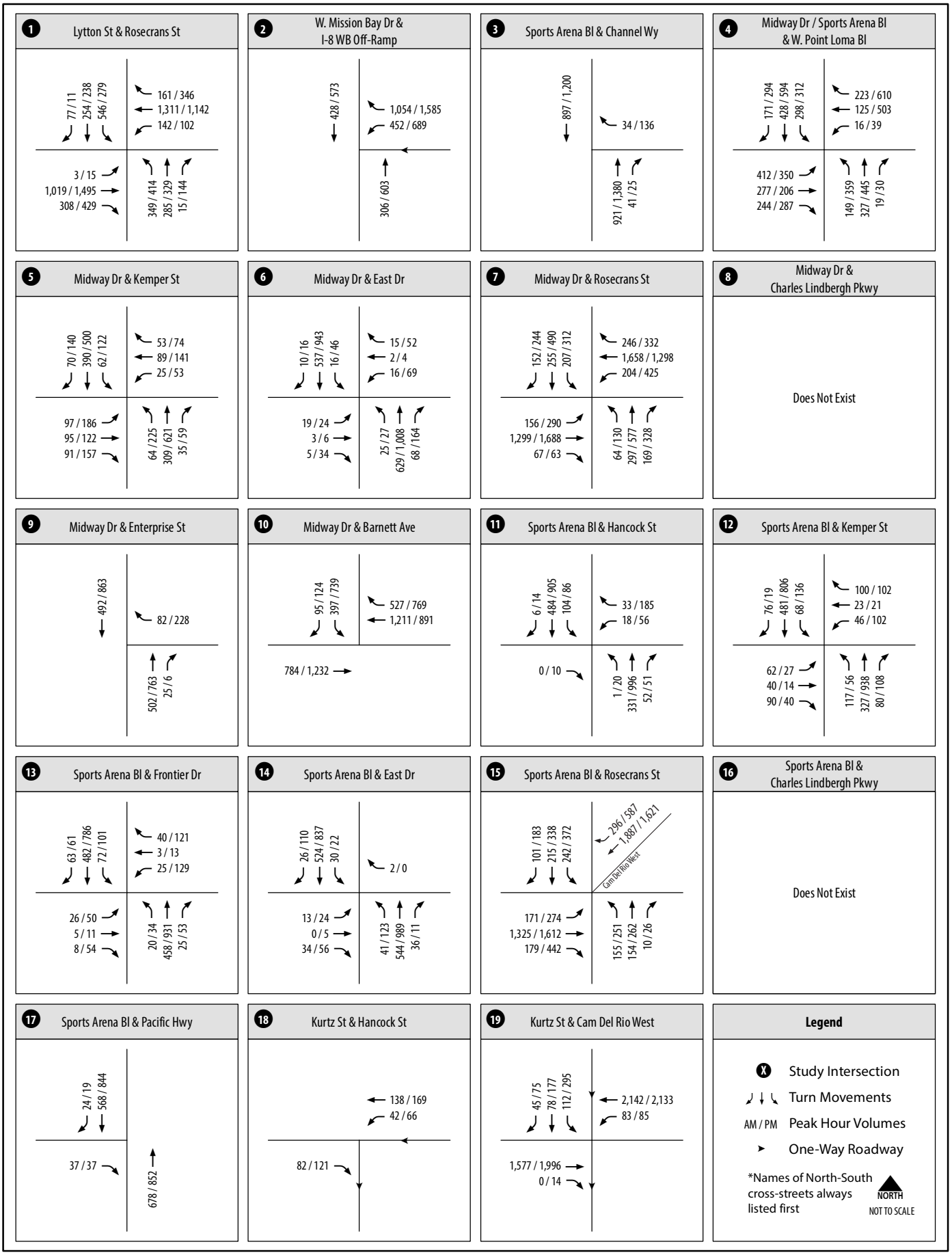
Figure 3-3
Existing Intersection Geometrics (Intersections 39-57)



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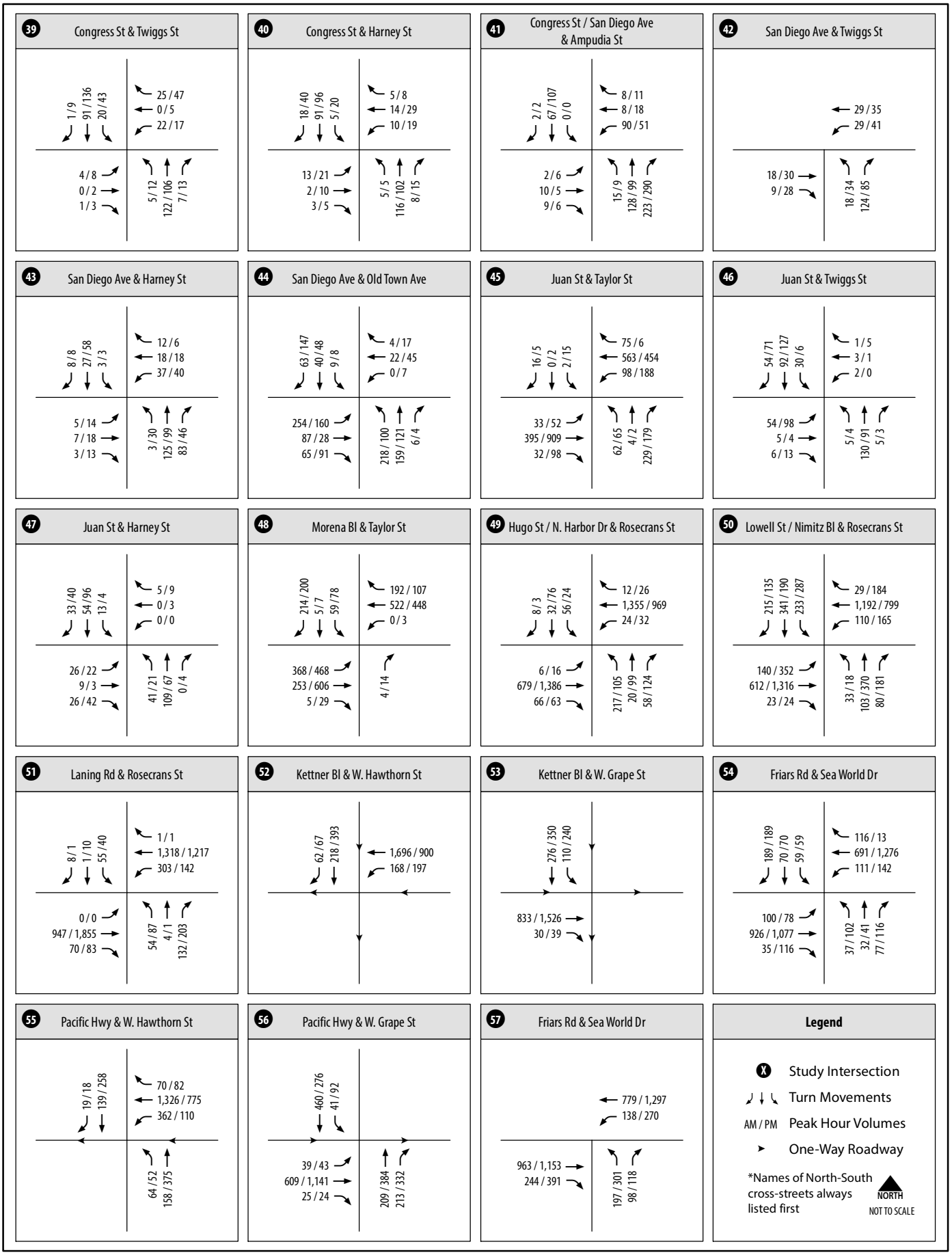
Figure 3-3
Existing Intersection Geometrics (Intersections 58-67)



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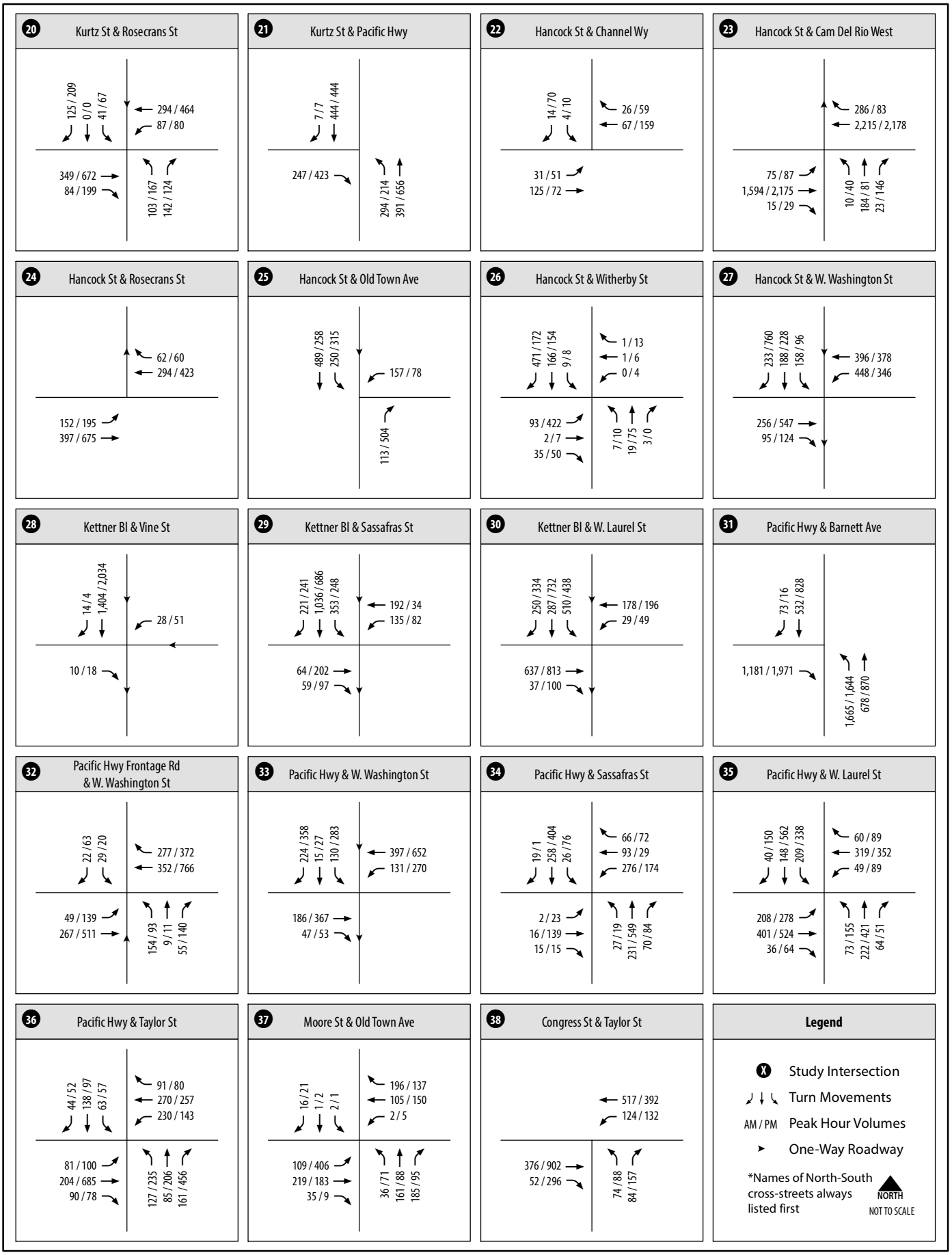
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 1-19)



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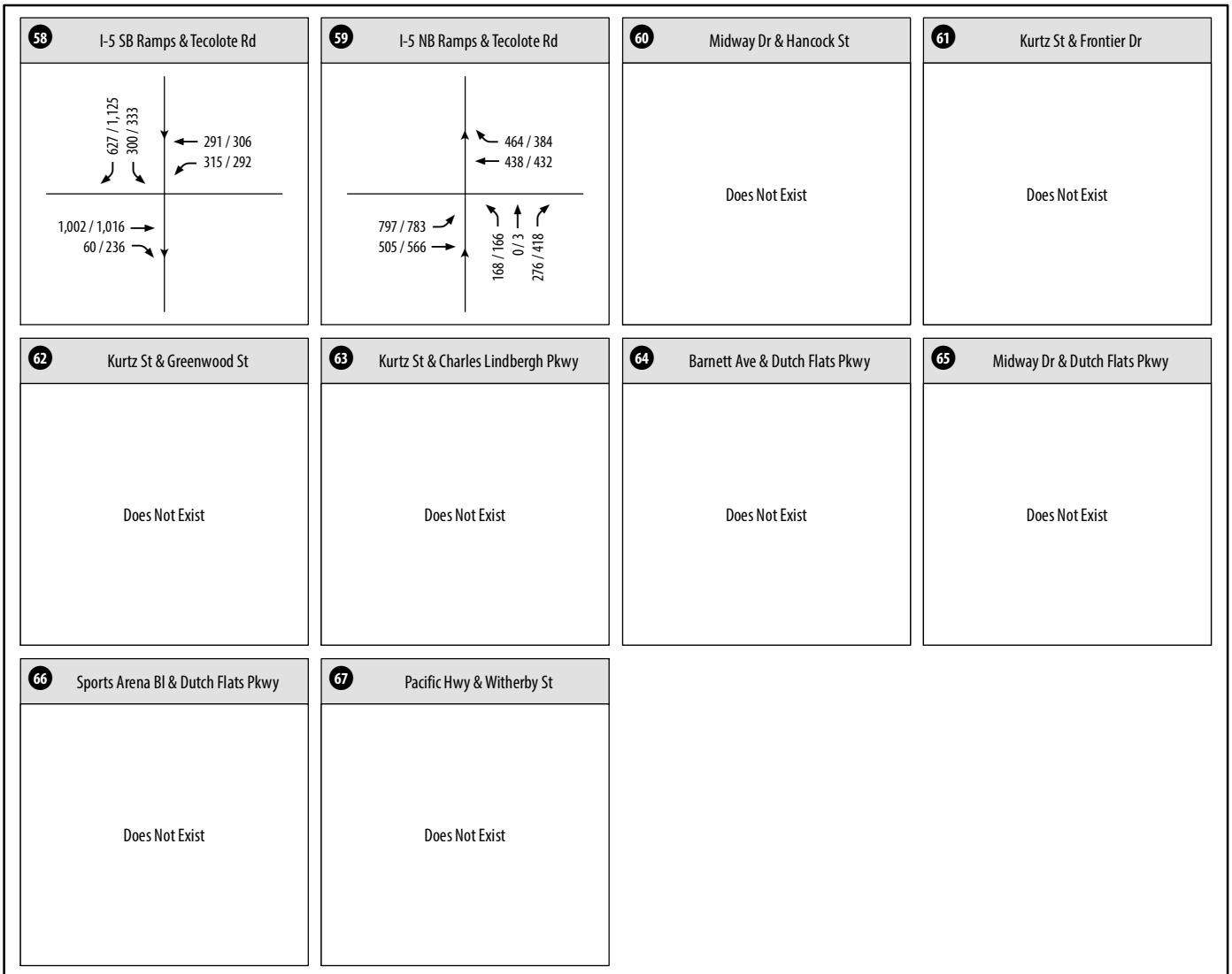
Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movement (Intersections 39-57)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 20-38)



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Figure 3-4
Existing AM/PM Peak Period Intersection Turning Movements (Intersections 58-67)

Table 3-4 Existing AM/PM Peak Hour Level of Service

No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
Midway-Pacific Highway						
1	Lytton St and Rosecrans St	Signal	**65.4**	**E**	44.5	D
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	14.8	B	**59.5**	**E**
3	Sports Arena Blvd and Channel Way	OWSC	11.2	B	14.7	B
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	36.6	D	47.2	D
5	Midway Dr and Kemper St	Signal	22.7	C	37.3	D
6	Midway Dr and East Dr	Signal	4.8	A	13.0	B
7	Midway Dr and Rosecrans St	Signal	34.9	C	49.1	D
8	Midway Dr and Unknown Future Connector 1	Unknown	*Does Not Exist*			
9	Midway Dr and Enterprise St	OWSC	11.0	B	18.1	C
10	Midway Dr and Barnett Ave	Signal	13.8	B	19.8	B
11	Sports Arena Blvd and Hancock St	Signal	10.0	A	13.1	B
12	Sports Arena Blvd and Kemper St	Signal	18.8	B	17.5	B
13	Sports Arena Blvd and Sports Arena Driveway	Signal	17.1	B	24.8	C
14	Sports Arena Blvd and East Dr	Signal	26.0	C	11.9	B
15	Sports Arena Blvd and Rosecrans St	Signal	35.7	D	43.2	D
16	Sports Arena Blvd and Unknown Future Connector 1	Unknown	*Does Not Exist*			
17	Sports Arena Blvd and Pacific Hwy	OWSC	10.6	B	12.0	B
18	Kurtz St and Hancock St	OWSC	*No Control Delay*			
19	Kurtz St and Camino Del Rio West	Signal	9.4	A	20.2	C
20	Kurtz St and Rosecrans St	Signal	20.0	B	31.7	C
21	Kurtz St and Pacific Hwy	OWSC	11.2	B	13.7	B
22	Hancock St and Channel Wy	OWSC	9.3	A	10.5	B
23	Hancock St and Camino Del Rio West	Signal	24.3	C	20.3	C
24	Hancock St and Rosecrans St	Unsignalized	*No Conflicting Movements*			
25	Hancock St and Old Town Ave	AWSC	16.9	C	14.6	B
26	Hancock St and Witherby St	AWSC	16.0	C	23.5	C
27	Hancock St and Washington St	Signal	22.8	C	25.9	C
28	Kettner Blvd and Vine St	TWSC	14.3	B	23.2	C
29	Kettner Blvd and Sassafras St	Signal	12.0	B	11.9	B
30	Kettner Blvd and West Laurel St	Signal	20.0	B	29.7	C
31	Pacific Hwy and Barnett Ave	Grade Separated	*No Control Delay*			
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	19.4	B	36.0	D
33	Pacific Hwy and Washington St @ Pacific St	Signal	18.7	B	31.2	C
34	Pacific Hwy and Sassafras St	Signal	14.4	B	27.3	C
35	Pacific Hwy and West Laurel St	Signal	48.4	D	42.9	D
Old Town						
36	Pacific Hwy and Taylor St	Signal	**64.6**	**E**	33.5	C
37	Moore St and Old Town Ave	Signal	16.4	B	16.4	B

Table 3-4 Existing AM/PM Peak Hour Level of Service

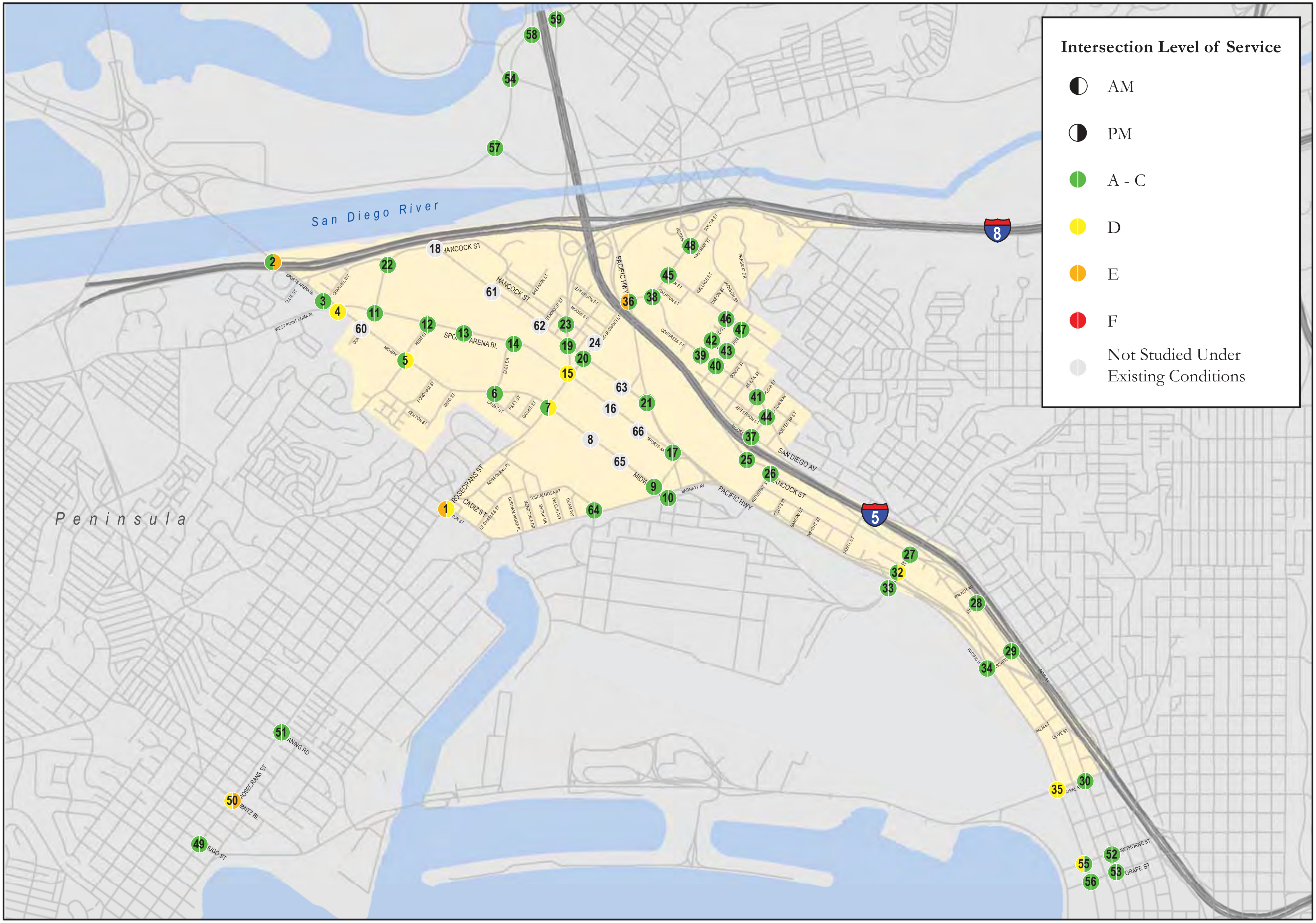
No.	Intersection	Traffic Control[1]	AM		PM	
			Delay (sec)	LOS	Delay (sec)	LOS
38	Congress St and Taylor St	Signal	19.9	B	21.7	C
39	Congress St and Twiggs St	AWSC	8.1	A	8.6	A
40	Congress St and Harney St	AWSC	8.1	A	8.3	A
41	Congress St and San Diego Ave/Ampudia St	TWSC	12.3	B	11.5	B
42	San Diego Ave and Twiggs St	AWSC	7.9	A	8.0	A
43	San Diego Ave and Harney St	AWSC	8.2	A	8.2	A
44	San Diego Ave and Old Town Ave	Signal	18.4	B	11.6	B
45	Juan St and Taylor St	Signal	10.4	B	10.7	B
46	Juan St and Twiggs St	AWSC	8.8	A	8.5	A
47	Juan St and Harney St	AWSC	8.3	A	7.9	A
48	Morena Blvd and Taylor St	Signal	22.4	C	16.4	B
Intersections Outside of Study Communities						
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	14.7	B	20.7	C
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	41.2	D	**63.3**	**E**
51	Laning Rd and Rosecrans St	Signal	15.5	B	12.9	B
52	Kettner Blvd and West Hawthorn St	Signal	11.1	B	15.0	B
53	Kettner Blvd and West Grape St	Signal	7.4	A	8.7	A
54	Pacific Hwy and Sea World Dr	Signal	19.9	B	25.6	C
55	Pacific Hwy and West Hawthorn St	Signal	35.4	D	20.2	C
56	Pacific Hwy and West Grape St	Signal	16.8	B	24.2	C
57	Friars Rd and Sea World Dr	Signal	11.5	B	13.8	B
58	I-5 SB Ramps and Sea World Dr	Signal	15.5	B	16.3	B
59	I-5 NB Ramps and Sea World Dr	Signal	21.4	C	28.4	C

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

Notes:

Bold letter indicates substandard LOS.

1 Signal = Traffic Signal; OWSC = One-Way Stop-Control; 3WSC = Three-Way Stop-Control; AWSC = All-Way Stop-Control;



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Figure 3-5
Existing AM/PM Peak Hour Intersection LOS Results

3.4 Freeway Segment Analysis

Two regional corridors run adjacent to the Midway-Pacific Highway and Old Town communities, providing regional access to and from the communities.

Interstate 5 (I-5) is a north-south freeway that traverses the United States from the Mexican to the Canadian border through the states of California, Oregon, and Washington. Within California, I-5 connects the major metropolitan areas of San Diego, Los Angeles, Sacramento and the eastern portion of the San Francisco Bay Area. I-5 bisects the two study communities and can be accessed via the following roadway interchanges:

Midway-Pacific Highway

- Camino Del Rio West (NB on & SB off only)
- Pacific Highway (SB on & NB off only)
- Washington Street
- Palm Street (SB on only)
- Sassafras Street (NB & SB off only)

Old Town

- Old Town Avenue

Interstate 8 (I-8) is an east-west freeway that extends from the western coast of San Diego to central Arizona. I-8 runs just north of the study communities, with access provided via the following roadway interchanges:

Midway-Pacific Highway

- West Mission Bay Drive (EB & WB off only)
- Camino Del Rio West (EB on & WB off only)

Old Town

- Taylor Street

Table 3-5 displays freeway segment LOS analysis results for key freeway segments in the vicinity of the Midway-Pacific Highway and Old Town communities. Caltrans freeway volume worksheets are provided in Appendix F.

As shown, all key freeway segments are currently operating at LOS D or better with the exception of the following three (3) segments:

- I-5 NB, between Sea World Drive and I-8 (LOS E: PM Peak Period)
- I-5 SB, between I-8 and Old Town Avenue (LOS E: PM Peak Period)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: PM Peak Period)

Table 3-5 Existing Freeway Segment Level of Service Results

Freeway	Segment	ADT	Heavy Vehicle	Dir	Lanes	Capacity	AM Peak Hr %	AM Split	AM Peak Hr Vol	AM V/C	AM LOS	PM Peak Hr %	PM Split	PM Peak Hr Vol	PM V/C	PM LOS
I-8	Beginning of Freeway to Sports Arena Blvd	46,500	1.2%	EB	2M + 0A	4,700	6.3%	60%	1,900	0.40	A	8.5%	72%	3,200	0.68	C
				WB	2M + 0A	4,700		40%	1,300	0.28	A		28%	1,300	0.28	A
	Sports Arena Blvd to I-5	102,000	2.8%	EB	3M + 1A	8,450	6.4%	60%	4,400	0.52	B	7.8%	63%	5,600	0.66	C
				WB	3M + 1A	8,450		40%	2,900	0.34	A		37%	3,400	0.40	A
	I-5 to Morena Blvd	132,000	2.8%	EB	4M + 1A	10,800	6.4%	41%	3,900	0.36	A	7.2%	51%	5,500	0.51	B
				WB	5M + 0A	11,750		59%	5,500	0.47	B		49%	5,200	0.44	B
	Morena Blvd to Hotel Circle	191,000	2.8%	EB	4M + 1A	10,800	6.5%	47%	6,500	0.60	B	8.2%	55%	9,700	0.90	D
				WB	5M + 0A	11,750		53%	7,400	0.63	C		45%	8,000	0.68	C
I-5	Clairemont Dr to Sea World Dr	220,000	4.5%	NB	5M + 0A	11,750	6.4%	61%	10,000	0.85	D	8.3%	51%	10,700	0.91	D
				SB	5M + 0A	11,750		39%	6,200	0.53	B		49%	10,300	0.88	D
	Sea World Dr to I-8	199,000	4.5%	NB	4M + 1A	10,800	6.4%	62%	9,000	0.83	D	8.4%	52%	10,000	0.93	**E**
				SB	4M + 2A	12,200		38%	5,400	0.44	B		48%	9,200	0.75	C
	I-8 to Old Town Ave	199,000	4.1%	NB	4M + 1A	10,800	6.9%	49%	7,700	0.71	C	8.2%	39%	7,300	0.68	C
				SB	5M + 0A	11,750		51%	7,900	0.67	C		61%	11,400	0.97	**E**
	Old Town Ave to Washington St	192,000	4.1%	NB	4M + 0A	9,400	6.9%	49%	7,500	0.80	D	8.0%	51%	9,000	0.96	**E**
				SB	5M + 0A	11,750		51%	7,700	0.66	C		49%	8,600	0.73	C
	Washington St to Pacific Highway	142,000	4.1%	NB	4M + 0A	9,400	6.9%	54%	6,000	0.64	C	8.1%	36%	4,800	0.51	B
				SB	4M + 0A	9,400		46%	5,200	0.55	B		64%	8,400	0.89	D
	Pacific Highway to Laurel Street	147,000	4.1%	NB	4M + 1A	10,800	6.7%	58%	6,600	0.61	B	7.0%	49%	5,800	0.54	B
				SB	4M + 1A	10,800		42%	4,700	0.44	B		51%	6,100	0.56	B
	Laurel Street to Hawthorne Street	183,000	4.1%	NB	4M + 1A	10,800	6.7%	57%	8,100	0.75	C	7.3%	46%	7,100	0.66	C
				SB	4M + 1A	10,800		43%	6,000	0.56	B		54%	8,200	0.76	C

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (2016)

3.5 Freeway Ramp Metering Analysis

Table 3-6 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 3-6 Existing Freeway Ramp Meter Analysis

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Volume	Excess Demand	Delay (Minutes)	Queue (Feet)
I-8 EB / Sports Arena Boulevard	PM	2	1	641	913	423	51.8	12,267
I-5 SB / Sea World Drive	AM	1	1	444	375	57	10.8	1,653
	PM	1	1	444	528	210	39.6	6,090
I-5 NB / Sea World Drive	AM	2	0	1,555	1,261	143	7.7	4,147
	PM	2	0	1,656	1,170	0	0.0	0
I-5 SB / Old Town Avenue	PM	1	0	461	360	8	1.4	232
I-5 NB / Old Town Avenue	AM	2	0	905	466	0	0.0	0
	PM	2	0	888	631	0	0.0	0

Source: Midway-Pacific Highway Corridor & Old Town Existing Conditions Mobility Report, Fehr & Peers (September, 2012)

As shown in Table 3-6, the following ramp meters within the study communities experience delays in excess of 15 minutes:

- I-8 EB / Sports Arena Boulevard (PM Peak) – 51.8 minute delay and 12,267 feet of queue
- I-5 SB / Sea World Drive (PM Peak) – 39.6 minute delay and 6,090 feet of queue

4.0 Preferred Plan

This chapter assess the potential traffic impacts of the Preferred Plan by comparing Preferred Plan conditions to Existing Conditions. Evaluations are provided for vehicle miles traveled (VMT), roadway segment and intersection peak hour operations, and freeway segment and ramp meters operations.

The Preferred Plan forecast traffic volumes were developed utilizing the SANDAG Series 12 Preferred Plan Future Year 2035. The modeling methodology and assumptions are provided in Chapter 5 of the Midway-Pacific Highway and Old Town Community Plan Update Mobility Report. Final SANDAG Series 12 Forecast Model Results for Year 2035, including manual adjustments, are provided in Appendix F.

4.1 Vehicle Miles Traveled

The vehicle miles traveled (VMT) within the communities were estimated using the SANDAG Series 12 Preferred Plan Future Year 2035 and Base Year models. VMT is the total number of miles driven by all vehicle trips generated within the Midway-Pacific Highway and Old Town communities, including trips to, from, and within the communities. Table 4-1A and Table 4-1B display the total VMT generated and average trip length within the Midway-Pacific Highway and Old Town communities, respectively, under both Preferred Plan and Base Year conditions. The results for the San Diego region are also presented in the tables for comparison purposes. VMT calculations are provided as Appendix G.

Table 4-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	833,315	103,194	14.1%	85,182,063	109,000,134	23,818,071	28.0%
Total # of Auto Trips	294,796	313,049	18,253	6.2%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.5%	5.2	5.4	0.2	3.7%
Population	4,672	26,140	21,468	459.5%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	32	-124	-79.6%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:
1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Preferred Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.5%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-79.6%).

Table 4-1B Vehicle Miles Traveled Comparison – Old Town Community

Measure	Community Planning Area				San Diego Region			
	Base Year	Preferred Plan	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	175,289	23,989	15.9%	85,182,063	109,000,134	23,818,071	28.0%
Total # of Auto Trips	57,989	61,622	3,633	6.3%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.8	0.2	9.0%	5.2	5.4	0.2	3.7%
Population	834	2,430	1,596	191.4%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	72	-109	-60.2%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Preferred Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region. With the implementation of the Preferred Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 9.0%. However, the anticipated population increase within the community results in an overall decrease in the daily VMT by population (-60.2%).

4.2 Roadway Segment Analysis

The majority of roadways within the Midway-Pacific Highway and Old Town communities will remain unchanged from existing conditions, however, the Preferred Plan includes roadway improvements and new roadway segments intended to accommodate anticipated future traffic demands. Table 4-2 identifies the proposed roadway segment modifications, including new roadways, in the Midway-Pacific Highway community.

Due to the historic nature of the Old Town community, the Preferred Plan does not propose any roadway widenings or other roadway capacity improvements. However, San Diego Avenue, between Twiggs Street and Conde Street, has a large curb-to-curb width (50 feet) for a standard two-lane collector roadway (typically 40 feet wide). Therefore, in order to better utilize the curb-to-curb right-of-way, it is recommended that the parallel parking on the east side of the roadway be converted to angled parking. The recommended improvement will not affect the capacity of the roadway and will increase the already constrained parking capacity within the Old Town community.

Table 4-2 Summary of Roadway Improvements

Roadway	Segment	Existing Configuration	Recommended Classification
Segment Modifications			
Lytton St / Barnett Ave	Rosecrans St and Midway Dr	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Sports Arena Blvd	I-8 WB Ramps and I-8 EB Ramps	5-Lane Prime Arterial	6-Lane Prime Arterial
Sports Arena Blvd	I-8 EB Ramps and Rosecrans St	5-Lane Major Arterial	6-Lane Major Arterial
Sports Arena Blvd	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Kurtz St	Rosecrans St and Pacific Hwy	2-Lane Collector	2-Lane Collector W/ CLTL
Rosecrans St	Lytton St and Sports Arena Blvd	6-Lane Major Arterial	6-Lane Prime Arterial
Rosecrans St	Sports Arena Blvd and Taylor St	4-Lane Collector W/ CLTL	4-Lane Major Arterial
Hancock St	Kurtz St and Rosecrans Street	2-Lane Collector (One-Way)	3-Lane Major (One-Way)
Hancock St	Old Town Ave and Witherby St	2-Lane Collector	4-Lane Collector
Barnett Ave	Midway Dr and Pacific Hwy	4-Lane Major Arterial	6-Lane Prime Arterial
Midway Drive	Rosecrans St and Barnett Avenue	4-Lane Collector W/CLTL	4-Lane Major Arterial
New Roadways			
Kemper St	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Frontier Dr	Sports Arena Blvd and Kurtz St	Does Not Exist	2-Lane Collector W/ CLTL
Greenwood St	Kurtz St and Sports Arena Blvd	Does Not Exist	2-Lane Collector
Charles Lindbergh Pkwy	Kurtz St and Midway Dr	Does Not Exist	2-Lane Collector W/ CLTL
Dutch Flats Pkwy	Sports Arena Blvd and Barnett Ave	Does Not Exist	2-Lane Collector W/ CLTL

Source: Chen Ryan Associates (June 2016)

Table 4-3 displays the level of service analysis results for the study area roadway segments under both the Preferred Plan and Existing Conditions within the Midway-Pacific Highway and Old Town communities. The proposed roadway classifications and forecast ADT and LOS under buildout of the Preferred Plan are shown in Figure 4-1 and Figure 4-2.

Table 4-3 Roadway Segment Level of Service Results

Roadway	From	To	Preferred Plan Conditions					Existing Conditions					Δ V/C	SI?
			Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS		
North-South														
Midway Pacific Highway														
Lytton Street/ Barnett Ave	Rosecrans St	Midway Dr	4-Lane Major Arterial	40,000	24,300	0.61	C	4-Lane Collector (CLTL)	30,000	22,070	0.74	D	-0.13	No
Midway Dr	W. Point Loma Blvd/ Sports Arena Blvd	Kemper St	4-Lane Collector (CLTL)	30,000	23,300	0.78	D	4-Lane Collector (CLTL)	30,000	19,960	0.67	C	0.11	No
	Kemper St	East Dr	4-Lane Collector (CLTL)	30,000	20,100	0.67	D	4-Lane Collector (CLTL)	30,000	20,240	0.67	D	0.0	No
	East Dr	Rosecrans St	4-Lane Collector (CLTL)	30,000	26,800	0.89	E	4-Lane Collector (CLTL)	30,000	27,600	0.92	E	-0.03	No
	Rosecrans St	Barnett Ave	4-Lane Major Arterial	40,000	28,100	0.70	C	4-Lane Collector (CLTL)	30,000	23,000	0.77	D	-0.07	No
Sports Arena Blvd	I-8 WB Ramps	I-8 EB Ramps	6-Lane Prime Arterial	60,000	45,400	0.76	C	5-Lane Prime Arterial	50,000	35,670	0.71	C	0.05	No
	I-8 EB Ramps	W. Point Loma Blvd	6-Lane Major Arterial	50,000	39,200	0.78	C	6-Lane Major Arterial	50,000	31,010	0.62	C	0.16	No
	W. Point Loma Blvd/Midway Dr	Kemper St	6-Lane Major Arterial	50,000	19,500	0.39	A	5-Lane Collector (CLTL)	37,500	17,600	0.47	B	-0.08	No
	Kemper St	East Dr	6-Lane Major Arterial	50,000	25,300	0.51	B	5-Lane Major Arterial	45,000	19,520	0.43	B	0.08	No
	East Dr	Rosecrans St	6-Lane Major Arterial	50,000	17,700	0.35	A	5-Lane Major Arterial	45,000	26,800	0.60	C	-0.25	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	11,000	0.73	D	2-Lane Collector	8,000	2,600	0.33	B	0.40	No
Kurtz St	Hancock St	Rosecrans St	2-Lane Collector (One-Way)	17,500	12,800	0.73	D	2-Lane Collector (One-Way)	17,500	5,340	0.31	A	0.42	No
	Rosecrans St	Pacific Hwy	2-Lane Collector (CLTL)	15,000	6,900	0.46	B	2-Lane Collector	8,000	6,690	0.84	E	-0.38	No

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Hancock St	Sports Arena Blvd	Kurtz St	4-Lane Collector	15,000	1,100	0.07	A	2-Lane Collector (CLTL)	15,000	3,930	0.26	A	-0.19	No
	Kurtz St	Camino Del Rio West	3-Lane Major (One-Way)	27,500	14,800	0.54	B	2-Lane Collector (One-Way)	17,500	4,710	0.27	A	0.27	No
	Camino Del Rio West	Rosecrans St	3-Lane Major (One-Way)	27,500	7,500	0.27	A	2-Lane Collector (One-Way)	17,500	2,990	0.17	A	0.10	No
	Old Town Ave	Witherby St	4-Lane Collector	15,000	11,300	0.75	D	2-Lane Collector	8,000	9,680	1.21	**F**	-0.46	No
	Witherby St	Washington St	2-Lane Collector	8,000	5,100	0.64	D	2-Lane Collector	8,000	2,740	0.34	B	0.30	No
Kettner Blvd	Washington St	Vine St	3-Lane Major (One-Way)	27,500	34,700	1.26	**F**	3-Lane Major (One-Way)	27,500	23,720	0.86	D	0.40	**Yes**
	Vine St	Sassafras St	3-Lane Major (One-Way)	27,500	34,600	1.26	**F**	3-Lane Major (One-Way)	27,500	23,080	0.84	D	0.42	**Yes**
	Sassafras St	Laurel St	3-Lane Major (One-Way)	27,500	32,800	1.19	**F**	3-Lane Major (One-Way)	27,500	20,150	0.73	C	0.46	**Yes**
Pacific Hwy	Sea World Dr	Taylor St	2-Lane Collector (CLTL)	15,000	10,600	0.71	D	2-Lane Collector (CLTL)	15,000	7,460	0.5	C	0.21	No
	Taylor St	Kurtz St	6-Lane Major Arterial	50,000	19,300	0.39	A	6-Lane Major Arterial	50,000	13,300	0.27	A	0.12	No
	Kurtz St	Sports Arena Blvd	6-Lane Major Arterial	50,000	24,000	0.48	B	6-Lane Major Arterial	50,000	21,470	0.43	B	0.05	No
	Sports Arena Blvd	Barnett Ave	5-Lane Major Arterial	45,000	17,400	0.39	A	5-Lane Prime Arterial	50,000	11,600	0.23	A	0.16	No
	Barnett Ave	Washington St	Expressway	80,000	51,100	0.64	C	Expressway	80,000	54,690	0.68	C	-0.04	No
	Washington St	Sassafras St	6-Lane Major Arterial	50,000	18,600	0.37	A	6-Lane Prime Arterial	60,000	11,650	0.19	A	0.18	No
	Sassafras St	Laurel St	6-Lane Major Arterial	50,000	31,100	0.62	C	6-Lane Major Arterial	50,000	19,160	0.38	B	0.24	No
Old Town														
Congress St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,800	0.98	**E**	2-Lane Collector	8,000	4,230	0.53	C	0.45	**Yes**

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Congress St	Twiggs St	Harney St	2-Lane Collector	8,000	6,400	0.80	D	2-Lane Collector	8,000	4,380	0.55	C	0.25	No
	Harney St	San Diego Ave/ Ampudia St	2-Lane Collector	8,000	6,000	0.75	D	2-Lane Collector	8,000	4,280	0.54	C	0.21	No
San Diego Ave	Twiggs St	Harney St	2-Lane Collector	8,000	4,900	0.61	C	2-Lane Collector	8,000	3,540	0.44	C	0.17	No
	Conde St	Arista Ave	2-Lane Collector	8,000	4,600	0.58	C	2-Lane Collector	8,000	4,350	0.54	C	0.04	No
	Ampudia St	Old Town Ave	2-Lane Collector	8,000	12,100	1.51	**F**	2-Lane Collector	8,000	10,160	1.27	**F**	0.24	**Yes**
	Old Town Ave	Hortensia St	2-Lane Collector	8,000	6,800	0.85	**E**	2-Lane Collector	8,000	5,400	0.68	D	0.17	**Yes**
Juan St	Taylor St	Twiggs St	2-Lane Collector	8,000	7,000	0.88	**E**	2-Lane Collector	8,000	5,430	0.68	D	0.20	**Yes**
	Twiggs St	Harney St	2-Lane Collector	8,000	6,600	0.83	**E**	2-Lane Collector	8,000	4,810	0.60	C	0.23	**Yes**
	Harney St	San Juan Rd	2-Lane Collector	8,000	3,700	0.46	C	2-Lane Collector	8,000	2,930	0.37	B	0.09	No
Morena Blvd	I-5 Ramps	Taylor St	3-lane Major Arterial	30,000	21,800	0.73	C	3-lane Major Arterial	30,000	7,585	0.25	A	0.48	No
East-West														
Midway Pacific Highway														
Channel Wy	W. Mission Bay Dr	Hancock St	4-Lane Collector	15,000	7,100	0.47	C	2-Lane Collector	8,000	1,280	0.16	A	0.31	No
Kemper St	Kenyon St	Midway Dr	4-Lane Collector	15,000	9,600	0.64	C	2-Lane Collector (CLTL)	15,000	9,010	0.60	C	0.04	No
	Midway Dr	Sports Arena Blvd	4-Lane Collector	15,000	9,300	0.62	C	2-Lane Collector (CLTL)	15,000	8,120	0.54	C	0.08	No
	Sports Arena Blvd	Hancock St	2-Lane Collector (CLTL)	15,000	9,500	0.63	C	*Does Not Exist*						No
Frontier Dr	Sports Arena Blvd	Kurtz St	2-Lane Collector (CLTL)	15,000	12,400	0.83	D	*Does Not Exist*						No
Greenwood St	Sports Arena Blvd	Kurtz St	2-Lane Collector	8,000	7,000	0.88	**E**	*Does Not Exist*						**Yes**
Camino Del Rio West	Rosecrans St	I-5/I-8 Ramps	6-Lane Prime Arterial	60,000	66,800	1.11	**F**	6-Lane Prime Arterial	60,000	50,700	0.85	D	0.26	**Yes**
Rosecrans St	Lytton St	Midway Dr	6-Lane Prime Arterial	60,000	54,100	0.90	D	6-Lane Major Arterial	50,000	46,400	0.93	**E**	-0.03	No

Table 4-3 Roadway Segment Level of Service Results

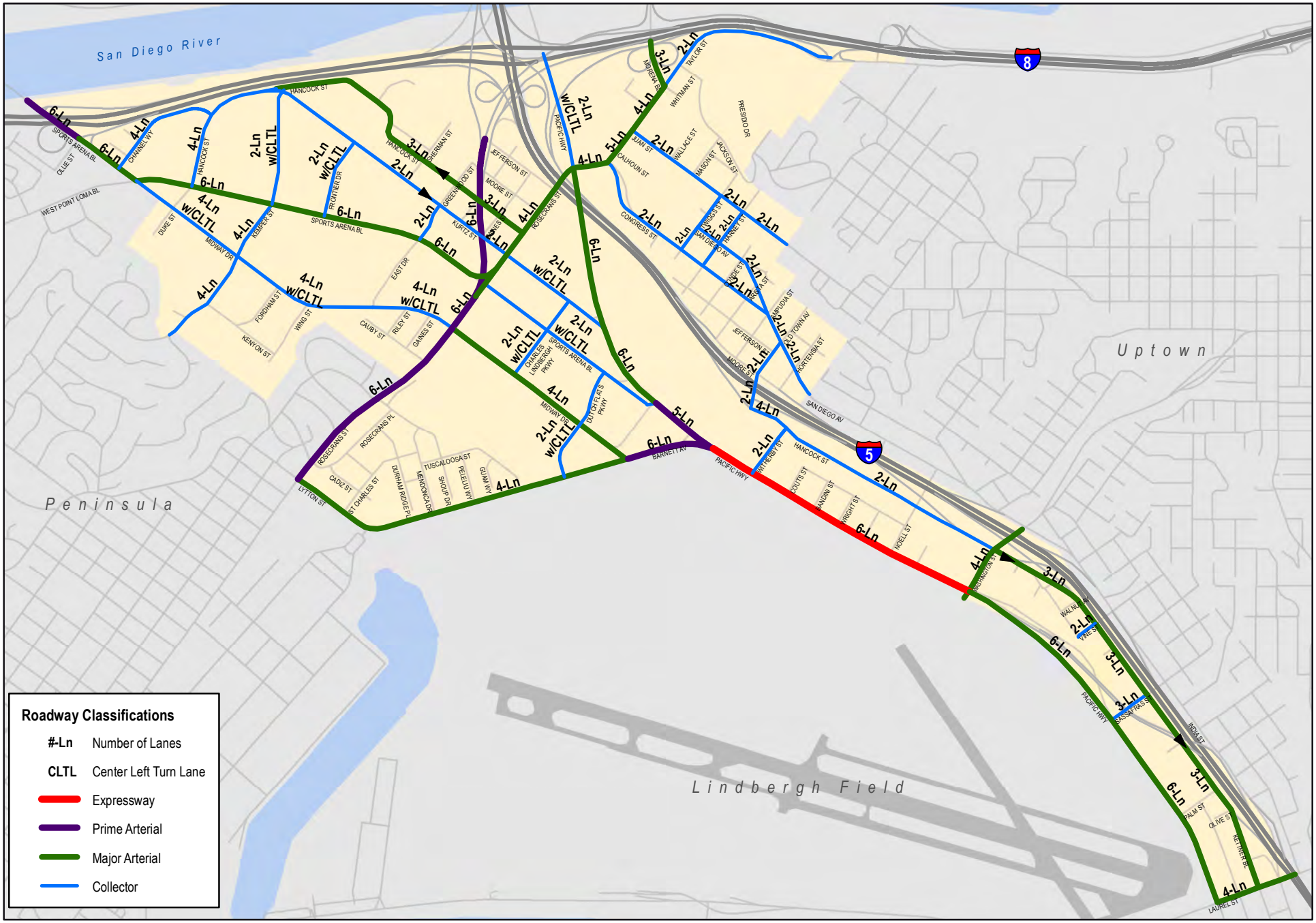
			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Rosecrans St	Midway Dr	Sports Arena Blvd	6-Lane Prime Arterial	60,000	56,800	0.95	**E**	6-Lane Major Arterial	50,000	59,100	1.18	**F**	-0.23	No
	Sports Arena Blvd	Pacific Hwy/Taylor St	4-Lane Major Arterial	40,000	22,000	0.55	C	4-Lane Collector (CLTL)	30,000	15,500	0.52	C	0.03	No
Charles Lindbergh Pkwy	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	6,000	0.40	B	*Does Not Exist*						No
	Sports Arena Blvd	Kurtz Street	2-Lane Collector (CLTL)	15,000	8,100	0.54	C	*Does Not Exist*						No
Dutch Flats Pkwy	Barnett Avenue	Midway Dr	2-Lane Collector (CLTL)	15,000	13,300	0.89	**E**	*Does Not Exist*						**Yes**
	Midway Dr	Sports Arena Blvd	2-Lane Collector (CLTL)	15,000	8,700	0.58	C	*Does Not Exist*						No
Barnett Ave	Midway Dr	Pacific Hwy	6-Lane Prime Arterial	60,000	51,500	0.86	D	4-Lane Major Arterial	40,000	57,954	1.45	**F**	-0.59	No
Washington St	Frontage Rd	Pacific St	4-Lane Major Arterial	40,000	16,300	0.41	B	4-Lane Major Arterial	40,000	10,680	0.27	A	0.14	No
	Pacific St	Hancock St	4-Lane Major Arterial	40,000	22,900	0.57	C	4-Lane Major Arterial	40,000	12,870	0.32	A	0.25	No
Vine St	California St	Kettner Blvd	2-Lane Collector	8,000	2,000	0.25	A	2-Lane Collector	8,000	250	0.03	A	0.22	No
Sassafras St	Pacific Hwy	Kettner Blvd	3-Lane Collector	11,000	21,200	1.93	**F**	3-Lane Collector	11,000	8,700	0.79	D	1.14	**Yes**
Laurel St	Pacific Hwy	Kettner Blvd	4-Lane Major Arterial	40,000	29,500	0.74	C	4-Lane Major Arterial	40,000	26,290	0.66	C	0.08	No
Old Town														
Taylor St	Pacific Hwy/ Rosecrans St	Congress St	4-Lane Major Arterial	40,000	30,300	0.76	D	4-Lane Major Arterial	40,000	22,100	0.55	C	0.21	No
	Congress St	Juan St	5-Lane Major Arterial	45,000	21,200	0.47	B	5-Lane Major Arterial	45,000	13,560	0.30	A	0.17	No
	Juan St	Morena Blvd	4-Lane Major Arterial	40,000	25,600	0.64	C	4-Lane Major Arterial	40,000	17,530	0.44	B	0.20	No
	Morena Blvd	I-8 EB Ramps	2-Lane Collector	8,000	15,300	1.91	**F**	2-Lane Collector	8,000	13,140	1.64	**F**	0.27	**Yes**

Table 4-3 Roadway Segment Level of Service Results

			Preferred Plan Conditions					Existing Conditions						
Roadway	From	To	Roadway Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Functional Classification	Maximum Capacity at LOS E	ADT	V/C	LOS	Δ V/C	SI?
Twiggs St	Congress St	San Diego Ave	2-Lane Collector	8,000	2,600	0.33	B	2-Lane Collector	8,000	2,080	0.26	A	0.07	No
Twiggs St	San Diego Ave	Juan St	2-Lane Collector	8,000	3,600	0.45	C	2-Lane Collector	8,000	2,670	0.33	B	0.12	No
Harney St	Congress St	San Diego Ave	2-Lane Collector	8,000	1,800	0.23	A	2-Lane Collector	8,000	1,520	0.19	A	0.04	No
	San Diego Ave	Juan St	2-Lane Collector	8,000	3,300	0.41	B	2-Lane Collector	8,000	2,350	0.29	A	0.12	No
Old Town Ave	Hancock St	Moore St	2-Lane Collector	8,000	12,400	1.55	**F**	2-Lane Collector	8,000	11,750	1.47	**F**	0.08	**Yes**
	Moore St	San Diego Ave	2-Lane Collector	8,000	6,700	0.84	**E**	2-Lane Collector	8,000	6,120	0.77	D	0.07	**Yes**

Source: Chen Ryan Associates (May 2017)

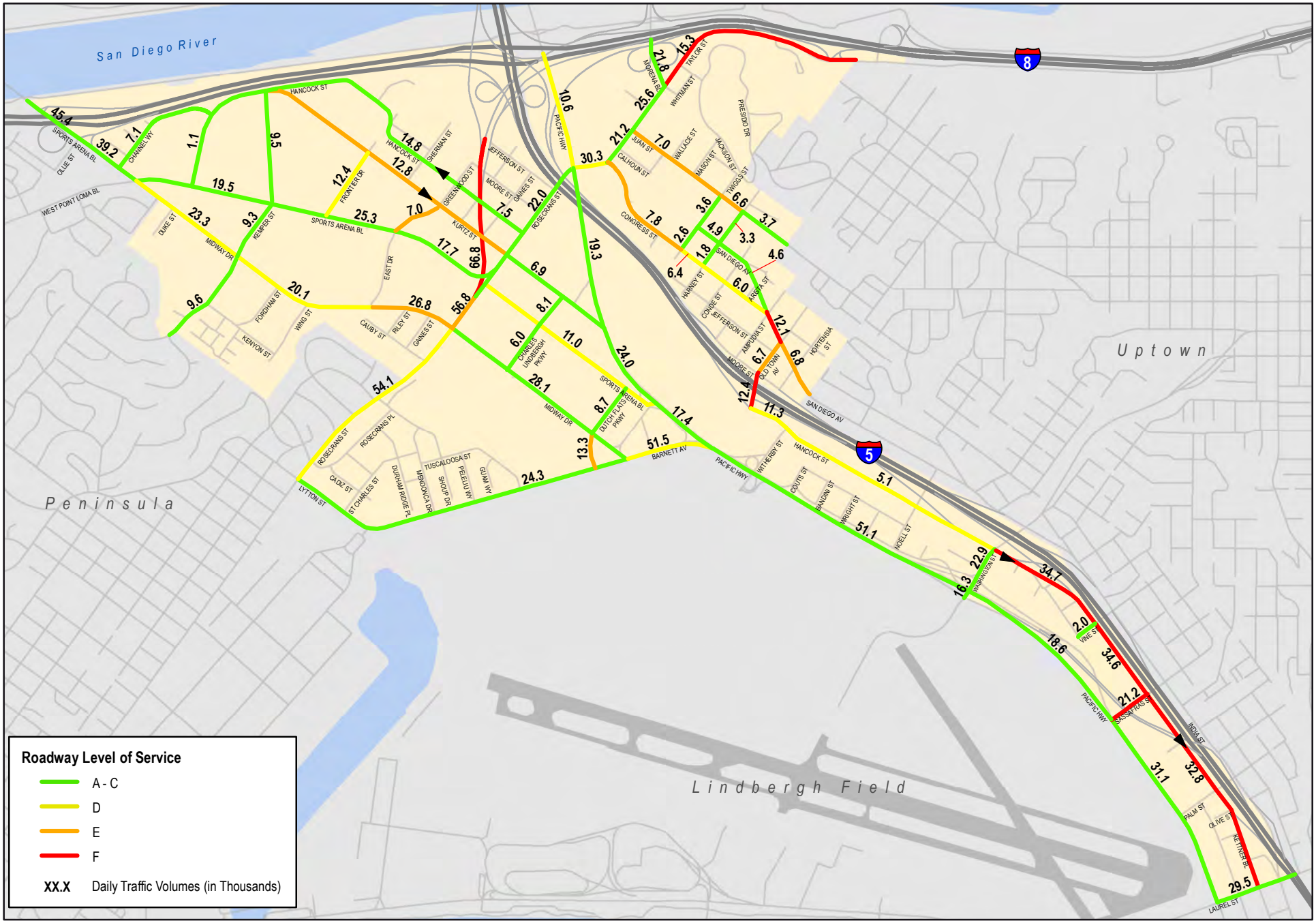
Note:
Bold letter indicates LOS E or F



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Figure 4-1
Roadway Classifications -
Preferred Plan Conditions



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Figure 4-2
Daily Roadway Segment Traffic Volumes and LOS - Preferred Plan Conditions

Based on the criteria documented in Chapter 2, the following roadway segments will have a significant impact under buildout of the Preferred Plan:

Midway-Pacific Highway Community

- Kettner Boulevard, between Washington Street and Vine Street (LOS F, ΔVC 0.40)
- Kettner Boulevard, between Vine Street and Sassafras Street (LOS F, ΔVC 0.42)
- Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F, ΔVC 0.46)
- Greenwood Street between Sport Arena Boulevard and Kurtz Street (LOS E, New Road)
- Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F, ΔVC 0.26)
- Dutch Flats Parkway between Barnett Avenue and Midway Drive (LOS E, New Road)
- Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F, ΔVC 1.14)

Old Town Community

- Congress Street between Taylor Street and Twiggs Street (LOS E, ΔVC 0.45)
- San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F, ΔVC 0.24)
- San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E, ΔVC 0.17)
- Juan Street, between Taylor Street and Twiggs Street (LOS E, ΔVC 0.20)
- Juan Street, between Twiggs Street and Harney Street (LOS E, ΔVC 0.23)
- Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F, ΔVC 0.27)
- Old Town Avenue, between Hancock Street and Moore Street (LOS F, ΔVC 0.08)
- Old Town Avenue, between Moore Street and San Diego Avenue (LOS E, ΔVC 0.07)

4.3 Intersection Analysis

AM and PM peak hour intersection LOS analyses were conducted under Preferred Plan and Existing Conditions. The following intersection improvements were assumed under buildout of the Preferred Plan:

Rosecrans Street / Sports Arena Boulevard / Camino Del Rio West:

- Remove the southbound free right-turn movement from Camino Del Rio West onto Sports Arena Boulevard and replace it with an exclusive right-turn lane.
- Allow southbound movements to continue on Sports Arena Boulevard through the intersection. It should be noted that you would still not be able to access the southern leg of Sports Arena Boulevard from westbound Rosecrans Street or southwest bound Camino del Rio West.

Sports Arena Boulevard / Pacific Highway:

- Move intersection approximately 500 feet to the north.
- Re-align Sports Arena Boulevard to create a right-angle with Pacific Highway.
- Signalize the intersection.
- Provide an exclusive eastbound left-turn lane from Sports Arena Boulevard onto Pacific Highway.
- Provide an exclusive northbound left-turn lane from Pacific Highway onto Sports Arena Boulevard.

Sports Arena Boulevard / West Point Loma Boulevard / Midway Drive

- Remove the westbound free right-turn movement from Sports Arena Boulevard onto Sports Arena Boulevard. The right-of-way will be used to extend the curb and create a curb bulb-out to reduce the pedestrian crossing distance. Right-turn movements will be permitted from the outside through lane.

- Square up and control the northbound free right-turn movement from Midway Drive onto Sports Arena Boulevard with the intersection.

West Washington Street / Pacific Highway

- Further analyze operations at this intersection to determine if additional improvements would be beneficial.

Congress Street / San Diego Avenue / Ampudia Street:

- Convert intersection to all-way stop control
- Implement bulb-outs on all legs of the intersection
- Widen the sidewalks along the north side of San Diego Avenue

Seven new intersections are recommended for the Midway-Pacific Highway community. Additionally, the roadway network was evaluated to identify intersection locations, both existing and new intersections, that would benefit from the implementation of a roundabout or signalization. A summary of recommended intersection improvements are displayed in Table 4-4. It is not known at this time if the implementation of roundabout will be feasible at any or all intersections. A roundabout feasibility analysis will need to be performed once the new intersections and roadways are designed. Therefore, to be conservative the analysis assumed that all new intersections would be signalized, unless otherwise noted. However, it is recommended that a roundabout be implemented in lieu of a signal at all new intersections, where feasible.

With the exception of the intersection of Congress Street / San Diego Avenue, / Ampudia Street, no other operational intersection improvements were identified for the Old Town community. Traffic signal warrants were conducted at the intersections where signalization is recommended. Figure 4C-103 (CA) of the California Manual on Uniform Traffic Control Devices (MUTCD) 2012 Edition was utilized for the signal warrant. All intersections where signalization is recommended met the warrants. Signal warrant worksheets are provided in Appendix H of the Mobility Report.

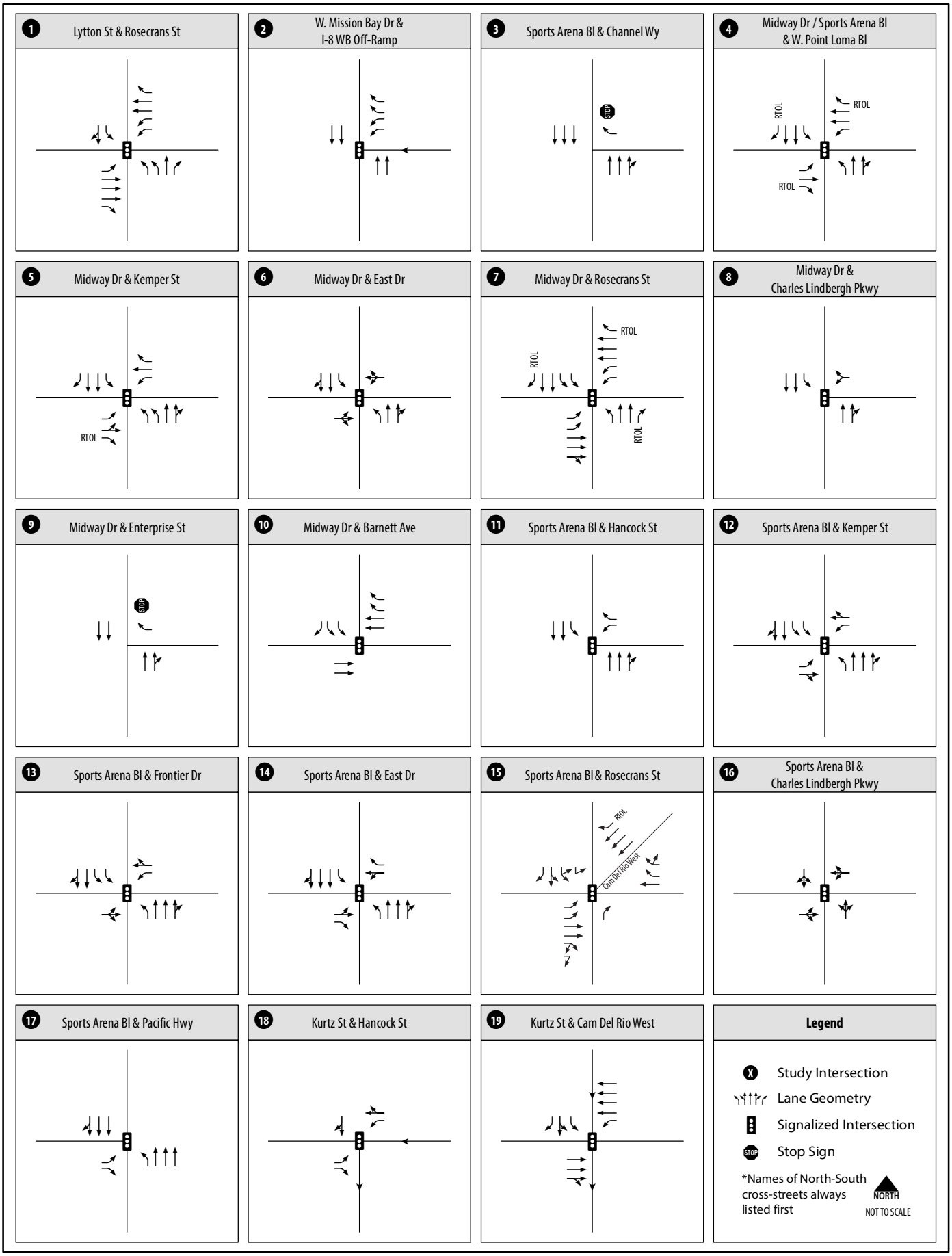
Table 4-4 Summary of Intersection Improvements

No.	Intersection	Improvement	Control
8	Midway Drive / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
12	Kemper Street / Sports Arena Boulevard	Add north leg	Signalized
13	Sports Arena Boulevard / Frontier Drive	Add north leg	Signalized
14	Sports Arena Boulevard / Greenwood Street	Add north leg	Signalized
16	Sports Arena Boulevard / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
17	Sports Arena Boulevard / Pacific Highway	Relocate intersection and signalize	Signalized
18	Kurtz Street / Hancock Street	Add south leg and signalize	Signalized
21	Kurtz Street / Pacific Highway	Signalize	Signalized
61	Kurtz Street / Frontier Drive	New intersection	Roundabout/SSSC
62	Kurtz Street / Greenwood Street	Add south leg and signalize	Signalized
63	Kurtz Street / Charles Lindbergh Parkway	New intersection	Roundabout/Signalized
64	Barnett Avenue / Dutch Flats Parkway	New intersection	Roundabout/Signalized
65	Midway Drive / Dutch Flats Parkway	New intersection	Roundabout/Signalized
66	Sports Arena Boulevard / Dutch Flats Parkway	New intersection	Roundabout/Signalized
N/A	Hancock Street / Greenwood Street	Signalize	Signalized

Source: Chen Ryan Associates (June 2016)

The proposed intersection geometrics and forecast AM/PM peak hour turning movement volumes under Preferred Plan buildout conditions are provided in Figure 4-3 and Figure 4-4, respectively.

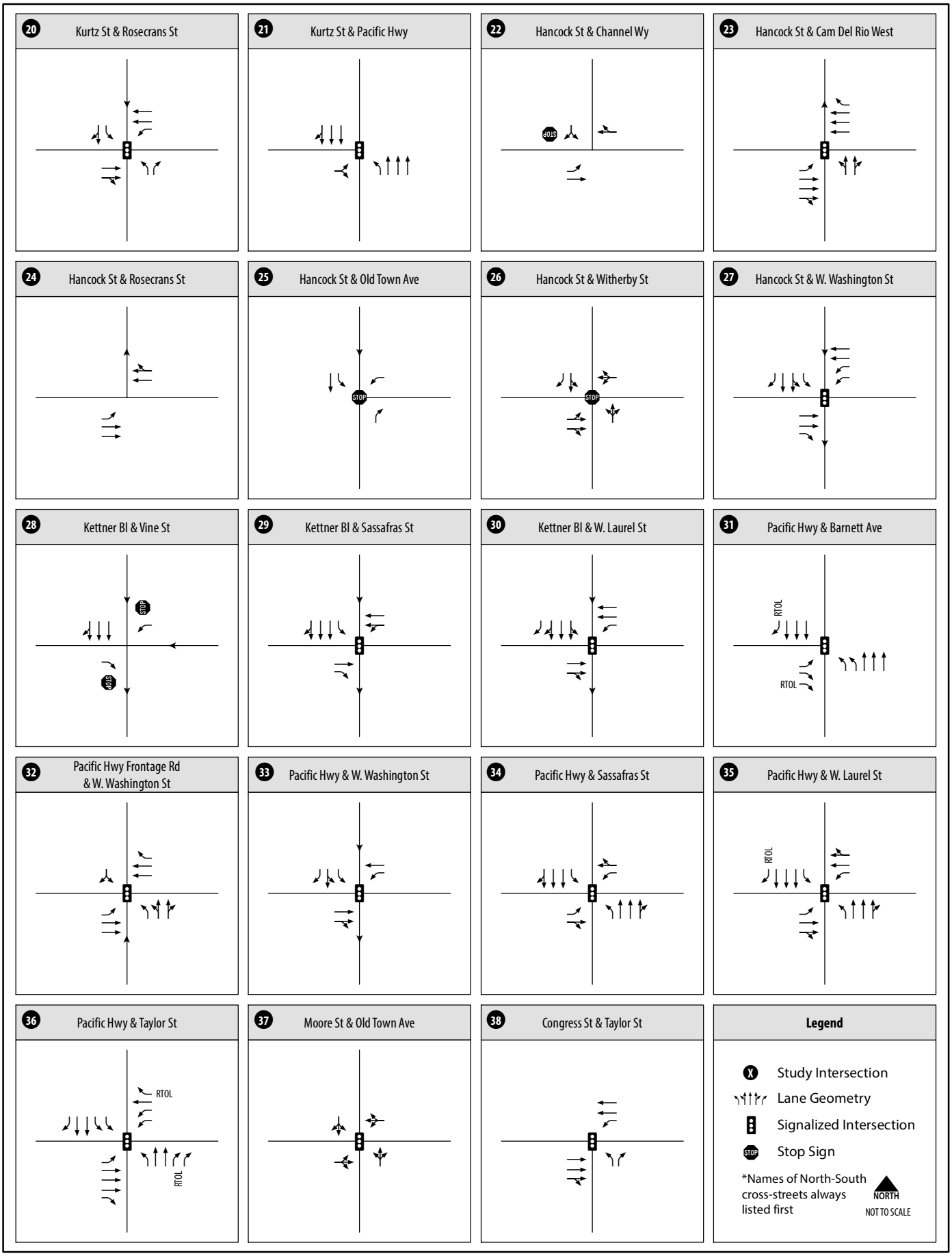
Table 4-5 displays intersection level of service and average vehicle delay results for study area intersections under Preferred Plan and Existing Conditions. Level of service calculation worksheets are provided in Appendix I.



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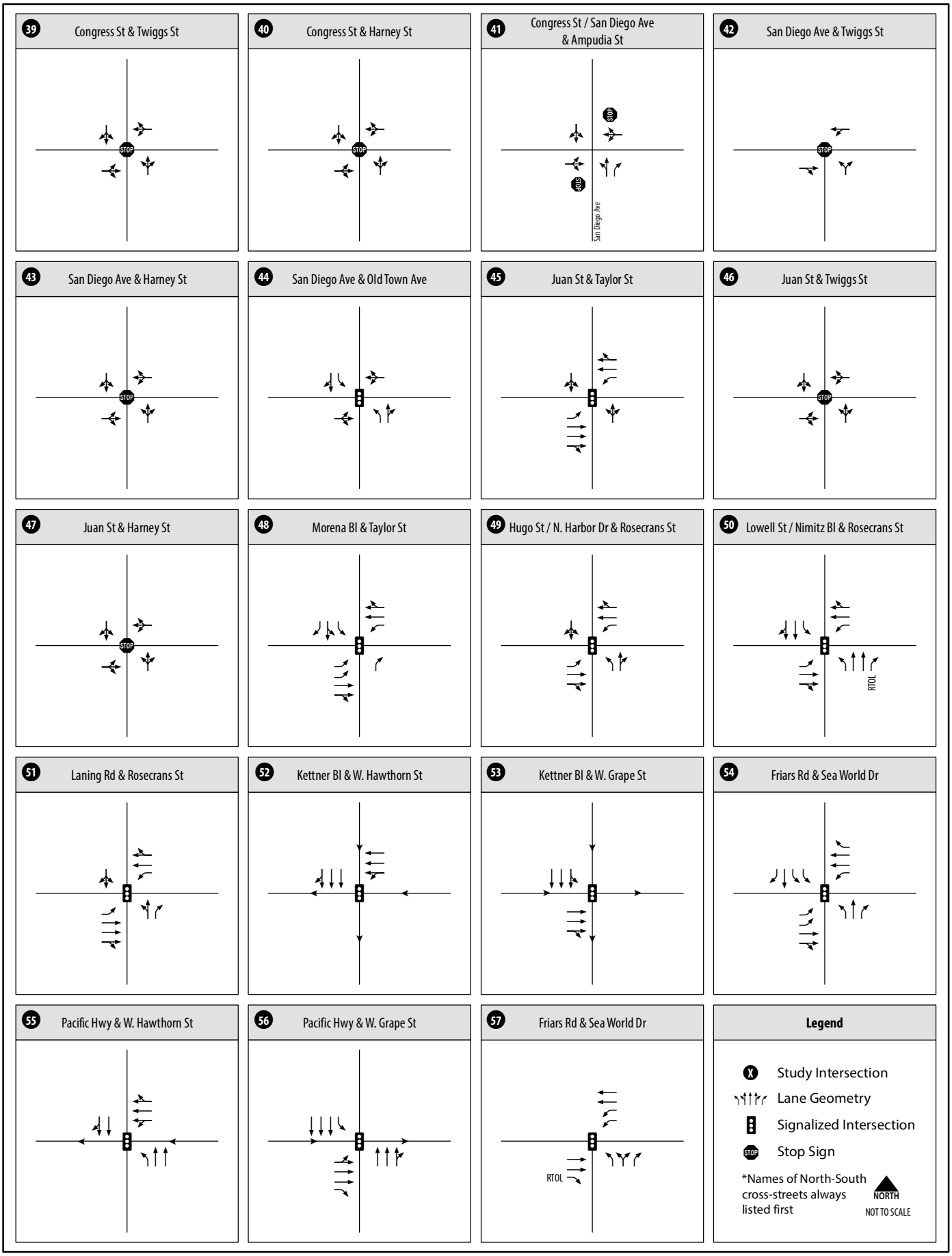
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 1-19)



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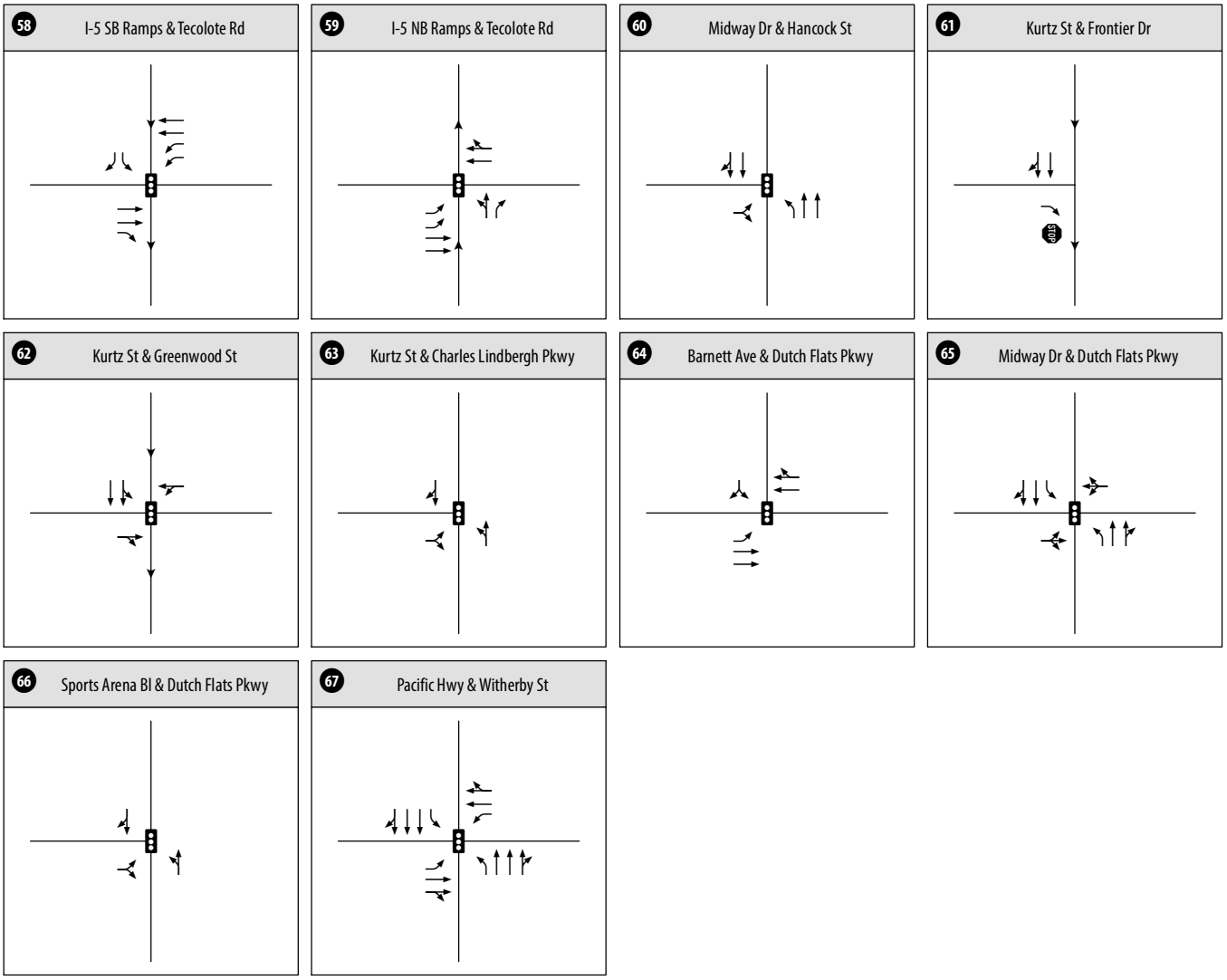
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 20-38)



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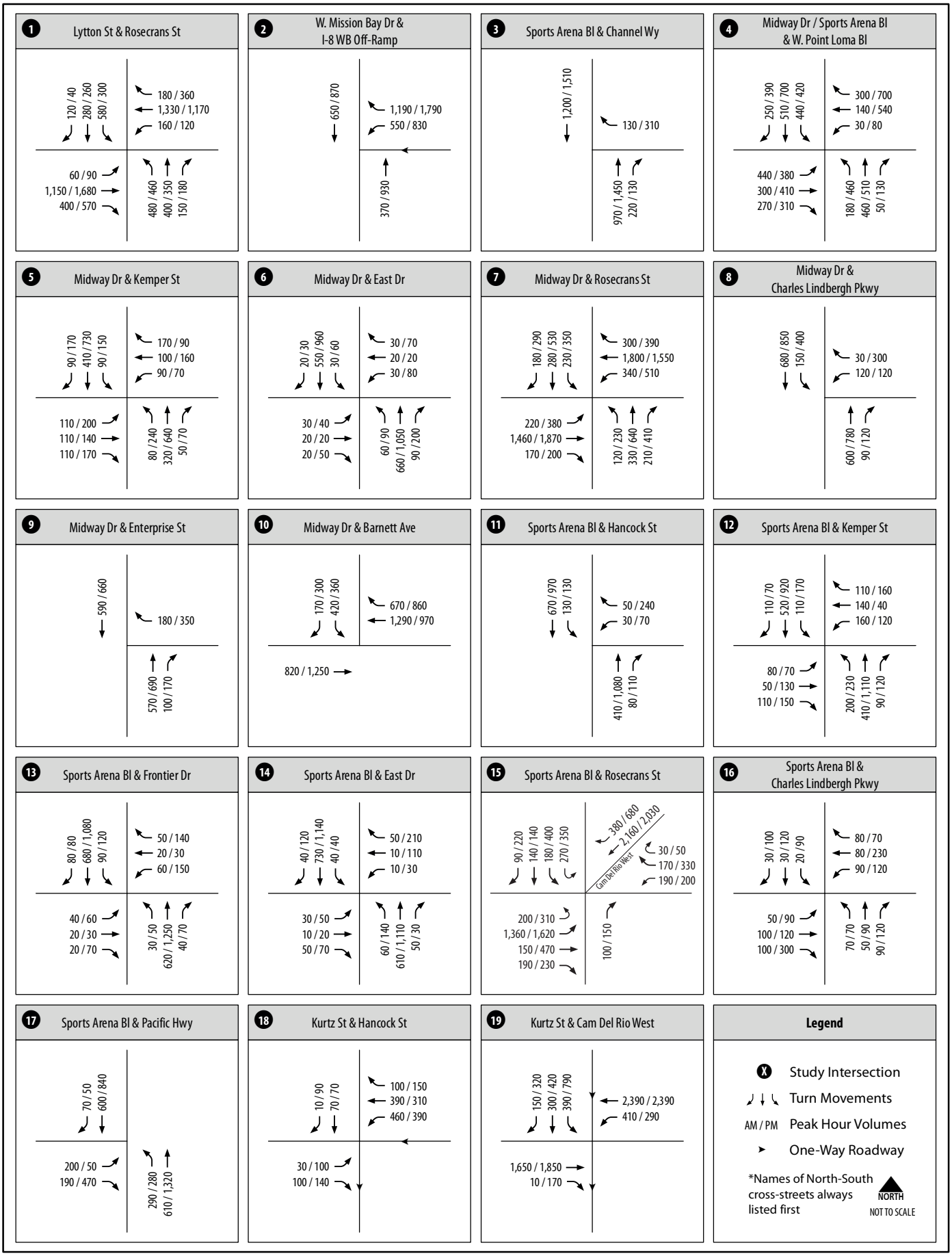
Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 39-57)



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Figure 4-3
Intersection Geometrics - Preferred Plan Conditions (Intersections 58-67)

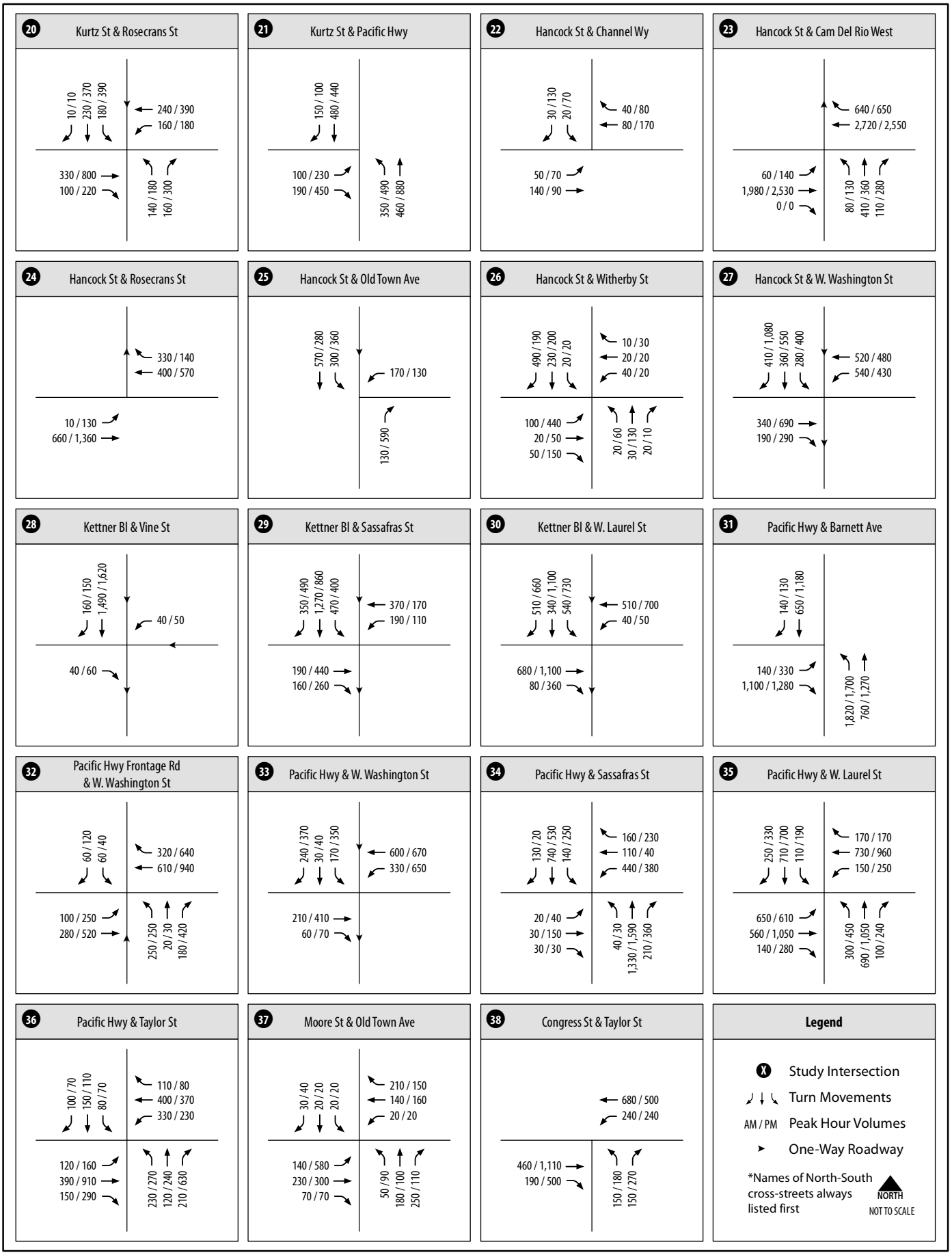


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 1-19)

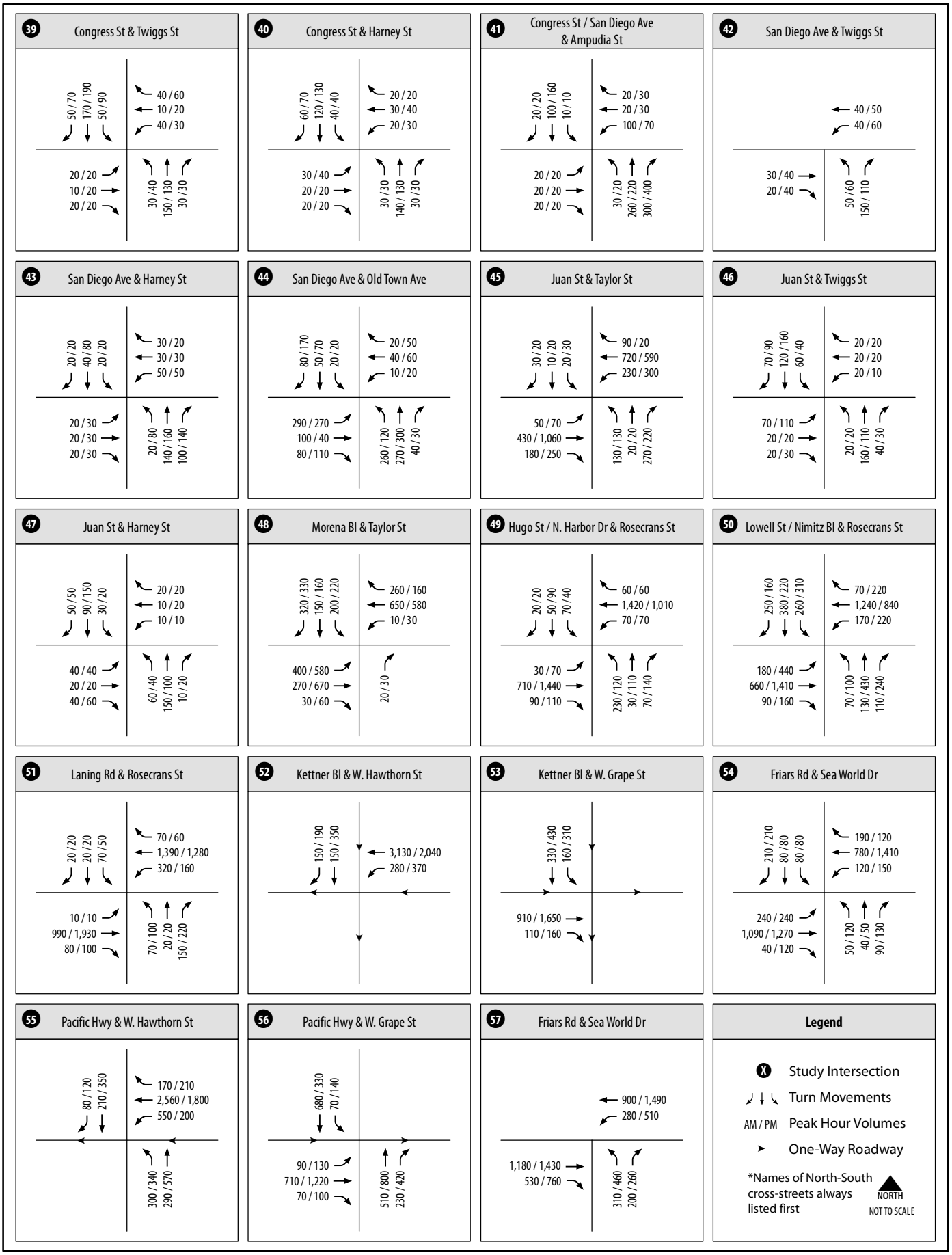


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Figure 4-4

Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 20-38)



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Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 39-57)

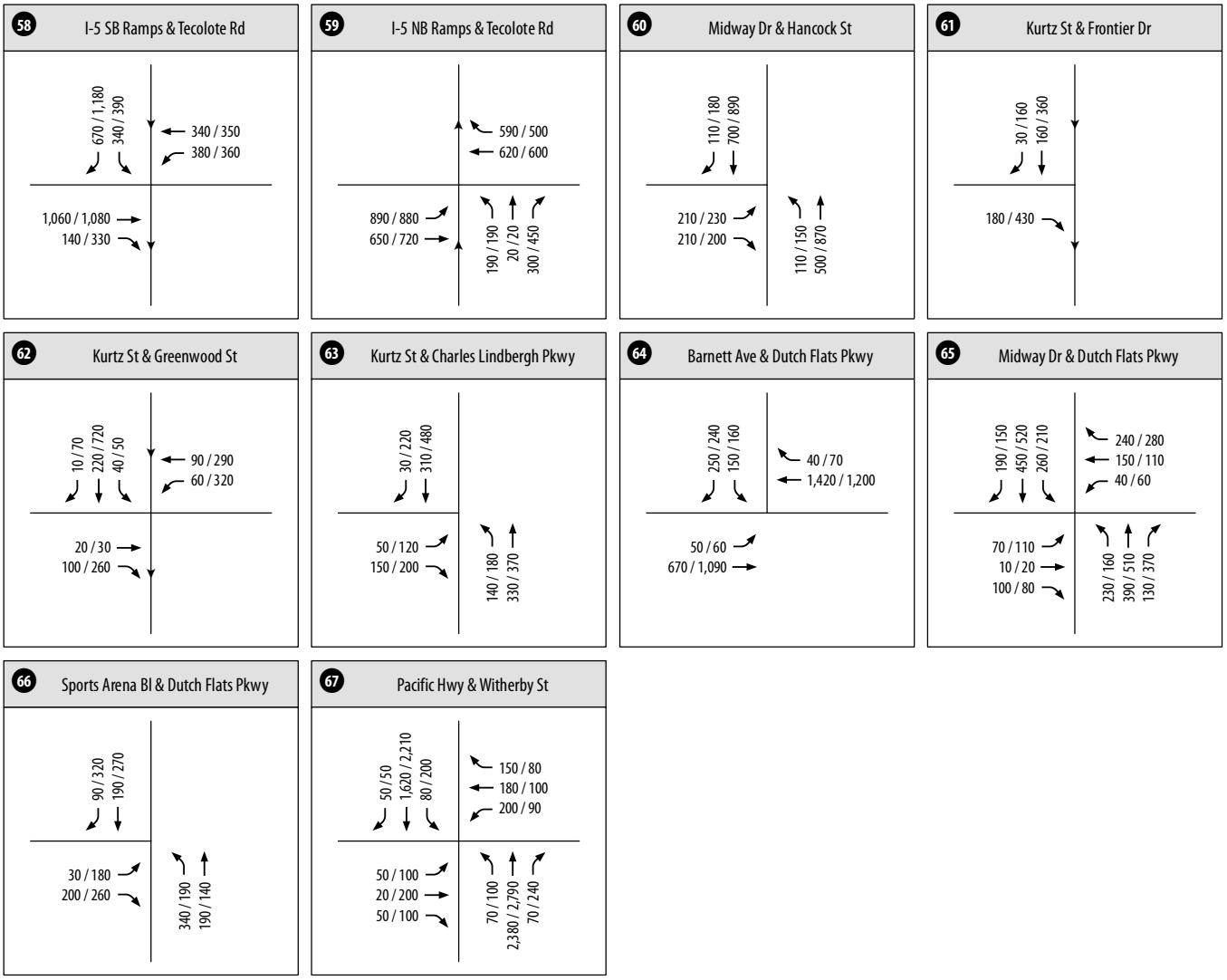


Figure 4-4
Peak Hour Turning Movement Volumes - Preferred Plan Conditions (Intersections 58-67)

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Midway-Pacific Highway													
1	Lytton St and Rosecrans St	Signal	97.7	**F**	55.2	**E**	65.4	**E**	44.5	D	32.3	10.7	**Yes**
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	15.4	B	70.5	**E**	14.8	B	59.5	**E**	0.6	11.0	**Yes**
3	Sports Arena Blvd and Channel Way	SSSC[2]	12.1	B	31.4	D	11.2	B	14.7	B	0.9	16.7	No
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	53.0	D	78.3	**E**	36.6	D	47.2	D	16.4	31.1	**Yes**
5	Midway Dr and Kemper St	Signal	31.7	C	38.1	D	22.7	C	37.3	D	9.0	0.8	No
6	Midway Dr and East Dr	Signal	6.8	A	17.6	B	4.8	A	13.0	B	2.0	4.6	No
7	Midway Dr and Rosecrans St	Signal	39.3	D	75.2	**E**	34.9	C	49.1	D	4.4	26.1	**Yes**
8	Midway Dr and Charles Lindbergh Pkwy	Signal	11.1	B	28.2	C	*Intersection does not currently exist*						No
9	Midway Dr and Enterprise St	SSSC[2]	13.1	B	25.8	D	11.0	B	18.1	C	2.1	7.7	No
10	Midway Dr and Barnett Ave	Signal	13.7	B	12.3	B	13.8	B	19.8	B	-0.1	-7.5	No
11	Sports Arena Blvd and Hancock St	Signal	14.8	B	19.1	B	10.0	A	13.1	B	4.8	6.0	No
12	Sports Arena Blvd and Kemper St	Signal	37.3	D	43.5	D	18.8	B	17.5	B	18.5	26.0	No
13	Sports Arena Blvd and Sports Arena Driveway	Signal	18.7	B	26.8	C	17.1	B	24.8	C	1.6	2.0	No
14	Sports Arena Blvd and East Dr	Signal	7.9	A	25.2	C	26.0	C	11.9	B	-18.1	13.3	No
15	Sports Arena Blvd and Rosecrans St	Signal	36.9	D	51.9	D	35.7	D	43.2	D	1.2	8.7	No
16	Sports Arena Blvd and Charles Lindbergh Pkwy	Signal	13.9	B	18.5	B	*Intersection does not currently exist*						No
17	Sports Arena Blvd and Pacific Hwy	Signal	25.4	C	17.5	B	10.6	B	12.0	B	14.8	5.5	No
18	Kurtz St and Hancock St	Signal	12.7	B	12.4	B	*Intersection does not currently exist*						No
19	Kurtz St and Camino Del Rio West	Signal	30.7	C	53.9	D	9.4	A	20.2	C	21.3	33.7	No
20	Kurtz St and Rosecrans St	Signal	33.1	C	41.9	D	20.0	B	31.7	C	13.1	10.2	No
21	Kurtz St and Pacific Hwy	Signal	30.1	C	52.5	D	11.2	B	13.7	B	18.9	38.8	No
22	Hancock St and Channel Wy	SSSC[2]	10.0	B	12.9	B	9.3	A	10.5	B	0.7	2.4	No
23	Hancock St and Camino Del Rio West	Signal	47.3	D	49.5	D	24.3	C	20.3	C	23.0	29.2	No
24	Hancock St and Rosecrans St	*No Conflicting Movements*											

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
25	Hancock St and Old Town Ave	AWSC[3]	24.8	C	20.9	C	16.9	C	14.6	B	7.9	6.3	No
26	Hancock St and Witherby St	AWSC[3]	13.9	B	33.6	D	16.0	C	23.5	C	-2.1	10.1	No
27	Hancock St and Washington St	Signal	22.9	C	68.7	**E**	22.8	C	25.9	C	0.1	42.8	**Yes**
28	Kettner Blvd and Vine St	SSSC[2]	16.5	C	19.9	C	14.3	B	23.2	C	2.2	-3.3	No
29	Kettner Blvd and Sassafras St	Signal	14.9	B	15.3	B	12.0	B	11.9	B	2.9	3.4	No
30	Kettner Blvd and West Laurel St	Signal	19.3	B	88.2	**F**	20.0	B	29.7	C	-0.7	58.5	**Yes**
31	Pacific Hwy and Barnett Ave	*No Conflicting Movements*											
32	Pacific Hwy and Washington St @ Frontage Rd	Signal	20.5	C	46.9	D	19.4	B	36.0	D	1.1	10.9	No
33	Pacific Hwy and Washington St	Signal	21.5	C	28.5	C	18.7	B	31.2	C	2.8	-2.7	No
34	Pacific Hwy and Sassafras St	Signal	31.8	C	75.4	**E**	14.4	B	27.3	C	17.4	48.1	**Yes**
35	Pacific Hwy and West Laurel St	Signal	91.4	**F**	144.5	**F**	48.4	D	42.9	D	43.0	101.6	**Yes**
Old Town													
36	Pacific Hwy and Taylor St	Signal	31.1	C	51.2	D	64.6	**E**	33.5	C	-33.5	17.7	No
37	Moore St and Old Town Ave	Signal	23.2	C	96.5	**F**	16.4	B	16.4	B	6.8	80.1	**Yes**
38	Congress St and Taylor St	Signal	14.3	B	20.5	C	19.9	B	21.7	C	-5.6	-1.2	No
39	Congress St and Twiggs St	AWSC[3]	9.6	A	10.8	B	8.1	A	8.6	A	1.5	2.2	No
40	Congress St and Harney St	AWSC[3]	9.1	A	9.4	A	8.1	A	8.3	A	1.0	1.1	No
41	Congress St and San Diego Ave/Ampudia St	AWSC[3]	10.6	B	11.4	B	12.3	B	11.5	B	-1.7	-0.1	No
42	San Diego Ave and Twiggs St	AWSC[3]	7.9	A	8.1	A	7.9	A	8.0	A	0.0	0.1	No
43	San Diego Ave and Harney St	AWSC[3]	9.0	A	10.8	B	8.2	A	8.2	A	0.8	2.6	No
44	San Diego Ave and Old Town Ave	Signal	17.5	B	13.7	B	18.4	B	11.6	B	-0.9	2.1	No
45	Juan St and Taylor St	Signal	14.8	B	19.6	B	10.4	B	10.7	B	4.4	8.9	No
46	Juan St and Twiggs St	AWSC[3]	9.7	A	10.1	B	8.8	A	8.5	A	0.9	1.6	No
47	Juan St and Harney St	AWSC[3]	9.0	A	9.0	A	8.3	A	7.9	A	0.7	1.1	No
48	Morena Blvd and Taylor St	Signal	21.9	C	24.4	C	22.4	C	16.4	B	-0.5	8.0	No

Table 4-5 Peak Hour Intersection Level of Service Results

No.	Intersection	Control (Preferred Plan)	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS	Existing Conditions AM Avg. Delay (sec)	Existing Conditions AM LOS	Existing Conditions PM Avg. Delay (sec)	Existing Conditions PM LOS	Δ in AM Delay (sec)	Δ in PM Delay (sec)	SI?[1]
Intersections Outside of Study Communities													
49	Hugo St/N. Harbor Dr and Rosecrans St	Signal	29.0	C	31.5	C	14.7	B	20.7	C	14.3	10.8	No
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	61.1	**E**	114.1	**F**	41.2	D	63.3	**E**	19.9	50.8	**Yes**
51	Laning Rd and Rosecrans St	Signal	25.5	C	23.1	C	15.5	B	12.9	B	10.0	10.2	No
52	Kettner Blvd and West Hawthorn St	Signal	40.1	D	13.4	B	11.1	B	15.0	B	29.0	-1.6	No
53	Kettner Blvd and West Grape St	Signal	10.1	B	9.5	A	7.4	A	8.7	A	2.7	0.8	No
54	Pacific Hwy and Sea World Dr	Signal	24.2	C	34.1	C	19.9	B	25.6	C	4.3	8.5	No
55	Pacific Hwy and West Hawthorn St	Signal	37.1	D	32.5	C	35.4	D	20.2	C	1.7	12.3	No
56	Pacific Hwy and West Grape St	Signal	17.9	B	31.7	C	16.8	B	24.2	C	1.1	7.5	No
57	Friars Rd and Sea World Dr	Signal	15.4	B	26.8	C	11.5	B	13.8	B	3.9	13.0	No
58	I-5 SB Ramps and Sea World Dr	Signal	17.8	B	20.5	C	15.5	B	16.3	B	2.3	4.2	No
59	I-5 NB Ramps and Sea World Dr	Signal	29.3	C	43.3	D	21.4	C	28.4	C	7.9	14.9	No
New Intersections (Midway-Pacific Highway Community)													
60	Midway Dr & Duke Street / Hancock St	Signal	27.0	C	32.1	C	*Intersection does not currently exist*						No
61	Kurtz St & Frontier Dr	SSSC[2]	9.9	A	19.0	C	*Intersection does not currently exist*						No
62	Kurtz St & Greenwood St	Signal	11.9	B	16.9	B	*Intersection does not currently exist*						No
63	Kurtz St & Charles Lindbergh Pkwy	Signal	8.3	A	22.1	C	*Intersection does not currently exist*						No
64	Barnett Ave & Dutch Flats Pkwy	Signal	24.6	C	14.4	B	*Intersection does not currently exist*						No
65	Midway Dr & Dutch Flats Pkwy	Signal	46.1	D	53.0	D	*Intersection does not currently exist*						No
66	Dutch Flats Pkwy & Sports Arena Bl	Signal	10.9	B	21.5	C	*Intersection does not currently exist*						No

Source: Chen Ryan Associates (May 2017)

Note:
Bold letter indicates LOS E or F.
[1] Significant Impact
[2] Single Side Stop Controlled
[3] All Way Stop Controlled

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following intersections:

Midway-Pacific Highway Community

1. Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)
2. Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)
4. Midway Drive / West Point Loma Drive and Sports Arena Boulevard (LOS E: PM Peak Hour)
7. Midway Drive and Rosecrans Street (LOS E: PM Peak Hour)
27. Hancock Street and Washington Street (LOS E: PM Peak Hour)
30. Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)
34. Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)
35. Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)

Old Town Community

37. Moore Street and Old Town Street (LOS F: PM Peak Hour)

Outside of the Community

50. Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)

It is important to note that three of the ten intersections listed above currently experience LOS E or F during the AM and/or PM peak period under existing conditions. Additionally, two intersections experiencing LOS E or F under existing conditions will be improved to a satisfactory LOS through implementation of the Preferred Plan.

4.4 Freeway Segment Analysis

Neither the Revenue Constrained Alternative of SANDAG's *San Diego Forward Plan* (October 2015) nor the Preferred Plan recommend freeway improvements within the project study area.

Table 4-6A and Table 4-6B display freeway segment analysis results within the project study area for the AM and PM peak hours, respectively.

Based on the significant impact criterial outlined in section 2.2.5, implementation of the Preferred Plan would result in a significant impact at the following freeway segments:

- I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour)
- I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours)
- I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour)
- I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour)
- I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour)
- I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour)
- I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour)
- I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour)

Table 4-6A Freeway Segment Level of Service Comparison (AM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (AM)				Existing Conditions (AM)				Δ in V/C (AM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	6.30%	60%	61,200	2,600	0.55	B	46,500	1,900	0.40	A	0.15	No
			WB	2M + 0A	4,700		40%		1,700	0.36	A		1,300	0.28	A	0.08	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	6.40%	60%	122,200	5,400	0.64	C	102,000	4,400	0.52	B	0.12	No
			WB	3M + 1A	8,450		40%		3,500	0.41	B		2,900	0.34	A	0.07	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	6.40%	41%	183,000	5,500	0.51	B	132,000	3,900	0.36	A	0.15	No
			WB	5M + 0A	11,750		59%		7,700	0.66	C		5,500	0.47	B	0.19	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	6.50%	47%	216,900	7,600	0.70	C	191,000	6,500	0.60	B	0.10	No
			WB	5M + 0A	11,750		53%		8,400	0.71	C		7,400	0.63	C	0.08	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	6.40%	61%	241,400	11,000	0.94	**E**	220,000	10,000	0.85	D	0.09	**Yes**
			SB	5M + 0A	11,750		39%		6,900	0.59	B		6,200	0.53	B	0.06	No
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	6.40%	62%	231,600	10,500	0.97	**E**	199,000	9,000	0.83	D	0.14	**Yes**
			SB	4M + 2A	12,200		38%		6,400	0.52	B		5,400	0.44	B	0.08	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	6.90%	49%	242,700	9,400	0.87	D	199,000	7,700	0.71	C	0.16	No
			SB	5M + 0A	11,750		51%		9,700	0.83	D		7,900	0.67	C	0.16	No
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	6.90%	49%	227,100	8,800	0.94	**E**	192,000	7,500	0.80	D	0.14	**Yes**
			SB	5M + 0A	11,750		51%		9,300	0.79	D		7,700	0.66	C	0.13	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	6.90%	54%	171,400	7,100	0.76	C	142,000	6,000	0.64	C	0.12	No
			SB	4M + 0A	9,400		46%		6,400	0.68	C		5,200	0.55	B	0.13	No
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	6.70%	58%	216,400	9,600	0.89	D	147,000	6,600	0.61	B	0.28	No
			SB	4M + 1A	10,800		42%		7,200	0.67	C		4,700	0.44	B	0.23	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	6.70%	57%	222,000	9,900	0.92	D	183,000	8,100	0.75	C	0.17	No
			SB	4M + 1A	10,800		43%		7,600	0.70	C		6,000	0.56	B	0.14	No

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

Table 4-6B Freeway Segment Level of Service Comparison (PM)

Freeway	Segment	Heavy Vehicle	Dir	Lanes	Capacity	Peak Hr %	Split	Preferred Plan (PM)				Existing Conditions (PM)				Δ in V/C (PM)	SI?
								ADT	Peak Hr Vol	V/C	LOS	ADT	Peak Hr Vol	V/C	LOS		
I-8	Beginning of Freeway to Sports Arena Blvd	1.2%	EB	2M + 0A	4,700	8.50%	72%	61,200	3,100	0.66	C	46,500	3,200	0.68	C	-0.02	No
			WB	2M + 0A	4,700		28%		2,800	0.60	B		1,300	0.28	A	0.32	No
	Sports Arena Blvd to I-5	2.8%	EB	3M + 1A	8,450	7.80%	63%	122,200	5,500	0.65	C	102,000	5,600	0.66	C	-0.01	No
			WB	3M + 1A	8,450		37%		5,400	0.64	C		3,400	0.4	A	0.24	No
	I-5 to Morena Blvd	2.8%	EB	4M + 1A	10,800	7.20%	51%	183,000	6,600	0.61	B	132,000	5,500	0.51	B	0.10	No
			WB	5M + 0A	11,750		49%		8,300	0.71	C		5,200	0.44	B	0.27	No
	Morena Blvd to Hotel Circle	2.8%	EB	4M + 1A	10,800	8.20%	55%	216,900	11,000	1.02	**F**	191,000	9,700	0.9	D	0.12	**Yes**
			WB	5M + 0A	11,750		45%		9,000	0.77	C		8,000	0.68	C	0.09	No
I-5	Clairemont Dr to Sea World Dr	4.5%	NB	5M + 0A	11,750	8.30%	51%	241,400	11,700	1.00	**E**	220,000	10,700	0.91	D	0.09	**Yes**
			SB	5M + 0A	11,750		49%		11,300	0.96	**E**		10,300	0.88	D	0.08	**Yes**
	Sea World Dr to I-8	4.5%	NB	4M + 1A	10,800	8.40%	52%	231,600	11,600	1.07	**F**	199,000	10,000	0.93	**E**	0.14	**Yes**
			SB	4M + 2A	12,200		48%		10,700	0.88	D		9,200	0.75	C	0.13	No
	I-8 to Old Town Ave	4.1%	NB	4M + 1A	10,800	8.20%	39%	242,700	8,900	0.82	D	199,000	7,300	0.68	C	0.14	No
			SB	5M + 0A	11,750		61%		13,900	1.18	**F**		11,400	0.97	**E**	0.21	**Yes**
	Old Town Ave to Washington St	4.1%	NB	4M + 0A	9,400	8.00%	51%	227,100	10,600	1.13	**F**	192,000	9,000	0.96	**E**	0.17	**Yes**
			SB	5M + 0A	11,750		49%		10,200	0.87	D		8,600	0.73	C	0.14	No
	Washington St to Pacific Highway	4.1%	NB	4M + 0A	9,400	8.10%	36%	171,400	5,700	0.61	B	142,000	4,800	0.51	B	0.10	No
			SB	4M + 0A	9,400		64%		10,200	1.09	**F**		8,400	0.89	D	0.20	**Yes**
	Pacific Highway to Laurel Street	4.1%	NB	4M + 1A	10,800	7.00%	49%	216,400	8,400	0.78	C	147,000	5,800	0.54	B	0.24	No
			SB	4M + 1A	10,800		51%		9,300	0.86	D		6,100	0.56	B	0.30	No
	Laurel Street to Hawthorne Street	4.1%	NB	4M + 1A	10,800	7.30%	46%	222,000	8,300	0.77	C	183,000	7,100	0.66	C	0.11	No
			SB	4M + 1A	10,800		54%		10,400	0.96	**E**		8,200	0.76	C	0.20	**Yes**

Note: **Bold** letter indicates LOS E or F

Source: Chen Ryan Associates, Inc. (May 2017)

4.5 Ramp Meter Analysis

Table 4-7 displays the ramp metering analysis results for on-ramp meter locations within the study area.

Table 4-7 Freeway Ramp Meter Analysis Comparison

Ramp	Peak	Lanes SOV	Lanes HOV	Flow Rate	Preferred Plan Volume	Preferred Plan Excess Demand	Preferred Plan Delay (Minutes)	Preferred Plan Queue (Feet)	Existing Delay (Minutes)	Δ In Delay
I-8 EB / Sports Arena Boulevard	PM	2	1	641	920	279	26.1	8,091	25.5	0.6
I-5 SB / Sea World Drive	AM	1	1	444	520	76	10.3	2,204	0.0	10.3
	PM	1	1	444	690	246	33.2	7,134	11.4	21.8
I-5 NB / Sea World Drive	AM	2	0	1,555	1,480	0	0.0	0	0.0	0.0
	PM	2	0	1,656	1,380	0	0.0	0	0.0	0.0
I-5 SB / Old Town Avenue	PM	1	0	461	410	0	0.0	0	0.0	0.0
I-5 NB / Old Town Avenue	AM	2	0	905	370	0	0.0	0	0.0	0.0
	PM	2	0	888	690	0	0.0	0	0.0	0.0

Source: Chen Ryan Associates, Inc. (May 2017)

Based on the significance criteria outlined in Section 2.2.5, implementation of the preferred Plan would result in a significant impact to the I-5 SB / Sea World Dive ramp during the PM peak hour.

4.6 Significant Impacts and Mitigation Measures

This section identifies recommended mitigation measures for intersection and roadway facilities that would be significantly impacted through implementation of the Preferred Plan.

4.6.1 Roadway Mitigation Measures

Midway-Pacific Highway Community

Kettner Boulevard, between Washington Street and Vine Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Kettner Boulevard, between Vine Street and Sassafras Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing*

features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.

Kettner Boulevard, between Sassafras Street and Laurel Street (LOS F) – Widening the roadway from a 3-Lane Major (One-Way) Arterial to a 4-Lane Major (One-Way) Arterial would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Since Preferred Plan maintains existing travel lanes (3), parking (on the west side of the roadway), and a proposed Class II Buffered Bicycle Lane through restriping there will not be enough right-of-way on Kettner Boulevard to accommodate additional lane, maintain existing features, and proposed improvements. For these reasons this improvement project is not identified in the Midway Pacific Highway IFS.*

Greenwood Street, between Sports Arena Boulevard and Kurtz Street (LOS E) – Improving from a 2-Lane Collector to a 2-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *However, due to implementation of this improvement not being in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods and to right-of-way constraints, this improvement project is not identified in the Midway Pacific Highway IFS.*

Camino Del Rio West, between Rosecrans Street and the I-5/I-8 Ramps (LOS F) – Improving this roadway from a 6-Lane Prime Arterial to a 6-Lane Expressway would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *This improvement would require grade separating all intersections along this segment of the roadway which is not consistent with the General Plan & Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Dutch Flats Parkway, between Barnett Avenue and Midway Drive (LOS E) – Improving from a 2-Lane Collector with a Center Left Turn-Lane to a 4-Lane Collector with a Center Left Turn-Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Implementing Dutch Flats Parkway as a 4-Lane Collector with Continuous Left-Turn Lane will create longer crossing distances within a residential area and potentially could act as a barrier for pedestrians. Implementation of this improvement would not be in conformance with General Plan, and Community Plan Update Goals and Policies for walkable neighborhoods. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Sassafras Street, between Pacific Highway and Kettner Boulevard (LOS F) - Widening the roadway from a 3-Lane Collector to a 4-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way available along this segment of Sassafras Street to accommodate a fourth travel lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

<u>Old Town Community</u>

Congress Street between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS C. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this*

roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Congress Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 26 regular parking spaces and 13 loading/taxi parking spaces would need to be removed in order to accommodate this mitigation measure. Finally, this mitigation measure would be in conflict with the Community Plan, which proposed balancing all travel modes through an enhanced active transportation environment. Therefore, this improvement project is not identified in the Old Town IFS.

San Diego Avenue, between Ampudia St and Old Town Avenue (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 5 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

San Diego Avenue, between Old Town Avenue and Hortensia Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of San Diego Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 9 regular parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Taylor Street and Twiggs Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 48 regular parking spaces and 4 loading parking spaces would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.*

Juan Street, between Twiggs Street and Harney Street (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Juan Street to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 11 regular parking spaces*

would need to be removed in order to accommodate this mitigation measure. Therefore, this improvement project is not identified in the Old Town IFS.

Taylor Street, between Morena Boulevard and I-8 Ramps (LOS F) - Widening the roadway from a 2-Lane Collector to a 4-Lane Major Arterial would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this improvement. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Taylor Street to accommodate two additional through lanes and a center median, while maintaining a Class II bicycle facility. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Hancock Street and Moore Street (LOS F) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS D. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane while maintaining right-of-way for the proposed Class II bicycle lanes. Therefore, this improvement project is not identified in the Old Town IFS.*

Old Town Avenue, between Moore Street and San Diego Avenue (LOS E) - Widening the roadway from a 2-Lane Collector to a 2-Lane Collector with Center Left-Turn Lane would improve the operations to LOS B. The identified significant traffic related impact to this roadway segment would be fully mitigated with the implementation of this mitigation measure. *Due to the historic nature of the Old Town Community, the Preferred Plan does not propose any road widenings or significant capacity improvements; therefore, widening this roadway would not be in conformance with the Community Plan Goals and Policies. Additionally, there is not enough right-of-way available along this segment of Old Town Avenue to accommodate a center left-turn lane and maintain existing features such as on-street parking, sidewalks, etc. Up to 18 regular parking spaces and 1 loading parking space would need to be removed in order to accommodate this mitigation measure. Finally, a Class II bicycle facility is proposed along this segment. Therefore, this improvement project is not identified in the Old Town IFS.*

4.6.2 Intersection Mitigation Measures

<u>Midway-Pacific Highway Community</u>

1. *Lytton Street and Rosecrans Street (LOS F: AM Peak Hour and LOS E PM Peak Hour)* – The westbound through movement, as well as the southbound left-turn and through movements are projected to be over capacity, under implementation of the Preferred Plan. Implementing the following improvements would allow the intersection to operate at LOS D or better during both peak hours.

    - Add a second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street
    - Add an additional westbound through movement lane on Rosecrans Street (three total)
    - Implement right-turn overlap (RTOL) phases at all legs of the intersection

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is currently not enough right-of-way on Rosecrans Street to accommodate a third westbound through lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: If the second southbound left-turn lane from Lytton Street to eastbound Rosecrans Street and RTOL phases at all legs are implemented (feasible improvements) the overall intersection delay would be reduced to the following:

AM: LOS E
PM: LOS D

Implementation of this improvement will partially mitigate the traffic related impact at the intersection. *This improvement project is identified in the Midway Pacific Highway IFS.*

2. *Sports Arena Boulevard / West Mission Bay and I-8 WB Off-Ramp (LOS E: PM Peak Hour)* – The westbound right-turn movement, from I-8 WB to northbound West Mission Bay Drive, is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Providing a third exclusive westbound right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The Preferred Plan is consistent with the CIP Project #S00871: W. Mission Bay Drive Bridge Over San Diego River, which was reviewed by City and Caltrans staff. Further mitigations, beyond what is recommended as part of this CIP project would be inconsistent with Community Plan Policies and Goals for multimodal facilities*. *Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

4. *Midway Drive / West Point Loma Boulevard and Sports Arena Boulevard (LOS E: PM Peak Hour)* – All four left-turn movements at this intersection are projected to be over capacity during the PM peak hour. Providing dual-left turn lanes on Midway Drive in the northbound direction, on Sports Arena Boulevard in the southbound direction, and on West Point Loma Boulevard in the eastbound direction would improve intersection operations to LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way within the intersection to accommodate any of the additional left-turn lanes considering the proposed multi-use urban trails along Midway Drive and Sports Arena Boulevard, and in-road bicycle facilities. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

7. *Midway Drive and Rosecrans Street* (LOS E: PM Peak Hour) – Rosecrans Street is projected to operate at LOS E during the PM peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches of Rosecrans Street to include a fourth through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen Rosecrans Street to eight lanes through the intersection*

considering the proposed multi-use urban path improvements. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.

Partial Mitigation: None recommended, limited to no right-of-way is anticipated to be available with proposed Multi-Use Urban Path improvements.

27. *Hancock Street and Washington Street (LOS E: PM Peak Hour)* – The southbound Hancock Street to westbound Washington Street right-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Restriping the southbound approach to include a second southbound right-turn lane would allow the intersection to operate at LOS C during the PM Peak Hour. This improvement is feasible but may require additional engineering study. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *This improvement would require the removal of on-street parking, which is heavily utilized by the businesses and restaurants in this area. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

30. *Kettner Boulevard and Laurel Street (LOS F: PM Peak Hour)* – The eastbound through movement on Laurel Street is projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Widening the eastbound Laurel Street approach of the intersection to include a third through lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the eastbound Laurel Street approach to three lanes. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

34. *Pacific Highway and Sassafras Street (LOS E: PM Peak Hour)* – The southbound Pacific Highway to eastbound Sassafras Street left-turn movement is projected to be over capacity during the PM peak hour, under the implementation of the Preferred Plan. Adding a second southbound left-turn lane would allow the intersection to operate at LOS D during the PM peak hour. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way to widen the southbound approach of Pacific Hwy to include a second left-turn lane. Therefore, this improvement project is not identified in the Midway Pacific Highway IFS.*

    Partial Mitigation: None recommended.

35. *Pacific Highway and Laurel Street (LOS F: AM and PM Peak Hours)* – Laurel Street is projected to be over capacity during both peak hours, under implementation of the Preferred Plan. Widening the eastbound and westbound approaches to include a second eastbound left-turn lane and a third through lane in each direction along Laurel Street, as well as widening the northbound approach of Pacific Highway to include a second northbound left-turn lane and exclusive right-turn lane would improve the intersection operations to LOS D. The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Laurel Street to widen to three lanes in each direction. Also,*

there is not enough right-of-way on northbound Pacific Highway with the improvements of the cycle track, multi-use urban path. Therefore, *this improvement project is not identified in the Midway Pacific Highway IFS.*

Partial Mitigation: None recommended.

Old Town Community

37. Moore Street and Old Town Avenue (LOS F: PM Peak Hour) – The eastbound and westbound approaches along Old Town Avenue are projected to be over capacity during the PM peak hour, under implementation of the Preferred Plan. Implementation of the following improvements would allow the intersection to operate at LOS D during the PM peak hour.

- Implement exclusive eastbound and westbound left-turn lanes on the Old Town Avenue approaches of the intersection.
- Convert the eastbound/westbound signal phasing from permitted to protected phasing.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *The eastbound approach on the Old Town Avenue bridge is not wide enough to accommodate an eastbound left-turn lane. Therefore, this improvement project is not identified in the Old Town IFS.*

Partial Mitigation: None recommended.

Outside of the Community

50. *Nimitz Boulevard / Lowell Street and Rosecrans Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour*) – Both the eastbound Rosecrans Street through movement, and the eastbound Rosecrans Street to northbound Nimitz Boulevard left-turn movement are anticipated to be over capacity for both peak hours, under implementation of Preferred Plan. Widening the Rosecrans Street eastbound and westbound approaches of the intersection to include a third through lane, and providing an additional eastbound left-turn lane from Rosecrans Street to Nimitz Boulevard would improve the intersection operations to LOS D or better during both the AM and PM peak hours.

The identified significant traffic related impact to this intersection would be fully mitigated with the implementation of this improvement. *There is not enough right-of-way on Rosecrans Street to widen to six lanes. Therefore, this improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

Partial Mitigation: None recommended.

Table 4-8 provides a comparison of Preferred Plan operations at the impacted intersections, with and without mitigation measures.

Table 4-8 Impacted Intersection Level of Service with Mitigation Measures

No.	Intersection	Control (Preferred Plan)	Mitigated Conditions AM Avg. Delay (sec)	Mitigated Conditions AM LOS	Mitigated Conditions PM Avg. Delay (sec)	Mitigated Conditions PM LOS	Preferred Plan AM Avg. Delay (sec)	Preferred Plan AM LOS	Preferred Plan PM Avg. Delay (sec)	Preferred Plan PM LOS
Midway-Pacific Highway										
1	Lytton St and Rosecrans St	Signal	47.8	D	42.7	D	97.7	F	55.2	E
2	W Mission Bay Dr and I-8 WB Off-Ramp	Signal	12.7	B	36.8	D	15.4	B	70.2	E
4	Midway Dr and Sports Arena/W Point Loma Blvd	Signal	30.8	C	49.3	D	53.0	D	78.3	E
7	Midway Dr and Rosecrans St	Signal	32.4	C	54.4	D	39.3	D	75.2	E
27	Hancock St and Washington St	Signal	22.4	C	35.8	D	22.9	C	68.7	E
30	Kettner Blvd and West Laurel St	Signal	17.9	B	40.6	D	19.3	B	88.2	F
34	Pacific Hwy and Sassafras St	Signal	30.2	C	54.4	D	31.8	C	75.4	E
35	Pacific Hwy and West Laurel St	Signal	40.4	D	52.0	D	91.4	F	144.5	F
Old Town										
37	Moore St and Old Town Ave	Signal	28.6	C	39.1	D	23.2	C	96.5	F
Intersections Outside of Study Communities										
50	Lowell St/Nimitz Blvd and Rosecrans St	Signal	34.6	C	54.9	D	61.1	E	114.1	F

Source: Chen Ryan Associates (October 2017)

Note:
Bold letter indicates LOS E or F.

4.6.3 Freeway Segment Mitigation Measures

I-8 EB, between Morena Boulevard and Hotel Circle Drive (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies operational improvements along this segment. These improvements are anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvements and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Clairemont Drive and Sea World Drive (LOS E: AM & PM Peak Hours) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Clairemont Drive and Sea World Drive (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Sea World Drive and I-8 (LOS E: AM Peak Hour, LOS F PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between I-8 and Old Town Avenue (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 NB, between Old Town Avenue and Washington Street (LOS E: AM Peak Hour and LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Washington Street and Pacific Highway (LOS F: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

I-5 SB, between Laurel Street and Hawthorne Avenue (LOS E: PM Peak Hour) – SANDAG's 2050 San Diego Forward: The Regional Plan (RTP) Revenue Constrained Managed Lanes and Highway Network identifies the construction of a managed lane along this segment. This improvement is anticipated to be completed by Year 2050. There is some uncertainty related to the actual improvement and associated traffic impacts that will materialize over time. Future development projects' transportation studies would be able to more accurately identify individual project-level impacts and provide the mechanism to mitigate them through fair share contributions in addition to the funding identified in the Revenue Constrained Network. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

4.6.4 Ramp Meter Mitigation Measures

I-5 SB / Sea World Drive Ramp (PM Peak Hour) – Ramp meter delays would decrease to less than 15 minutes if the ramp flow rate is increased from 444 cars per hour to 555 cars per hour. Increased ramp meter flow rates can be achieved by either reducing the ramp meter cycle length or providing additional travel lanes on the ramp.

The identified significant traffic related impact to this ramp would be fully mitigated with the implementation of this improvement. *This improvement project is not identified in the either the Midway Pacific Highway or Old Town IFS.*

5.0 Adopted Community Plan (No Project)

This chapter provides a comparison of the buildout of the currently Adopted Community plan or the No Project scenario analysis results to the Existing Conditions. As stated, the Midway-Pacific Highway Corridor Community Plan and Local Coastal Program Land Use Plan was adopted in 1991, and the Old Town San Diego Community Plan was adopted in 1987. Since the land uses and roadway network proposed by the Preferred Plan (or an alternative) would supersede the Adopted Community Plan, only a trip generation and VMT generation comparison was conducted for the Adopted Community Plan (No Project) scenario.

5.1 Vehicle Miles Traveled

The VMT generated within the community was estimated using the SANDAG Series 12 Future Year 2035 models. VMT is the total number of miles driven by all vehicle trips generated within the Midway Pacific Highway Corridor and communities, including trips to/from and within the community. Table 5-1A and Table 5-1B displays the total VMT generated within the Midway-Pacific Highway Corridor and Old Town communities, respectively, as well as the average trip length under Base Year, and Adopted Plan conditions. VMT calculations for the both communities are provided in Appendix J.

Table 5-1A Vehicle Miles Traveled Comparison – Midway-Pacific Highway Community – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	730,121	832,025	101,904	14.0%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	294,796	311,502	16,706	5.7%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.5	2.7	0.2	7.8%	5.2	5.4	0.2	3.7%
Population	4,672	11,775	7,103	152.0%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	156	71	-86	-54.8%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Midway-Pacific Highway community is only anticipated to experience minimal growth (based on the regional averages). With the implementation of the Adopted Plan infrastructure and land uses, the average vehicular trip length is anticipated to increase by 7.8%. However, with the significant population increase anticipated within the community, the daily VMT by population is anticipated to drop dramatically (-54.8%).

Table 5-1B Vehicle Miles Traveled Comparison – Old Town – Adopted Plan

Measure	Community Planning Area				San Diego Region			
	Base Year	Buildout	Δ in Value	Δ in %	Base Year	Year 2035	Δ in Value	Δ in %
Total VMT (miles)	151,300	171,581	20,281	13.4%	85,182,063	108,485,008	23,302,945	27.4%
Total # of Auto Trips	57,989	58,192	203	0.4%	16,458,692	20,183,171	3,724,479	22.6%
Average Trip Length[1] (miles)	2.6	2.9	0.3	13.0%	5.2	5.4	0.2	3.7%
Population	834	985	151	18.1%	3,130,717	4,035,834	905,117	28.9%
Daily VMT by Population (miles)	181	174	-7	-4.0%	27	27	0	-1.5%

Source: Chen Ryan Associates (May 2017)

Note:

1. Average trip length is estimated by dividing the total VMT by the total # of auto trips.

As shown, under implementation of the Adopted Plan the number of new auto trips and total VMT generated within the Old Town community is only anticipated to experience average growth (based on the region). With the implementation of the Adopted Plan infrastructure and land uses the average vehicular trip length is anticipated to increase by 13.0%. However, with the population increase anticipated within the community, the daily VMT by population is anticipated to decrease (-4.0%).

Appendix A
VMT Analysis Worksheets – Base Year

2008 Base Year - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	2,357	-	2,357	3,333,368
CHULA VISTA TOTAL	3,951,266	7,048	-	7,048	3,944,218
CORONADO TOTAL	431,361	1,275	-	1,275	430,086
DEL MAR TOTAL	96,012	45	-	45	95,967
EL CAJON TOTAL	2,176,865	3,091	-	3,091	2,173,774
ENCINITAS TOTAL	2,065,242	2,987	-	2,987	2,062,255
ESCONDIDO TOTAL	2,793,535	1,506	-	1,506	2,792,029
External TOTAL	347,454	352	-	352	347,102
IMPERIAL BEACH TOTAL	119,764	49	-	49	119,715
LA MESA TOTAL	1,822,392	4,950	-	4,950	1,817,442
LEMON GROVE TOTAL	831,075	1,644	-	1,644	829,431
NATIONAL CITY TOTAL	1,647,424	6,346	-	6,346	1,641,078
OCEANSIDE TOTAL	3,208,748	779	-	779	3,207,969
POWAY TOTAL	1,105,609	492	-	492	1,105,117
OLD TOWN	38,613,579	241,420	16,727	224,693	38,372,159
SAN MARCOS TOTAL	2,020,740	250	-	250	2,020,490
SANTEE TOTAL	860,205	606	-	606	859,599
SOLANA BEACH TOTAL	567,653	1,106	-	1,106	566,547
Unincorporated TOTAL	17,458,561	9,472	-	9,472	17,449,089
VISTA TOTAL	1,728,853	99	-	99	1,728,754
REGIONWIDE TOTAL	85,182,063	151,301 437,175	16,727	269,147	84,896,189

2008 Base Year - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	3,335,725	10,481	-	10,481	3,325,244
CHULA VISTA TOTAL	3,951,266	30,546	-	30,546	3,920,720
CORONADO TOTAL	431,361	6,218	-	6,218	425,143
DEL MAR TOTAL	96,012	206	-	206	95,806
EL CAJON TOTAL	2,176,865	12,696	-	12,696	2,164,169
ENCINITAS TOTAL	2,065,242	12,892	-	12,892	2,052,350
ESCONDIDO TOTAL	2,793,535	6,670	-	6,670	2,786,865
External TOTAL	347,454	1,979	-	1,979	345,475
IMPERIAL BEACH TOTAL	119,764	392	-	392	119,372
LA MESA TOTAL	1,822,392	19,612	-	19,612	1,802,780
LEMON GROVE TOTAL	831,075	7,624	-	7,624	823,451
NATIONAL CITY TOTAL	1,647,424	27,517	-	27,517	1,619,907
OCEANSIDE TOTAL	3,208,748	3,821	-	3,821	3,204,927
POWAY TOTAL	1,105,609	2,103	-	2,103	1,103,506
SAN DIEGO TOTAL	38,613,579	1,087,144	176,404	910,740	37,526,435
SAN MARCOS TOTAL	2,020,740	1,069	-	1,069	2,019,671
SANTEE TOTAL	860,205	2,581	-	2,581	857,624
SOLANA BEACH TOTAL	567,653	4,696	-	4,696	562,957
Unincorporated TOTAL	17,458,561	44,980	-	44,980	17,413,581
VISTA TOTAL	1,728,853	612	-	612	1,728,241
		730,121.50			
REGIONWIDE TOTAL	85,182,063	2,013,961	176,404	1,107,435	83,898,224
	66.7%	(670,292)			

Appendix B
Daily Roadway Traffic Counts

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-094

Location: Lytton St. btwn. Rosecrans St. & Midway Dr.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	11		8					12:00	222		148				
00:15	10		5					12:15	172		138				
00:30	12		5					12:30	163		160				
00:45	7	40	8	26			66	12:45	163	720	151	597			1317
01:00	3		4					13:00	149		147				
01:15	3		5					13:15	173		160				
01:30	3		6					13:30	170		151				
01:45	9	18	6	21			39	13:45	154	646	161	619			1265
02:00	5		4					14:00	154		171				
02:15	2		5					14:15	170		216				
02:30	4		4					14:30	191		219				
02:45	5	16	2	15			31	14:45	228	743	201	807			1550
03:00	4		2					15:00	223		185				
03:15	4		6					15:15	219		212				
03:30	3		2					15:30	236		226				
03:45	12	23	4	14			37	15:45	250	928	262	885			1813
04:00	14		6					16:00	243		275				
04:15	11		6					16:15	217		322				
04:30	14		13					16:30	268		247				
04:45	24	63	12	37			100	16:45	256	984	268	1112			2096
05:00	42		26					17:00	261		243				
05:15	60		24					17:15	235		219				
05:30	93		35					17:30	192		157				
05:45	104	299	47	132			431	17:45	209	897	154	773			1670
06:00	129		56					18:00	202		134				
06:15	179		82					18:15	185		167				
06:30	223		100					18:30	160		121				
06:45	213	744	124	362			1106	18:45	120	667	106	528			1195
07:00	316		159					19:00	135		103				
07:15	286		197					19:15	129		87				
07:30	194		218					19:30	78		79				
07:45	270	1066	201	775			1841	19:45	110	452	69	338			790
08:00	239		200					20:00	85		77				
08:15	247		235					20:15	97		77				
08:30	225		205					20:30	98		72				
08:45	191	902	177	817			1719	20:45	111	391	81	307			698
09:00	176		156					21:00	69		52				
09:15	127		128					21:15	67		63				
09:30	127		117					21:30	61		45				
09:45	134	564	120	521			1085	21:45	63	260	41	201			461
10:00	133		92					22:00	52		50				
10:15	145		127					22:15	54		46				
10:30	159		143					22:30	40		44				
10:45	147	584	120	482			1066	22:45	38	184	28	168			352
11:00	153		123					23:00	30		23				
11:15	148		155					23:15	20		19				
11:30	179		126					23:30	23		21				
11:45	180	660	116	520			1180	23:45	11	84	14	77			161
Total Vol.		4979		3722			**8701**			6956		6412			**13368**

Daily Totals

NB	SB	EB	WB	Combined
11935	10134			**22069**

	AM			PM		
Split %	57.2%	42.8%	**39.4%**	52.0%	48.0%	**60.6%**
Peak Hour	07:00	07:30	**07:00**	16:30	16:00	**16:00**
Volume	1066	854	**1841**	1020	1112	**2096**
P.H.F.	0.84	0.91	**0.95**	0.95	0.86	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-086

Location: Mission Bay Dr. btwn. I-8 WB Off Ramp & I-8 EB On Ramp

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	13		78					12:00	130		376				
00:15	16		56					12:15	154		409				
00:30	12		54					12:30	139		403				
00:45	8	49	54	242			291	12:45	145	568	475	1663			2231
01:00	9		43					13:00	133		392				
01:15	12		40					13:15	144		423				
01:30	11		45					13:30	142		428				
01:45	10	42	47	175			217	13:45	167	586	456	1699			2285
02:00	2		44					14:00	152		410				
02:15	7		26					14:15	133		431				
02:30	5		36					14:30	126		472				
02:45	5	19	21	127			146	14:45	111	522	441	1754			2276
03:00	3		24					15:00	134		460				
03:15	1		16					15:15	138		494				
03:30	1		18					15:30	129		520				
03:45	6	11	19	77			88	15:45	126	527	506	1980			2507
04:00	7		16					16:00	133		530				
04:15	4		20					16:15	159		552				
04:30	5		22					16:30	125		568				
04:45	6	22	39	97			119	16:45	130	547	574	2224			2771
05:00	9		42					17:00	164		580				
05:15	8		57					17:15	161		643				
05:30	13		64					17:30	140		591				
05:45	18	48	159	322			370	17:45	131	596	621	2435			3031
06:00	22		125					18:00	124		601				
06:15	36		162					18:15	114		578				
06:30	45		222					18:30	141		488				
06:45	51	154	270	779			933	18:45	109	488	412	2079			2567
07:00	67		329					19:00	120		388				
07:15	68		420					19:15	109		390				
07:30	86		469					19:30	109		333				
07:45	100	321	505	1723			2044	19:45	104	442	336	1447			1889
08:00	76		440					20:00	105		334				
08:15	70		451					20:15	95		315				
08:30	98		478					20:30	95		275				
08:45	111	355	424	1793			2148	20:45	70	365	267	1191			1556
09:00	118		398					21:00	63		248				
09:15	118		390					21:15	68		196				
09:30	134		366					21:30	73		192				
09:45	163	533	374	1528			2061	21:45	60	264	198	834			1098
10:00	138		230					22:00	64		159				
10:15	118		332					22:15	51		135				
10:30	102		330					22:30	59		146				
10:45	131	489	346	1238			1727	22:45	58	232	126	566			798
11:00	114		357					23:00	24		135				
11:15	140		359					23:15	22		126				
11:30	123		383					23:30	21		87				
11:45	143	520	380	1479			1999	23:45	19	86	82	430			516
Total Vol.		2563		9580			**12143**			5223		18302			**23525**

Daily Totals

NB	SB	EB	WB	**Combined**
7786	27882			**35668**

	AM			**PM**		
Split %	21.1%	78.9%	**34.0%**	22.2%	77.8%	**66.0%**
Peak Hour	11:45	07:45	**07:45**	13:15	17:15	**17:00**
Volume	566	1874	**2218**	605	2456	**3031**
P.H.F.	0.92	0.93	**0.92**	0.91	0.95	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-088

Location: Midway Dr. btwn. Sports Arena Blvd. & Kemper St.

AM Period	NB	SB	EB		WB		
00:00			15		25		
00:15			17		26		
00:30			14		19		
00:45			12	58	8	78	136
01:00			11		16		
01:15			15		11		
01:30			9		17		
01:45			8	43	14	58	101
02:00			5		13		
02:15			6		6		
02:30			7		8		
02:45			6	24	5	32	56
03:00			3		5		
03:15			5		7		
03:30			6		4		
03:45			1	15	6	22	37
04:00			12		7		
04:15			11		8		
04:30			13		5		
04:45			19	55	11	31	86
05:00			13		17		
05:15			14		17		
05:30			28		24		
05:45			43	98	31	89	187
06:00			34		27		
06:15			43		37		
06:30			58		59		
06:45			71	206	90	213	419
07:00			82		78		
07:15			102		81		
07:30			117		100		
07:45			159	460	91	350	810
08:00			125		94		
08:15			166		113		
08:30			134		112		
08:45			143	568	137	456	1024
09:00			128		143		
09:15			133		133		
09:30			154		130		
09:45			147	562	154	560	1122
10:00			141		174		
10:15			152		152		
10:30			163		163		
10:45			139	595	139	628	1223
11:00			133		133		
11:15			135		154		
11:30			154		178		
11:45			147	569	152	617	1186
Total Vol.				3253		3134	**6387**

PM Period	NB	SB	EB		WB		
12:00			171		174		
12:15			159		166		
12:30			152		196		
12:45			158	640	182	718	1358
13:00			133		187		
13:15			139		169		
13:30			163		170		
13:45			150	585	174	700	1285
14:00			145		154		
14:15			147		165		
14:30			154		199		
14:45			155	601	185	703	1304
15:00			160		187		
15:15			155		198		
15:30			144		178		
15:45			180	639	199	762	1401
16:00			182		219		
16:15			169		193		
16:30			160		221		
16:45			180	691	204	837	1528
17:00			215		223		
17:15			209		244		
17:30			195		230		
17:45			220	839	210	907	1746
18:00			197		189		
18:15			170		216		
18:30			156		202		
18:45			181	704	186	793	1497
19:00			151		186		
19:15			154		150		
19:30			113		184		
19:45			116	534	140	660	1194
20:00			102		158		
20:15			122		131		
20:30			93		134		
20:45			81	398	131	554	952
21:00			76		103		
21:15			86		102		
21:30			62		82		
21:45			61	285	76	363	648
22:00			40		95		
22:15			36		54		
22:30			43		49		
22:45			34	153	49	247	400
23:00			32		54		
23:15			27		30		
23:30			33		40		
23:45			20	112	26	150	262
				6181		7394	**13575**

Daily Totals

NB	SB	EB	WB	Combined
		9434	10528	**19962**

	AM			PM		
Split %	50.9%	49.1%	**32.0%**	45.5%	54.5%	**68.0%**
Peak Hour	11:30	11:45	**11:45**	17:00	17:00	**17:00**
Volume	631	688	**1317**	839	907	**1746**
P.H.F.	0.92	0.88	**0.95**	0.95	0.93	**0.96**

Volumes for: STATION# on Tuesday, March 16, 2010 City: San Diego Project #: 10-4068-018
Location: Midway Dr between Kemper St & Fordham St File No. MC0214-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	16	169			24	211				
12:15	18	185			26	221				
12:30	17	191			17	210				
12:45	10	215	61	760	14	215	81	857	142	1617
1:00	6	179			14	208				
1:15	8	187			10	206				
1:30	13	171			13	172				
1:45	8	145	35	682	22	191	59	777	94	1459
2:00	7	166			14	175				
2:15	7	169			12	205				
2:30	12	177			13	177				
2:45	4	175	30	687	7	165	46	722	76	1409
3:00	16	180			7	197				
3:15	8	148			5	213				
3:30	10	170			5	203				
3:45	4	189	38	687	15	230	32	843	70	1530
4:00	7	186			9	224				
4:15	11	144			9	193				
4:30	5	174			4	181				
4:45	10	174	33	678	14	202	36	800	69	1478
5:00	8	179			16	235				
5:15	28	214			18	209				
5:30	41	166			29	230				
5:45	44	184	121	743	43	166	106	840	227	1583
6:00	30	203			29	182				
6:15	42	185			31	164				
6:30	59	190			39	198				
6:45	71	155	202	733	56	175	155	719	357	1452
7:00	76	150			65	192				
7:15	90	160			58	183				
7:30	110	158			69	164				
7:45	119	105	395	573	91	140	283	679	678	1252
8:00	129	147			86	125				
8:15	111	112			108	138				
8:30	102	113			102	124				
8:45	118	88	460	460	109	135	405	522	865	982
9:00	110	86			108	123				
9:15	129	92			123	81				
9:30	120	72			113	92				
9:45	135	50	494	300	148	80	492	376	986	676
10:00	111	46			142	69				
10:15	135	46			142	52				
10:30	163	47			138	60				
10:45	152	51	561	190	150	50	572	231	1133	421
11:00	152	37			192	45				
11:15	143	18			177	51				
11:30	182	24			190	28				
11:45	169	21	646	100	219	35	778	159	1424	259
Total	3076	6593	3076	6593	3045	7525	3045	7525	6121	14118
Combined Total	9669		9669		10570		10570		20239	
AM Peak	11:45 AM				11:45 AM					
Vol.	714				861					
P.H.F.	0.935				0.974					
PM Peak		12:30 PM				4:45 PM				
Vol.		772				876				
P.H.F.		0.898				0.932				
Percentage	31.8%	68.2%			28.8%	71.2%				

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
MIDWAY DR	[GAINES ST - RILEY ST]	03100 - 03150	1190	EAST	:	14600	6/27/1990	0985-90
				WEST	:	17700	7/20/1990	0986-90
				EAST	:	13800	6/17/1991	0917-91
				WEST	:	16900	6/17/1991	0918-91
				*TOTAL	:	30700		
				EAST	:	14300	6/9/1992	0498-92
				WEST	:	16900	6/9/1992	0499-92
				*TOTAL	:	31200		
				EAST	:	12100	6/2/1995	0663-95
				WEST	:	15100	6/2/1995	0664-95
				*TOTAL	:	27200		
				EAST	:	12600	6/22/1999	0479-99
				WEST	:	14900	6/22/1999	0479-99
				*TOTAL	:	27500		
				EAST	:	10960	6/18/2002	0629-02
				WEST	:	14250	6/25/2002	0630-02
				EAST	:	18590	6/13/2006	0068-06
				WEST	:	14360	6/13/2006	0068-06
				*TOTAL	:	32950		
				EAST	:	12720	8/12/2008	0313-08
				WEST	:	14410	8/12/2008	0313-08
				*TOTAL	:	27130		
				EAST	:	12860	6/16/2009	MC0396-0
				WEST	:	14745	6/16/2009	MC0396-0
				*TOTAL	:	27605		
MIDWAY DR	[KEMPER ST - DUKE ST]	03600 - 03800	1771	EAST	:	12200	6/18/1991	0855-91
				WEST	:	12900	6/18/1991	0856-91
				*TOTAL	:	25100		
				EAST	:	13000	5/26/1993	0418-93
				WEST	:	13300	5/26/1993	0419-93
				*TOTAL	:	26300		
				EAST	:	10800	5/13/1996	0487-96

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Midway Dr (STATION#1860/FILE#MC0443-10)	Project:	10-4169-031	11,737	11,246	0	0	22,983

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	17		24					12:00	237		211				
00:15	27		40					12:15	236		200				
00:30	23		20					12:30	267		215				
00:45	18	85	17	101			186	12:45	215	955	277	903			1858
01:00	9		21					13:00	246		225				
01:15	13		15					13:15	221		182				
01:30	18		11					13:30	225		188				
01:45	14	54	27	74			128	13:45	223	915	234	829			1744
02:00	17		20					14:00	192		203				
02:15	14		13					14:15	209		201				
02:30	6		14					14:30	183		212				
02:45	6	43	9	56			99	14:45	218	802	209	825			1627
03:00	5		3					15:00	211		199				
03:15	11		11					15:15	208		205				
03:30	16		7					15:30	213		207				
03:45	16	48	10	31			79	15:45	212	844	226	837			1681
04:00	17		12					16:00	240		230				
04:15	13		12					16:15	233		193				
04:30	18		13					16:30	247		234				
04:45	19	67	19	56			123	16:45	249	969	204	861			1830
05:00	16		29					17:00	254		209				
05:15	34		28					17:15	294		225				
05:30	38		47					17:30	264		185				
05:45	72	160	38	142			302	17:45	185	997	220	839			1836
06:00	49		58					18:00	175		205				
06:15	57		61					18:15	172		158				
06:30	80		79					18:30	148		175				
06:45	104	290	98	296			586	18:45	144	639	144	682			1321
07:00	97		100					19:00	142		175				
07:15	115		139					19:15	143		147				
07:30	143		124					19:30	127		140				
07:45	136	491	117	480			971	19:45	151	563	169	631			1194
08:00	144		128					20:00	92		127				
08:15	161		113					20:15	102		133				
08:30	129		97					20:30	67		127				
08:45	148	582	106	444			1026	20:45	76	337	120	507			844
09:00	150		107					21:00	79		121				
09:15	182		142					21:15	84		87				
09:30	179		163					21:30	58		99				
09:45	176	687	131	543			1230	21:45	55	276	77	384			660
10:00	159		127					22:00	54		76				
10:15	180		139					22:15	41		53				
10:30	184		148					22:30	35		40				
10:45	189	712	167	581			1293	22:45	31	161	48	217			378
11:00	205		182					23:00	29		41				
11:15	236		178					23:15	20		26				
11:30	265		201					23:30	34		39				
11:45	248	954	228	789			1743	23:45	23	106	32	138			244
Total Vol.	4173		3593				**7766**		7564		7653				**15217**

	NB	SB	EB	WB	Total
Daily Totals :	**11,737**	**11,246**	**0**	**0**	**22,983**

	AM			PM			
Split %	53.7%	46.3%	**33.8%**		49.7%	50.3%	**66.2%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	12:15	**16:30**
Volume	988	854	**1842**	**Volume**	1061	917	**1916**
P.H.F.	0.925	0.936	**0.955**	**P.H.F.**	0.902	0.828	**0.923**
7 - 9 Vol.	1073	924	**1997**	**4 - 6 Vol.**	1966	1700	**3666**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	584	508	**1066**	**Volume**	1061	872	**1916**
P.H.F.	0.907	0.914	**0.973**	**P.H.F.**	0.902	0.932	**0.923**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-087

Location: Mission Bay Dr. btwn. I-8 EB On Ramp & Sports Arena Blvd.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	29		33					12:00	269		213				
00:15	37		32					12:15	297		241				
00:30	25		31					12:30	289		248				
00:45	27	118	14	110			228	12:45	298	1153	252	954			2107
01:00	23		31					13:00	273		249				
01:15	27		22					13:15	314		230				
01:30	21		27					13:30	298		230				
01:45	18	89	23	103			192	13:45	298	1183	253	962			2145
02:00	22		16					14:00	303		239				
02:15	19		12					14:15	295		219				
02:30	20		19					14:30	274		205				
02:45	13	74	8	55			129	14:45	284	1156	224	887			2043
03:00	9		18					15:00	252		235				
03:15	7		9					15:15	296		260				
03:30	18		8					15:30	270		240				
03:45	22	56	11	46			102	15:45	265	1083	262	997			2080
04:00	15		11					16:00	312		251				
04:15	18		12					16:15	306		285				
04:30	16		11					16:30	296		276				
04:45	23	72	25	59			131	16:45	279	1193	257	1069			2262
05:00	28		23					17:00	360		274				
05:15	31		33					17:15	292		320				
05:30	40		25					17:30	288		289				
05:45	64	163	79	160			323	17:45	282	1222	303	1186			2408
06:00	81		60					18:00	276		298				
06:15	95		77					18:15	257		274				
06:30	132		90					18:30	252		228				
06:45	136	444	121	348			792	18:45	263	1048	225	1025			2073
07:00	177		157					19:00	260		215				
07:15	202		183					19:15	212		192				
07:30	233		192					19:30	229		180				
07:45	250	862	246	778			1640	19:45	209	910	170	757			1667
08:00	204		209					20:00	217		153				
08:15	205		199					20:15	197		153				
08:30	208		209					20:30	187		144				
08:45	240	857	200	817			1674	20:45	158	759	136	586			1345
09:00	218		232					21:00	163		140				
09:15	225		213					21:15	136		110				
09:30	262		203					21:30	165		96				
09:45	249	954	235	883			1837	21:45	140	604	98	444			1048
10:00	219		228					22:00	129		71				
10:15	241		244					22:15	111		65				
10:30	222		214					22:30	104		71				
10:45	230	912	230	916			1828	22:45	99	443	64	271			714
11:00	217		233					23:00	67		69				
11:15	214		241					23:15	67		59				
11:30	215		225					23:30	55		42				
11:45	228	874	236	935			1809	23:45	30	219	44	214			433
Total Vol.		5475		5210			**10685**			10973		9352			**20325**

Daily Totals

NB	SB	EB	WB	Combined
16448	14562			**31010**

	AM			PM		
Split %	51.2%	48.8%	**34.5%**	54.0%	46.0%	**65.5%**
Peak Hour	11:45	11:45	**11:45**	16:15	17:15	**17:00**
Volume	1083	938	**2021**	1241	1210	**2408**
P.H.F.	0.91	0.95	**0.94**	0.86	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-090

Location: Sports Arena Blvd. btwn. Midway Dr. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		21			12:00			144		148		
00:15			14		21			12:15			135		137		
00:30			6		16			12:30			163		142		
00:45			5	33	14	72	105	12:45			141	583	141	568	1151
01:00			7		10			13:00			148		167		
01:15			4		7			13:15			137		161		
01:30			4		1			13:30			156		158		
01:45			3	18	9	27	45	13:45			152	593	155	641	1234
02:00			6		9			14:00			150		152		
02:15			5		7			14:15			139		140		
02:30			2		3			14:30			140		133		
02:45			2	15	3	22	37	14:45			147	576	139	564	1140
03:00			7		5			15:00			133		146		
03:15			6		7			15:15			139		180		
03:30			6		4			15:30			163		158		
03:45			6	25	5	21	46	15:45			152	587	166	650	1237
04:00			4		6			16:00			162		169		
04:15			4		4			16:15			142		171		
04:30			6		8			16:30			171		215		
04:45			8	22	8	26	48	16:45			143	618	166	721	1339
05:00			10		7			17:00			155		213		
05:15			12		5			17:15			164		220		
05:30			25		17			17:30			155		194		
05:45			32	79	12	41	120	17:45			173	647	168	795	1442
06:00			32		20			18:00			159		197		
06:15			42		22			18:15			156		175		
06:30			62		32			18:30			178		155		
06:45			71	207	51	125	332	18:45			140	633	150	677	1310
07:00			78		62			19:00			134		152		
07:15			109		61			19:15			153		152		
07:30			115		57			19:30			119		137		
07:45			135	437	57	237	674	19:45			116	522	156	597	1119
08:00			140		65			20:00			117		123		
08:15			139		80			20:15			105		133		
08:30			122		96			20:30			82		120		
08:45			145	546	91	332	878	20:45			74	378	115	491	869
09:00			124		79			21:00			78		103		
09:15			139		109			21:15			55		104		
09:30			133		122			21:30			36		90		
09:45			154	550	126	436	986	21:45			40	209	83	380	589
10:00			147		139			22:00			29		84		
10:15			141		133			22:15			27		59		
10:30			152		130			22:30			30		68		
10:45			133	573	128	530	1103	22:45			19	105	51	262	367
11:00			130		124			23:00			14		143		
11:15			128		147			23:15			20		55		
11:30			124		152			23:30			24		26		
11:45			147	529	163	586	1115	23:45			14	72	17	241	313
Total Vol.				3034		2455	**5489**					5523		6587	**12110**

Daily Totals

NB	SB	EB	WB	Combined
		8557	9042	**17599**

	AM			PM		
Split %	55.3%	44.7%	**31.2%**	45.6%	54.4%	**68.8%**
Peak Hour	09:45	11:15	**11:45**	17:45	16:30	**16:30**
Volume	594	610	**1179**	666	814	**1447**
P.H.F.	0.96	0.94	**0.95**	0.94	0.93	**0.94**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-091

Location: Sports Arena Blvd. btwn. Kemper St. & East Dr.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			26		15			12:00			122		130		
00:15			14		15			12:15			131		133		
00:30			11		15			12:30			128		139		
00:45			10	61	13	58	119	12:45			133	514	143	545	1059
01:00			5		12			13:00			130		141		
01:15			5		5			13:15			163		147		
01:30			4		3			13:30			139		154		
01:45			8	22	8	28	50	13:45			155	587	166	608	1195
02:00			9		4			14:00			154		196		
02:15			5		3			14:15			174		185		
02:30			1		3			14:30			155		174		
02:45			1	16	0	10	26	14:45			156	639	187	742	1381
03:00			4		3			15:00			166		188		
03:15			0		9			15:15			198		174		
03:30			6		9			15:30			187		154		
03:45			10	20	8	29	49	15:45			174	725	165	681	1406
04:00			12		6			16:00			188		166		
04:15			5		3			16:15			204		158		
04:30			10		10			16:30			218		162		
04:45			9	36	12	31	67	16:45			213	823	165	651	1474
05:00			14		5			17:00			237		185		
05:15			14		6			17:15			246		200		
05:30			20		29			17:30			216		166		
05:45			31	79	39	79	158	17:45			231	930	179	730	1660
06:00			27		32			18:00			222		178		
06:15			30		37			18:15			244		188		
06:30			68		48			18:30			224		171		
06:45			62	187	67	184	371	18:45			206	896	166	703	1599
07:00			78		76			19:00			213		162		
07:15			101		53			19:15			194		129		
07:30			129		77			19:30			191		115		
07:45			117	425	72	278	703	19:45			185	783	101	507	1290
08:00			126		103			20:00			163		97		
08:15			124		83			20:15			159		110		
08:30			132		93			20:30			140		88		
08:45			135	517	98	377	894	20:45			148	610	70	365	975
09:00			148		86			21:00			121		73		
09:15			147		117			21:15			131		61		
09:30			127		122			21:30			135		62		
09:45			128	550	121	446	996	21:45			112	499	51	247	746
10:00			114		120			22:00			103		56		
10:15			128		122			22:15			73		44		
10:30			133		147			22:30			103		45		
10:45			130	505	124	513	1018	22:45			110	389	48	193	582
11:00			128		128			23:00			253		80		
11:15			124		133			23:15			102		36		
11:30			141		139			23:30			55		29		
11:45			143	536	163	563	1099	23:45			29	439	22	167	606
Total Vol.				2954		2596	**5550**					7834		6139	**13973**

Daily Totals

NB	SB	EB	WB	Combined
		10788	8735	**19523**

	AM			PM		
Split %	53.2%	46.8%	**28.4%**	56.1%	43.9%	**71.6%**
Peak Hour	08:30	11:15	**11:30**	17:00	14:00	**17:00**
Volume	562	565	**1102**	930	742	**1660**
P.H.F.	0.95	0.87	**0.90**	0.95	0.95	**0.93**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
SPORTS ARENA BL	[ROSECRANS ST - EAST DR]	03100 - 03300	1211	EAST	:	14780	6/15/2005	0296-05
				WEST	:	14640	6/15/2005	0296-05
				*TOTAL	:	29420		
				EAST	:	13620	7/29/2008	0315-08
				WEST	:	13160	7/29/2008	0315-08
				*TOTAL	:	26780		
SPORTS ARENA BL	[KEMPER ST - HANCOCK ST]	03600 - 03800	1210	EAST	:	11200	6/25/1990	0976-90
				WEST	:	10300	6/25/1990	0977-90
				*TOTAL	:	21500		
				EAST	:	9400	6/18/1991	0853-91
				WEST	:	7900	6/18/1991	0854-91
				*TOTAL	:	17300		
				EAST	:	8400	9/15/1994	0672-94
				WEST	:	8600	9/15/1994	0673-94
				*TOTAL	:	17000		
				EAST	:	9600	6/17/1997	0370-97
				WEST	:	9500	6/17/1997	0371-97
				*TOTAL	:	19100		
				EAST	:	9780	6/9/2005	0292-05
				WEST	:	9590	6/9/2005	0292-05
				*TOTAL	:	19370		
				EAST	:	8105	6/15/2010	MC0511-1
				WEST	:	8655	6/15/2010	MC0511-1
				*TOTAL	:	16760		
				EAST	:	7475	1/11/2011	MC1210-1
				WEST	:	8145	1/11/2011	MC1210-1
				*TOTAL	:	15620		
SPORTS ARENA BL	[HANCOCK ST - W PT LOMA BL]	03800 - 03900	1213	EAST	:	10000	6/25/1990	1001-90
				WEST	:	11200	6/25/1990	1002-90
				*TOTAL	:	21200		
				EAST	:	10600	6/26/1991	0952-91
				WEST	:	16300	6/26/1991	0953-91

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-092

Location: Sports Arena Blvd. btwn. Rosecrans St. & Enterprise St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			0		1			12:00			44		24		
00:15			2		2			12:15			33		28		
00:30			0		0			12:30			36		24		
00:45			0	2	4	7	9	12:45			37	150	21	97	247
01:00			0		3			13:00			31		28		
01:15			2		0			13:15			31		24		
01:30			0		0			13:30			30		26		
01:45			1	3	1	4	7	13:45			36	128	22	100	228
02:00			0		4			14:00			30		20		
02:15			0		0			14:15			29		24		
02:30			2		2			14:30			20		21		
02:45			0	2	8	14	16	14:45			30	109	14	79	188
03:00			2		1			15:00			17		19		
03:15			0		1			15:15			20		22		
03:30			1		3			15:30			18		20		
03:45			3	6	3	8	14	15:45			19	74	28	89	163
04:00			0		2			16:00			25		24		
04:15			0		4			16:15			33		32		
04:30			2		0			16:30			31		39		
04:45			0	2	2	8	10	16:45			18	107	35	130	237
05:00			2		2			17:00			14		54		
05:15			0		2			17:15			9		74		
05:30			1		8			17:30			15		45		
05:45			4	7	4	16	23	17:45			21	59	50	223	282
06:00			5		5			18:00			14		21		
06:15			2		3			18:15			26		28		
06:30			3		1			18:30			13		21		
06:45			6	16	1	10	26	18:45			16	69	14	84	153
07:00			10		11			19:00			9		16		
07:15			13		10			19:15			11		13		
07:30			15		14			19:30			15		11		
07:45			15	53	8	43	96	19:45			8	43	10	50	93
08:00			13		11			20:00			6		8		
08:15			12		10			20:15			7		7		
08:30			9		14			20:30			6		5		
08:45			18	52	19	54	106	20:45			10	29	3	23	52
09:00			30		13			21:00			2		2		
09:15			15		18			21:15			3		1		
09:30			19		11			21:30			9		4		
09:45			22	86	10	52	138	21:45			4	18	1	8	26
10:00			31		14			22:00			3		5		
10:15			22		42			22:15			3		2		
10:30			22		32			22:30			11		1		
10:45			31	106	28	116	222	22:45			0	17	4	12	29
11:00			28		24			23:00			7		1		
11:15			29		25			23:15			2		5		
11:30			32		24			23:30			3		2		
11:45			33	122	16	89	211	23:45			2	14	3	11	25
Total Vol.				457		421	**878**					817		906	**1723**

Daily Totals

NB	SB	EB	WB	Combined
		1274	1327	**2601**

	AM			PM		
Split %	52.1%	47.9%	**33.8%**	47.4%	52.6%	**66.2%**
Peak Hour	11:45	10:15	**11:45**	12:00	17:00	**17:00**
Volume	146	126	**238**	150	223	**282**
P.H.F.	0.83	0.75	**0.88**	0.85	0.75	**0.85**

Volumes for: Thursday, August 19, 2010 City: San Diego Project #: 10-4243-049

Location: Kurtz St (STATION#1873/FILE#MC0742-10) between Riley St & Greenwood St

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		14				12:00		130			
00:15		8				12:15		127			
00:30		15				12:30		107			
00:45		11	48		48	12:45		105	469		469
01:00		9				13:00		110			
01:15		4				13:15		91			
01:30		4				13:30		104			
01:45		6	23		23	13:45		94	399		399
02:00		5				14:00		83			
02:15		6				14:15		100			
02:30		4				14:30		89			
02:45		2	17		17	14:45		90	362		362
03:00		5				15:00		109			
03:15		5				15:15		110			
03:30		8				15:30		117			
03:45		5	23		23	15:45		115	451		451
04:00		13				16:00		145			
04:15		22				16:15		116			
04:30		15				16:30		128			
04:45		12	62		62	16:45		121	510		510
05:00		12				17:00		154			
05:15		9				17:15		113			
05:30		14				17:30		105			
05:45		18	53		53	17:45		97	469		469
06:00		23				18:00		93			
06:15		21				18:15		71			
06:30		34				18:30		53			
06:45		28	106		106	18:45		47	264		264
07:00		39				19:00		43			
07:15		45				19:15		38			
07:30		66				19:30		45			
07:45		57	207		207	19:45		27	153		153
08:00		61				20:00		30			
08:15		68				20:15		42			
08:30		60				20:30		30			
08:45		69	258		258	20:45		21	123		123
09:00		57				21:00		21			
09:15		73				21:15		25			
09:30		86				21:30		27			
09:45		77	293		293	21:45		26	99		99
10:00		92				22:00		18			
10:15		89				22:15		19			
10:30		116				22:30		18			
10:45		98	395		395	22:45		15	70		70
11:00		105				23:00		18			
11:15		102				23:15		16			
11:30		103				23:30		12			
11:45		116	426		426	23:45		10	56		56
Total Vol.			1911		**1911**			3425			**3425**

Daily Totals

NB	SB	EB	WB	Combined
	5336			**5336**

	AM		PM	
Split %	100.0%	**35.8%**	100.0%	**64.2%**
Peak Hour	11:45	**11:45**	16:15	**16:15**
Volume	480	**480**	519	**519**
P.H.F.	0.92	**0.92**	0.84	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-084

Location: Kurtz St. btwn. Rosecrans St. & Pacific Highway

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		8					12:00	82		48				
00:15	8		1					12:15	54		71				
00:30	6		2					12:30	68		59				
00:45	7	23	1	12			35	12:45	58	262	88	266			528
01:00	3		9					13:00	73		68				
01:15	3		1					13:15	38		88				
01:30	2		4					13:30	54		81				
01:45	5	13	5	19			32	13:45	50	215	91	328			543
02:00	2		4					14:00	53		73				
02:15	4		2					14:15	42		80				
02:30	5		1					14:30	49		67				
02:45	7	18	4	11			29	14:45	51	195	79	299			494
03:00	7		1					15:00	56		78				
03:15	10		6					15:15	49		63				
03:30	7		2					15:30	65		55				
03:45	6	30	2	11			41	15:45	65	235	50	246			481
04:00	2		5					16:00	60		54				
04:15	11		4					16:15	61		41				
04:30	3		7					16:30	53		45				
04:45	18	34	3	19			53	16:45	58	232	65	205			437
05:00	9		8					17:00	67		51				
05:15	18		4					17:15	66		38				
05:30	23		3					17:30	49		46				
05:45	36	86	5	20			106	17:45	52	234	46	181			415
06:00	41		3					18:00	44		35				
06:15	58		19					18:15	41		54				
06:30	52		22					18:30	47		34				
06:45	72	223	24	68			291	18:45	28	160	69	192			352
07:00	50		24					19:00	30		66				
07:15	62		29					19:15	16		37				
07:30	58		33					19:30	31		45				
07:45	71	241	30	116			357	19:45	27	104	44	192			296
08:00	59		54					20:00	25		42				
08:15	59		41					20:15	27		28				
08:30	59		45					20:30	23		48				
08:45	62	239	55	195			434	20:45	19	94	23	141			235
09:00	47		42					21:00	12		33				
09:15	57		24					21:15	9		25				
09:30	48		29					21:30	12		24				
09:45	49	201	33	128			329	21:45	16	49	22	104			153
10:00	54		47					22:00	11		24				
10:15	56		37					22:15	8		20				
10:30	54		60					22:30	7		22				
10:45	64	228	31	175			403	22:45	11	37	13	79			116
11:00	63		58					23:00	8		8				
11:15	65		45					23:15	8		5				
11:30	54		65					23:30	4		6				
11:45	72	254	65	233			487	23:45	5	25	3	22			47
Total Vol.		1590		1007			**2597**			1842		2255			**4097**

Daily Totals

NB	SB	EB	WB	Combined
3432	3262			**6694**

	AM			PM		
Split %	61.2%	38.8%	**38.8%**	45.0%	55.0%	**61.2%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:15	**12:45**
Volume	276	249	**519**	262	333	**548**
P.H.F.	0.84	0.88	**0.95**	0.80	0.91	**0.94**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-001

Location: Hancock St(STATION#1878/FILE#MC0592-10) between Channel Wy & Sports Arena Blvd

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	3		6					12:00	60		36				
00:15	5		3					12:15	53		44				
00:30	3		2					12:30	66		41				
00:45	0	11	1	12			23	12:45	41	220	42	163			383
01:00	0		2					13:00	33		51				
01:15	1		1					13:15	43		42				
01:30	1		1					13:30	42		33				
01:45	1	3	1	5			8	13:45	46	164	30	156			320
02:00	3		1					14:00	49		42				
02:15	0		2					14:15	56		34				
02:30	1		0					14:30	42		40				
02:45	1	5	2	5			10	14:45	42	189	37	153			342
03:00	2		3					15:00	46		40				
03:15	2		0					15:15	54		32				
03:30	1		2					15:30	51		24				
03:45	3	8	1	6			14	15:45	41	192	26	122			314
04:00	1		1					16:00	56		29				
04:15	1		4					16:15	38		19				
04:30	2		2					16:30	47		23				
04:45	2	6	8	15			21	16:45	60	201	23	94			295
05:00	3		6					17:00	51		21				
05:15	2		2					17:15	48		17				
05:30	3		2					17:30	48		23				
05:45	4	12	16	26			38	17:45	28	175	21	82			257
06:00	6		10					18:00	30		18				
06:15	7		14					18:15	39		19				
06:30	6		21					18:30	25		18				
06:45	11	30	24	69			99	18:45	24	118	14	69			187
07:00	20		27					19:00	25		21				
07:15	17		23					19:15	16		15				
07:30	21		24					19:30	11		19				
07:45	18	76	37	111			187	19:45	17	69	14	69			138
08:00	20		50					20:00	14		10				
08:15	21		36					20:15	14		9				
08:30	18		28					20:30	12		13				
08:45	21	80	35	149			229	20:45	7	47	13	45			92
09:00	29		41					21:00	11		9				
09:15	29		29					21:15	9		4				
09:30	23		27					21:30	9		9				
09:45	30	111	24	121			232	21:45	6	35	12	34			69
10:00	43		35					22:00	8		13				
10:15	39		40					22:15	6		10				
10:30	30		25					22:30	6		7				
10:45	41	153	31	131			284	22:45	4	24	3	33			57
11:00	47		28					23:00	1		2				
11:15	40		33					23:15	8		2				
11:30	38		32					23:30	4		5				
11:45	51	176	31	124			300	23:45	2	15	2	11			26
Total Vol.		671		774			**1445**			1449		1031			**2480**

Daily Totals

NB	SB	EB	WB	Combined
2120	1805			**3925**

	AM			PM		
Split %	46.4%	53.6%	**36.8%**	58.4%	41.6%	**63.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:00**
Volume	230	152	**382**	220	178	**383**
P.H.F.	0.87	0.86	**0.89**	0.93	0.87	**0.89**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-076

Location: Hancock St. btwn. Greenwood St. & Riley St. (one way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	12					12:00	72				
00:15	12					12:15	105				
00:30	5					12:30	83				
00:45	9	38			38	12:45	106	366			366
01:00	7					13:00	93				
01:15	9					13:15	89				
01:30	11					13:30	80				
01:45	9	36			36	13:45	80	342			342
02:00	10					14:00	69				
02:15	19					14:15	75				
02:30	17					14:30	77				
02:45	11	57			57	14:45	67	288			288
03:00	9					15:00	82				
03:15	10					15:15	90				
03:30	8					15:30	76				
03:45	25	52			52	15:45	91	339			339
04:00	4					16:00	67				
04:15	16					16:15	72				
04:30	7					16:30	67				
04:45	22	49			49	16:45	42	248			248
05:00	20					17:00	58				
05:15	21					17:15	54				
05:30	31					17:30	52				
05:45	54	126			126	17:45	47	211			211
06:00	42					18:00	41				
06:15	55					18:15	44				
06:30	50					18:30	35				
06:45	79	226			226	18:45	52	172			172
07:00	89					19:00	24				
07:15	88					19:15	21				
07:30	69					19:30	21				
07:45	108	354			354	19:45	32	98			98
08:00	119					20:00	33				
08:15	101					20:15	32				
08:30	105					20:30	19				
08:45	97	422			422	20:45	26	110			110
09:00	96					21:00	28				
09:15	81					21:15	17				
09:30	62					21:30	18				
09:45	92	331			331	21:45	25	88			88
10:00	98					22:00	19				
10:15	81					22:15	13				
10:30	74					22:30	20				
10:45	78	331			331	22:45	17	69			69
11:00	70					23:00	18				
11:15	72					23:15	27				
11:30	85					23:30	9				
11:45	68	295			295	23:45	9	63			63
Total Vol.		2317			**2317**		2394				**2394**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
	4711				**4711**

	AM		PM	
Split %	100.0%	**49.2%**	100.0%	**50.8%**
Peak Hour	07:45	**07:45**	12:15	**12:15**
Volume	433	**433**	387	**387**
P.H.F.	0.91	**0.91**	0.91	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-077

Location: Hancock St. btwn. Gaines St. & Rosecrans St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00	4					12:00	57				
00:15	8					12:15	69				
00:30	3					12:30	64				
00:45	6	21			21	12:45	69	259			259
01:00	3					13:00	49				
01:15	4					13:15	66				
01:30	5					13:30	42				
01:45	3	15			15	13:45	60	217			217
02:00	3					14:00	47				
02:15	6					14:15	52				
02:30	7					14:30	62				
02:45	5	21			21	14:45	67	228			228
03:00	5					15:00	73				
03:15	6					15:15	78				
03:30	1					15:30	63				
03:45	8	20			20	15:45	66	280			280
04:00	4					16:00	62				
04:15	9					16:15	76				
04:30	3					16:30	78				
04:45	12	28			28	16:45	71	287			287
05:00	6					17:00	70				
05:15	12					17:15	64				
05:30	17					17:30	41				
05:45	24	59			59	17:45	48	223			223
06:00	14					18:00	64				
06:15	22					18:15	38				
06:30	27					18:30	34				
06:45	33	96			96	18:45	33	169			169
07:00	32					19:00	25				
07:15	40					19:15	20				
07:30	45					19:30	24				
07:45	38	155			155	19:45	26	95			95
08:00	65					20:00	21				
08:15	42					20:15	15				
08:30	7					20:30	20				
08:45	0	114			114	20:45	16	72			72
09:00	0					21:00	20				
09:15	5					21:15	14				
09:30	30					21:30	19				
09:45	43	78			78	21:45	9	62			62
10:00	55					22:00	11				
10:15	54					22:15	13				
10:30	42					22:30	11				
10:45	53	204			204	22:45	6	41			41
11:00	39					23:00	5				
11:15	51					23:15	13				
11:30	64					23:30	5				
11:45	59	213			213	23:45	8	31			31
Total Vol.		1024			**1024**		1964				**1964**

Daily Totals

NB	SB	EB	WB	**Combined**
2988				**2988**

	AM		PM	
Split %	100.0%	**34.3%**	100.0%	**65.7%**
Peak Hour	11:30	**11:30**	16:15	**16:15**
Volume	249	**249**	295	**295**
P.H.F.	0.90	**0.90**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, June 17, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Hancock St (STATION#2603/FILE#MC0428-10)	Project:	10-4169-016	0	0	5,774	3,903	9,677

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			7	9		12:00			81	65	
00:15			5	9		12:15			88	68	
00:30			6	3		12:30			94	66	
00:45			3 21	7 28	49	12:45			90 353	54 253	606
01:00			5	6		13:00			66	68	
01:15			1	7		13:15			101	71	
01:30			3	2		13:30			85	67	
01:45			4 13	1 16	29	13:45			88 340	57 263	603
02:00			2	0		14:00			60	73	
02:15			0	6		14:15			65	92	
02:30			4	1		14:30			70	53	
02:45			3 9	0 7	16	14:45			75 270	73 291	561
03:00			4	2		15:00			65	72	
03:15			2	3		15:15			70	92	
03:30			6	2		15:30			74	94	
03:45			6 18	1 8	26	15:45			77 286	95 353	639
04:00			9	2		16:00			97	154	
04:15			14	2		16:15			92	114	
04:30			18	3		16:30			88	112	
04:45			26 67	3 10	77	16:45			88 365	92 472	837
05:00			36	4		17:00			97	106	
05:15			44	4		17:15			113	74	
05:30			71	6		17:30			111	80	
05:45			80 231	7 21	252	17:45			69 390	68 328	718
06:00			113	9		18:00			68	83	
06:15			148	12		18:15			58	70	
06:30			168	15		18:30			48	85	
06:45			198 627	15 51	678	18:45			60 234	58 296	530
07:00			151	25		19:00			48	46	
07:15			168	33		19:15			46	35	
07:30			165	37		19:30			43	48	
07:45			153 637	30 125	762	19:45			27 164	53 182	346
08:00			110	38		20:00			45	57	
08:15			86	36		20:15			30	53	
08:30			97	32		20:30			47	40	
08:45			90 383	39 145	528	20:45			30 152	67 217	369
09:00			90	39		21:00			32	39	
09:15			85	41		21:15			28	26	
09:30			80	45		21:30			19	27	
09:45			92 347	34 159	506	21:45			20 99	44 136	235
10:00			70	49		22:00			18	24	
10:15			71	45		22:15			14	12	
10:30			81	52		22:30			14	11	
10:45			81 303	63 209	512	22:45			9 55	7 54	109
11:00			100	68		23:00			11	7	
11:15			89	62		23:15			13	6	
11:30			99	57		23:30			9	2	
11:45			80 368	71 258	626	23:45			9 42	6 21	63
Total Vol.			3024	1037	**4061**				2750	2866	**5616**

	NB	SB	EB	WB	Total
Daily Totals :	0	0	5,774	3,903	9,677

	AM			PM		
Split %	74.5%	25.5%	**42.0%**	49.0%	51.0%	**58.0%**
AM				**PM**		
Peak Hr.	06:30	11:45	**06:45**	**Peak Hr.**	16:45	15:45	**16:00**
Volume	685	270	**792**	**Volume**	409	475	**837**
P.H.F.	0.865	0.951	**0.930**	**P.H.F.**	0.905	0.771	**0.834**
7 - 9 Vol.	1020	270	**1290**	**4 - 6 Vol.**	755	800	**1555**
Peak Hr.	07:00	08:00	**07:00**	**Peak Hr.**	16:45	16:00	**16:00**
Volume	637	145	**762**	**Volume**	409	472	**837**
P.H.F.	0.948	0.929	**0.943**	**P.H.F.**	0.905	0.766	**0.834**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-078

Location: Hancock St. btwn. Witherby St. & Noell St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	2		2					12:00	19		31				
00:15	1		2					12:15	17		42				
00:30	0		2					12:30	20		34				
00:45	0	3	1	7			10	12:45	16	72	26	133			205
01:00	1		1					13:00	22		29				
01:15	0		0					13:15	18		38				
01:30	2		0					13:30	12		42				
01:45	0	3	4	5			8	13:45	20	72	38	147			219
02:00	1		1					14:00	19		33				
02:15	0		0					14:15	17		32				
02:30	0		1					14:30	10		36				
02:45	0	1	1	3			4	14:45	11	57	29	130			187
03:00	0		1					15:00	19		47				
03:15	2		1					15:15	18		22				
03:30	2		1					15:30	8		42				
03:45	1	5	7	10			15	15:45	16	61	44	155			216
04:00	1		6					16:00	29		28				
04:15	2		1					16:15	25		20				
04:30	2		0					16:30	19		27				
04:45	0	5	3	10			15	16:45	14	87	39	114			201
05:00	1		6					17:00	18		54				
05:15	2		1					17:15	15		34				
05:30	5		6					17:30	19		24				
05:45	4	12	15	28			40	17:45	12	64	29	141			205
06:00	4		21					18:00	21		21				
06:15	1		18					18:15	45		23				
06:30	4		20					18:30	11		23				
06:45	5	14	25	84			98	18:45	11	88	18	85			173
07:00	11		23					19:00	7		21				
07:15	12		23					19:15	10		22				
07:30	5		46					19:30	11		18				
07:45	14	42	23	115			157	19:45	6	34	17	78			112
08:00	18		17					20:00	17		6				
08:15	7		31					20:15	9		9				
08:30	7		45					20:30	3		10				
08:45	11	43	20	113			156	20:45	7	36	4	29			65
09:00	9		49					21:00	6		6				
09:15	13		23					21:15	4		4				
09:30	10		38					21:30	13		10				
09:45	19	51	33	143			194	21:45	7	30	4	24			54
10:00	18		27					22:00	4		8				
10:15	17		33					22:15	4		5				
10:30	27		20					22:30	7		1				
10:45	21	83	19	99			182	22:45	1	16	1	15			31
11:00	18		28					23:00	1		2				
11:15	18		23					23:15	2		1				
11:30	20		34					23:30	0		4				
11:45	11	67	31	116			183	23:45	0	3	2	9			12
Total Vol.		329		733			**1062**			620		1060			**1680**

Daily Totals

NB	SB	EB	WB	Combined
949	1793			**2742**

	AM			PM		
Split %	31.0%	69.0%	**38.7%**	36.9%	63.1%	**61.3%**
Peak Hour	10:30	08:15	**11:30**	17:30	15:00	**13:15**
Volume	84	145	**205**	97	155	**220**
P.H.F.	0.78	0.74	**0.87**	0.54	0.82	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-079

Location: Kettner Blvd. btwn. Washington St. & Vine St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		55				12:00		380			
00:15		43				12:15		381			
00:30		28				12:30		400			
00:45		37	163		163	12:45		316	1477		1477
01:00		20				13:00		342			
01:15		19				13:15		341			
01:30		10				13:30		306			
01:45		14	63		63	13:45		303	1292		1292
02:00		18				14:00		326			
02:15		9				14:15		319			
02:30		6				14:30		304			
02:45		8	41		41	14:45		316	1265		1265
03:00		10				15:00		310			
03:15		10				15:15		281			
03:30		32				15:30		325			
03:45		22	74		74	15:45		306	1222		1222
04:00		63				16:00		333			
04:15		75				16:15		470			
04:30		141				16:30		470			
04:45		232	511		511	16:45		409	1682		1682
05:00		238				17:00		460			
05:15		298				17:15		439			
05:30		239				17:30		356			
05:45		279	1054		1054	17:45		356	1611		1611
06:00		233				18:00		348			
06:15		231				18:15		335			
06:30		255				18:30		299			
06:45		265	984		984	18:45		331	1313		1313
07:00		251				19:00		280			
07:15		284				19:15		271			
07:30		309				19:30		268			
07:45		360	1204		1204	19:45		279	1098		1098
08:00		367				20:00		253			
08:15		355				20:15		267			
08:30		378				20:30		244			
08:45		382	1482		1482	20:45		239	1003		1003
09:00		356				21:00		216			
09:15		381				21:15		221			
09:30		360				21:30		180			
09:45		407	1504		1504	21:45		179	796		796
10:00		344				22:00		148			
10:15		350				22:15		156			
10:30		353				22:30		147			
10:45		375	1422		1422	22:45		119	570		570
11:00		370				23:00		119			
11:15		396				23:15		77			
11:30		400				23:30		69			
11:45		379	1545		1545	23:45		81	346		346
Total Vol.			10047		**10047**				13675		**13675**

Daily Totals

NB	SB	EB	WB	Combined
	23722			**23722**

	AM		PM	
Split %	100.0%	**42.4%**	100.0%	**57.6%**
Peak Hour	11:15	**11:15**	16:15	**16:15**
Volume	1555	**1555**	1809	**1809**
P.H.F.	0.97	**0.97**	0.96	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-080

Location: Kettner Blvd. btwn. Vine St. & Sassafras St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		53				12:00		373			
00:15		47				12:15		377			
00:30		27				12:30		403			
00:45		36	163		163	12:45		382	1535		1535
01:00		23				13:00		349			
01:15		20				13:15		341			
01:30		11				13:30		305			
01:45		15	69		69	13:45		305	1300		1300
02:00		20				14:00		343			
02:15		10				14:15		324			
02:30		6				14:30		312			
02:45		9	45		45	14:45		317	1296		1296
03:00		10				15:00		300			
03:15		9				15:15		283			
03:30		28				15:30		318			
03:45		17	64		64	15:45		297	1198		1198
04:00		54				16:00		328			
04:15		68				16:15		463			
04:30		126				16:30		469			
04:45		216	464		464	16:45		399	1659		1659
05:00		213				17:00		450			
05:15		273				17:15		428			
05:30		207				17:30		353			
05:45		242	935		935	17:45		376	1607		1607
06:00		212				18:00		342			
06:15		215				18:15		329			
06:30		234				18:30		280			
06:45		239	900		900	18:45		320	1271		1271
07:00		238				19:00		266			
07:15		249				19:15		254			
07:30		292				19:30		250			
07:45		343	1122		1122	19:45		270	1040		1040
08:00		351				20:00		249			
08:15		333				20:15		273			
08:30		342				20:30		238			
08:45		364	1390		1390	20:45		231	991		991
09:00		342				21:00		211			
09:15		362				21:15		200			
09:30		357				21:30		192			
09:45		381	1442		1442	21:45		191	794		794
10:00		349				22:00		147			
10:15		339				22:15		154			
10:30		349				22:30		138			
10:45		369	1406		1406	22:45		124	563		563
11:00		366				23:00		114			
11:15		371				23:15		75			
11:30		402				23:30		64			
11:45		348	1487		1487	23:45		81	334		334
Total Vol.			9487		**9487**				13588		**13588**

Daily Totals

NB	SB	EB	WB	Combined
	23075			**23075**

	AM		PM	
Split %	100.0%	**41.1%**	100.0%	**58.9%**
Peak Hour	10:45	**10:45**	16:15	**16:15**
Volume	1508	**1508**	1781	**1781**
P.H.F.	0.94	**0.94**	0.95	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-081

Location: Kettner Blvd. btwn. Redwood St. & Palm St. (one-way street)

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00		42				12:00		280			
00:15		32				12:15		337			
00:30		30				12:30		275			
00:45		23	127		127	12:45		310	1202		1202
01:00		17				13:00		291			
01:15		12				13:15		269			
01:30		11				13:30		276			
01:45		16	56		56	13:45		280	1116		1116
02:00		9				14:00		264			
02:15		8				14:15		276			
02:30		7				14:30		267			
02:45		9	33		33	14:45		264	1071		1071
03:00		9				15:00		247			
03:15		27				15:15		275			
03:30		20				15:30		272			
03:45		53	109		109	15:45		294	1088		1088
04:00		72				16:00		414			
04:15		100				16:15		397			
04:30		168				16:30		354			
04:45		177	517		517	16:45		410	1575		1575
05:00		222				17:00		383			
05:15		190				17:15		326			
05:30		214				17:30		290			
05:45		195	821		821	17:45		304	1303		1303
06:00		182				18:00		302			
06:15		230				18:15		240			
06:30		232				18:30		272			
06:45		209	853		853	18:45		235	1049		1049
07:00		232				19:00		239			
07:15		257				19:15		214			
07:30		317				19:30		222			
07:45		317	1123		1123	19:45		200	875		875
08:00		335				20:00		212			
08:15		304				20:15		208			
08:30		326				20:30		194			
08:45		316	1281		1281	20:45		187	801		801
09:00		297				21:00		177			
09:15		314				21:15		164			
09:30		357				21:30		144			
09:45		306	1274		1274	21:45		132	617		617
10:00		302				22:00		155			
10:15		281				22:15		133			
10:30		329				22:30		122			
10:45		317	1229		1229	22:45		106	516		516
11:00		331				23:00		57			
11:15		320				23:15		57			
11:30		311				23:30		69			
11:45		318	1280		1280	23:45		47	230		230
Total Vol.			8703		**8703**				11443		**11443**

Daily Totals

NB	SB	EB	WB	Combined
	20146			**20146**

	AM		PM	
Split %	100.0%	**43.2%**	100.0%	**56.8%**
Peak Hour	10:30	**10:30**	16:00	**16:00**
Volume	1297	**1297**	1575	**1575**
P.H.F.	0.98	**0.98**	0.95	**0.95**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just N/o Taylor St	Project:	10-4143-036	4,318	3,139	0	0	7,457

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		6					12:00	88		58				
00:15	11		3					12:15	58		67				
00:30	7		3					12:30	68		69				
00:45	5	32	1	13			45	12:45	84	298	57	251			549
01:00	5		3					13:00	50		43				
01:15	1		2					13:15	70		52				
01:30	2		3					13:30	69		32				
01:45	4	12	1	9			21	13:45	74	263	65	192			455
02:00	3		1					14:00	75		41				
02:15	6		3					14:15	62		55				
02:30	4		0					14:30	61		44				
02:45	1	14	1	5			19	14:45	69	267	50	190			457
03:00	3		0					15:00	75		43				
03:15	2		1					15:15	66		71				
03:30	3		3					15:30	70		59				
03:45	8	16	5	9			25	15:45	96	307	61	234			541
04:00	2		7					16:00	136		52				
04:15	3		4					16:15	154		60				
04:30	10		5					16:30	129		49				
04:45	7	22	11	27			49	16:45	139	558	42	203			761
05:00	10		5					17:00	103		66				
05:15	9		12					17:15	110		69				
05:30	15		20					17:30	120		65				
05:45	24	58	19	56			114	17:45	87	420	64	264			684
06:00	28		19					18:00	63		67				
06:15	22		32					18:15	46		40				
06:30	31		47					18:30	45		43				
06:45	46	127	53	151			278	18:45	30	184	30	180			364
07:00	41		53					19:00	33		28				
07:15	31		47					19:15	33		23				
07:30	51		64					19:30	44		21				
07:45	50	173	63	227			400	19:45	32	142	17	89			231
08:00	38		61					20:00	31		18				
08:15	48		44					20:15	23		12				
08:30	44		50					20:30	33		16				
08:45	44	174	52	207			381	20:45	26	113	8	54			167
09:00	46		61					21:00	34		15				
09:15	60		53					21:15	33		8				
09:30	64		62					21:30	31		8				
09:45	56	226	59	235			461	21:45	33	131	8	39			170
10:00	59		59					22:00	38		8				
10:15	59		58					22:15	40		11				
10:30	79		52					22:30	20		9				
10:45	81	278	40	209			487	22:45	25	123	11	39			162
11:00	58		54					23:00	30		8				
11:15	79		55					23:15	13		6				
11:30	86		77					23:30	14		4				
11:45	73	296	49	235			531	23:45	27	84	3	21			105
Total Vol.		1428		1383			**2811**			2890		1756			**4646**

	NB	SB	EB	WB	Total
Daily Totals :	**4,318**	**3,139**	**0**	**0**	**7,457**

	AM			PM			
Split %	50.8%	49.2%	**37.7%**	62.2%	37.8%		**62.3%**
AM				**PM**			
Peak Hr.	11:15	11:30	**11:15**	**Peak Hr.**	16:00	17:15	**16:00**
Volume	326	251	**565**	**Volume**	558	265	**761**
P.H.F.	0.926	0.815	**0.867**	**P.H.F.**	0.906	0.960	**0.889**
7 - 9 Vol.	347	434	**781**	**4 - 6 Vol.**	978	467	**1445**
Peak Hr.	07:30	07:15	**07:30**	**Peak Hr.**	16:00	17:00	**16:00**
Volume	187	235	**419**	**Volume**	558	264	**761**
P.H.F.	0.917	0.918	**0.911**	**P.H.F.**	0.906	0.957	**0.889**

Prepared by NDS/ATD

Volumes for: Thursday, May 13, 2010	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Pacific Hwy just S/o Taylor St	Project: 10-4143-037	8,122	5,199	0	0	13,321

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	6		3					12:00	120		82				
00:15	11		2					12:15	111		80				
00:30	11		5					12:30	103		82				
00:45	10	38	8	18			56	12:45	105	439	93	337			776
01:00	4		5					13:00	101		91				
01:15	3		5					13:15	96		86				
01:30	4		2					13:30	108		84				
01:45	2	13	2	14			27	13:45	121	426	85	346			772
02:00	4		4					14:00	108		84				
02:15	7		0					14:15	133		73				
02:30	3		1					14:30	150		84				
02:45	0	14	5	10			24	14:45	170	561	82	323			884
03:00	4		2					15:00	188		85				
03:15	4		2					15:15	194		81				
03:30	6		4					15:30	251		112				
03:45	12	26	6	14			40	15:45	224	857	90	368			1225
04:00	4		8					16:00	284		90				
04:15	1		6					16:15	263		88				
04:30	7		13					16:30	288		97				
04:45	9	21	26	53			74	16:45	289	1124	83	358			1482
05:00	23		19					17:00	283		82				
05:15	20		26					17:15	322		83				
05:30	34		34					17:30	242		75				
05:45	44	121	86	165			286	17:45	175	1022	82	322			1344
06:00	33		66					18:00	151		72				
06:15	53		109					18:15	113		58				
06:30	77		111					18:30	94		53				
06:45	70	233	115	401			634	18:45	80	438	57	240			678
07:00	91		121					19:00	83		44				
07:15	89		133					19:15	62		40				
07:30	86		120					19:30	54		42				
07:45	85	351	115	489			840	19:45	52	251	33	159			410
08:00	87		95					20:00	61		31				
08:15	95		82					20:15	50		38				
08:30	93		83					20:30	40		28				
08:45	96	371	95	355			726	20:45	39	190	28	125			315
09:00	92		77					21:00	28		26				
09:15	89		72					21:15	39		16				
09:30	104		82					21:30	33		17				
09:45	91	376	57	288			664	21:45	31	131	18	77			208
10:00	94		59					22:00	30		11				
10:15	101		68					22:15	37		16				
10:30	99		80					22:30	23		19				
10:45	110	404	91	298			702	22:45	24	114	16	62			176
11:00	113		71					23:00	25		14				
11:15	148		82					23:15	19		8				
11:30	138		84					23:30	11		13				
11:45	132	531	100	337			868	23:45	15	70	5	40			110
Total Vol.		2499		2442			**4941**			5623		2757			**8380**

	NB	SB	EB	WB	Total
Daily Totals :	8,122	5,199	0	0	13,321

	AM			PM			
Split %	50.6%	49.4%	**37.1%**		67.1%	32.9%	**62.9%**
AM				**PM**			
Peak Hr.	11:15	06:45	**11:15**	**Peak Hr.**	16:30	15:30	**16:30**
Volume	538	489	**886**	**Volume**	1182	380	**1527**
P.H.F.	0.909	0.919	**0.955**	**P.H.F.**	0.918	0.848	**0.943**
7 - 9 Vol.	722	844	**1566**	**4 - 6 Vol.**	2146	680	**2826**
Peak Hr.	08:00	07:00	**07:00**	**Peak Hr.**	16:30	16:00	**16:30**
Volume	371	489	**840**	**Volume**	1182	358	**1527**
P.H.F.	0.966	0.919	**0.946**	**P.H.F.**	0.918	0.923	**0.943**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-045

Location: Pacific Hy (STATION#2653/FILE#MC1190-10) between Sports Arena Blvd & Kurtz St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	12		12					12:00	164		209				
00:15	7		9					12:15	168		221				
00:30	10		9					12:30	157		269				
00:45	7	36	13	43			79	12:45	157	646	247	946			1592
01:00	12		22					13:00	181		246				
01:15	14		10					13:15	168		233				
01:30	4		10					13:30	173		215				
01:45	6	36	10	52			88	13:45	146	668	211	905			1573
02:00	5		7					14:00	154		209				
02:15	13		4					14:15	155		209				
02:30	6		0					14:30	159		215				
02:45	10	34	6	17			51	14:45	165	633	224	857			1490
03:00	6		9					15:00	174		204				
03:15	13		2					15:15	194		231				
03:30	9		16					15:30	224		256				
03:45	11	39	7	34			73	15:45	196	788	243	934			1722
04:00	9		12					16:00	218		253				
04:15	20		27					16:15	194		252				
04:30	15		28					16:30	227		296				
04:45	33	77	27	94			171	16:45	232	871	287	1088			1959
05:00	17		36					17:00	223		268				
05:15	35		41					17:15	274		233				
05:30	51		64					17:30	256		204				
05:45	86	189	91	232			421	17:45	195	948	195	900			1848
06:00	56		90					18:00	139		191				
06:15	77		98					18:15	112		153				
06:30	90		126					18:30	91		156				
06:45	145	368	151	465			833	18:45	91	433	146	646			1079
07:00	130		128					19:00	77		127				
07:15	141		146					19:15	62		99				
07:30	150		178					19:30	57		98				
07:45	162	583	193	645			1228	19:45	55	251	92	416			667
08:00	183		188					20:00	62		83				
08:15	180		192					20:15	43		69				
08:30	163		144					20:30	52		74				
08:45	148	674	156	680			1354	20:45	47	204	68	294			498
09:00	145		127					21:00	50		77				
09:15	149		145					21:15	33		71				
09:30	138		143					21:30	50		72				
09:45	165	597	156	571			1168	21:45	39	172	60	280			452
10:00	141		150					22:00	28		43				
10:15	135		169					22:15	40		60				
10:30	158		133					22:30	30		44				
10:45	137	571	169	621			1192	22:45	24	122	38	185			307
11:00	173		166					23:00	28		28				
11:15	190		175					23:15	23		22				
11:30	152		204					23:30	17		47				
11:45	149	664	212	757			1421	23:45	18	86	20	117			203
Total Vol.		3868		4211			**8079**			5822		7568			**13390**

Daily Totals

NB	SB	EB	WB	Combined
9690	11779			**21469**

	AM			PM		
Split %	47.9%	52.1%	**37.6%**	43.5%	56.5%	**62.4%**
Peak Hour	07:45	11:45	**11:45**	16:45	16:15	**16:30**
Volume	688	911	**1549**	985	1103	**2040**
P.H.F.	0.94	0.85	**0.91**	0.92	0.93	**0.98**

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-001
Location: Pacific Hwy between Barnett Ave & Enterprise St File No. MC0305-10

Start	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	0	0			16	195				
12:15	0	0			12	204				
12:30	0	0			15	196				
12:45	0	0			16	189	59	784		
1:00	0	0			9	198				
1:15	0	0			7	175				
1:30	0	0			8	195				
1:45	0	0			6	177	30	745		
2:00	0	0			12	212				
2:15	0	0			5	200				
2:30	0	0			3	282				
2:45	0	0			5	219	25	913		
3:00	0	0			8	260				
3:15	0	0			6	206				
3:30	0	0			4	278				
3:45	0	0			8	253	26	997		
4:00	0	0			13	300				
4:15	0	0			19	259				
4:30	0	0			28	343				
4:45	0	0			15	308	75	1210		
5:00	0	0			20	290				
5:15	0	0			27	236				
5:30	0	0			38	207				
5:45	0	0			33	196	118	929		
6:00	0	0			45	209				
6:15	0	0			35	173				
6:30	0	0			53	176				
6:45	0	0			66	190	199	748		
7:00	0	0			85	167				
7:15	0	0			92	167				
7:30	0	0			97	149				
7:45	0	0			102	165	376	648		
8:00	0	0			98	136				
8:15	0	0			108	152				
8:30	0	0			105	135				
8:45	0	0			101	122	412	545		
9:00	0	0			107	160				
9:15	0	0			110	124				
9:30	0	0			124	132	0			
9:45	0	0			132	114	473	530		
10:00	0	0			139	95				
10:15	0	0			146	89				
10:30	0	0			139	79				
10:45	0	0			160	74	584	337		
11:00	0	0			167	49				
11:15	0	0			165	34				
11:30	0	0			191	58				
11:45	0	0			147	28	670	169		
Total	0	0	0	0	3047	8555	3047	8555	0	0
Combined Total	0		0		11602		11602		0	
AM Peak					11:45 AM					
Vol.					742					
P.H.F.					0.909					
PM Peak						4:00 PM				
Vol.						1210				
P.H.F.						0.882				
Percentage					26.3%	73.7%				

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-073

Location: Pacific Highway btwn. Barnett Ave. & Washington St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	40		69					12:00	471		401				
00:15	35		43					12:15	456		459				
00:30	44		31					12:30	424		443				
00:45	22	141	36	179			320	12:45	417	1768	470	1773			3541
01:00	19		33					13:00	382		438				
01:15	21		33					13:15	391		482				
01:30	15		20					13:30	431		426				
01:45	17	72	18	104			176	13:45	378	1582	478	1824			3406
02:00	22		22					14:00	369		459				
02:15	16		17					14:15	379		493				
02:30	14		19					14:30	398		524				
02:45	30	82	15	73			155	14:45	439	1585	525	2001			3586
03:00	22		19					15:00	445		582				
03:15	31		14					15:15	440		555				
03:30	30		25					15:30	449		709				
03:45	56	139	25	83			222	15:45	482	1816	721	2567			4383
04:00	46		30					16:00	459		775				
04:15	100		87					16:15	431		699				
04:30	108		104					16:30	434		748				
04:45	158	412	133	354			766	16:45	464	1788	649	2871			4659
05:00	208		139					17:00	443		697				
05:15	322		166					17:15	479		583				
05:30	289		185					17:30	425		560				
05:45	355	1174	210	700			1874	17:45	407	1754	534	2374			4128
06:00	347		228					18:00	335		488				
06:15	420		221					18:15	310		404				
06:30	494		185					18:30	301		387				
06:45	543	1804	215	849			2653	18:45	282	1228	339	1618			2846
07:00	607		242					19:00	221		353				
07:15	573		260					19:15	201		308				
07:30	546		319					19:30	205		288				
07:45	613	2339	302	1123			3462	19:45	190	817	262	1211			2028
08:00	592		308					20:00	160		249				
08:15	550		353					20:15	169		244				
08:30	496		411					20:30	165		243				
08:45	476	2114	304	1376			3490	20:45	126	620	224	960			1580
09:00	404		322					21:00	121		204				
09:15	375		296					21:15	112		198				
09:30	335		312					21:30	124		186				
09:45	417	1531	304	1234			2765	21:45	126	483	154	742			1225
10:00	355		304					22:00	109		146				
10:15	380		358					22:15	104		142				
10:30	346		343					22:30	113		112				
10:45	380	1461	326	1331			2792	22:45	101	427	87	487			914
11:00	360		354					23:00	62		80				
11:15	398		369					23:15	79		66				
11:30	412		400					23:30	53		94				
11:45	454	1624	408	1531			3155	23:45	63	257	62	302			559
Total Vol.		12893		8937			**21830**			14125		18730			**32855**

Daily Totals

NB	SB	EB	WB	Combined
27018	27667			**54685**

	AM			PM		
Split %	59.1%	40.9%	**39.9%**	43.0%	57.0%	**60.1%**
Peak Hour	07:00	11:45	**07:45**	15:15	15:45	**15:45**
Volume	2339	1711	**3625**	1830	2943	**4749**
P.H.F.	0.95	0.93	**0.99**	0.95	0.95	**0.96**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-074

Location: Pacific Highway btwn. Washington St. & Sassafras St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	14		6					12:00	145		67				
00:15	12		6					12:15	148		92				
00:30	15		2					12:30	147		88				
00:45	10	51	5	19			70	12:45	139	579	75	322			901
01:00	7		7					13:00	130		90				
01:15	9		2					13:15	120		92				
01:30	6		5					13:30	115		80				
01:45	8	30	2	16			46	13:45	133	498	91	353			851
02:00	5		2					14:00	124		77				
02:15	3		1					14:15	116		72				
02:30	4		6					14:30	130		102				
02:45	2	14	3	12			26	14:45	143	513	94	345			858
03:00	6		5					15:00	117		83				
03:15	7		2					15:15	114		98				
03:30	1		2					15:30	109		65				
03:45	7	21	5	14			35	15:45	146	486	95	341			827
04:00	6		2					16:00	117		102				
04:15	11		8					16:15	131		87				
04:30	10		13					16:30	130		96				
04:45	14	41	16	39			80	16:45	116	494	81	366			860
05:00	18		14					17:00	128		118				
05:15	22		21					17:15	175		94				
05:30	20		28					17:30	134		95				
05:45	24	84	16	79			163	17:45	125	562	80	387			949
06:00	27		16					18:00	110		97				
06:15	33		15					18:15	87		73				
06:30	59		31					18:30	97		64				
06:45	58	177	37	99			276	18:45	73	367	54	288			655
07:00	56		32					19:00	81		50				
07:15	55		36					19:15	88		55				
07:30	89		67					19:30	82		61				
07:45	91	291	56	191			482	19:45	66	317	67	233			550
08:00	82		40					20:00	59		50				
08:15	84		66					20:15	62		43				
08:30	89		66					20:30	79		47				
08:45	100	355	49	221			576	20:45	46	246	47	187			433
09:00	112		71					21:00	41		50				
09:15	79		60					21:15	52		29				
09:30	103		75					21:30	54		29				
09:45	119	413	73	279			692	21:45	45	192	28	136			328
10:00	108		53					22:00	49		29				
10:15	120		81					22:15	53		21				
10:30	100		62					22:30	45		12				
10:45	126	454	74	270			724	22:45	46	193	12	74			267
11:00	117		73					23:00	32		13				
11:15	136		83					23:15	25		9				
11:30	137		79					23:30	24		12				
11:45	150	540	83	318			858	23:45	13	94	10	44			138
Total Vol.		2471		1557			**4028**			4541		3076			**7617**

Daily Totals

NB	SB	EB	WB	Combined
7012	4633			**11645**

	AM			PM		
Split %	61.3%	38.7%	**34.6%**	59.6%	40.4%	**65.4%**
Peak Hour	11:45	11:45	**11:45**	12:00	16:30	**17:00**
Volume	590	330	**920**	579	389	**949**
P.H.F.	0.98	0.90	**0.96**	0.98	0.82	**0.88**

Volumes for: Thursday, December 09, 2010 City: San Diego Project #: 10-4375-044

Location: Pacific Hy (STATION#2657/FILE#MC1189-10) between Palm St & Sassafras St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	38		24					12:00	169		184				
00:15	17		20					12:15	154		151				
00:30	31		22					12:30	168		189				
00:45	26	112	31	97			209	12:45	150	641	178	702			1343
01:00	38		22					13:00	157		165				
01:15	26		20					13:15	170		172				
01:30	17		9					13:30	182		181				
01:45	8	89	8	59			148	13:45	149	658	178	696			1354
02:00	11		8					14:00	171		133				
02:15	6		3					14:15	154		140				
02:30	7		5					14:30	168		165				
02:45	4	28	3	19			47	14:45	165	658	152	590			1248
03:00	2		7					15:00	151		123				
03:15	1		1					15:15	170		153				
03:30	3		8					15:30	149		137				
03:45	7	13	16	32			45	15:45	192	662	142	555			1217
04:00	14		18					16:00	154		173				
04:15	15		33					16:15	156		172				
04:30	19		49					16:30	168		174				
04:45	30	78	71	171			249	16:45	159	637	222	741			1378
05:00	28		79					17:00	167		235				
05:15	30		83					17:15	199		199				
05:30	51		76					17:30	178		194				
05:45	51	160	75	313			473	17:45	141	685	191	819			1504
06:00	55		79					18:00	139		172				
06:15	50		91					18:15	115		147				
06:30	63		105					18:30	92		139				
06:45	63	231	121	396			627	18:45	110	456	121	579			1035
07:00	67		117					19:00	107		129				
07:15	80		131					19:15	92		104				
07:30	93		146					19:30	63		94				
07:45	112	352	151	545			897	19:45	78	340	85	412			752
08:00	116		143					20:00	84		102				
08:15	121		168					20:15	77		73				
08:30	105		144					20:30	73		96				
08:45	124	466	138	593			1059	20:45	91	325	74	345			670
09:00	102		114					21:00	84		76				
09:15	157		158					21:15	90		75				
09:30	119		149					21:30	93		76				
09:45	142	520	131	552			1072	21:45	85	352	64	291			643
10:00	117		134					22:00	94		62				
10:15	155		156					22:15	84		62				
10:30	161		133					22:30	53		51				
10:45	144	577	139	562			1139	22:45	53	284	28	203			487
11:00	164		153					23:00	52		26				
11:15	148		166					23:15	46		23				
11:30	149		196					23:30	37		16				
11:45	155	616	189	704			1320	23:45	31	166	9	74			240
Total Vol.		3242		4043			**7285**			5864		6007			**11871**

Daily Totals

	NB	SB	EB	WB	Combined
	9106	10050			**19156**

	AM			PM		
Split %	44.5%	55.5%	**38.0%**	49.4%	50.6%	**62.0%**
Peak Hour	11:45	11:15	**11:45**	16:45	16:45	**16:45**
Volume	646	735	**1359**	703	850	**1553**
P.H.F.	0.96	0.94	**0.95**	0.91	0.90	**0.97**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-069

Location: Congress St. btwn. Taylor St. & Twiggs St.

AM Period	NB		SB		EB	WB	PM Period	NB		SB		EB	WB	
00:00	6		4				12:00	45		34				
00:15	4		5				12:15	32		23				
00:30	2		3				12:30	28		24				
00:45	5	17	2	14		31	12:45	37	142	31	112			254
01:00	2		6				13:00	37		38				
01:15	1		2				13:15	32		37				
01:30	2		0				13:30	40		27				
01:45	1	6	1	9		15	13:45	37	146	47	149			295
02:00	2		1				14:00	32		38				
02:15	0		0				14:15	38		40				
02:30	1		4				14:30	33		42				
02:45	1	4	1	6		10	14:45	44	147	44	164			311
03:00	2		0				15:00	37		43				
03:15	0		1				15:15	41		47				
03:30	1		2				15:30	34		40				
03:45	1	4	1	4		8	15:45	34	146	37	167			313
04:00	3		2				16:00	44		40				
04:15	2		1				16:15	35		26				
04:30	3		5				16:30	41		32				
04:45	2	10	1	9		19	16:45	32	152	36	134			286
05:00	3		0				17:00	57		27				
05:15	6		4				17:15	52		34				
05:30	4		4				17:30	47		40				
05:45	11	24	3	11		35	17:45	40	196	40	141			337
06:00	11		4				18:00	36		39				
06:15	5		12				18:15	34		55				
06:30	7		6				18:30	50		46				
06:45	11	34	14	36		70	18:45	37	157	63	203			360
07:00	16		20				19:00	28		58				
07:15	16		14				19:15	31		36				
07:30	27		20				19:30	35		27				
07:45	19	78	29	83		161	19:45	24	118	26	147			265
08:00	26		15				20:00	41		24				
08:15	17		20				20:15	39		19				
08:30	21		13				20:30	49		28				
08:45	25	89	43	91		180	20:45	38	167	16	87			254
09:00	26		31				21:00	39		18				
09:15	30		17				21:15	49		20				
09:30	27		37				21:30	39		11				
09:45	18	101	34	119		220	21:45	21	148	13	62			210
10:00	21		36				22:00	15		17				
10:15	24		25				22:15	16		11				
10:30	23		33				22:30	18		7				
10:45	19	87	29	123		210	22:45	11	60	6	41			101
11:00	25		32				23:00	10		7				
11:15	29		28				23:15	9		4				
11:30	20		37				23:30	11		6				
11:45	28	102	25	122		224	23:45	7	37	6	23			60
Total Vol.		556		627		**1183**			1616		1430			**3046**

Daily Totals

NB	SB	EB	WB	Combined
2172	2057			**4229**

	AM			PM		
Split %	47.0%	53.0%	**28.0%**	53.1%	46.9%	**72.0%**
Peak Hour	11:45	09:30	**11:15**	17:00	18:15	**18:15**
Volume	133	132	**246**	196	222	**371**
P.H.F.	0.74	0.89	**0.78**	0.86	0.88	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Tuesday, May 24, 2011 City: San Diego Project #: 11-1080-070

Location: Congress St. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	8		6					12:00	49		47				
00:15	1		6					12:15	34		25				
00:30	1		5					12:30	36		25				
00:45	4	14	3	20			34	12:45	30	149	43	140			289
01:00	2		3					13:00	42		51				
01:15	0		2					13:15	24		42				
01:30	1		0					13:30	38		42				
01:45	1	4	1	6			10	13:45	30	134	36	171			305
02:00	1		0					14:00	22		43				
02:15	0		1					14:15	26		30				
02:30	1		3					14:30	31		33				
02:45	2	4	1	5			9	14:45	38	117	39	145			262
03:00	0		1					15:00	32		33				
03:15	4		3					15:15	30		40				
03:30	1		1					15:30	30		48				
03:45	1	6	0	5			11	15:45	32	124	51	172			296
04:00	0		1					16:00	42		46				
04:15	2		1					16:15	27		34				
04:30	1		4					16:30	30		32				
04:45	2	5	2	8			13	16:45	36	135	40	152			287
05:00	4		3					17:00	56		35				
05:15	5		2					17:15	54		35				
05:30	5		4					17:30	41		38				
05:45	10	24	3	12			36	17:45	35	186	45	153			339
06:00	12		5					18:00	29		42				
06:15	5		12					18:15	39		55				
06:30	9		7					18:30	44		55				
06:45	11	37	14	38			75	18:45	37	149	57	209			358
07:00	16		13					19:00	30		65				
07:15	17		16					19:15	31		48				
07:30	26		21					19:30	31		36				
07:45	19	78	24	74			152	19:45	39	131	15	164			295
08:00	19		17					20:00	59		14				
08:15	13		21					20:15	64		12				
08:30	22		17					20:30	67		19				
08:45	23	77	36	91			168	20:45	46	236	16	61			297
09:00	27		31					21:00	52		20				
09:15	34		24					21:15	54		21				
09:30	29		32					21:30	49		14				
09:45	33	123	28	115			238	21:45	36	191	18	73			264
10:00	32		29					22:00	31		13				
10:15	27		31					22:15	21		4				
10:30	24		36					22:30	14		12				
10:45	13	96	13	109			205	22:45	9	75	8	37			112
11:00	54		18					23:00	11		8				
11:15	35		29					23:15	5		3				
11:30	28		43					23:30	9		6				
11:45	38	155	26	116			271	23:45	6	31	6	23			54
Total Vol.		623		599			**1222**			1658		1500			**3158**

Daily Totals

	NB	SB	EB	WB	Combined
	2281	2099			**4380**

	AM			PM		
Split %	51.0%	49.0%	**27.9%**	52.5%	47.5%	**72.1%**
Peak Hour	11:45	11:15	**11:15**	20:00	18:15	**18:15**
Volume	157	145	**295**	236	232	**382**
P.H.F.	0.80	0.77	**0.77**	0.88	0.89	**0.96**

Prepared by NDS/ATD

Volumes for: Thursday, October 28, 2010 | **City: San Diego**

Location: Congress St (STATION#2466/FILE#MC0940-10) | **Project: 10-4300-021**

Daily Totals	NB	SB	EB	WB	Total
	1,891	2,392	0	0	4,283

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	0		3					12:00	42		38				
00:15	2		4					12:15	37		35				
00:30	3		1					12:30	36		45				
00:45	2	7	0	8	15			12:45	39	154	58	176			330
01:00	0		5					13:00	30		39				
01:15	1		1					13:15	29		47				
01:30	4		3					13:30	37		39				
01:45	0	5	1	10	15			13:45	28	124	54	179			303
02:00	2		0					14:00	19		37				
02:15	0		2					14:15	23		40				
02:30	0		1					14:30	27		46				
02:45	0	2	0	3	5			14:45	34	103	41	164			267
03:00	1		3					15:00	19		36				
03:15	2		5					15:15	36		32				
03:30	5		2					15:30	30		44				
03:45	3	11	4	14	25			15:45	30	115	56	168			283
04:00	0		2					16:00	33		47				
04:15	1		0					16:15	34		38				
04:30	1		0					16:30	46		65				
04:45	2	4	3	5	9			16:45	58	171	58	208			379
05:00	2		0					17:00	48		55				
05:15	2		3					17:15	45		46				
05:30	7		3					17:30	48		54				
05:45	6	17	5	11	28			17:45	40	181	39	194			375
06:00	3		13					18:00	37		44				
06:15	14		12					18:15	52		36				
06:30	10		13					18:30	23		53				
06:45	22	49	17	55	104			18:45	31	143	41	174			317
07:00	11		13					19:00	18		39				
07:15	17		25					19:15	23		42				
07:30	23		35					19:30	16		31				
07:45	17	68	38	111	179			19:45	25	82	40	152			234
08:00	34		18					20:00	16		32				
08:15	23		17					20:15	17		24				
08:30	31		36					20:30	23		26				
08:45	41	129	32	103	232			20:45	15	71	36	118			189
09:00	24		28					21:00	13		30				
09:15	39		28					21:15	9		12				
09:30	30		31					21:30	14		29				
09:45	22	115	31	118	233			21:45	15	51	30	101			152
10:00	30		30					22:00	14		18				
10:15	33		38					22:15	6		16				
10:30	23		19					22:30	7		14				
10:45	36	122	28	115	237			22:45	3	30	10	58			88
11:00	27		33					23:00	3		17				
11:15	26		28					23:15	0		7				
11:30	29		29					23:30	2		3				
11:45	49	131	27	117	248			23:45	1	6	3	30			36
Total Vol.		660		670	**1330**					1231		1722			**2953**

	NB	SB	EB	WB	Total
Daily Totals :	**1,891**	**2,392**	**0**	**0**	**4,283**

	AM			PM			
Split %	49.6%	50.4%	**31.1%**	41.7%	58.3%		**68.9%**
AM				**PM**			
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	164	145	**309**	**Volume**	199	224	**421**
P.H.F.	0.837	0.806	**0.954**	**P.H.F.**	0.858	0.862	**0.907**
7 - 9 Vol.	197	214	**411**	**4 - 6 Vol.**	352	402	**754**
Peak Hr.	08:00	07:15	**08:00**	**Peak Hr.**	16:45	16:30	**16:30**
Volume	129	116	**232**	**Volume**	199	224	**421**
P.H.F.	0.787	0.763	**0.795**	**P.H.F.**	0.858	0.862	**0.907**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-067

Location: San Diego Ave. btwn. Twiggs St. & Harney St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	4		0					12:00	22		32				
00:15	2		2					12:15	20		39				
00:30	2		1					12:30	17		38				
00:45	3	11	6	9			20	12:45	19	78	37	146			224
01:00	1		4					13:00	13		38				
01:15	1		3					13:15	18		38				
01:30	2		0					13:30	18		34				
01:45	1	5	0	7			12	13:45	17	66	36	146			212
02:00	6		3					14:00	19		33				
02:15	1		0					14:15	33		39				
02:30	1		1					14:30	30		34				
02:45	0	8	0	4			12	14:45	35	117	31	137			254
03:00	0		0					15:00	28		34				
03:15	0		1					15:15	24		38				
03:30	2		1					15:30	29		42				
03:45	0	2	0	2			4	15:45	33	114	40	154			268
04:00	1		0					16:00	30		43				
04:15	1		3					16:15	32		39				
04:30	0		1					16:30	22		34				
04:45	0	2	2	6			8	16:45	36	120	25	141			261
05:00	2		3					17:00	51		27				
05:15	2		1					17:15	60		26				
05:30	6		0					17:30	55		30				
05:45	3	13	1	5			18	17:45	41	207	31	114			321
06:00	2		0					18:00	46		43				
06:15	5		5					18:15	27		36				
06:30	7		1					18:30	38		43				
06:45	5	19	7	13			32	18:45	47	158	40	162			320
07:00	12		5					19:00	29		23				
07:15	10		5					19:15	36		34				
07:30	19		13					19:30	28		21				
07:45	12	53	17	40			93	19:45	31	124	13	91			215
08:00	24		16					20:00	39		15				
08:15	11		18					20:15	34		15				
08:30	22		18					20:30	23		17				
08:45	37	94	23	75			169	20:45	25	121	14	61			182
09:00	31		23					21:00	29		24				
09:15	22		20					21:15	26		13				
09:30	26		20					21:30	19		14				
09:45	35	114	23	86			200	21:45	29	103	7	58			161
10:00	37		28					22:00	23		10				
10:15	28		28					22:15	14		8				
10:30	22		26					22:30	18		7				
10:45	20	107	26	108			215	22:45	19	74	15	40			114
11:00	24		24					23:00	6		7				
11:15	29		20					23:15	9		7				
11:30	22		22					23:30	4		4				
11:45	20	95	19	85			180	23:45	3	22	3	21			43
Total Vol.		523		440			**963**			1304		1271			**2575**

Daily Totals

NB	SB	EB	WB	Combined
1827	1711			**3538**

	AM			PM		
Split %	54.3%	45.7%	**27.2%**	50.6%	49.4%	**72.8%**
Peak Hour	09:30	11:45	**09:45**	17:00	15:30	**17:15**
Volume	126	128	**227**	207	164	**332**
P.H.F.	0.85	0.82	**0.87**	0.86	0.95	**0.93**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-068

Location: San Diego Ave. btwn. Conde St. & Arista St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		2					12:00	25		29				
00:15	3		3					12:15	21		33				
00:30	1		1					12:30	28		30				
00:45	2	11	6	12			23	12:45	32	106	28	120			226
01:00	3		7					13:00	30		24				
01:15	2		3					13:15	33		21				
01:30	3		4					13:30	29		14				
01:45	3	11	2	16			27	13:45	28	120	19	78			198
02:00	2		2					14:00	32		22				
02:15	1		1					14:15	30		20				
02:30	2		0					14:30	33		24				
02:45	0	5	1	4			9	14:45	39	134	41	107			241
03:00	0		0					15:00	31		52				
03:15	0		1					15:15	44		49				
03:30	1		1					15:30	40		43				
03:45	1	2	0	2			4	15:45	35	150	40	184			334
04:00	2		1					16:00	30		45				
04:15	2		1					16:15	34		47				
04:30	1		2					16:30	32		51				
04:45	6	11	1	5			16	16:45	44	140	55	198			338
05:00	1		5					17:00	54		58				
05:15	3		2					17:15	72		60				
05:30	7		3					17:30	69		52				
05:45	7	18	5	15			33	17:45	61	256	28	198			454
06:00	6		3					18:00	45		48				
06:15	11		1					18:15	33		49				
06:30	14		4					18:30	37		38				
06:45	13	44	19	27			71	18:45	46	161	53	188			349
07:00	24		14					19:00	45		39				
07:15	27		12					19:15	35		42				
07:30	21		18					19:30	38		47				
07:45	35	107	21	65			172	19:45	30	148	46	174			322
08:00	34		15					20:00	36		39				
08:15	23		22					20:15	33		33				
08:30	26		13					20:30	28		38				
08:45	43	126	19	69			195	20:45	28	125	36	146			271
09:00	33		22					21:00	25		45				
09:15	24		30					21:15	24		45				
09:30	38		26					21:30	21		28				
09:45	47	142	13	91			233	21:45	15	85	32	150			235
10:00	35		29					22:00	25		30				
10:15	30		21					22:15	13		13				
10:30	28		19					22:30	16		19				
10:45	29	122	22	91			213	22:45	14	68	23	85			153
11:00	22		16					23:00	9		15				
11:15	20		19					23:15	10		9				
11:30	24		14					23:30	5		11				
11:45	29	95	21	70			165	23:45	3	27	8	43			70
Total Vol.		694		467			**1161**			1520		1671			**3191**

Daily Totals

NB	SB	EB	WB	Combined
2214	2138			**4352**

	AM			PM		
Split %	59.8%	40.2%	**26.7%**	47.6%	52.4%	**73.3%**
Peak Hour	09:30	11:45	**09:15**	17:00	16:45	**16:45**
Volume	150	113	**242**	256	225	**464**
P.H.F.	0.80	0.86	**0.95**	0.89	0.94	**0.88**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: San Diego Ave (STATION#2460/FILE#MC0424-10)	Project:	10-4169-012	5,458	4,702	0	0	10,160

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	5		16					12:00	106		60				
00:15	7		16					12:15	82		76				
00:30	7		8					12:30	87		72				
00:45	1	20	10	50			70	12:45	92	367	70	278			645
01:00	6		5					13:00	83		69				
01:15	4		4					13:15	86		82				
01:30	3		2					13:30	73		66				
01:45	1	14	1	12			26	13:45	84	326	71	288			614
02:00	2		5					14:00	90		70				
02:15	2		3					14:15	92		83				
02:30	8		5					14:30	111		82				
02:45	0	12	2	15			27	14:45	105	398	87	322			720
03:00	1		2					15:00	99		83				
03:15	4		0					15:15	92		93				
03:30	2		5					15:30	103		87				
03:45	3	10	3	10			20	15:45	113	407	86	349			756
04:00	2		9					16:00	108		86				
04:15	1		2					16:15	123		82				
04:30	4		1					16:30	135		94				
04:45	5	12	3	15			27	16:45	131	497	82	344			841
05:00	3		9					17:00	146		97				
05:15	5		11					17:15	162		100				
05:30	10		9					17:30	119		98				
05:45	11	29	7	36			65	17:45	123	550	100	395			945
06:00	11		9					18:00	122		77				
06:15	16		16					18:15	122		63				
06:30	33		14					18:30	115		77				
06:45	29	89	22	61			150	18:45	96	455	67	284			739
07:00	48		25					19:00	121		90				
07:15	34		28					19:15	82		78				
07:30	50		31					19:30	85		80				
07:45	52	184	32	116			300	19:45	68	356	69	317			673
08:00	58		27					20:00	68		82				
08:15	52		28					20:15	71		65				
08:30	45		32					20:30	65		77				
08:45	78	233	50	137			370	20:45	47	251	105	329			580
09:00	62		39					21:00	31		86				
09:15	59		36					21:15	29		74				
09:30	73		39					21:30	38		101				
09:45	80	274	43	157			431	21:45	27	125	93	354			479
10:00	69		33					22:00	33		106				
10:15	90		49					22:15	27		100				
10:30	81		57					22:30	23		61				
10:45	85	325	57	196			521	22:45	19	102	56	323			425
11:00	79		55					23:00	11		35				
11:15	109		56					23:15	12		19				
11:30	90		59					23:30	5		24				
11:45	110	388	48	218			606	23:45	6	34	18	96			130
Total Vol.		1590		1023			**2613**			3868		3679			**7547**

	NB	SB	EB	WB	Total
Daily Totals :	**5,458**	**4,702**	**0**	**0**	**10,160**

	AM			PM			
Split %	60.8%	39.2%	**25.7%**	51.3%	48.7%		**74.3%**
AM				**PM**			
Peak Hr.	11:15	11:45	**11:45**	**Peak Hr.**	16:30	21:30	**16:30**
Volume	415	256	**641**	**Volume**	574	400	**947**
P.H.F.	0.943	0.842	**0.965**	**P.H.F.**	0.886	0.943	**0.904**
7 - 9 Vol.	417	253	**670**	**4 - 6 Vol.**	1047	739	**1786**
Peak Hr.	08:00	08:00	**08:00**	**Peak Hr.**	16:30	17:00	**16:30**
Volume	233	137	**370**	**Volume**	574	395	**947**
P.H.F.	0.747	0.685	**0.723**	**P.H.F.**	0.886	0.988	**0.904**

Prepared by NDS/ATD

VOLUME

San Diego Ave from Old Town Ave to Witherby St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_004

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	8		2				10		12:00	56		35				91	
00:15	8		7				15		12:15	97		35				132	
00:30	5		3				8		12:30	63		45				108	
00:45	3	24	3	15			6	39	12:45	60	276	54	169			114	445
01:00	2		1				3		13:00	60		44				104	
01:15	4		1				5		13:15	69		39				108	
01:30	1		2				3		13:30	53		30				83	
01:45	2	9	3	7			5	16	13:45	61	243	34	147			95	390
02:00	1		2				3		14:00	39		36				75	
02:15	2		2				4		14:15	48		45				93	
02:30	1		0				1		14:30	53		29				82	
02:45	0	4	2	6			2	10	14:45	58	198	34	144			92	342
03:00	3		0				3		15:00	49		31				80	
03:15	1		0				1		15:15	52		37				89	
03:30	0		1				1		15:30	46		40				86	
03:45	1	5	0	1			1	6	15:45	50	197	32	140			82	337
04:00	1		2				3		16:00	53		29				82	
04:15	2		2				4		16:15	44		33				77	
04:30	4		1				5		16:30	49		38				87	
04:45	3	10	4	9			7	19	16:45	53	199	41	141			94	340
05:00	5		5				10		17:00	59		52				111	
05:15	7		2				9		17:15	60		48				108	
05:30	10		3				13		17:30	53		51				104	
05:45	10	32	3	13			13	45	17:45	47	219	40	191			87	410
06:00	23		4				27		18:00	57		42				99	
06:15	20		8				28		18:15	71		38				109	
06:30	28		9				37		18:30	61		42				103	
06:45	26	97	10	31			36	128	18:45	47	236	44	166			91	402
07:00	26		15				41		19:00	65		45				110	
07:15	39		12				51		19:15	48		36				84	
07:30	52		16				68		19:30	33		42				75	
07:45	77	194	26	69			103	263	19:45	37	183	19	142			56	325
08:00	41		30				71		20:00	34		21				55	
08:15	63		15				78		20:15	44		23				67	
08:30	64		24				88		20:30	29		30				59	
08:45	41	209	28	97			69	306	20:45	22	129	18	92			40	221
09:00	46		33				79		21:00	30		23				53	
09:15	52		26				78		21:15	30		34				64	
09:30	33		35				68		21:30	32		23				55	
09:45	61	192	28	122			89	314	21:45	17	109	17	97			34	206
10:00	45		32				77		22:00	14		16				30	
10:15	45		22				67		22:15	16		13				29	
10:30	47		31				78		22:30	17		12				29	
10:45	44	181	34	119			78	300	22:45	9	56	10	51			19	107
11:00	51		29				80		23:00	14		7				21	
11:15	76		33				109		23:15	15		8				23	
11:30	49		35				84		23:30	7		7				14	
11:45	54	230	32	129			86	359	23:45	4	40	6	28			10	68
TOTALS		1187		618				1805	TOTALS		2085		1508				3593
SPLIT %		65.8%		34.2%				33.4%	SPLIT %		58.0%		42.0%				66.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,272	2,126	0	0	5,398

AM Peak Hour	11:45	11:45	11:45	PM Peak Hour	12:15	16:45	12:15
AM Pk Volume	270	147	417	PM Pk Volume	280	192	458
Pk Hr Factor	0.696	0.817	0.790	Pk Hr Factor	0.722	0.923	0.867
7 - 9 Volume	403	166	569	4 - 6 Volume	418	332	750
7 - 9 Peak Hour	07:45	08:00	07:45	4 - 6 Peak Hour	16:45	16:45	16:45
7 - 9 Pk Volume	245	97	340	4 - 6 Pk Volume	225	192	417
Pk Hr Factor	0.795	0.808	0.825	Pk Hr Factor	0.938	0.923	0.939

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-064

Location: Juan St. btwn. Taylor St. & Mason St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		1			12:00			32		28		
00:15			1		2			12:15			30		24		
00:30			0		1			12:30			29		41		
00:45			1	5	3	7	12	12:45			28	119	45	138	257
01:00			0		0			13:00			32		50		
01:15			3		2			13:15			30		39		
01:30			0		0			13:30			33		35		
01:45			4	7	3	5	12	13:45			41	136	44	168	304
02:00			0		5			14:00			45		46		
02:15			0		2			14:15			48		58		
02:30			1		0			14:30			48		57		
02:45			0	1	0	7	8	14:45			45	186	62	223	409
03:00			2		0			15:00			47		59		
03:15			3		1			15:15			46		70		
03:30			1		0			15:30			38		56		
03:45			0	6	0	1	7	15:45			54	185	73	258	443
04:00			0		4			16:00			47		66		
04:15			1		1			16:15			63		75		
04:30			2		1			16:30			63		52		
04:45			3	6	1	7	13	16:45			66	239	61	254	493
05:00			6		4			17:00			54		69		
05:15			2		7			17:15			50		57		
05:30			3		5			17:30			65		62		
05:45			8	19	14	30	49	17:45			59	228	48	236	464
06:00			6		14			18:00			69		50		
06:15			12		9			18:15			50		50		
06:30			22		18			18:30			44		48		
06:45			20	60	25	66	126	18:45			44	207	46	194	401
07:00			22		31			19:00			44		50		
07:15			21		36			19:15			44		29		
07:30			27		32			19:30			45		34		
07:45			34	104	44	143	247	19:45			34	167	48	161	328
08:00			30		39			20:00			36		28		
08:15			30		52			20:15			22		54		
08:30			26		48			20:30			26		31		
08:45			23	109	46	185	294	20:45			25	109	57	170	279
09:00			34		27			21:00			22		49		
09:15			37		40			21:15			15		25		
09:30			51		31			21:30			16		31		
09:45			33	155	38	136	291	21:45			10	63	25	130	193
10:00			53		49			22:00			11		27		
10:15			48		43			22:15			3		20		
10:30			36		33			22:30			8		19		
10:45			43	180	29	154	334	22:45			8	30	7	73	103
11:00			33		49			23:00			5		13		
11:15			55		38			23:15			3		5		
11:30			49		34			23:30			3		6		
11:45			36	173	20	141	314	23:45			4	15	7	31	46
Total Vol.				825		882	**1707**					1684		2036	**3720**

Daily Totals

NB	SB	EB	W8	**Combined**
		2509	2918	**5427**

	AM			**PM**		
Split %	48.3%	51.7%	**31.5%**	45.3%	54.7%	**68.5%**
Peak Hour	09:30	08:00	**09:30**	16:15	15:30	**16:15**
Volume	185	185	**346**	246	270	**503**
P.H.F.	0.87	0.89	**0.85**	0.93	0.90	**0.91**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-065

Location: Juan St. btwn. Twiggs St. & Harney St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			2		4			12:00			39		19		
00:15			0		1			12:15			34		23		
00:30			1		2			12:30			38		20		
00:45			0	3	1	8	11	12:45			42	153	22	84	237
01:00			0		0			13:00			40		18		
01:15			1		4			13:15			43		30		
01:30			0		0			13:30			46		32		
01:45			1	2	2	6	8	13:45			35	164	16	96	260
02:00			1		3			14:00			40		26		
02:15			0		1			14:15			35		27		
02:30			0		0			14:30			44		17		
02:45			0	1	0	4	5	14:45			49	168	27	97	265
03:00			1		1			15:00			49		26		
03:15			1		2			15:15			47		27		
03:30			1		1			15:30			39		22		
03:45			0	3	0	4	7	15:45			40	175	32	107	282
04:00			0		2			16:00			54		32		
04:15			1		2			16:15			58		36		
04:30			1		2			16:30			64		30		
04:45			2	4	2	8	12	16:45			65	241	22	120	361
05:00			3		8			17:00			69		50		
05:15			0		5			17:15			59		52		
05:30			1		2			17:30			63		63		
05:45			7	11	13	28	39	17:45			50	241	41	206	447
06:00			5		7			18:00			70		68		
06:15			10		16			18:15			46		35		
06:30			9		19			18:30			49		57		
06:45			19	43	31	73	116	18:45			38	203	37	197	400
07:00			28		41			19:00			33		53		
07:15			30		41			19:15			41		37		
07:30			38		54			19:30			25		36		
07:45			29	125	53	189	314	19:45			20	119	30	156	275
08:00			33		46			20:00			28		37		
08:15			29		42			20:15			26		35		
08:30			25		52			20:30			27		40		
08:45			23	110	45	185	295	20:45			15	96	20	132	228
09:00			38		43			21:00			16		27		
09:15			30		47			21:15			10		19		
09:30			29		48			21:30			11		25		
09:45			30	127	55	193	320	21:45			8	45	15	86	131
10:00			33		51			22:00			9		14		
10:15			32		56			22:15			7		13		
10:30			44		53			22:30			3		15		
10:45			38	147	71	231	378	22:45			4	23	6	48	71
11:00			39		43			23:00			0		5		
11:15			33		49			23:15			4		7		
11:30			40		41			23:30			2		5		
11:45			34	146	36	169	315	23:45			3	9	7	24	33
Total Vol.				722		1098	**1820**					1637		1353	**2990**

Daily Totals

NB	SB	EB	WB	Combined
		2359	2451	**4810**

	AM			PM		
Split %	39.7%	60.3%	**37.8%**	54.7%	45.3%	**62.2%**
Peak Hour	10:30	10:00	**10:00**	16:30	17:15	**17:15**
Volume	154	231	**378**	257	224	**466**
P.H.F.	0.88	0.81	**0.87**	0.93	0.82	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-066

Location: Juan St. btwn. Harney St. & San Juan Rd.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			1	0		12:00			28	21	
00:15			0	1		12:15			32	24	
00:30			0	2		12:30			30	29	
00:45			0 1	0 3	4	12:45			33 123	30 104	227
01:00			0	3		13:00			29	32	
01:15			1	0		13:15			30	28	
01:30			0	0		13:30			32	21	
01:45			0 1	1 4	5	13:45			24 115	20 101	216
02:00			1	2		14:00			28	26	
02:15			0	1		14:15			27	37	
02:30			0	0		14:30			31	20	
02:45			0 1	0 3	4	14:45			28 114	30 113	227
03:00			0	0		15:00			28	26	
03:15			2	1		15:15			29	33	
03:30			1	0		15:30			22	26	
03:45			0 3	0 1	4	15:45			20 99	24 109	208
04:00			0	2		16:00			19	28	
04:15			1	1		16:15			21	28	
04:30			2	1		16:30			17	24	
04:45			2 5	2 6	11	16:45			15 72	32 112	184
05:00			2	3		17:00			11	31	
05:15			0	3		17:15			15	21	
05:30			0	2		17:30			19	22	
05:45			2 4	7 15	19	17:45			20 65	23 97	162
06:00			2	8		18:00			15	19	
06:15			9	11		18:15			25	22	
06:30			6	11		18:30			24	20	
06:45			12 29	13 43	72	18:45			29 93	17 78	171
07:00			13	27		19:00			22	19	
07:15			18	24		19:15			20	13	
07:30			20	32		19:30			21	11	
07:45			24 75	39 122	197	19:45			14 77	10 53	130
08:00			29	28		20:00			19	14	
08:15			22	25		20:15			13	18	
08:30			20	43		20:30			11	13	
08:45			24 95	29 125	220	20:45			10 53	11 56	109
09:00			26	21		21:00			14	10	
09:15			26	22		21:15			9	8	
09:30			32	25		21:30			7	6	
09:45			28 112	39 107	219	21:45			7 37	6 30	67
10:00			24	29		22:00			5	9	
10:15			29	31		22:15			5	6	
10:30			28	18		22:30			6	5	
10:45			24 105	27 105	210	22:45			2 18	2 22	40
11:00			29	25		23:00			0	2	
11:15			33	19		23:15			3	3	
11:30			30	24		23:30			1	0	
11:45			32 124	18 86	210	23:45			1 5	0 5	10
Total Vol.			555	620	**1175**				871	880	**1751**

Daily Totals

NB	SB	EB	WB	Combined
		1426	1500	**2926**

	AM			PM		
Split %	47.2%	52.8%	**40.2%**	49.7%	50.3%	**59.8%**
Peak Hour	11:00	07:45	**09:30**	12:15	12:30	**12:30**
Volume	124	135	**237**	124	119	**241**
P.H.F.	0.94	0.78	**0.88**	0.94	0.93	**0.96**

Prepared by NDS/ATD

VOLUME

Channel Way between W Mission Bay Dr & Hancock St

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Period	NB		SB		EB		WB		TOTAL	
00:00					1		7		8	
00:15					0		1		1	
00:30					0		3		3	
00:45					0	1	2	13	2	14
01:00					1		0		1	
01:15					0		1		1	
01:30					1		2		3	
01:45					0	2	0	3	0	5
02:00					1		0		1	
02:15					0		0		0	
02:30					0		0		0	
02:45					0	1	0		0	1
03:00					1		1		2	
03:15					1		2		3	
03:30					0		0		0	
03:45					0	2	0	3	0	5
04:00					1		0		1	
04:15					1		1		2	
04:30					0		1		1	
04:45					0	2	2	4	2	6
05:00					0		1		1	
05:15					0		1		1	
05:30					1		3		4	
05:45					2	3	5	10	7	13
06:00					3		4		7	
06:15					1		6		7	
06:30					2		2		4	
06:45					3	9	7	19	10	28
07:00					3		5		8	
07:15					4		3		7	
07:30					5		10		15	
07:45					6	18	10	28	16	46
08:00					5		7		12	
08:15					6		12		18	
08:30					7		10		17	
08:45					4	22	10	39	14	61
09:00					6		10		16	
09:15					4		7		11	
09:30					8		12		20	
09:45					9	27	11	40	20	67
10:00					8		12		20	
10:15					10		13		23	
10:30					7		12		19	
10:45					5	30	8	45	13	75
11:00					4		14		18	
11:15					9		12		21	
11:30					7		17		24	
11:45					7	27	20	63	27	90
TOTALS						144		267		411
SPLIT %						35.0%		65.0%		32.1%

PM Period	NB		SB		EB		WB		TOTAL	
12:00					4		9		13	
12:15					7		23		30	
12:30					14		11		25	
12:45					10	35	4	47	14	82
13:00					9		15		24	
13:15					6		22		28	
13:30					12		7		19	
13:45					8	35	13	57	21	92
14:00					4		24		28	
14:15					9		16		25	
14:30					10		22		32	
14:45					7	30	14	76	21	106
15:00					7		22		29	
15:15					5		17		22	
15:30					4		29		33	
15:45					9	25	27	95	36	120
16:00					8		30		38	
16:15					6		26		32	
16:30					11		28		39	
16:45					7	32	23	107	30	139
17:00					9		28		37	
17:15					7		29		36	
17:30					4		18		22	
17:45					8	28	18	93	26	121
18:00					6		14		20	
18:15					5		13		18	
18:30					3		12		15	
18:45					2	16	9	48	11	64
19:00					2		9		11	
19:15					3		11		14	
19:30					2		11		13	
19:45					0	7	7	38	7	45
20:00					1		6		7	
20:15					3		6		9	
20:30					2		6		8	
20:45					1	7	4	22	5	29
21:00					6		6		12	
21:15					2		7		9	
21:30					1		5		6	
21:45					2	11	7	25	9	36
22:00					2		3		5	
22:15					1		6		7	
22:30					4		2		6	
22:45					1	8	4	15	5	23
23:00					3		0		3	
23:15					2		2		4	
23:30					3		1		4	
23:45					0	8	1	4	1	12
TOTALS						242		627		869
SPLIT %						27.8%		72.2%		67.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	386	894	1,280

AM Peak Hour	09:30	11:30	11:45	PM Peak Hour	12:15	15:30	15:45
AM Pk Volume	35	69	95	PM Pk Volume	40	112	145
Pk Hr Factor	0.875	0.750	0.792	Pk Hr Factor	0.714	0.933	0.929
7 - 9 Volume	40	67	107	4 - 6 Volume	60	200	260
7 - 9 Peak Hour	07:45	07:30	07:45	4 - 6 Peak Hour	16:30	16:30	16:30
7 - 9 Pk Volume	24	39	63	4 - 6 Pk Volume	34	108	142
Pk Hr Factor	0.857	0.813	0.875	Pk Hr Factor	0.773	0.931	0.910

Prepared by NDS/ATD

VOLUME

Kemper St from Kenyon St to Midway Dr

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_003

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		10				13		12:00	91		101				192	
00:15	4		3				7		12:15	104		110				214	
00:30	3		8				11		12:30	75		93				168	
00:45	3	13	7	28			10	41	12:45	79	349	119	423			198	772
01:00	2		4				6		13:00	85		101				186	
01:15	5		5				10		13:15	85		118				203	
01:30	3		8				11		13:30	82		106				188	
01:45	1	11	2	19			3	30	13:45	72	324	92	417			164	741
02:00	2		2				4		14:00	57		105				162	
02:15	1		4				5		14:15	102		96				198	
02:30	1		5				6		14:30	79		114				193	
02:45	2	6	3	14			5	20	14:45	62	300	87	402			149	702
03:00	7		1				8		15:00	59		83				142	
03:15	1		4				5		15:15	82		86				168	
03:30	4		4				8		15:30	73		79				152	
03:45	1	13	3	12			4	25	15:45	70	284	80	328			150	612
04:00	0		4				4		16:00	68		83				151	
04:15	3		0				3		16:15	66		112				178	
04:30	1		3				4		16:30	70		106				176	
04:45	9	13	2	9			11	22	16:45	68	272	107	408			175	680
05:00	2		0				2		17:00	72		102				174	
05:15	11		3				14		17:15	75		117				192	
05:30	10		4				14		17:30	75		111				186	
05:45	14	37	5	12			19	49	17:45	73	295	93	423			166	718
06:00	19		3				22		18:00	64		98				162	
06:15	26		7				33		18:15	62		93				155	
06:30	50		14				64		18:30	67		92				159	
06:45	44	139	24	48			68	187	18:45	73	266	76	359			149	625
07:00	58		42				100		19:00	45		67				112	
07:15	64		22				86		19:15	44		52				96	
07:30	61		35				96		19:30	49		56				105	
07:45	57	240	40	139			97	379	19:45	40	178	51	226			91	404
08:00	57		42				99		20:00	50		49				99	
08:15	58		39				97		20:15	39		47				86	
08:30	61		46				107		20:30	29		53				82	
08:45	72	248	42	169			114	417	20:45	25	143	45	194			70	337
09:00	66		57				123		21:00	32		36				68	
09:15	84		63				147		21:15	25		35				60	
09:30	81		72				153		21:30	21		25				46	
09:45	61	292	60	252			121	544	21:45	10	88	40	136			50	224
10:00	91		77				168		22:00	16		28				44	
10:15	89		91				180		22:15	17		24				41	
10:30	64		68				132		22:30	10		27				37	
10:45	69	313	77	313			146	626	22:45	10	53	12	91			22	144
11:00	76		68				144		23:00	12		18				30	
11:15	75		71				146		23:15	9		12				21	
11:30	77		92				169		23:30	5		15				20	
11:45	89	317	79	310			168	627	23:45	5	31	7	52			12	83
TOTALS		1642		1325				2967	TOTALS		2583		3459				6042
SPLIT %		55.3%		44.7%				32.9%	SPLIT %		42.8%		57.2%				67.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,225	4,784	0	0	9,009

AM Peak Hour	11:30	11:45	11:30	PM Peak Hour	12:00	12:45	12:45
AM Pk Volume	361	383	743	PM Pk Volume	349	444	775
Pk Hr Factor	0.868	0.870	0.868	Pk Hr Factor	0.839	0.933	0.954
7 - 9 Volume	488	308	796	4 - 6 Volume	567	831	1398
7 - 9 Peak Hour	08:00	08:00	08:00	4 - 6 Peak Hour	17:00	16:45	16:45
7 - 9 Pk Volume	248	169	417	4 - 6 Pk Volume	295	437	727
Pk Hr Factor	0.861	0.918	0.914	Pk Hr Factor	0.983	0.934	0.947

Prepared by NDS/ATD

VOLUME

Kemper St from Midway Dr to Sports Arena Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_002

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	3		5						8		12:00	87		116						203	
00:15	1		3						4		12:15	93		107						200	
00:30	4		4						8		12:30	86		119						205	
00:45	1	9	3	15					4	24	12:45	72	338	110	452					182	790
01:00	1		2						3		13:00	74		66						140	
01:15	1		3						4		13:15	80		114						194	
01:30	0		2						2		13:30	84		103						187	
01:45	0	2	3	10					3	12	13:45	67	305	70	353					137	658
02:00	1		2						3		14:00	76		78						154	
02:15	0		1						1		14:15	72		96						168	
02:30	1		0						1		14:30	69		82						151	
02:45	1	3	4	7					5	10	14:45	61	278	73	329					134	607
03:00	1		0						1		15:00	62		68						130	
03:15	1		0						1		15:15	65		73						138	
03:30	1		3						4		15:30	61		72						133	
03:45	2	5	0	3					2	8	15:45	61	249	93	306					154	555
04:00	2		4						6		16:00	51		108						159	
04:15	3		1						4		16:15	66		92						158	
04:30	2		4						6		16:30	65		87						152	
04:45	3	10	3	12					6	22	16:45	69	251	77	364					146	615
05:00	5		2						7		17:00	66		90						156	
05:15	3		1						4		17:15	54		82						136	
05:30	12		5						17		17:30	59		73						132	
05:45	10	30	7	15					17	45	17:45	47	226	107	352					154	578
06:00	16		8						24		18:00	44		90						134	
06:15	20		11						31		18:15	59		92						151	
06:30	26		15						41		18:30	47		73						120	
06:45	21	83	33	67					54	150	18:45	42	192	52	307					94	499
07:00	38		27						65		19:00	47		51						98	
07:15	26		29						55		19:15	41		34						75	
07:30	45		43						88		19:30	52		48						100	
07:45	53	162	44	143					97	305	19:45	41	181	49	182					90	363
08:00	46		51						97		20:00	46		41						87	
08:15	43		64						107		20:15	18		32						50	
08:30	56		59						115		20:30	31		44						75	
08:45	61	206	62	236					123	442	20:45	21	116	18	135					39	251
09:00	63		76						139		21:00	23		22						45	
09:15	61		75						136		21:15	12		24						36	
09:30	70		56						126		21:30	11		26						37	
09:45	47	241	68	275					115	516	21:45	7	53	25	97					32	150
10:00	74		74						148		22:00	11		22						33	
10:15	77		108						185		22:15	11		23						34	
10:30	74		75						149		22:30	10		20						30	
10:45	80	305	99	356					179	661	22:45	8	40	14	79					22	119
11:00	75		86						161		23:00	3		9						12	
11:15	92		97						189		23:15	3		7						10	
11:30	80		102						182		23:30	3		6						9	
11:45	81	328	86	371					167	699	23:45	1	10	4	26					5	36
TOTALS		1384		1510						2894	TOTALS		2239		2982						5221
SPLIT %		47.8%		52.2%						35.7%	SPLIT %		42.9%		57.1%						64.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	3,623	4,492	0	0	8,115

AM Peak Hour	11:45	11:45	11:45		PM Peak Hour	12:00	12:00	12:00
AM Pk Volume	347	428	775		PM Pk Volume	338	452	790
Pk Hr Factor	0.933	0.899	0.945		Pk Hr Factor	0.909	0.950	0.963
7 - 9 Volume	368	379	747		4 - 6 Volume	477	716	1193
7 - 9 Peak Hour	08:00	08:00	08:00		4 - 6 Peak Hour	16:15	16:00	16:00
7 - 9 Pk Volume	206	236	442		4 - 6 Pk Volume	266	364	615
Pk Hr Factor	0.844	0.922	0.898		Pk Hr Factor	0.964	0.843	0.967

Table 3-2. Roadway Segment Level of Service
Existing Conditions

Roadway	Segment	Class	Lanes	LOS E Capacity	Existing		
					ADT	V/C	LOS
Rosecrans Street	From Pacific Highway to Sports Arena Blvd.	Major	4	40,000	15,503	0.39	B
	From Sports Arena Blvd. to Midway Dr.	Major	6	50,000	59,120	1.18	F
	From Midway Dr. to Lytton St.	Major	6	50,000	46,384	0.93	E
	From Lytton St. to Roosevelt Rd.	Major	5	45,000	42,513	0.94	E
	From Laning Rd. to Nimitz Blvd.	Major	4	40,000	34,259	0.86	D
	From Nimitz Blvd. to N. Harbor Dr.	Major	4	40,000	36,450	0.91	E
	From N. Harbor Dr. to Canon St.	Major	4	40,000	34,390	0.86	D
	From Canon St. to Talbot St.	Major (1)	2	27,000	17,850	0.66	C
	From Talbot St. to Kellogg St.	Major (1)	2	27,000	15,200	0.56	B
Camino Del Rio	North of Sports Arena Blvd.	Prime	7	70,000	50,700	0.72	C
Pacific Highway	North of Rosecrans St.	Major (2)	2	20,000	5,818	0.29	A
	South of Rosecrans St.	Prime	6	60,000	13,070	0.22	A
Sports Arena Blvd.	Northwest of Rosecrans St.	Major	5	45,000	26,780	0.60	C
Midway Drive	Northwest of Rosecrans St.	Major	4	40,000	27,130	0.68	C
	Southeast of Rosecrans St.	Major	4	40,000	29,440	0.74	C
Lytton Street	Northwest of Rosecrans St.	Major (2)	2	20,000	11,797	0.59	C
	Southeast of Rosecrans St.	Major	4	40,000	19,650	0.49	B
Nimitz Boulevard	Northwest of Rosecrans St.	Major	4	40,000	17,264	0.43	B
	Southeast of Rosecrans St.	Major	4	40,000	12,020	0.30	A
North Harbor Drive	Rosecrans St. to Scott Rd.	Major	4	40,000	6,321	0.16	A
Canon Street	Northwest of Rosecrans St.	Collector	2	15,000	12,870	0.86	D
Talbot Street	Northwest of Rosecrans St.	Collector	2	8,000	5,950	0.74	D

(1) LOS E Capacity has been estimated based on results of the Highway Capacity Manual Urban Street Methodology.
(2) Since a published standard capacity for a 2-Lane Major does not exist, capacity is assumed to be half of a 4-Lane Major.

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
CAM RIO	[HANCOCK ST - MOORE ST]	03800W - 03700W	1032	SOUTH	:	35800	6/10/1992	0493-92
				*TOTAL	:	64900		
				NORTH	:	27610	7/27/2005	0408-05
				SOUTH	:	32160	7/27/2005	0408-05
				*TOTAL	:	59770		
				EAST	:	27290	9/16/2008	0346-08
				WEST	:	28560	9/16/2008	0346-08
				*TOTAL	:	55852		
CAM RIO	[SPORTS ARENA BL - KURTZ ST]	03899W - 03850W	9369	NORTH	:	24400	6/4/1987	1019-87
				SOUTH	:	28700	6/4/1987	1020-87
				*TOTAL	:	53100		
				NORTH	:	23900	6/25/1990	1005-90
				SOUTH	:	29100	6/25/1990	1006-90
				*TOTAL	:	53000		
				NORTH	:	24200	6/20/1991	0934-91
				SOUTH	:	30200	6/20/1991	0935-91
				*TOTAL	:	54400		
				NORTH	:	25780	7/25/2002	0814-02
				SOUTH	:	27180	7/25/2002	0815-02
				*TOTAL	:	52960		
				NORTH	:	23720	9/10/2008	0405-08
				SOUTH	:	26980	9/10/2008	0405-08
				*TOTAL	:	50700		
CAM RIO N	[CAM ARR - MSS CTR RD]	00750 - 01200	6721	EAST	:	4400	9/27/1990	1924-90
				WEST	:	5300	9/27/1990	1925-90
				*TOTAL	:	9700		
				EAST	:	3400	10/14/1993	0900-93
				WEST	:	4400	10/25/1993	0901-93
				EAST	:	3700	10/17/1996	1006-96
				WEST	:	4200	10/17/1996	1007-96
				*TOTAL	:	7900		

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1987 to 2/25/2009

STREET NAME	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION	WK-DAY VOLUME	STARTING DATE	FILE NUMBER
ROSECRANS ST	[MALAGA ST - MADRID ST]	03050 - 03200	9371	SOUTH	20220	7/21/2005	0668-05
				*TOTAL	39770		
				NORTH	21650	9/9/2008	0407-08
				SOUTH	21120	9/9/2008	0407-08
				*TOTAL	42770		
ROSECRANS ST	[MIDWAY DR - SPORTS ARENA BL]	03500 - 03650	9370	NORTH	26900	6/2/1987	0986-87
				SOUTH	27300	6/2/1987	0987-87
				*TOTAL	54200		
				NORTH	28100	6/6/1988	1008-88
				SOUTH	28200	6/6/1988	1009-88
				*TOTAL	56300		
				NORTH	26700	6/25/1990	1009-90
				SOUTH	26700	6/25/1990	1010-90
				*TOTAL	53400		
				NORTH	27400	6/20/1991	0936-91
				SOUTH	28200	6/20/1991	0937-91
				*TOTAL	55600		
				NORTH	31110	7/16/2002	0674-02
				SOUTH	27000	7/16/2002	0675-02
				*TOTAL	58110		
				NORTH	28720	9/9/2008	0406-08
				SOUTH	30400	9/9/2008	0406-08
				*TOTAL	59120		
ROSECRANS ST	[SPORTS ARENA BL - KURTZ ST]	03650 - 03750	1882	NORTH	12000	6/2/1987	0992-87
				SOUTH	9500	6/2/1987	0993-87
				*TOTAL	21500		
				NORTH	14300	6/28/1988	1133-88
				SOUTH	10800	6/28/1988	1134-88
				*TOTAL	25100		
				NORTH	12700	6/9/1989	0693-89
				SOUTH	8300	6/9/1989	0694-89
				*TOTAL	21000		

Volumes for: STATION# on Thursday, April 15, 2010 City: San Diego Project #: 10-4123-002
Location: Barnett Ave between Midway St & Pacific Hwy File No. MC0306-10

Start	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00	52	359			34	402				
12:15	31	417			34	411				
12:30	30	405			28	417				
12:45	27	395	140	1576	26	388	122	1618	262	3194
1:00	34	408			23	374				
1:15	17	433			19	370				
1:30	30	493			24	400				
1:45	22	479	103	1813	29	364	95	1508	198	3321
2:00	27	414			20	374				
2:15	18	421			15	358				
2:30	19	460			23	397				
2:45	9	475	73	1770	11	443	69	1572	142	3342
3:00	20	477			19	398				
3:15	19	538			14	486				
3:30	23	597			31	495				
3:45	12	701	74	2313	30	501	94	1880	168	4193
4:00	16	663			22	505				
4:15	25	661			26	485				
4:30	54	576			33	518				
4:45	46	572	141	2472	77	513	158	2021	299	4493
5:00	58	583			76	502				
5:15	76	575			113	592				
5:30	88	597			166	575				
5:45	140	567	362	2322	228	515	583	2184	945	4506
6:00	118	565			198	479				
6:15	169	443			345	473				
6:30	208	422			376	463				
6:45	207	451	702	1881	474	454	1393	1869	2095	3750
7:00	275	459			485	441				
7:15	342	422			481	397				
7:30	361	411			493	400				
7:45	339	412	1317	1704	525	362	1984	1600	3301	3304
8:00	331	407			515	322				
8:15	344	362			536	312				
8:30	419	374			473	311				
8:45	351	357	1445	1500	448	266	1972	1211	3417	2711
9:00	355	382			341	314				
9:15	297	365			337	289				
9:30	264	345			342	257				
9:45	246	302	1162	1394	348	265	1368	1125	2530	2519
10:00	289	320			286	260				
10:15	264	310			288	233				
10:30	296	272			304	233				
10:45	292	263	1141	1165	341	262	1219	988	2360	2153
11:00	302	284			348	229				
11:15	356	286			384	241				
11:30	331	263			412	226				
11:45	338	194	1327	1027	383	174	1527	870	2854	1897
Total	7987	20937	7987	20937	10584	18446	10584	18446	18571	39383
Combined Total	28924		28924		29030		29030		57954	
AM Peak	11:45 AM				7:30 AM					
Vol.	1519				2069					
P.H.F.	0.911				0.965					
PM Peak		3:30 PM				5:00 PM				
Vol.		2622				2184				
P.H.F.		0.935				0.922				
Percentage	27.6%	72.4%			36.5%	63.5%				

Day: TUESDAY
Date: 5/11/10

Classification Report / Prepared by: National Data & Surveying Services
Location: Washington St from Pacific Hwy & Frontage Rd

City: San Diego
Project #: 10-4143-030

SUMMARY

Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	Total
00:00 AM	0	30	4	2	1	1	0	0	1	0	0	0	0	39
01:00	0	46	8	0	3	0	0	2	1	0	0	0	0	60
02:00	0	43	7	0	1	2	0	2	5	0	0	0	0	60
03:00	2	67	14	2	7	0	0	5	9	0	0	0	0	106
04:00	2	116	37	0	18	1	0	6	5	0	0	0	0	185
05:00	6	271	56	8	24	6	0	15	15	0	3	0	0	404
06:00	9	350	55	21	32	6	0	16	6	0	2	0	0	497
07:00	10	425	49	20	24	5	0	14	8	0	1	0	0	556
08:00	11	475	81	25	35	9	0	18	7	0	3	0	0	664
09:00	4	474	78	15	36	5	0	17	9	0	2	0	0	640
10:00	5	510	65	29	28	2	0	21	7	0	1	0	0	668
11:00	6	526	83	27	31	5	0	20	8	0	3	0	0	709
12:00 PM	6	503	81	29	34	8	0	22	2	0	3	0	0	688
13:00	12	536	68	19	25	1	0	21	4	0	1	0	0	687
14:00	5	563	78	17	30	5	0	14	4	0	2	0	0	718
15:00	7	603	86	22	14	1	0	12	1	0	0	0	0	746
16:00	7	702	82	33	22	7	0	22	1	0	0	0	0	876
17:00	9	636	62	23	23	4	0	16	3	0	0	0	0	776
18:00	4	433	48	8	23	4	0	11	4	0	0	0	0	535
19:00	5	325	34	6	18	2	0	8	3	0	0	0	0	401
20:00	1	250	23	3	5	2	0	0	3	0	0	0	0	287
21:00	1	179	24	1	2	0	0	2	2	0	0	0	0	211
22:00	3	75	14	2	2	0	0	0	1	0	0	0	0	97
23:00	0	59	4	1	2	0	0	0	0	0	0	0	0	66
Totals	**115**	**8197**	**1141**	**313**	**440**	**76**		**264**	**109**		**21**			**10676**
% of Totals	1%	77%	11%	3%	4%	1%		2%	1%		0%			100%
	55	3333	537	149	240	42	0	136	81	0	15	0	0	4588
% AM	1%	31%	5%	1%	2%	0%		1%	1%		0%			43%
AM Peak Hour	08:00	11:00	11:00	10:00	09:00	08:00		10:00	05:00		05:00			11:00
Volume	11	526	83	29	36	9		21	15		3			709
	60	4864	604	164	200	34	0	128	28	0	6	0	0	6088
% PM	1%	46%	6%	2%	2%	0%		1%	0%		0%			57%
PM Peak Hour	13:00	16:00	15:00	16:00	12:00	12:00		12:00	13:00		12:00			16:00
Volume	12	702	86	33	34	8		22	4		3			876

Peak Period Totals	AM 7-9		NOON 12-2		PM 4-6		Off Peak Volumes	
	Volume	%	Volume	%	Volume	%	Volume	%
	1220 ⟷	11%	1375 ⟷	13%	1652 ⟷	15%	6429 ⟷	60%

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-106

Location: Washington St. btwn. Frontage St. & Hancock St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		6			12:00			133		132		
00:15			13		8			12:15			133		119		
00:30			12		4			12:30			117		128		
00:45			10	47	2	20	67	12:45			128	511	121	500	1011
01:00			11		6			13:00			143		139		
01:15			7		4			13:15			148		114		
01:30			4		1			13:30			128		109		
01:45			2	24	3	14	38	13:45			129	548	115	477	1025
02:00			4		4			14:00			126		106		
02:15			1		2			14:15			110		110		
02:30			1		1			14:30			158		126		
02:45			6	12	4	11	23	14:45			156	550	117	459	1009
03:00			3		2			15:00			142		121		
03:15			2		7			15:15			141		143		
03:30			3		11			15:30			129		124		
03:45			1	9	7	27	36	15:45			159	571	97	485	1056
04:00			3		6			16:00			134		128		
04:15			4		9			16:15			133		97		
04:30			4		9			16:30			180		108		
04:45			12	23	19	43	66	16:45			136	583	118	451	1034
05:00			19		19			17:00			144		121		
05:15			13		33			17:15			123		108		
05:30			20		47			17:30			119		96		
05:45			24	76	63	162	238	17:45			80	466	55	380	846
06:00			28		70			18:00			68		49		
06:15			20		62			18:15			68		59		
06:30			31		111			18:30			67		53		
06:45			35	114	104	347	461	18:45			68	271	50	211	482
07:00			48		107			19:00			72		44		
07:15			68		112			19:15			65		43		
07:30			75		106			19:30			64		37		
07:45			71	262	138	463	725	19:45			65	266	42	166	432
08:00			87		117			20:00			59		42		
08:15			89		135			20:15			45		31		
08:30			96		123			20:30			50		37		
08:45			103	375	119	494	869	20:45			33	187	28	138	325
09:00			89		125			21:00			55		22		
09:15			89		116			21:15			39		31		
09:30			106		112			21:30			36		25		
09:45			80	364	98	451	815	21:45			37	167	23	101	268
10:00			101		95			22:00			34		15		
10:15			97		80			22:15			29		20		
10:30			89		98			22:30			36		14		
10:45			114	401	111	384	785	22:45			26	125	14	63	188
11:00			112		113			23:00			17		7		
11:15			135		113			23:15			29		10		
11:30			124		121			23:30			21		13		
11:45			113	484	120	467	951	23:45			17	84	7	37	121
Total Vol.				2191		2883	**5074**					4329		3468	**7797**

Daily Totals

NB	SB	EB	WB	Combined
		6520	6351	**12871**

	AM			PM		
Split %	43.2%	56.8%	**39.4%**	55.5%	44.5%	**60.6%**
Peak Hour	11:15	07:45	**11:30**	15:45	12:15	**14:30**
Volume	505	513	**995**	606	507	**1104**
P.H.F.	0.94	0.93	**0.94**	0.84	0.91	**0.97**

Prepared by NDS/ATO

VOLUME

Vine St from California St to Kettner Blvd

Day: Thursday
Date: 6/9/2011

City: San Diego
Project #: CA11_4168_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0		0		0	12:00	6		0		6
00:15	0		0		0	12:15	7		1		8
00:30	0		0		0	12:30	1		1		2
00:45	0		0		0	12:45	0	14	0	2	0 16
01:00	0		0		0	13:00	2		1		3
01:15	0		0		0	13:15	1		3		4
01:30	0		0		0	13:30	2		1		3
01:45	0		0		0	13:45	4	9	0	5	4 14
02:00	0		0		0	14:00	5		2		7
02:15	0		0		0	14:15	9		2		11
02:30	0		0		0	14:30	8		3		11
02:45	0		0		0	14:45	4	26	2	9	6 35
03:00	0		0		0	15:00	2		2		4
03:15	0		0		0	15:15	0		4		4
03:30	0		0		0	15:30	1		2		3
03:45	0		0		0	15:45	2	5	1	9	3 14
04:00	1		0		1	16:00	1		3		4
04:15	0		0		0	16:15	2		5		7
04:30	0		0		0	16:30	4		6		10
04:45	0	1	0		0 1	16:45	5	12	3	17	8 29
05:00	0		0		0	17:00	3		2		5
05:15	0		1		1	17:15	1		2		3
05:30	0		0		0	17:30	2		1		3
05:45	4	4	0	1	4 5	17:45	1	7	0	5	1 12
06:00	1		0		1	18:00	2		1		3
06:15	3		1		4	18:15	1		0		1
06:30	0		1		1	18:30	0		1		1
06:45	2	6	0	2	2 8	18:45	0	3	0	2	0 5
07:00	0		1		1	19:00	1		1		2
07:15	0		2		2	19:15	1		1		2
07:30	4		2		6	19:30	0		0		0
07:45	1	5	2	7	3 12	19:45	1	3	1	3	2 6
08:00	5		1		6	20:00	1		1		2
08:15	4		1		5	20:15	1		5		6
08:30	2		0		2	20:30	2		0		2
08:45	2	13	0	2	2 15	20:45	0	4	0	6	0 10
09:00	3		1		4	21:00	0		0		0
09:15	3		3		6	21:15	0		0		0
09:30	5		0		5	21:30	0		0		0
09:45	1	12	2	6	3 18	21:45	1	1	0		1 1
10:00	5		3		8	22:00	1		0		1
10:15	2		0		2	22:15	2		1		3
10:30	5		2		7	22:30	0		0		0
10:45	2	14	1	6	3 20	22:45	0	3	0	1	0 4
11:00	3		1		4	23:00	0		0		0
11:15	2		0		2	23:15	2		0		2
11:30	5		2		7	23:30	0		0		0
11:45	4	14	2	5	6 19	23:45	1	3	0		1 3
TOTALS		69		29	98	TOTALS		90		59	149
SPLIT %		70.4%		29.6%	39.7%	SPLIT %		60.4%		39.6%	60.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	159	88	247

AM Peak Hour	11:30	09:15	11:30	PM Peak Hour	13:45	16:00	14:00
AM Pk Volume	22	8	27	PM Pk Volume	26	17	35
Pk Hr Factor	0.786	0.667	0.844	Pk Hr Factor	0.722	0.708	0.795
7 - 9 Volume	18	9	27	4 - 6 Volume	19	22	41
7 - 9 Peak Hour	07:30	07:00	07:30	4 - 6 Peak Hour	16:15	16:00	16:15
7 - 9 Pk Volume	14	7	20	4 - 6 Pk Volume	14	17	30
Pk Hr Factor	0.700	0.875	0.833	Pk Hr Factor	0.700	0.708	0.750

Prepared by NDS/ATD

Volumes for: Thursday, May 26, 2011	City: San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Sassafras St between Kettner Blvd & Pacific Hy	Project: 11-4109-048	0	0	3,496	5,220	8,716

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			19		2			12:00			82		94		
00:15			15		1			12:15			77		75		
00:30			15		2			12:30			67		83		
00:45			17	66	1	6	72	12:45			73	299	74	326	625
01:00			13		2			13:00			53		91		
01:15			10		4			13:15			59		65		
01:30			2		5			13:30			66		54		
01:45			4	29	3	14	43	13:45			53	231	68	278	509
02:00			2		1			14:00			48		65		
02:15			3		1			14:15			59		72		
02:30			4		3			14:30			47		58		
02:45			1	10	1	6	16	14:45			78	232	70	265	497
03:00			1		0			15:00			57		54		
03:15			1		3			15:15			49		85		
03:30			1		4			15:30			44		63		
03:45			0	3	2	9	12	15:45			46	196	66	268	464
04:00			6		6			16:00			52		73		
04:15			6		9			16:15			55		57		
04:30			11		31			16:30			54		68		
04:45			10	33	42	88	121	16:45			56	217	65	263	480
05:00			8		59			17:00			60		54		
05:15			15		84			17:15			69		52		
05:30			11		92			17:30			67		67		
05:45			15	49	74	309	358	17:45			58	254	52	225	479
06:00			17		81			18:00			55		62		
06:15			20		84			18:15			40		50		
06:30			19		118			18:30			38		58		
06:45			28	84	100	383	467	18:45			32	165	55	225	390
07:00			23		104			19:00			53		44		
07:15			32		109			19:15			45		35		
07:30			24		125			19:30			67		51		
07:45			33	112	114	452	564	19:45			42	207	67	197	404
08:00			31		106			20:00			50		43		
08:15			47		127			20:15			33		40		
08:30			35		104			20:30			45		35		
08:45			42	155	121	458	613	20:45			40	168	53	171	339
09:00			34		94			21:00			49		33		
09:15			33		85			21:15			38		44		
09:30			36		101			21:30			30		41		
09:45			32	135	99	379	514	21:45			38	155	30	148	303
10:00			35		78			22:00			35		36		
10:15			49		82			22:15			35		29		
10:30			53		80			22:30			35		16		
10:45			53	190	79	319	509	22:45			49	154	14	95	249
11:00			72		83			23:00			39		22		
11:15			51		60			23:15			27		13		
11:30			62		67			23:30			19		8		
11:45			63	248	78	288	536	23:45			19	104	5	48	152

Total Vol.			1114		2711	3825					2382		2991	5373
									NB	SB	EB		WB	Total
								Daily Totals :	0	0	3,496		5,220	8,716
			AM								PM			
Split %			29.1%		70.9%	43.9%					44.3%		55.7%	56.1%
ADT								PHF						
Peak Hr.			11:00		07:00	11:00		Peak Hr.			12:00		12:00	12:00
Volume			268		472	613		Volume			299		326	625
P.H.F.			0.953		0.929	0.879		P.H.F.			0.913		0.837	0.888
7 - 9 Vol.			267		518	1177		4 - 6 Vol.			471		488	959
Peak Hr.			10:00		07:30	08:00		Peak Hr.			17:00		16:30	16:45
Volume			155		472	613		Volume			254		263	480
P.H.F.			0.774		0.929	0.879		P.H.F.			0.913		0.911	0.914

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-109

Location: Laurel St. btwn. Pacific Highway & Kettner Blvd.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			36		20			12:00			181		168		
00:15			37		14			12:15			240		195		
00:30			33		17			12:30			239		194		
00:45			18	124	12	63	187	12:45			201	861	200	757	1618
01:00			14		2			13:00			217		210		
01:15			11		8			13:15			173		183		
01:30			13		2			13:30			185		183		
01:45			9	47	5	17	64	13:45			204	779	139	715	1494
02:00			11		2			14:00			280		171		
02:15			4		2			14:15			185		163		
02:30			5		5			14:30			228		163		
02:45			3	23	6	15	38	14:45			175	868	136	633	1501
03:00			4		3			15:00			219		151		
03:15			6		6			15:15			205		145		
03:30			3		20			15:30			186		148		
03:45			4	17	14	43	60	15:45			219	829	158	602	1431
04:00			8		24			16:00			185		163		
04:15			2		45			16:15			203		139		
04:30			23		81			16:30			269		164		
04:45			47	80	147	297	377	16:45			212	869	155	621	1490
05:00			89		195			17:00			219		140		
05:15			130		199			17:15			206		154		
05:30			155		189			17:30			175		116		
05:45			139	513	191	774	1287	17:45			154	754	133	543	1297
06:00			126		151			18:00			157		167		
06:15			105		172			18:15			155		149		
06:30			120		137			18:30			187		214		
06:45			87	438	131	591	1029	18:45			177	676	159	689	1365
07:00			96		147			19:00			170		169		
07:15			100		143			19:15			186		154		
07:30			118		142			19:30			179		180		
07:45			133	447	183	615	1062	19:45			167	702	181	684	1386
08:00			136		188			20:00			207		157		
08:15			161		205			20:15			217		160		
08:30			149		172			20:30			212		147		
08:45			167	613	173	738	1351	20:45			212	848	138	602	1450
09:00			160		191			21:00			186		145		
09:15			173		186			21:15			157		146		
09:30			162		227			21:30			155		145		
09:45			165	660	221	825	1485	21:45			195	693	102	538	1231
10:00			187		221			22:00			135		99		
10:15			210		212			22:15			138		118		
10:30			246		228			22:30			124		109		
10:45			216	859	207	868	1727	22:45			162	559	94	420	979
11:00			218		223			23:00			120		84		
11:15			210		183			23:15			171		72		
11:30			195		216			23:30			124		47		
11:45			192	815	216	838	1653	23:45			74	489	36	239	728
Total Vol.				4636		5684	**10320**					8927		7043	**15970**

Daily Totals

NB	SB	EB	WB	Combined
		13563	12727	**26290**

	AM			PM		
Split %	44.9%	55.1%	**39.3%**	55.9%	44.1%	**60.7%**
Peak Hour	10:15	09:45	**10:15**	16:30	12:15	**12:15**
Volume	890	882	**1760**	906	799	**1696**
P.H.F.	0.90	0.97	**0.93**	0.84	0.95	**0.97**

CITY OF SAN DIEGO - TRAFFIC ENGINEERING

Machine Count Traffic Volumes - City Street

All From Dates 1/1/1990 to 1/27/2011

STREET NAM	LIMITS	BLOCK NOS.	STATION NUMBER	DIRECTION		WK-DAY VOLUME	STARTING DATE	FILE NUMBER
TAYLOR ST	[HOTEL CR S - SD 008 R-A, E]	-	2631	EAST	:	7170	6/30/2010	MC0522-1
				WEST	:	7425	6/30/2010	MC0522-1
				*TOTAL	:	14595		
TAYLOR ST	[PACIFIC HY - CONGRESS ST]	04000 - 04010	2493	EAST	:	10500	7/22/1997	0524-97
				WEST	:	11900	7/22/1997	0525-97
				*TOTAL	:	22400		
				EAST	:	9300	6/2/1999	0330-99
				WEST	:	8000	6/2/1999	0330-99
				*TOTAL	:	17300		
				EAST	:	12230	6/20/2002	0648-02
				WEST	:	14880	6/20/2002	0649-02
				*TOTAL	:	27110		
				EAST	:	11780	6/15/2005	0315-05
				WEST	:	10230	6/15/2005	0315-05
				*TOTAL	:	22010		
				EAST	:	11990	8/20/2008	0336-08
				WEST	:	10060	8/20/2008	0336-08
				*TOTAL	:	22050		
TAYLOR ST	[PACIFIC HY - SN DIEGO AV]	04000 - 04010	2625	EAST	:	11700	3/8/1990	0341-90
				WEST	:	9700	3/8/1990	0342-90
				*TOTAL	:	21400		
				EAST	:	11000	3/15/1991	0420-91
				WEST	:	8400	3/15/1991	0421-91
				*TOTAL	:	19400		
				EAST	:	10100	11/3/1994	0810-94
				WEST	:	7500	11/3/1994	0811-94
				*TOTAL	:	17600		
				EAST	:	12500	6/18/1996	0666-96
				WEST	:	7000	6/18/1996	0667-96
				*TOTAL	:	19500		
TAYLOR ST	[CALHOUN ST - JUAN ST]	04030 - 04100	2491	NORTH	:	11300	9/21/1994	0700-94
				SOUTH	:	7700	9/21/1994	0701-94

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-099

Location: Taylor St. btwn. Congress St. & Juan St.

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	18		6					12:00	129		107				
00:15	9		9					12:15	140		116				
00:30	10		3					12:30	142		130				
00:45	3	40	7	25			65	12:45	149	560	93	446			1006
01:00	4		0					13:00	135		110				
01:15	3		1					13:15	149		99				
01:30	3		0					13:30	155		129				
01:45	4	14	0	1			15	13:45	140	579	96	434			1013
02:00	6		5					14:00	144		104				
02:15	3		3					14:15	141		95				
02:30	8		3					14:30	152		90				
02:45	1	18	1	12			30	14:45	164	601	87	376			977
03:00	3		1					15:00	185		92				
03:15	2		3					15:15	145		84				
03:30	2		9					15:30	193		119				
03:45	1	8	5	18			26	15:45	229	752	91	386			1138
04:00	5		3					16:00	214		117				
04:15	3		9					16:15	107		111				
04:30	7		12					16:30	117		123				
04:45	6	21	8	32			53	16:45	111	549	113	464			1013
05:00	7		14					17:00	134		122				
05:15	10		24					17:15	102		71				
05:30	13		27					17:30	119		105				
05:45	18	48	51	116			164	17:45	101	456	99	397			853
06:00	22		55					18:00	81		98				
06:15	28		69					18:15	87		66				
06:30	45		73					18:30	110		57				
06:45	49	144	99	296			440	18:45	76	354	69	290			644
07:00	53		125					19:00	82		49				
07:15	75		130					19:15	80		48				
07:30	85		111					19:30	80		46				
07:45	62	275	124	490			765	19:45	70	312	47	190			502
08:00	102		144					20:00	89		54				
08:15	124		110					20:15	75		40				
08:30	112		170					20:30	56		42				
08:45	91	429	224	648			1077	20:45	58	278	31	167			445
09:00	87		184					21:00	61		33				
09:15	115		207					21:15	49		37				
09:30	92		108					21:30	50		23				
09:45	92	386	103	602			988	21:45	41	201	32	125			326
10:00	85		75					22:00	39		22				
10:15	99		92					22:15	38		22				
10:30	101		101					22:30	33		18				
10:45	104	389	95	363			752	22:45	19	129	11	73			202
11:00	118		95					23:00	24		16				
11:15	142		101					23:15	16		12				
11:30	151		103					23:30	16		4				
11:45	121	532	112	411			943	23:45	20	76	11	43			119
Total Vol.		2304		3014			**5318**			4847		3391			**8238**

Daily Totals

NB	SB	EB	WB	Combined
7151	6405			**13556**

	AM			PM		
Split %	43.3%	56.7%	**39.2%**	58.8%	41.2%	**60.8%**
Peak Hour	11:15	08:30	**08:30**	15:15	16:15	**15:15**
Volume	543	785	**1190**	781	469	**1192**
P.H.F.	0.90	0.88	**0.92**	0.85	0.95	**0.90**

Volumes for: Thursday, July 08, 2010 City: San Diego Project #: 10-4214-003

Location: Taylor St (STATION#2490/FILE#MC0594-10) between Juan St & Sunset St

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	20		8					12:00	203		143				
00:15	23		6					12:15	172		164				
00:30	10		9					12:30	153		132				
00:45	5	58	6	29			87	12:45	172	700	139	578			1278
01:00	15		2					13:00	205		130				
01:15	3		7					13:15	187		139				
01:30	7		4					13:30	179		136				
01:45	2	27	5	18			45	13:45	164	735	134	539			1274
02:00	4		0					14:00	163		125				
02:15	1		1					14:15	175		113				
02:30	3		3					14:30	199		131				
02:45	4	12	6	10			22	14:45	191	728	116	485			1213
03:00	2		2					15:00	196		110				
03:15	4		5					15:15	223		136				
03:30	1		6					15:30	231		132				
03:45	1	8	6	19			27	15:45	213	863	128	506			1369
04:00	4		4					16:00	238		143				
04:15	3		8					16:15	263		116				
04:30	7		6					16:30	257		152				
04:45	7	21	13	31			52	16:45	284	1042	129	540			1582
05:00	12		24					17:00	249		143				
05:15	15		40					17:15	300		135				
05:30	18		30					17:30	231		145				
05:45	21	66	59	153			219	17:45	186	966	133	556			1522
06:00	16		52					18:00	189		138				
06:15	32		83					18:15	179		117				
06:30	40		85					18:30	159		113				
06:45	51	139	107	327			466	18:45	100	627	85	453			1080
07:00	59		112					19:00	142		93				
07:15	59		132					19:15	131		85				
07:30	69		121					19:30	93		88				
07:45	103	290	148	513			803	19:45	125	491	70	336			827
08:00	79		123					20:00	97		67				
08:15	124		132					20:15	99		73				
08:30	99		127					20:30	117		53				
08:45	92	394	149	531			925	20:45	94	407	44	237			644
09:00	87		173					21:00	94		50				
09:15	103		141					21:15	106		29				
09:30	88		136					21:30	86		43				
09:45	101	379	120	570			949	21:45	98	384	33	155			539
10:00	118		116					22:00	76		26				
10:15	112		120					22:15	78		26				
10:30	113		126					22:30	49		29				
10:45	123	466	130	492			958	22:45	36	239	21	102			341
11:00	120		123					23:00	39		12				
11:15	162		132					23:15	24		16				
11:30	148		149					23:30	32		8				
11:45	155	585	164	568			1153	23:45	12	107	11	47			154
Total Vol.		2445		3261			**5706**			7289		4534			**11823**

Daily Totals

NB	SB	EB	WB	Combined
9734	7795			**17529**

	AM			PM		
Split %	42.8%	57.2%	**32.6%**	61.7%	38.3%	**67.4%**
Peak Hour	11:45	11:30	**11:30**	16:30	12:00	**16:30**
Volume	683	620	**1298**	1090	578	**1649**
P.H.F.	0.84	0.95	**0.94**	0.91	0.88	**0.95**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-100

Location: Taylor St. btwn. Morena Blvd. & I-8 EB Ramps - Hotel Circle

AM Period	NB		SB		EB	WB		PM Period	NB		SB		EB	WB	
00:00	9		7					12:00	118		114				
00:15	7		8					12:15	94		128				
00:30	7		4					12:30	89		124				
00:45	4	27	8	27			54	12:45	98	399	119	485			884
01:00	5		1					13:00	93		105				
01:15	4		1					13:15	102		93				
01:30	0		2					13:30	125		108				
01:45	6	15	0	4			19	13:45	109	429	110	416			845
02:00	4		1					14:00	115		91				
02:15	1		4					14:15	125		99				
02:30	0		1					14:30	121		85				
02:45	3	8	1	7			15	14:45	133	494	84	359			853
03:00	1		2					15:00	147		96				
03:15	1		1					15:15	148		94				
03:30	2		5					15:30	188		100				
03:45	0	4	0	8			12	15:45	189	672	99	389			1061
04:00	5		3					16:00	191		116				
04:15	0		8					16:15	201		113				
04:30	4		10					16:30	196		105				
04:45	1	10	12	33			43	16:45	211	799	113	447			1246
05:00	4		10					17:00	212		100				
05:15	3		21					17:15	205		96				
05:30	8		29					17:30	183		122				
05:45	15	30	41	101			131	17:45	138	738	98	416			1154
06:00	13		61					18:00	112		100				
06:15	17		73					18:15	86		104				
06:30	16		83					18:30	102		108				
06:45	28	74	113	330			404	18:45	79	379	74	386			765
07:00	28		124					19:00	90		51				
07:15	33		132					19:15	78		40				
07:30	43		129					19:30	72		43				
07:45	43	147	132	517			664	19:45	70	310	46	180			490
08:00	56		152					20:00	73		42				
08:15	74		129					20:15	59		51				
08:30	53		252					20:30	48		34				
08:45	74	257	261	794			1051	20:45	56	236	32	159			395
09:00	62		243					21:00	53		27				
09:15	54		249					21:15	62		24				
09:30	73		144					21:30	50		19				
09:45	62	251	128	764			1015	21:45	33	198	21	91			289
10:00	66		113					22:00	27		18				
10:15	63		96					22:15	28		13				
10:30	82		98					22:30	31		11				
10:45	64	275	96	403			678	22:45	23	109	19	61			170
11:00	84		89					23:00	16		10				
11:15	81		122					23:15	17		18				
11:30	127		113					23:30	10		5				
11:45	86	378	98	422			800	23:45	11	54	12	45			99
Total Vol.		1476		3410			**4886**			4817		3434			**8251**

Daily Totals

NB	SB	EB	WB	Combined
6293	6844			**13137**

	AM			PM		
Split %	30.2%	69.8%	**37.2%**	58.4%	41.6%	**62.8%**
Peak Hour	11:30	08:30	**08:30**	16:30	12:00	**16:15**
Volume	425	1005	**1248**	824	485	**1251**
P.H.F.	0.84	0.96	**0.93**	0.97	0.95	**0.97**

Prepared by NDS/ATD

Volumes for: Thursday, June 24, 2010	City:	San Diego	Daily Totals NB	SB	EB	WB	Total
Location: Twiggs St (STATION#1589/FILE#MC05334-10)	Project:	10-4169-122	0	0	840	1,240	2,080

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB		
00:00			2	2		12:00			21	19		
00:15			1	3		12:15			16	28		
00:30			2	2		12:30			11	20		
00:45			2	7	0	7	14	12:45			13	61	26	93	154
01:00			3	1		13:00			10	19		
01:15			1	1		13:15			15	23		
01:30			1	1		13:30			12	18		
01:45			0	5	1	4	9	13:45			16	53	14	74	127
02:00			1	1		14:00			13	19		
02:15			0	1		14:15			11	21		
02:30			0	1		14:30			8	22		
02:45			0	1	0	3	4	14:45			14	46	21	83	129
03:00			0	0		15:00			9	26		
03:15			0	0		15:15			12	25		
03:30			1	0		15:30			10	20		
03:45			0	1	1	1	2	15:45			19	50	15	86	136
04:00			1	0		16:00			21	17		
04:15			0	0		16:15			15	23		
04:30			1	0		16:30			23	16		
04:45			0	2	1	1	3	16:45			16	75	22	78	153
05:00			0	0		17:00			17	21		
05:15			0	1		17:15			17	27		
05:30			0	0		17:30			25	27		
05:45			1	1	1	2	3	17:45			24	83	32	107	190
06:00			0	2		18:00			17	36		
06:15			3	1		18:15			23	29		
06:30			3	4		18:30			25	31		
06:45			6	12	1	8	20	18:45			18	83	30	126	209
07:00			3	3		19:00			17	32		
07:15			4	1		19:15			24	30		
07:30			5	5		19:30			12	25		
07:45			10	22	3	12	34	19:45			13	66	21	108	174
08:00			9	7		20:00			9	17		
08:15			6	4		20:15			12	14		
08:30			8	15		20:30			7	18		
08:45			9	32	7	33	65	20:45			15	43	16	65	108
09:00			8	13		21:00			8	13		
09:15			11	9		21:15			7	21		
09:30			7	13		21:30			10	19		
09:45			9	35	13	48	83	21:45			8	33	17	70	103
10:00			10	17		22:00			8	24		
10:15			8	21		22:15			9	16		
10:30			11	17		22:30			6	15		
10:45			10	39	20	75	114	22:45			2	25	6	61	86
11:00			12	13		23:00			6	2		
11:15			13	29		23:15			4	4		
11:30			10	18		23:30			3	2		
11:45			15	50	24	84	134	23:45			2	15	3	11	26
Total Vol.			207		278	**485**					633		962	**1595**

	NB	SB	EB	WB	Total
Daily Totals :	**0**	**0**	**840**	**1,240**	**2,080**

	AM			PM		
Split %	42.7%	57.3%	**23.3%**	39.7%	60.3%	**76.7%**
AM				**PM**		
Peak Hr.	11:45	11:45	**11:45**	**Peak Hr.**	17:30	17:45	**17:45**
Volume	63	91	**154**	**Volume**	89	128	**217**
P.H.F.	0.750	0.813	**0.875**	**P.H.F.**	0.890	0.889	**0.969**
7 - 9 Vol.	54	45	**99**	**4 - 6 Vol.**	158	185	**343**
Peak Hr.	07:45	08:00	**08:00**	**Peak Hr.**	17:00	17:00	**17:00**
Volume	33	33	**65**	**Volume**	83	107	**190**
P.H.F.	0.825	0.550	**0.707**	**P.H.F.**	0.830	0.836	**0.848**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-101

Location: Twiggs St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB	WB		PM Period	NB	SB	EB	WB	
00:00			4	2		12:00			22	25	
00:15			1	2		12:15			21	32	
00:30			2	1		12:30			21	39	
00:45			2	1		12:45			23	38	
			9	6	15				87	134	221
01:00			1	0		13:00			19	33	
01:15			1	0		13:15			23	28	
01:30			4	0		13:30			15	42	
01:45			1	0		13:45			27	41	
			7	0	7				84	144	228
02:00			0	0		14:00			23	26	
02:15			0	0		14:15			11	28	
02:30			1	0		14:30			16	26	
02:45			0	1		14:45			16	33	
			1	1	2				66	113	179
03:00			0	1		15:00			20	31	
03:15			1	1		15:15			22	29	
03:30			3	0		15:30			29	28	
03:45			2	0		15:45			26	36	
			6	2	8				97	124	221
04:00			1	1		16:00			12	24	
04:15			0	0		16:15			19	24	
04:30			1	1		16:30			22	30	
04:45			1	0		16:45			26	28	
			3	2	5				79	106	185
05:00			2	4		17:00			38	23	
05:15			1	0		17:15			33	19	
05:30			1	1		17:30			37	12	
05:45			5	4		17:45			22	21	
			9	9	18				130	75	205
06:00			4	1		18:00			37	19	
06:15			6	1		18:15			22	25	
06:30			7	3		18:30			31	21	
06:45			6	4		18:45			36	16	
			23	9	32				126	81	207
07:00			8	4		19:00			26	18	
07:15			6	8		19:15			24	16	
07:30			7	11		19:30			18	17	
07:45			16	7		19:45			27	16	
			37	30	67				95	67	162
08:00			12	9		20:00			25	14	
08:15			11	11		20:15			22	16	
08:30			27	12		20:30			19	14	
08:45			20	13		20:45			22	13	
			70	45	115				88	57	145
09:00			15	11		21:00			23	26	
09:15			23	10		21:15			10	10	
09:30			11	10		21:30			13	2	
09:45			22	15		21:45			15	7	
			71	46	117				61	45	106
10:00			12	11		22:00			7	14	
10:15			18	18		22:15			15	5	
10:30			17	15		22:30			13	7	
10:45			34	13		22:45			7	2	
			81	57	138				42	28	70
11:00			22	18		23:00			6	3	
11:15			35	14		23:15			9	2	
11:30			31	15		23:30			5	6	
11:45			31	9		23:45			4	4	
			119	56	175				24	15	39
Total Vol.			436	263	**699**				979	989	**1968**

Daily Totals

NB	SB	EB	WB	Combined
		1415	1252	**2667**

	AM			PM		
Split %	62.4%	37.6%	**26.2%**	49.7%	50.3%	**73.8%**
Peak Hour	10:45	11:45	**11:45**	16:45	13:00	**13:00**
Volume	122	105	**200**	134	144	**228**
P.H.F.	0.87	0.67	**0.83**	0.88	0.86	**0.84**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-102

Location: Harney St. btwn. Congress St. & San Diego Ave.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			1		2			12:00			7		10		
00:15			1		2			12:15			23		17		
00:30			8		2			12:30			17		8		
00:45			1	11	2	8	19	12:45			16	63	10	45	108
01:00			0		2			13:00			13		14		
01:15			3		0			13:15			5		6		
01:30			0		0			13:30			8		13		
01:45			0	3	0	2	5	13:45			14	40	9	42	82
02:00			0		0			14:00			11		8		
02:15			0		0			14:15			8		11		
02:30			0		0			14:30			13		11		
02:45			0	0	0	0		14:45			18	50	13	43	93
03:00			1		2			15:00			7		13		
03:15			0		2			15:15			10		13		
03:30			0		0			15:30			17		15		
03:45			0	1	0	4	5	15:45			21	55	13	54	109
04:00			0		0			16:00			16		16		
04:15			0		0			16:15			12		14		
04:30			0		1			16:30			13		11		
04:45			1	1	1	2	3	16:45			7	48	3	44	92
05:00			1		0			17:00			19		19		
05:15			2		2			17:15			22		19		
05:30			0		1			17:30			18		16		
05:45			1	4	4	7	11	17:45			5	64	14	68	132
06:00			2		3			18:00			21		14		
06:15			0		4			18:15			10		11		
06:30			1		8			18:30			28		21		
06:45			2	5	7	22	27	18:45			17	76	15	61	137
07:00			1		3			19:00			23		17		
07:15			3		11			19:15			16		15		
07:30			4		6			19:30			18		16		
07:45			4	12	11	31	43	19:45			22	79	15	63	142
08:00			4		11			20:00			12		13		
08:15			3		6			20:15			7		5		
08:30			4		11			20:30			9		3		
08:45			8	19	16	44	63	20:45			8	36	7	28	64
09:00			4		6			21:00			8		7		
09:15			3		3			21:15			13		12		
09:30			9		7			21:30			12		12		
09:45			6	22	2	18	40	21:45			13	46	9	40	86
10:00			10		6			22:00			5		10		
10:15			19		13			22:15			9		7		
10:30			7		3			22:30			8		7		
10:45			5	41	10	32	73	22:45			7	29	2	26	55
11:00			14		11			23:00			10		7		
11:15			7		9			23:15			7		4		
11:30			13		10			23:30			4		0		
11:45			16	50	14	44	94	23:45			3	24	2	13	37
Total Vol.				169		214	**383**					610		527	**1137**

Daily Totals

NB	SB	EB	WB	Combined
		779	741	**1520**

	AM			PM		
Split %	44.1%	55.9%	**25.2%**	53.6%	46.4%	**74.8%**
Peak Hour	11:45	11:30	**11:45**	18:30	17:00	**18:30**
Volume	63	51	**112**	84	68	**152**
P.H.F.	0.68	0.75	**0.70**	0.75	0.89	**0.78**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-103

Location: Harney St. btwn. San Diego Ave. & Juan St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			3		3			12:00			18		15		
00:15			1		3			12:15			34		13		
00:30			0		3			12:30			21		26		
00:45			2	6	1	10	16	12:45			23	96	14	68	164
01:00			1		1			13:00			15		27		
01:15			0		2			13:15			20		21		
01:30			0		0			13:30			15		32		
01:45			0	1	0	3	4	13:45			13	63	33	113	176
02:00			1		1			14:00			32		18		
02:15			0		1			14:15			27		18		
02:30			0		1			14:30			8		29		
02:45			0	1	0	3	4	14:45			19	86	44	109	195
03:00			0		2			15:00			18		27		
03:15			1		0			15:15			12		37		
03:30			0		1			15:30			12		30		
03:45			0	1	1	4	5	15:45			22	64	35	129	193
04:00			0		0			16:00			18		28		
04:15			0		1			16:15			24		22		
04:30			1		1			16:30			22		21		
04:45			2	3	5	7	10	16:45			30	94	25	96	190
05:00			0		0			17:00			19		23		
05:15			0		3			17:15			24		21		
05:30			1		4			17:30			29		18		
05:45			0	1	7	14	15	17:45			20	92	22	84	176
06:00			0		8			18:00			29		11		
06:15			1		10			18:15			24		12		
06:30			3		11			18:30			24		14		
06:45			1	5	17	46	51	18:45			25	102	11	48	150
07:00			4		7			19:00			17		28		
07:15			6		18			19:15			18		17		
07:30			6		19			19:30			18		19		
07:45			6	22	30	74	96	19:45			11	64	24	88	152
08:00			7		24			20:00			10		22		
08:15			13		19			20:15			7		18		
08:30			8		19			20:30			2		17		
08:45			8	36	28	90	126	20:45			10	29	11	68	97
09:00			5		22			21:00			9		18		
09:15			4		24			21:15			8		11		
09:30			5		20			21:30			7		2		
09:45			9	23	12	78	101	21:45			3	27	7	38	65
10:00			6		19			22:00			6		11		
10:15			16		22			22:15			3		10		
10:30			1		37			22:30			5		9		
10:45			12	35	23	101	136	22:45			2	16	4	34	50
11:00			25		18			23:00			2		6		
11:15			12		22			23:15			0		3		
11:30			21		18			23:30			3		2		
11:45			24	82	22	80	162	23:45			2	7	2	13	20
Total Vol.				216		510	**726**					740		888	**1628**

Daily Totals

NB	SB	EB	WB	Combined
		956	1398	**2354**

	AM			PM		
Split %	29.8%	70.2%	**30.8%**	45.5%	54.5%	**69.2%**
Peak Hour	11:30	10:00	**11:45**	16:45	14:45	**14:45**
Volume	97	101	**173**	102	138	**199**
P.H.F.	0.71	0.68	**0.92**	0.85	0.78	**0.79**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Thursday, May 26, 2011 City: San Diego Project #: 11-1080-104

Location: Old Town Ave. btwn. I-5 SB Ramps & I-5 NB Ramps

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			12		14			12:00			147		97		
00:15			4		4			12:15			109		64		
00:30			9		9			12:30			131		102		
00:45			10	35	16	43	78	12:45			133	520	112	375	895
01:00			7		4			13:00			129		113		
01:15			6		4			13:15			135		102		
01:30			6		1			13:30			118		105		
01:45			4	23	1	10	33	13:45			117	499	71	391	890
02:00			9		5			14:00			120		97		
02:15			8		4			14:15			142		98		
02:30			1		2			14:30			119		99		
02:45			4	22	2	13	35	14:45			123	504	91	385	889
03:00			8		4			15:00			162		95		
03:15			3		8			15:15			140		111		
03:30			4		4			15:30			153		122		
03:45			3	18	4	20	38	15:45			162	617	107	435	1052
04:00			7		7			16:00			168		144		
04:15			2		6			16:15			149		101		
04:30			7		7			16:30			179		106		
04:45			8	24	12	32	56	16:45			169	665	102	453	1118
05:00			10		10			17:00			158		121		
05:15			10		14			17:15			180		74		
05:30			9		6			17:30			145		92		
05:45			27	56	8	38	94	17:45			153	636	78	365	1001
06:00			25		22			18:00			132		84		
06:15			20		24			18:15			122		71		
06:30			34		10			18:30			106		50		
06:45			44	123	38	94	217	18:45			104	464	56	261	725
07:00			51		30			19:00			100		49		
07:15			71		26			19:15			83		59		
07:30			83		50			19:30			85		54		
07:45			91	296	33	139	435	19:45			66	334	58	220	554
08:00			88		44			20:00			69		54		
08:15			90		40			20:15			53		39		
08:30			76		48			20:30			53		41		
08:45			91	345	52	184	529	20:45			48	223	51	185	408
09:00			84		58			21:00			44		50		
09:15			91		63			21:15			47		52		
09:30			105		47			21:30			39		38		
09:45			99	379	63	231	610	21:45			33	163	35	175	338
10:00			89		67			22:00			37		39		
10:15			83		56			22:15			30		27		
10:30			120		60			22:30			24		35		
10:45			118	410	53	236	646	22:45			27	118	21	122	240
11:00			115		53			23:00			25		15		
11:15			123		56			23:15			18		25		
11:30			113		69			23:30			18		30		
11:45			113	464	75	253	717	23:45			9	70	8	78	148
Total Vol.				2195		1293	**3488**					4813		3445	**8258**

Daily Totals

NB	SB	EB	WB	Combined
		7008	4738	**11746**

	AM			PM		
Split %	62.9%	37.1%	**29.7%**	58.3%	41.7%	**70.3%**
Peak Hour	11:45	11:45	**11:45**	16:30	15:15	**16:00**
Volume	500	338	**838**	686	484	**1118**
P.H.F.	0.85	0.83	**0.86**	0.95	0.84	**0.90**

Field Data Services of Arizona, Inc.
(520) 316-6745

Volumes for: Wednesday, May 25, 2011 City: San Diego Project #: 11-1080-105

Location: Old Town Ave. btwn. I-5 NB Ramps & Jefferson St.

AM Period	NB	SB	EB		WB			PM Period	NB	SB	EB		WB		
00:00			8		18			12:00			56		37		
00:15			4		11			12:15			36		61		
00:30			8		14			12:30			56		29		
00:45			4	24	9	52	76	12:45			44	192	51	178	370
01:00			7		8			13:00			60		35		
01:15			5		9			13:15			58		34		
01:30			1		3			13:30			32		43		
01:45			1	14	4	24	38	13:45			58	208	33	145	353
02:00			2		4			14:00			47		36		
02:15			0		2			14:15			38		41		
02:30			1		1			14:30			46		42		
02:45			1	4	0	7	11	14:45			48	179	46	165	344
03:00			3		1			15:00			80		34		
03:15			0		0			15:15			84		37		
03:30			1		3			15:30			56		55		
03:45			1	5	0	4	9	15:45			52	272	53	179	451
04:00			2		3			16:00			55		53		
04:15			3		2			16:15			62		47		
04:30			2		5			16:30			47		58		
04:45			1	8	5	15	23	16:45			63	227	61	219	446
05:00			0		9			17:00			49		57		
05:15			2		7			17:15			39		61		
05:30			1		11			17:30			54		41		
05:45			1	4	16	43	47	17:45			65	207	50	209	416
06:00			6		12			18:00			41		67		
06:15			16		23			18:15			31		72		
06:30			16		27			18:30			39		42		
06:45			17	55	27	89	144	18:45			60	171	38	219	390
07:00			19		32			19:00			33		56		
07:15			33		42			19:15			30		58		
07:30			27		63			19:30			32		55		
07:45			42	121	63	200	321	19:45			28	123	63	232	355
08:00			51		47			20:00			24		49		
08:15			45		38			20:15			21		48		
08:30			45		40			20:30			24		58		
08:45			54	195	43	168	363	20:45			21	90	55	210	300
09:00			45		28			21:00			14		64		
09:15			41		33			21:15			19		58		
09:30			43		46			21:30			22		58		
09:45			75	204	42	149	353	21:45			20	75	43	223	298
10:00			43		38			22:00			21		36		
10:15			61		31			22:15			14		28		
10:30			43		38			22:30			8		27		
10:45			66	213	34	141	354	22:45			11	54	21	112	166
11:00			52		40			23:00			10		28		
11:15			58		38			23:15			8		12		
11:30			56		41			23:30			5		19		
11:45			70	236	45	164	400	23:45			3	26	11	70	96
Total Vol.				1083		1056	**2139**					1824		2161	**3985**

	Daily Totals				
	NB	SB	EB	WB	**Combined**
			2907	3217	**6124**

	AM			**PM**		
Split %	50.6%	49.4%	**34.9%**	45.8%	54.2%	**65.1%**
Peak Hour	11:15	07:15	**11:30**	15:00	16:30	**15:00**
Volume	240	215	**402**	272	237	**451**
P.H.F.	0.86	0.85	**0.87**	0.81	0.97	**0.93**

Appendix C
Peak Hour Arterial Analysis Worksheets – Existing Conditions

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	11.6	84.3	0.81	34.5	B
Total	II		72.7	11.6	84.3	0.81	34.5	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.1	34.5	0.17	17.6	D
Rosecrans St.	II	40	72.7	51.1	123.8	0.81	23.5	C
Total	II		92.1	66.2	158.3	0.98	22.2	C

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	31.3	97.6	0.55	20.4	C
Total	III		66.3	31.3	97.6	0.55	20.4	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	57.1	88.7	0.25	10.1	E
Total	III		31.6	57.1	88.7	0.25	10.1	E

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	46.2	106.0	0.50	16.9	D
East Dr	III	35	22.9	5.0	27.9	0.19	24.6	B
Kemper Street	III	35	39.9	21.5	61.4	0.33	19.5	C
Sports Arena	III	35	34.5	47.0	81.5	0.29	12.7	E
Total	III		157.1	119.7	276.8	1.31	17.0	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	21.7	56.2	0.29	18.4	C
East Drive	III	35	39.9	4.7	44.6	0.33	26.8	B
Rosecrans St.	III	35	22.9	43.2	66.1	0.19	10.4	E
Barnett Ave	III	35	59.8	25.2	85.0	0.50	21.1	C
Total	III		157.1	94.8	251.9	1.31	18.7	C

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	13.0	30.6	0.08	9.4	D
San Diego Ave	IV	25	25.0	24.3	49.3	0.11	8.3	E
Total	IV		42.6	37.3	79.9	0.19	8.7	E

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.6	26.3	0.07	9.7	D
Moore St	IV	25	25.0	5.9	30.9	0.11	13.2	C
Total	IV		43.7	13.5	57.2	0.18	11.6	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	12.4	29.5	0.13	16.3	D
Nimitz Blvd	III	35	22.4	42.3	64.7	0.19	10.4	E
Laning Rd	III	35	34.5	8.8	43.3	0.29	23.9	C
Barnett Ave	III	35	97.9	42.2	140.1	0.95	24.5	B
Midway Dr	III	35	58.8	23.7	82.5	0.49	21.4	C
Rosecrans St	III	35	16.7	17.3	34.0	0.13	13.8	E
Total	III		247.4	146.7	394.1	2.18	19.9	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	32.4	49.1	0.13	9.5	F
Lytton St	III	35	58.8	48.2	107.0	0.49	16.5	D
Laning Rd	III	35	97.9	7.9	105.8	0.95	32.4	A
Lowell St	III	35	34.5	35.2	69.7	0.29	14.8	D
Hugo St	III	35	22.4	5.5	27.9	0.19	24.1	B
Total	III		230.3	129.2	359.5	2.05	20.5	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	11.1	25.3	0.05	7.6	E
Total	IV		14.2	11.1	25.3	0.05	7.6	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	5.7	21.8	0.06	10.0	D
Total	IV		16.1	5.7	21.8	0.06	10.0	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	9.8	25.5	0.10	13.4	C
Juan St	IV	35	11.2	11.0	22.2	0.07	11.0	D
	IV	35	18.3	6.1	24.4	0.13	19.3	B
Total	IV		45.2	26.9	72.1	0.29	14.7	C

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	14.6	32.3	0.11	11.9	D
	IV	35	18.3	9.0	27.3	0.13	17.2	C
Congress St	IV	35	11.2	7.1	18.3	0.07	13.4	C
Pacific Highway	IV	35	15.7	20.1	35.8	0.10	9.6	D
Total	IV		62.9	50.8	113.7	0.40	12.7	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	9.8	45.9	0.30	23.6	C
Total	III		36.1	9.8	45.9	0.30	23.6	C

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	13.9	56.1	0.35	22.6	C
Sports Arena	III	35	36.1	46.0	82.1	0.30	13.2	E
Total	III		78.3	59.9	138.2	0.65	17.0	D

Arterial Level of Service: EB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
	II	40	72.7	21.7	94.4	0.81	30.8	B
Total	II		72.7	21.7	94.4	0.81	30.8	B

Arterial Level of Service: NB Barnett Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	II	40	19.4	15.9	35.3	0.17	17.2	D
Rosecrans St.	II	40	72.7	71.5	144.2	0.81	20.2	D
Total	II		92.1	87.4	179.5	0.98	19.6	D

Arterial Level of Service: SB Hancock St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Washington St	III	30	66.3	16.7	83.0	0.55	24.0	C
Total	III		66.3	16.7	83.0	0.55	24.0	C

Arterial Level of Service: NB Kurtz St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St	III	30	31.6	69.2	100.8	0.25	8.9	F
Total	III		31.6	69.2	100.8	0.25	8.9	F

Arterial Level of Service: NW Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Rosecrans St.	III	35	59.8	71.5	131.3	0.50	13.7	E
East Dr	III	35	22.9	12.7	35.6	0.19	19.3	C
Kemper Street	III	35	39.9	28.0	67.9	0.33	17.6	D
Sport Arena Blvd	III	35	34.5	42.8	77.3	0.29	13.4	E
Total	III		157.1	155.0	312.1	1.31	15.1	D

Arterial Level of Service: SB Midway Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Kemper St	III	35	34.5	16.0	50.5	0.29	20.5	C
East Drive	III	35	39.9	14.3	54.2	0.33	22.1	C
Rosecrans St.	III	35	22.9	62.4	85.3	0.19	8.0	F
Barnett Ave	III	35	59.8	32.4	92.2	0.50	19.5	C
Total	III		157.1	125.1	282.2	1.31	16.7	D

Arterial Level of Service: EB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Moore St	IV	25	17.6	81.1	98.7	0.08	2.9	F
San Diego Ave	IV	25	25.0	13.9	38.9	0.11	10.5	D
Total	IV		42.6	95.0	137.6	0.19	5.1	F

Arterial Level of Service: WB Old Town St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
San Diego Ave	IV	25	18.7	7.9	26.6	0.07	9.6	D
Moore St	IV	25	25.0	5.3	30.3	0.11	13.5	C
Total	IV		43.7	13.2	56.9	0.18	11.7	D

Arterial Level of Service: EB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hugo St	III	35	17.1	15.4	32.5	0.13	14.8	D
Nimitz Blvd	III	35	22.4	46.5	68.9	0.19	9.8	F
Laning Rd	III	35	34.5	6.1	40.6	0.29	25.5	B
Barnett Ave	III	35	97.9	37.7	135.6	0.95	25.3	B
Midway Dr	III	35	58.8	20.1	78.9	0.49	22.3	C
Rosecrans St	III	35	16.7	30.8	47.5	0.13	9.9	F
Total	III		247.4	156.6	404.0	2.18	19.4	C

Arterial Level of Service: WB Rosecrans St.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Midway Dr	III	35	16.7	45.1	61.8	0.13	7.6	F
Lytton St	III	35	58.8	27.4	86.2	0.49	20.5	C
Laning Rd	III	35	97.9	5.7	103.6	0.95	33.1	A
Lowell St	III	35	34.5	62.9	97.4	0.29	10.6	E
Hugo St	III	35	22.4	4.1	26.5	0.19	25.4	B
Total	III		230.3	145.2	375.5	2.05	19.6	C

Arterial Level of Service: NB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	14.2	8.6	22.8	0.05	8.5	E
Total	IV		14.2	8.6	22.8	0.05	8.5	E

Arterial Level of Service: SB San Diego Ave

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Old Town St	IV	25	16.1	4.0	20.1	0.06	10.9	D
Total	IV		16.1	4.0	20.1	0.06	10.9	D

Arterial Level of Service: EB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Congress St	IV	35	15.7	12.1	27.8	0.10	12.3	D
Juan St	IV	35	11.2	17.5	28.7	0.07	8.5	E
	IV	35	18.3	7.9	26.2	0.13	17.9	C
Total	IV		45.2	37.5	82.7	0.29	12.8	D

Arterial Level of Service: WB Taylor St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Morena Blvd	IV	35	17.7	15.7	33.4	0.11	11.6	D
	IV	35	18.3	8.7	27.0	0.13	17.4	C
Congress St	IV	35	11.2	6.8	18.0	0.07	13.6	C
Pacific Highway	IV	35	15.7	24.8	40.5	0.10	8.5	E
Total	IV		62.9	56.0	118.9	0.40	12.1	D

Arterial Level of Service: NB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	36.1	34.0	70.1	0.30	15.5	D
Total	III		36.1	34.0	70.1	0.30	15.5	D

Arterial Level of Service: SB W Mission Bay Dr

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-8 WB Off Ramp	III	35	42.2	70.4	112.6	0.35	11.3	E
W Point Loma Blvd	III	35	36.1	65.8	101.9	0.30	10.6	E
Total	III		78.3	136.2	214.5	0.65	11.0	E

Appendix D
Peak Hour Intersection Counts

Vehicle Intersection Counts

(1)

10

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

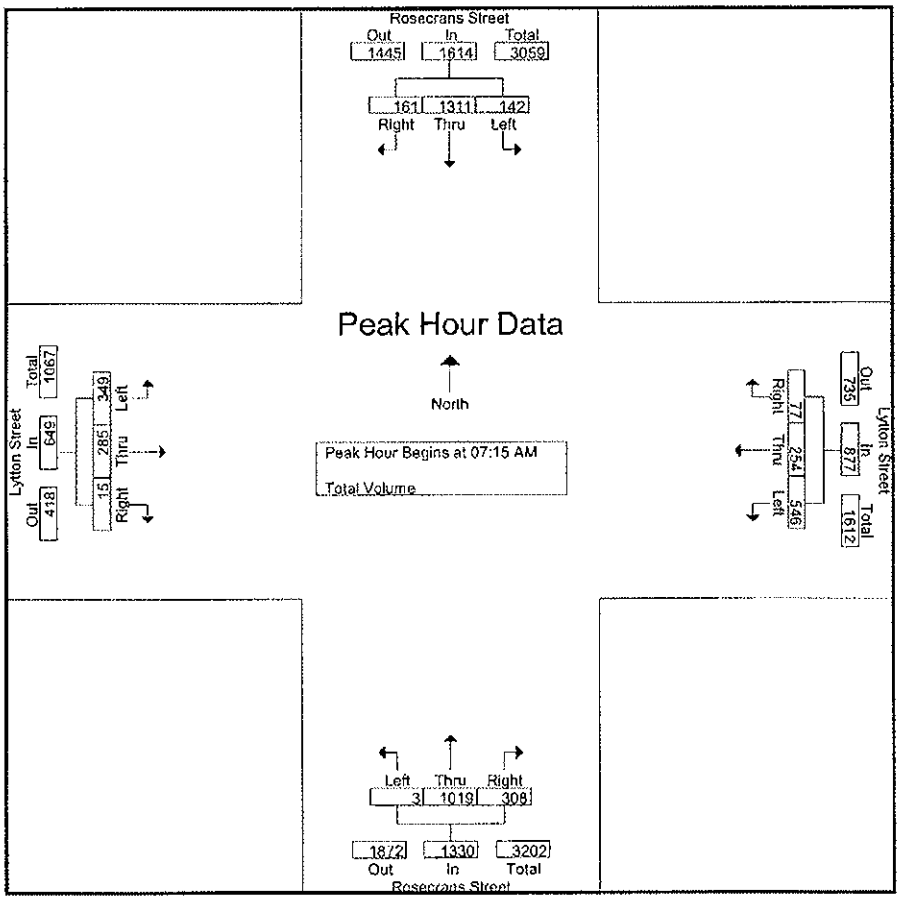
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
Total	22	298	64	384	163	61	5	229	1	191	21	213	62	54	3	119	945
07:00 AM	25	334	78	437	151	94	4	249	2	160	38	200	51	55	12	118	1004
07:15 AM	35	363	54	452	145	71	9	225	0	263	62	325	100	80	3	183	1185
07:30 AM	36	262	32	330	147	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	38	327	37	402	135	70	27	232	1	247	85	333	101	88	6	195	1162
Total	134	1286	201	1621	578	295	60	933	3	901	259	1163	336	284	23	643	4360
08:00 AM	33	359	38	430	119	53	21	193	2	278	87	367	64	56	4	124	1114
08:15 AM	35	349	60	444	103	72	25	200	3	285	77	365	55	59	1	115	1124
08:30 AM	20	269	46	335	96	52	20	168	1	321	88	410	69	49	1	119	1032
Grand Total	244	2561	409	3214	1059	533	131	1723	10	1976	532	2518	586	502	32	1120	8575
Apprch %	7.6	79.7	12.7		61.5	30.9	7.6		0.4	78.5	21.1		52.3	44.8	2.9		
Total %	2.8	29.9	4.8	37.5	12.3	6.2	1.5	20.1	0.1	23	6.2	29.4	6.8	5.9	0.4	13.1	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	35	**363**	**54**	**452**	145	71	9	225	0	263	62	325	100	80	3	183	**1185**
07:30 AM	36	262	32	330	**147**	60	20	227	0	231	74	305	84	61	2	147	1009
07:45 AM	**38**	327	37	402	135	70	**27**	**232**	1	247	85	333	**101**	**88**	**6**	**195**	1162
08:00 AM	33	359	38	430	119	53	21	193	**2**	**278**	**87**	**367**	64	56	4	124	1114
Total Volume	142	1311	161	1614	546	254	77	877	3	1019	308	1330	349	285	15	649	4470
% App. Total	8.8	81.2	10		62.3	29	8.8		0.2	76.6	23.2		53.8	43.9	2.3		
PHF	.934	.903	.745	.893	.929	.894	.713	.945	.375	.916	.885	.906	.864	.810	.625	.832	.943

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYAM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:45 AM				07:15 AM			
+0 mins.	25	334	78	437	151	94	4	249	1	247	85	333	100	80	3	183
+15 mins.	35	363	54	452	145	71	9	225	2	278	87	367	84	61	2	147
+30 mins.	36	262	32	330	147	60	20	227	3	285	77	365	101	88	6	195
+45 mins.	38	327	37	402	135	70	27	232	1	321	88	410	64	56	4	124
Total Volume	134	1286	201	1621	578	295	60	933	7	1131	337	1475	349	285	15	649
% App. Total	8.3	79.3	12.4		62	31.6	6.4		0.5	76.7	22.8		53.8	43.9	2.3	
PHF	.882	.886	.644	.897	.957	.785	.556	.937	.583	.881	.957	.899	.864	.810	.625	.832

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

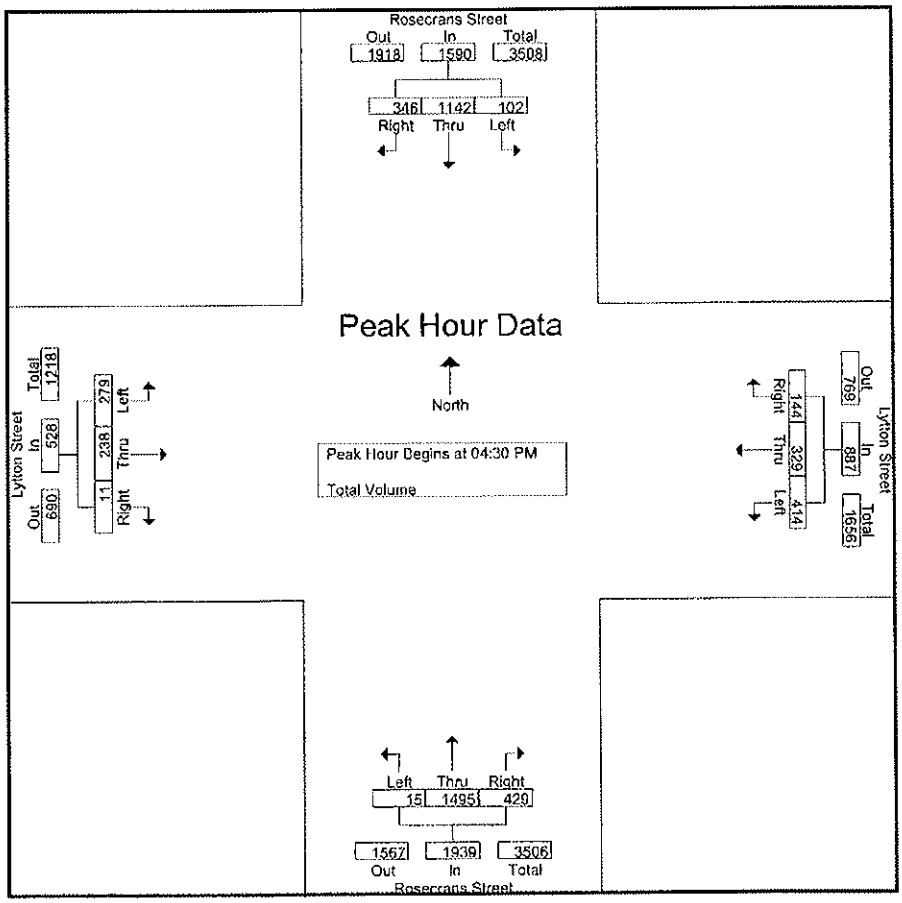
	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	250	40	312	108	107	17	232	3	405	98	506	60	81	2	143	1193
04:15 PM	14	255	52	321	116	71	24	211	5	376	107	488	54	43	3	100	1120
04:30 PM	29	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	313	73	409	107	77	42	226	3	347	98	448	70	61	1	132	1215
Total	88	1088	240	1416	424	335	122	881	15	1470	411	1896	249	238	8	495	4688
05:00 PM	22	273	71	366	103	81	37	221	1	433	119	553	76	62	3	141	1281
05:15 PM	28	286	127	441	111	91	26	228	7	373	104	484	68	62	5	135	1288
05:30 PM	14	314	84	412	71	76	28	175	3	362	69	434	55	60	2	117	1138
05:45 PM	11	307	42	360	85	82	25	192	2	307	69	378	50	42	6	98	1028
Total	75	1180	324	1579	370	330	116	816	13	1475	361	1849	249	226	16	491	4735
Grand Total	163	2268	564	2995	794	665	238	1697	28	2945	772	3745	498	464	24	986	9423
Apprch %	5.4	75.7	18.8		46.8	39.2	14		0.7	78.6	20.6		50.5	47.1	2.4		
Total %	1.7	24.1	6	31.8	8.4	7.1	2.5	18	0.3	31.3	8.2	39.7	5.3	4.9	0.3	10.5	

	Rosecrans Street Southbound				Lytton Street Westbound				Rosecrans Street Northbound				Lytton Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**29**	270	75	374	93	80	39	212	4	342	108	454	65	53	2	120	1160
04:45 PM	23	**313**	73	409	107	77	**42**	226	3	347	98	448	70	61	1	132	1215
05:00 PM	22	273	71	366	103	81	37	221	1	**433**	**119**	**553**	**76**	**62**	3	**141**	1281
05:15 PM	28	286	**127**	**441**	**111**	**91**	26	**228**	7	373	104	484	68	62	**5**	135	**1288**
Total Volume	102	1142	346	1590	414	329	144	887	15	1495	429	1939	279	238	11	528	4944
% App. Total	6.4	71.8	21.8		46.7	37.1	16.2		0.8	77.1	22.1		52.8	45.1	2.1		
PHF	.879	.912	.681	.901	.932	.904	.857	.973	.536	.863	.901	.877	.918	.960	.550	.936	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Lytton Street
Weather: Sunny

File Name : SDCROLYPM
Site Code : 9102003
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:15 PM				04:30 PM			
+0 mins.	23	313	73	409	93	80	39	212	5	376	107	488	65	53	2	120
+15 mins.	22	273	71	366	107	77	42	226	4	342	108	454	70	61	1	132
+30 mins.	28	286	127	441	103	81	37	221	3	347	98	448	76	62	3	141
+45 mins.	14	314	84	412	111	91	26	228	1	433	119	553	68	62	5	135
Total Volume	87	1186	355	1628	414	329	144	887	13	1498	432	1943	279	238	11	528
% App. Total	5.3	72.9	21.8		46.7	37.1	16.2		0.7	77.1	22.2		52.8	45.1	2.1	
PHF	.777	.944	.699	.923	.932	.904	.857	.973	.650	.865	.908	.878	.918	.960	.550	.936

(2A)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		66								108		182	356
7:15 AM		59								91		196	346
7:30 AM		70								97		242	409
7:45 AM		73								124		289	486
8:00 AM		83								109		256	448
8:15 AM		80								122		267	469
8:30 AM		108								83		205	396
8:45 AM		97								86		215	398

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	636	0	0	0	0	0	0	0	820	0	1852	3308
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	30.69%	0.00%	69.31%	

[illegible]													
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_001

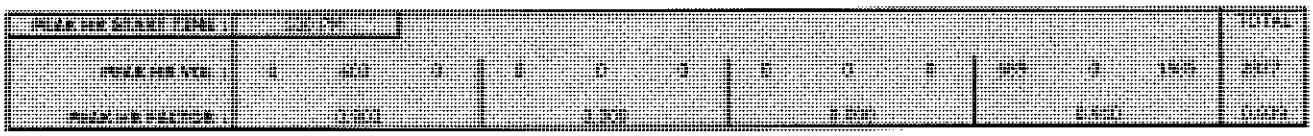
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	W Mission Bay Dr			W Mission Bay Dr			I-8 WB Off-Ramp			I-8 WB Off-Ramp			
	NORTHBOUND			SDUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		149								167		252	568
4:15 PM		150								176		297	623
4:30 PM		149								168		301	618
4:45 PM		144								157		363	664
5:00 PM		155								161		336	652
5:15 PM		141								180		445	766
5:30 PM		167								167		430	764
5:45 PM		140								181		374	695
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1195	0	0	0	0	0	0	0	1357	0	2798	5350
APPROACH %'s :	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	32.66%	0.00%	67.34%	



CONTROL :

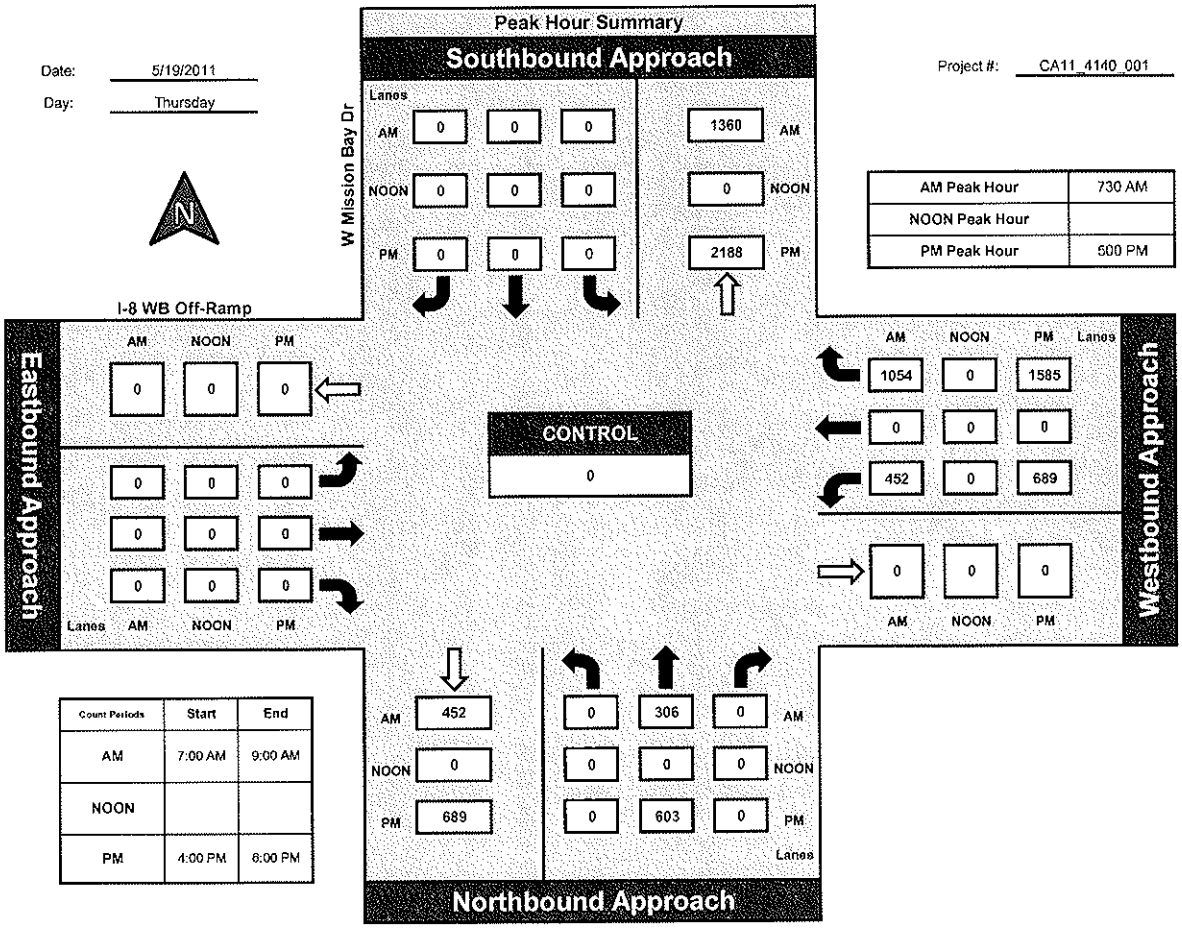
ITM Peak Hour Summary

Prepared by:

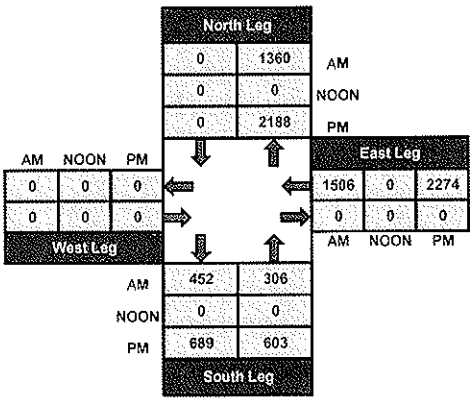
NDS

National Data & Surveying Services

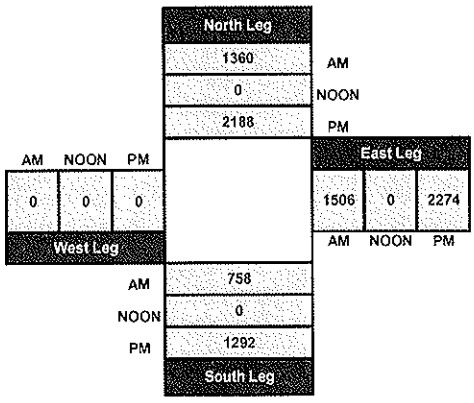
W Mission Bay Dr and I-8 WB Off-Ramp , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(2B)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	57	130		154	6			2				349
7:15 AM	0	67	130		163	2			3				365
7:30 AM	2	63	167		199	3			2				436
7:45 AM	2	80	166		211	9			3				471
8:00 AM	7	76	131		218	4			4				440
8:15 AM	1	86	163		225	1			4				480
8:30 AM	6	103	158		205	7			4				483
8:45 AM	3	101	145		220	0			4				473
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	633	1190	0	1595	32	0	0	26	0	0	0	3497
APPROACH %'s :	1.14%	34.33%	64.53%	0.00%	98.03%	1.97%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_002 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Blvd			Sport Arena Blvd			I-8 EB On-Ramp			I-8 EB On-Ramp			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	6	152	187		252	9			6				612
4:15 PM	1	146	184		274	10			5				620
4:30 PM	7	154	174		280	16			4				635
4:45 PM	3	152	147		277	13			3				595
5:00 PM	5	147	174		310	15			5				656
5:15 PM	5	145	126		278	16			8				578
5:30 PM	3	164	154		314	10			0				645
5:45 PM	4	141	161		306	13			7				632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	34	1201	1307	0	2291	102	0	0	38	0	0	0	4973
APPROACH %'s :	1.34%	47.25%	51.42%	0.00%	95.74%	4.26%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sport Arena Blvd and I-8 EB On-Ramp , City of San Diego

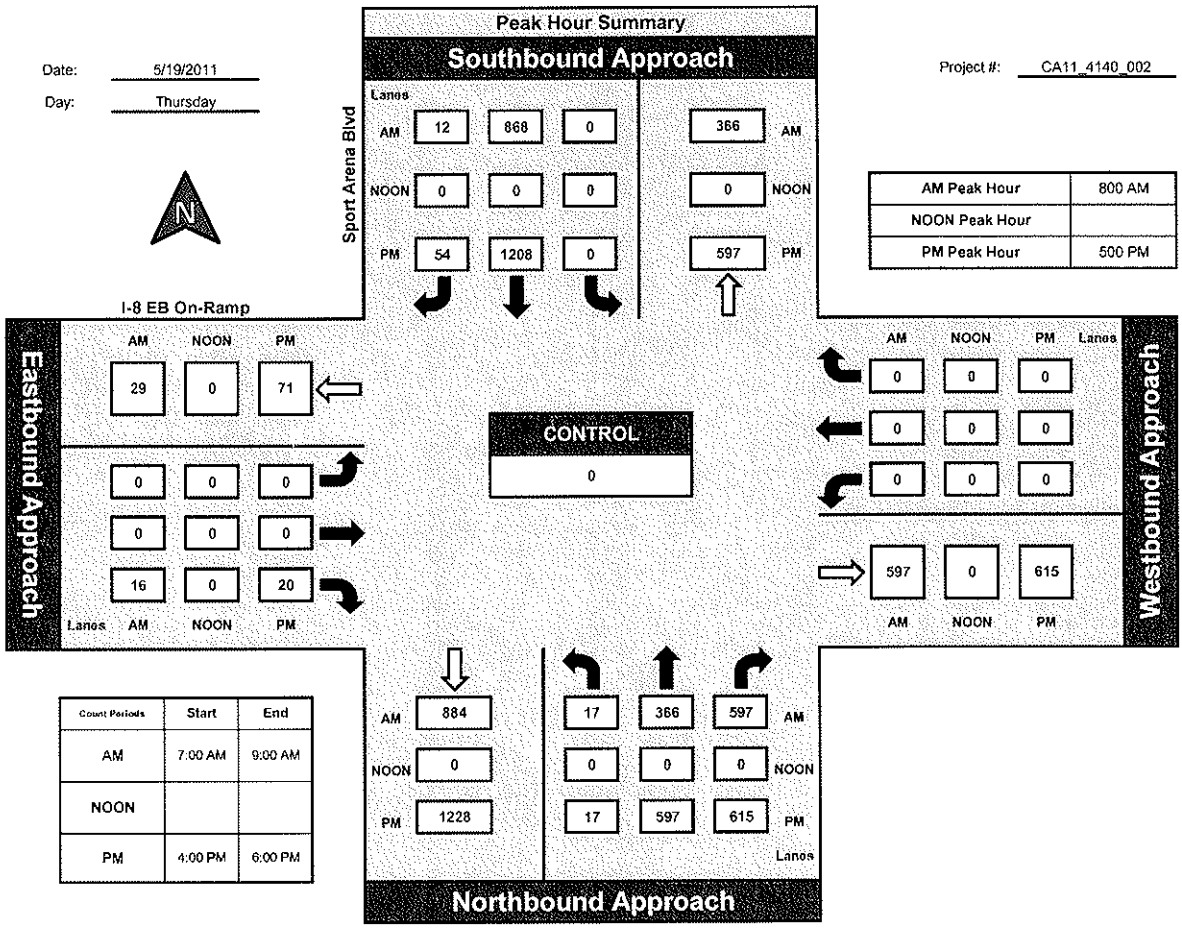
Date: 5/19/2011

Day: Thursday

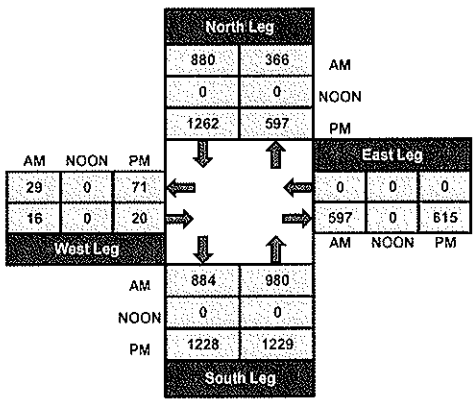
Project #: CA11_4140_002

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

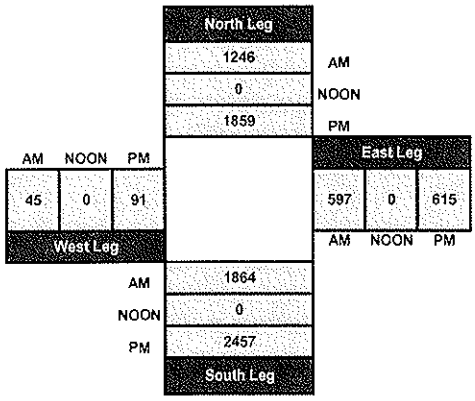
Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM



Total Ins & Outs



Total Volume Per Leg



③

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001

Day: THURSDAY

City: City of San Diego

Date: 6/9/2011

AM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
7:00 AM						3		137			157	2	299
7:15 AM						6		178			220	0	404
7:30 AM						4		164			250	3	421
7:45 AM						5		217			216	3	441
8:00 AM						8		204			214	1	427
8:15 AM						8		231			245	3	487
8:30 AM						13		190			226	3	432
8:45 AM						7		200			184	5	396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	54	0	1521	0	0	1712	20	3307
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	98.85%	1.15%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4167_001 **Day:** THURSDAY

City: City of San Diego **Date:** 6/9/2011

PM

NS/EW Streets:	West Mission Bay Dr			West Mission Bay Dr			Channel Way			Channel Way			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	0	0	0	0	1	0	0	3	0	0	3	0	
4:00 PM						29		266			334	6	635
4:15 PM						21		321			283	10	635
4:30 PM						35		287			319	5	646
4:45 PM						26		291			308	4	629
5:00 PM						36		324			306	9	675
5:15 PM						39		348			308	7	702
5:30 PM						17		334			246	3	600
5:45 PM						16		306			300	10	632
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	219	0	2477	0	0	2404	54	5154
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	97.80%	2.20%	
[illegible]													
[illegible]													
[illegible]													

CONTROL : 1-Way Stop (SB)

ITM Peak Hour Summary

Prepared by:

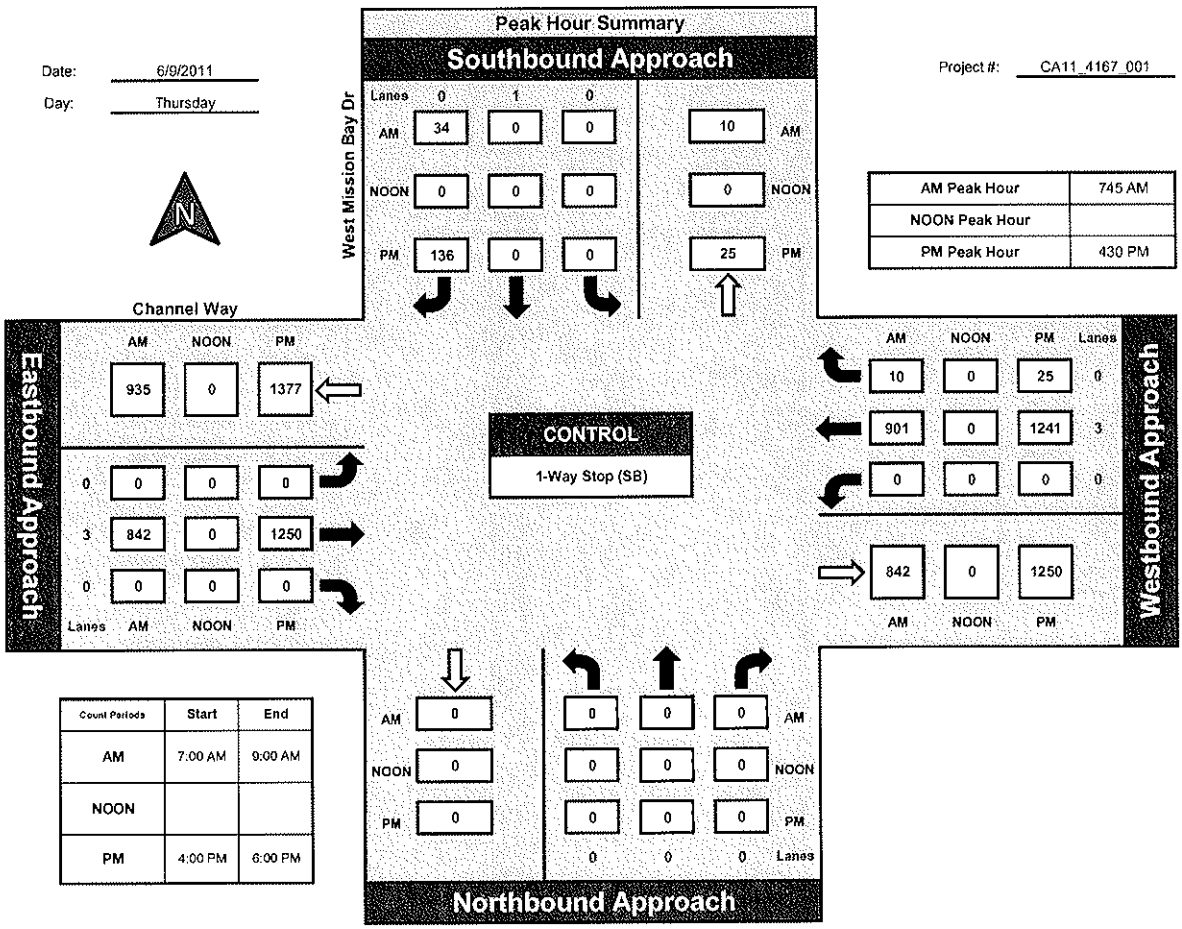
National Data & Surveying Services

West Mission Bay Dr and Channel Way , City of San Diego

Date: 6/9/2011

Day: Thursday

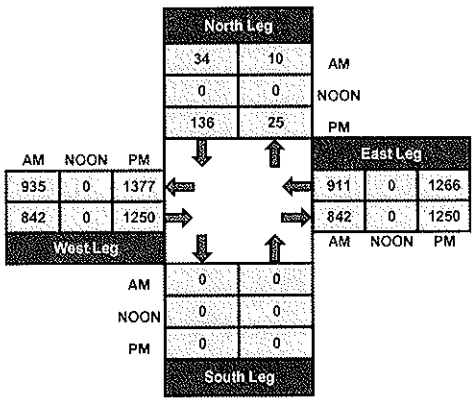
Project #: CA11_4167_001



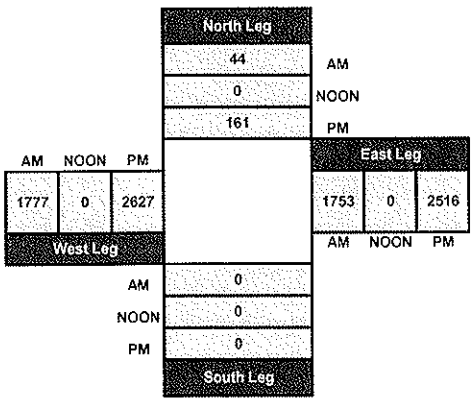
AM Peak Hour	7:45 AM
NOON Peak Hour	
PM Peak Hour	4:30 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(4)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	22	53	0	55	61	34	88	34	48	3	20	38	456
7:15 AM	29	62	1	61	81	49	135	50	57	2	20	45	592
7:30 AM	29	99	1	71	81	68	146	50	62	2	12	47	668
7:45 AM	29	67	2	79	97	54	121	73	62	3	23	47	657
8:00 AM	36	82	4	68	92	44	103	45	66	5	21	46	612
8:15 AM	25	70	8	79	118	36	98	42	51	3	36	52	618
8:30 AM	36	73	4	72	99	51	121	41	60	3	35	56	651
8:45 AM	52	102	3	79	119	40	90	49	67	5	33	69	708
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	258	608	23	564	748	376	902	384	473	26	200	400	4962
APPROACH %'s :	29.02%	68.39%	2.59%	33.41%	44.31%	22.27%	51.28%	21.83%	26.89%	4.15%	31.95%	63.90%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_003 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Sport Arena Blvd/W Point Loma Blvd			Sport Arena Blvd/W Point Loma Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	76	141	4	45	135	46	84	56	86	8	47	103	831
4:15 PM	90	140	2	61	142	54	73	54	76	10	62	97	861
4:30 PM	79	110	6	67	126	62	84	52	66	6	79	133	870
4:45 PM	73	107	4	65	136	52	85	60	59	7	74	98	820
5:00 PM	77	118	7	77	184	74	85	56	70	9	81	134	972
5:15 PM	94	114	3	62	113	65	92	46	75	11	88	104	867
5:30 PM	102	123	10	87	161	79	92	54	68	7	51	82	916
5:45 PM	86	81	10	86	136	76	81	50	74	12	83	90	865
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	677	934	46	550	1133	508	676	428	574	70	565	841	7002
APPROACH %'s :	40.86%	56.37%	2.78%	25.10%	51.71%	23.19%	40.29%	25.51%	34.21%	4.74%	38.28%	56.98%	
[illegible]													

CONTROL :

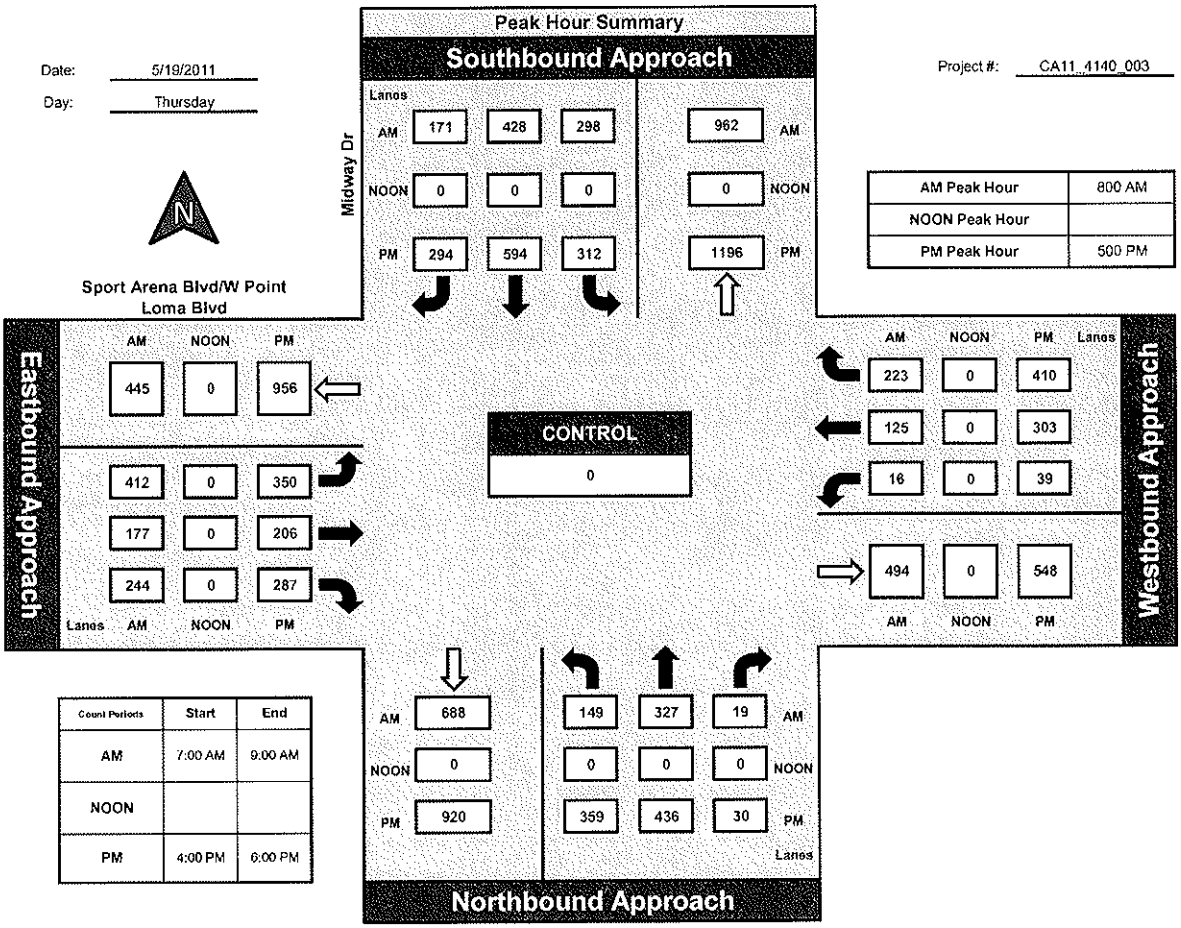
ITM Peak Hour Summary

Prepared by:

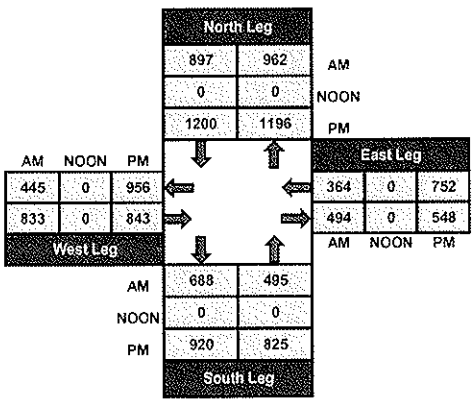
NDS

National Data & Surveying Services

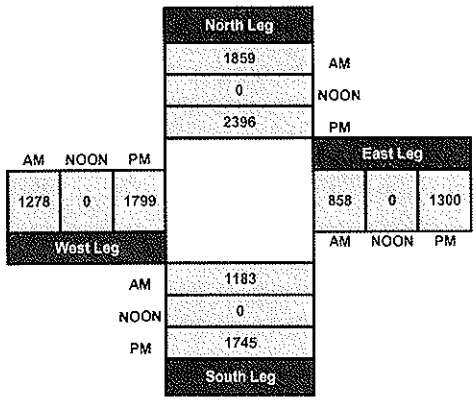
Midway Dr and Sport Arena Blvd/W Point Loma Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(5)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	18	23	3	9	3	3	57	13	9	56	10	224
7:15 AM	28	16	20	4	6	6	12	69	17	6	33	6	223
7:30 AM	26	20	28	5	9	5	18	86	16	11	56	9	289
7:45 AM	29	30	23	8	7	13	14	87	13	10	53	11	298
8:00 AM	19	22	14	6	11	12	16	91	21	21	68	7	308
8:15 AM	29	21	21	5	17	13	14	105	15	9	68	11	328
8:30 AM	24	30	34	8	10	11	18	103	20	18	84	6	366
8:45 AM	25	22	22	6	11	17	14	91	14	16	89	11	338
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	200	179	185	45	80	80	109	689	129	100	507	71	2374
APPROACH %'s :	35.46%	31.74%	32.80%	21.95%	39.02%	39.02%	11.76%	74.33%	13.92%	14.75%	74.78%	10.47%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_004 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	47	28	38	12	31	12	34	140	26	62	158	15	603
4:15 PM	26	38	35	9	34	19	32	118	24	70	140	16	561
4:30 PM	26	32	39	9	28	26	37	130	25	55	175	16	598
4:45 PM	41	29	47	15	42	10	23	91	53	49	138	11	549
5:00 PM	56	33	41	19	26	22	33	130	29	59	142	14	604
5:15 PM	47	31	31	9	35	28	34	151	27	59	174	17	643
5:30 PM	42	29	38	10	38	14	32	128	31	58	167	17	604
5:45 PM	49	15	28	9	39	18	29	122	29	47	146	9	540
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	334	235	297	92	273	149	254	1010	244	459	1240	115	4702
APPROACH %'s :	38.57%	27.14%	34.30%	17.90%	53.11%	28.99%	16.84%	66.98%	16.18%	25.30%	68.36%	6.34%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

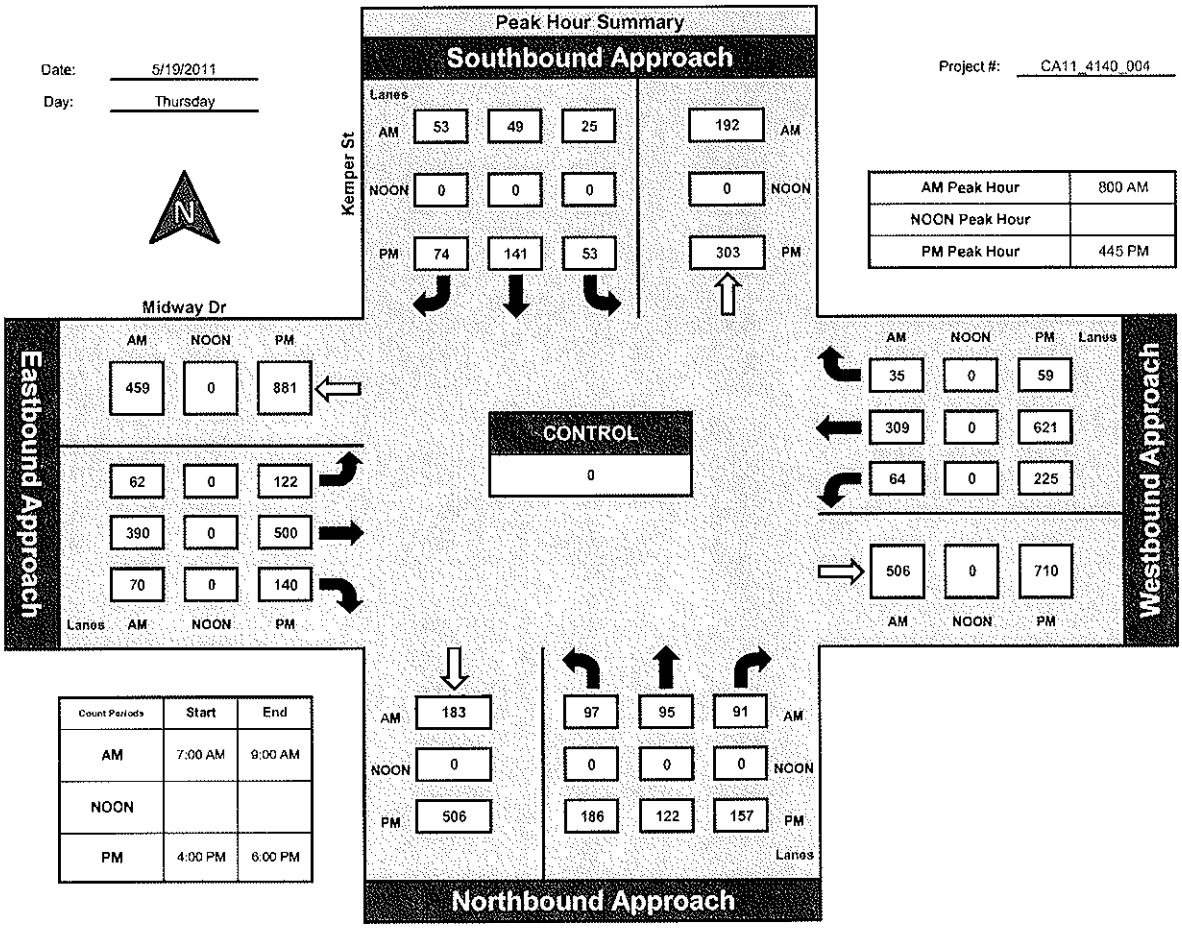
National Data & Surveying Services

Kemper St and Midway Dr , City of San Diego

Date: 5/19/2011

Day: Thursday

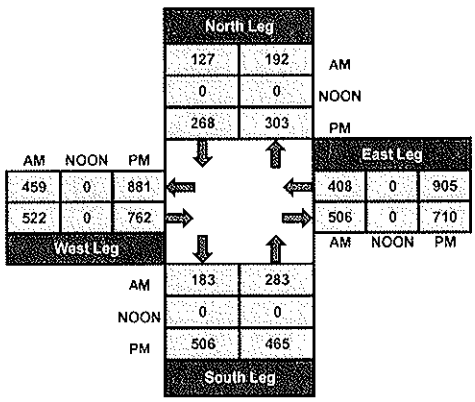
Project #: CA11_4140_004



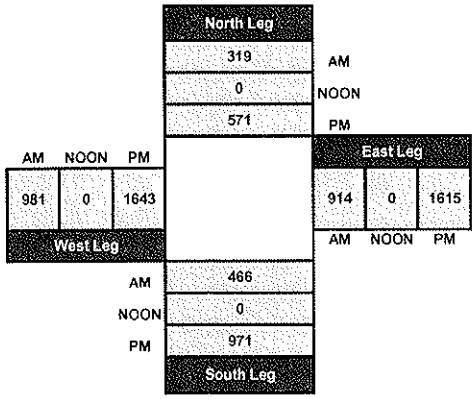
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(6)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	4	0	3	4	0	1	4	106	3	4	81	2	212
7:15 AM	1	2	1	1	0	2	3	102	2	2	90	4	210
7:30 AM	4	0	1	1	0	4	1	132	1	5	126	7	282
7:45 AM	3	0	1	1	1	4	1	114	2	7	132	11	277
8:00 AM	6	1	0	2	0	3	1	131	3	7	148	13	315
8:15 AM	7	1	3	4	1	3	4	139	5	6	158	12	343
8:30 AM	3	0	1	7	0	4	5	148	2	6	183	23	382
8:45 AM	3	1	1	3	1	5	6	119	0	6	140	20	305
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	31	5	11	23	3	26	25	991	18	43	1058	92	2326
APPROACH %'s :	65.96%	10.64%	23.40%	44.23%	5.77%	50.00%	2.42%	95.84%	1.74%	3.60%	88.68%	7.71%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_005 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Midway Dr			Midway Dr			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	3	4	1	12	1	10	19	203	1	8	273	39	574
4:15 PM	4	2	1	12	4	13	11	205	4	6	242	34	538
4:30 PM	7	4	2	20	2	20	14	221	4	8	267	35	604
4:45 PM	3	1	3	16	2	16	11	170	5	6	240	34	507
5:00 PM	6	0	4	11	0	10	7	217	2	7	284	44	592
5:15 PM	8	1	5	22	0	6	14	197	5	6	246	51	561
5:30 PM	1	3	2	14	3	19	23	219	4	5	278	27	598
5:45 PM	4	0	5	14	1	7	9	186	9	1	242	27	505
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	36	15	23	121	13	101	108	1618	34	47	2072	291	4479
APPROACH %'s :	48.65%	20.27%	31.08%	51.49%	5.53%	42.98%	6.14%	91.93%	1.93%	1.95%	85.98%	12.07%	



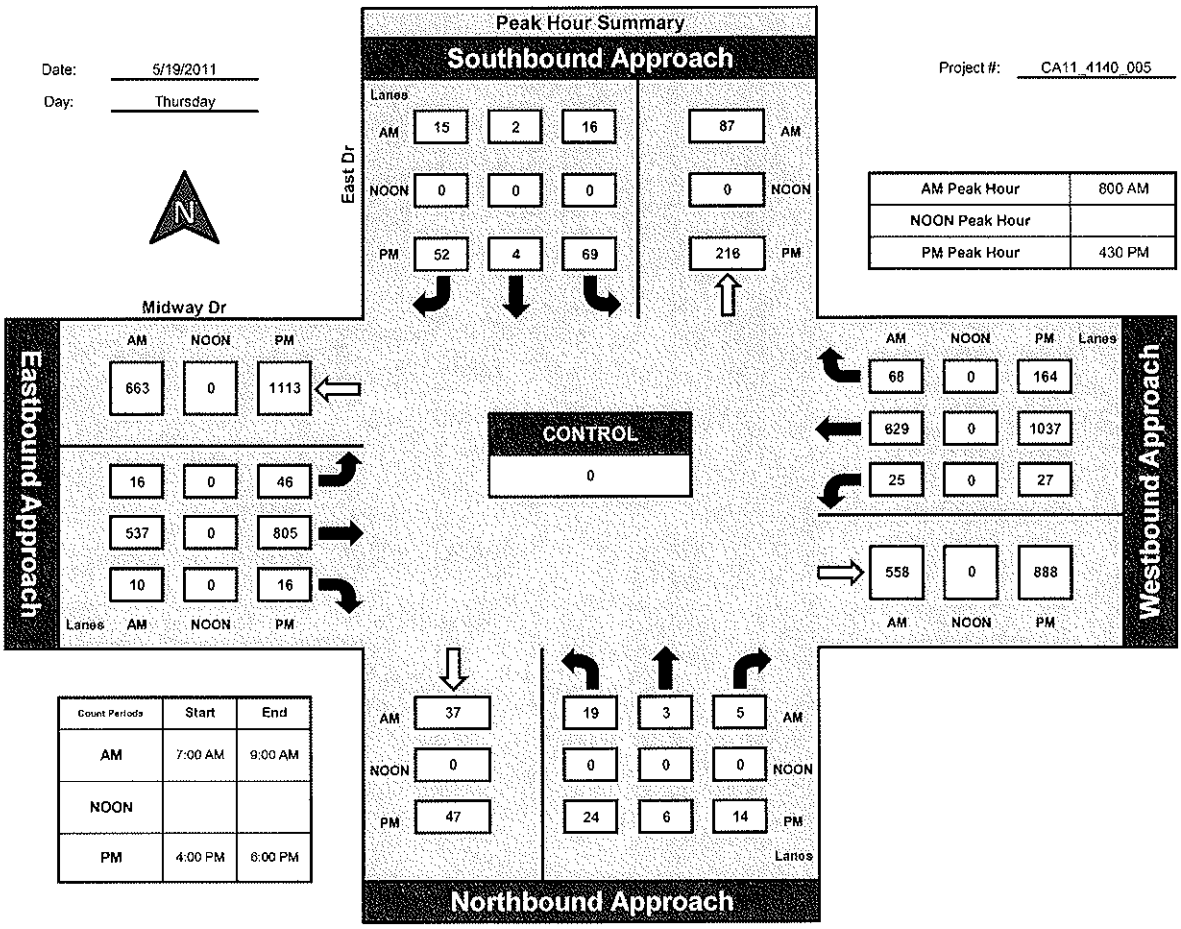
CONTROL :

ITM Peak Hour Summary

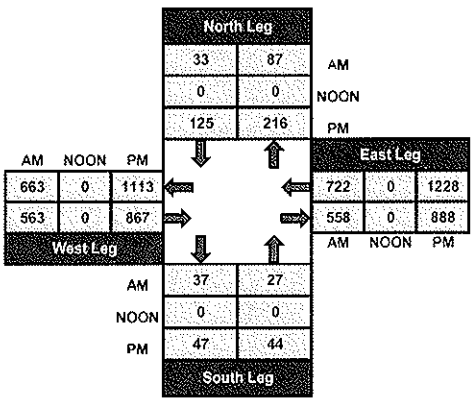
Prepared by:

National Data & Surveying Services

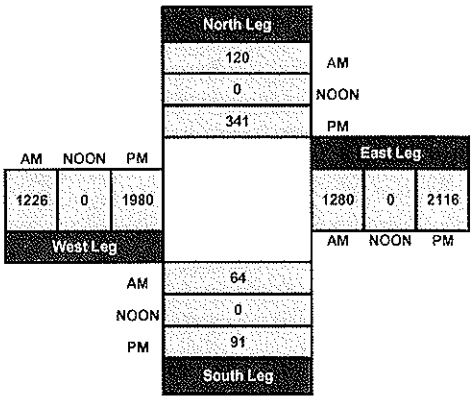
East Dr and Midway Dr , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(7)

8

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

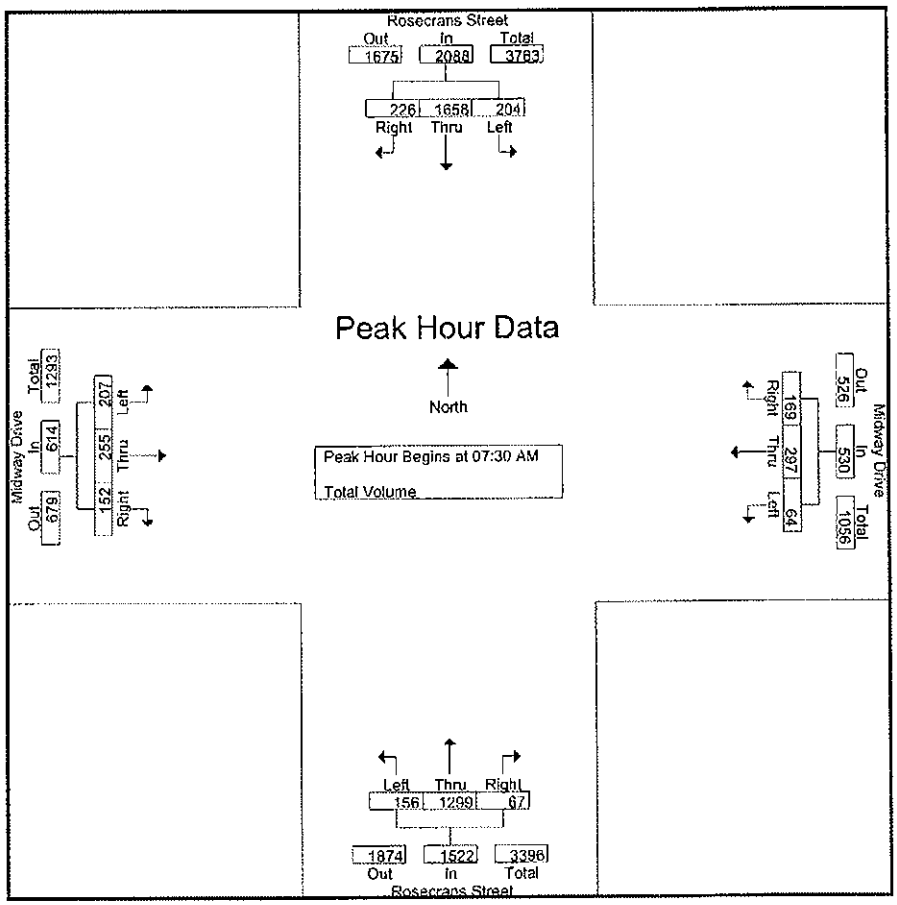
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
Total	60	341	21	422	10	42	25	77	15	168	14	197	42	46	22	110	806
07:00 AM	78	384	31	493	14	44	32	90	24	246	17	287	27	46	28	101	971
07:15 AM	67	472	45	584	18	54	25	97	17	283	13	313	45	59	16	120	1114
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
Total	259	1695	192	2146	62	240	127	429	104	1196	51	1351	165	238	115	518	4444
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
08:30 AM	58	310	55	423	15	88	45	148	33	332	20	385	55	77	35	167	1123
Grand Total	467	3165	378	4010	121	525	296	942	245	2328	131	2704	376	483	253	1112	8768
Apprch %	11.6	78.9	9.4		12.8	55.7	31.4		9.1	86.1	4.8		33.8	43.4	22.8		
Total %	5.3	36.1	4.3	45.7	1.4	6	3.4	10.7	2.8	26.6	1.5	30.8	4.3	5.5	2.9	12.7	

	Rosecrans Street Southbound				Midwny Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	71	355	48	474	10	70	34	114	34	349	11	394	49	66	38	153	1135
07:45 AM	43	484	68	595	20	72	36	128	29	318	10	357	44	67	33	144	1224
08:00 AM	48	417	57	522	13	59	59	131	50	286	24	360	67	62	39	168	1181
08:15 AM	42	402	53	497	21	96	40	157	43	346	22	411	47	60	42	149	1214
Total Volume	204	1658	226	2088	64	297	169	530	156	1299	67	1522	207	255	152	614	4754
% App. Total	9.8	79.4	10.8		12.1	56	31.9		10.2	85.3	4.4		33.7	41.5	24.8		
PHF	.718	.856	.831	.877	.762	.773	.716	.844	.780	.931	.698	.926	.772	.951	.905	.914	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIAM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	67	472	45	584	20	72	36	128	34	**349**	11	394	44	67	33	144
+15 mins.	**71**	355	48	474	13	59	**59**	131	29	318	10	357	**67**	62	39	**168**
+30 mins.	43	**484**	**68**	**595**	**21**	**96**	40	**157**	**50**	286	**24**	360	47	60	**42**	149
+45 mins.	48	417	57	522	15	88	45	148	43	346	22	**411**	55	77	35	167
Total Volume	229	1728	218	2175	69	315	180	564	156	1299	67	1522	213	266	149	628
% App. Total	10.5	79.4	10		12.2	55.9	31.9		10.2	85.3	4.4		33.9	42.4	23.7	
PHF	.806	.893	.801	.914	.821	.820	.763	.898	.780	.931	.698	.926	.795	.864	.887	.935

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

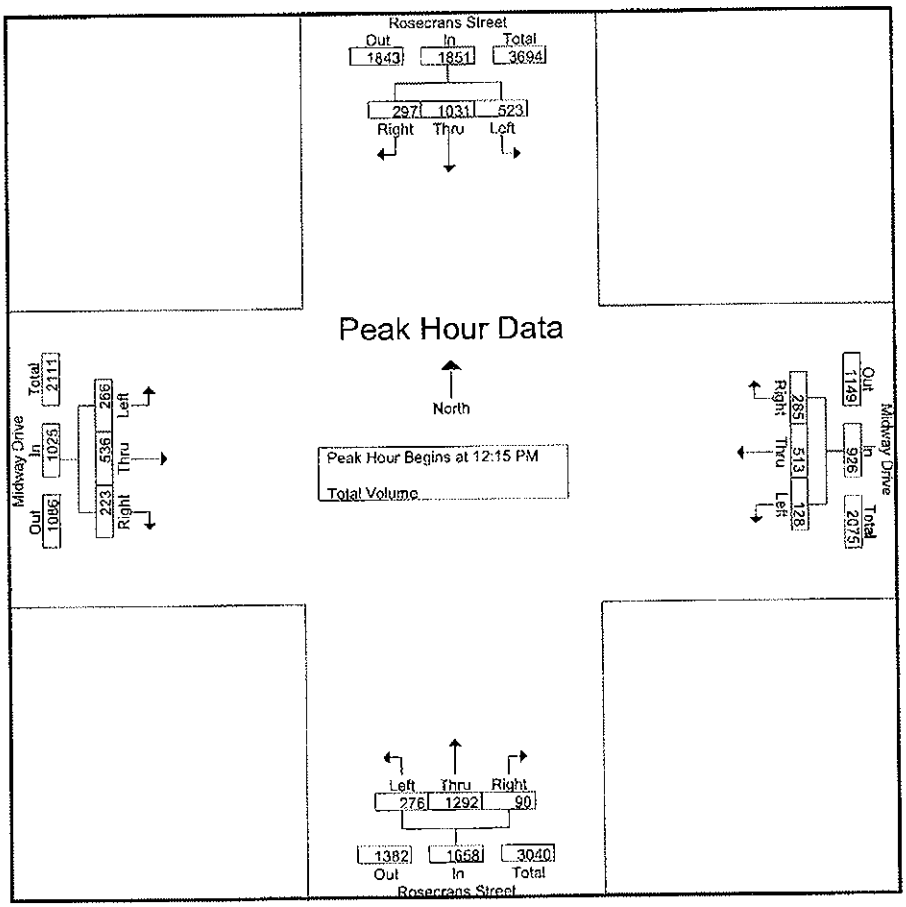
	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	123	255	86	464	28	107	62	197	76	270	16	362	90	110	46	246	1269
11:45 AM	131	222	49	402	34	145	55	234	89	319	20	428	50	108	43	201	1265
Total	254	477	135	866	62	252	117	431	165	589	36	790	140	218	89	447	2534
12:00 PM	152	299	69	520	46	120	68	234	49	287	22	358	56	102	42	200	1312
12:15 PM	120	237	76	433	34	143	77	254	73	282	24	379	72	144	68	284	1350
12:30 PM	120	288	84	492	37	120	77	234	76	377	22	475	56	126	55	237	1438
12:45 PM	131	233	68	432	27	144	76	247	63	308	19	390	69	130	58	257	1326
Total	523	1057	297	1877	144	527	298	969	261	1254	87	1602	253	502	223	978	5426
01:00 PM	152	273	69	494	30	106	55	191	64	325	25	414	69	136	42	247	1346
01:15 PM	135	211	73	419	35	102	43	180	72	288	24	384	51	107	36	194	1177
Grand Total	1064	2018	574	3656	271	987	513	1771	562	2456	172	3190	513	963	390	1866	10483
Apprch %	29.1	55.2	15.7		15.3	55.7	29		17.6	77	5.4		27.5	51.6	20.9		
Total %	10.1	19.3	5.5	34.9	2.6	9.4	4.9	16.9	5.4	23.4	1.6	30.4	4.9	9.2	3.7	17.8	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	120	237	76	433	34	143	77	**254**	73	282	24	379	**72**	**144**	**68**	**284**	1350
12:30 PM	120	**288**	**84**	492	**37**	120	77	234	**76**	**377**	**22**	**475**	56	126	55	237	**1438**
12:45 PM	131	233	68	432	27	**144**	76	247	63	308	19	390	69	130	58	257	1326
01:00 PM	**152**	273	69	**494**	30	106	55	191	64	325	**25**	414	69	136	42	247	1346
Total Volume	523	1031	297	1851	128	513	285	926	276	1292	90	1658	266	536	223	1025	5460
% App. Total	28.3	55.7	16		13.8	55.4	30.8		16.6	77.9	5.4		26	52.3	21.8		
PHF	.860	.895	.884	.937	.865	.891	.925	.911	.908	.857	.900	.873	.924	.931	.820	.902	.949

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIMD
Site Code : 9102025
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

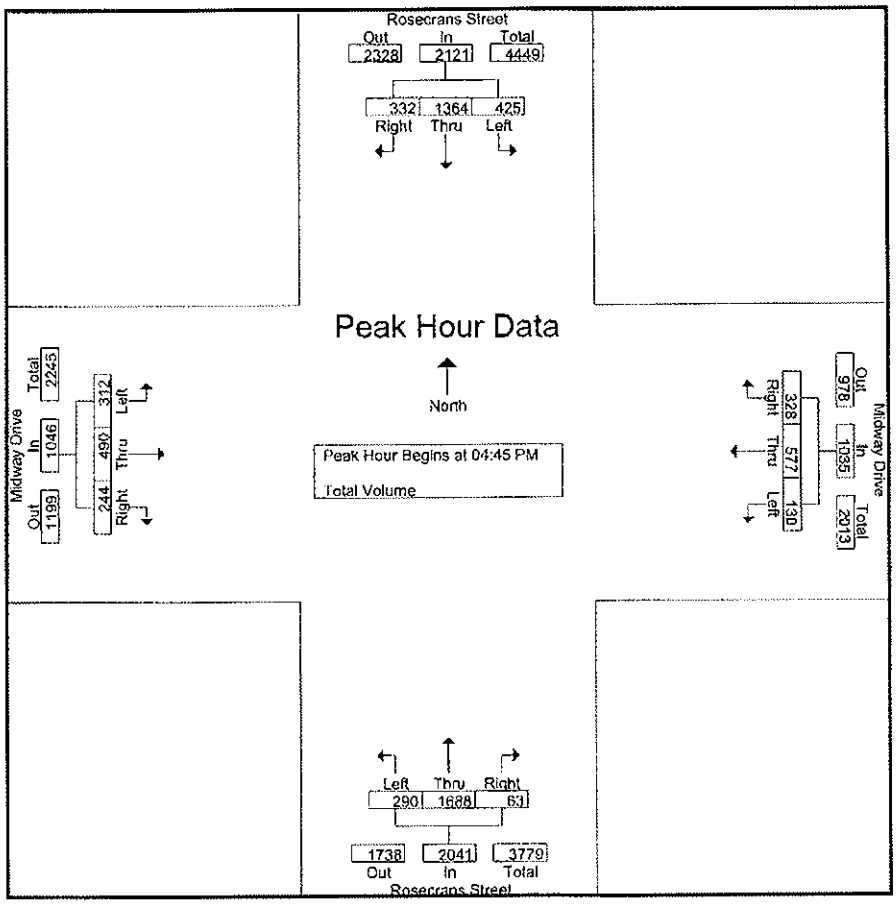
Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				12:30 PM				12:15 PM			
+0 mins.	**152**	**299**	69	**520**	**46**	120	68	234	**76**	**377**	22	**475**	**72**	**144**	**68**	**284**
+15 mins.	120	237	76	433	34	143	77	**254**	63	308	19	390	56	126	55	237
+30 mins.	120	288	**84**	492	37	120	77	234	64	325	**25**	414	69	130	58	257
+45 mins.	131	233	68	432	27	**144**	76	247	72	288	24	384	69	136	42	247
Total Volume	523	1057	297	1877	144	527	298	969	275	1298	90	1663	266	536	223	1025
% App. Total	27.9	56.3	15.8		14.9	54.4	30.8		16.5	78.1	5.4		26	52.3	21.8	
PHF	.860	.884	.884	.902	.783	.915	.968	.954	.905	.861	.900	.875	.924	.931	.820	.902

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:00 PM				04:45 PM			
+0 mins.	116	330	90	536	40	133	95	268	62	427	17	506	60	109	80	249
+15 mins.	120	332	81	533	23	129	90	242	69	455	14	538	84	108	52	244
+30 mins.	99	344	89	532	38	154	84	276	67	424	13	504	86	129	46	261
+45 mins.	90	358	72	520	39	152	83	274	75	434	14	523	82	144	66	292
Total Volume	425	1364	332	2121	140	568	352	1060	273	1740	58	2071	312	490	244	1046
% App. Total	20	64.3	15.7		13.2	53.6	33.2		13.2	84	2.8		29.8	46.8	23.3	
PHF	.885	.953	.922	.989	.875	.922	.926	.960	.910	.956	.853	.962	.907	.851	.763	.896

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Midway Drive
Weather: Sunny

File Name : SDCROMIPM
Site Code : 9102001
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	106	301	72	479	34	138	80	252	62	427	17	506	75	117	42	234	1471
04:15 PM	107	324	78	509	33	128	96	257	69	455	14	538	77	111	52	240	1544
04:30 PM	103	285	80	468	40	133	95	268	67	424	13	504	72	131	56	259	1499
04:45 PM	116	330	90	536	23	129	90	242	75	434	14	523	60	109	80	249	1550
Total	432	1240	320	1992	130	528	361	1019	273	1740	58	2071	284	468	230	982	6064
05:00 PM	120	332	81	533	38	154	84	276	69	398	20	487	84	108	52	244	1540
05:15 PM	99	344	89	532	39	152	83	274	71	432	14	517	86	129	46	261	1584
05:30 PM	90	358	72	520	30	142	71	243	75	424	15	514	82	144	66	292	1569
05:45 PM	121	327	67	515	37	119	62	218	71	350	20	441	64	119	52	235	1409
Total	430	1361	309	2100	144	567	300	1011	286	1604	69	1959	316	500	216	1032	6102
Grand Total	862	2601	629	4092	274	1095	661	2030	559	3344	127	4030	600	968	446	2014	12166
Apprch %	21.1	63.6	15.4		13.5	53.9	32.6		13.9	83	3.2		29.8	48.1	22.1		
Total %	7.1	21.4	5.2	33.6	2.3	9	5.4	16.7	4.6	27.5	1	33.1	4.9	8	3.7	16.6	

	Rosecrans Street Southbound				Midway Drive Westbound				Rosecrans Street Northbound				Midway Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	116	330	**90**	**536**	23	129	**90**	242	**75**	**434**	14	**523**	60	109	**80**	249	1550
05:00 PM	**120**	332	81	533	38	**154**	84	**276**	69	398	**20**	487	84	108	52	244	1540
05:15 PM	99	344	89	532	**39**	152	83	274	71	432	14	517	**86**	129	46	261	**1584**
05:30 PM	90	**358**	72	520	30	142	71	243	75	424	15	514	82	**144**	66	**292**	1569
Total Volume	425	1364	332	2121	130	577	328	1035	290	1688	63	2041	312	490	244	1046	6243
% App. Total	20	64.3	15.7		12.6	55.7	31.7		14.2	82.7	3.1		29.8	46.8	23.3		
PHF	.885	.953	.922	.989	.833	.937	.911	.938	.967	.972	.788	.976	.907	.851	.763	.896	.985

(9)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		85	4		87							17	193
7:15 AM		92	8		75							14	189
7:30 AM		118	2		117							10	247
7:45 AM		118	6		99							20	243
8:00 AM		114	8		112							21	255
8:15 AM		129	4		118							20	271
8:30 AM		149	7		150							24	330
8:45 AM		141	6		130							17	294

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	946	45	0	888	0	0	0	0	0	0	143	2022
APPROACH %'s :	0.00%	95.46%	4.54%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_006

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Enterprise St			Enterprise St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		172	4		203							63	442
4:15 PM		185	4		182							44	415
4:30 PM		169	1		228							71	469
4:45 PM		186	2		222							52	462
5:00 PM		220	1		232							53	506
5:15 PM		190	2		183							52	427
5:30 PM		164	1		206							43	414
5:45 PM		151	1		170							30	352
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1437	16	0	1626	0	0	0	0	0	0	408	3487
APPROACH %'s :	0.00%	98.90%	1.10%	0.00%	100.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	0.00%	100.00%	
[illegible]													
[illegible]													

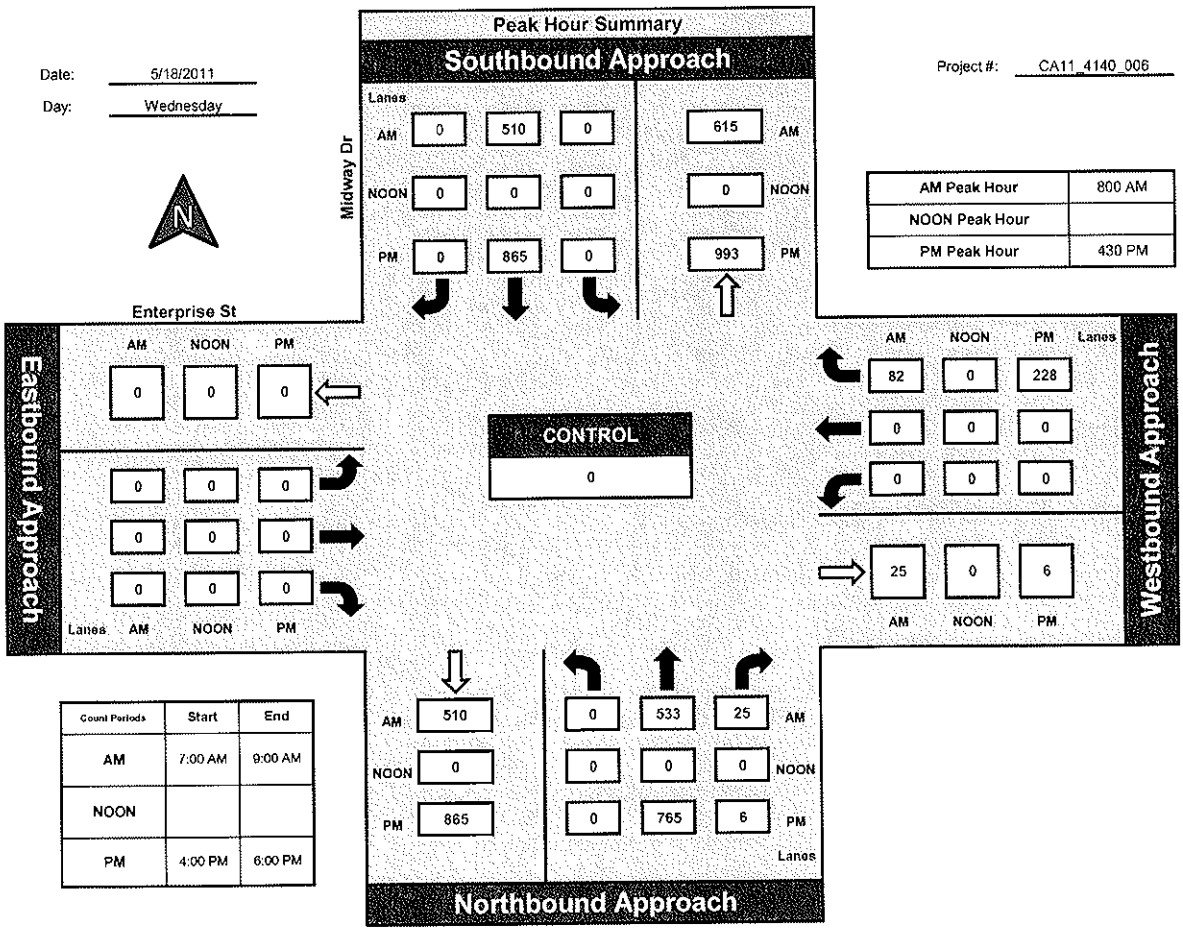
CONTROL :

ITM Peak Hour Summary

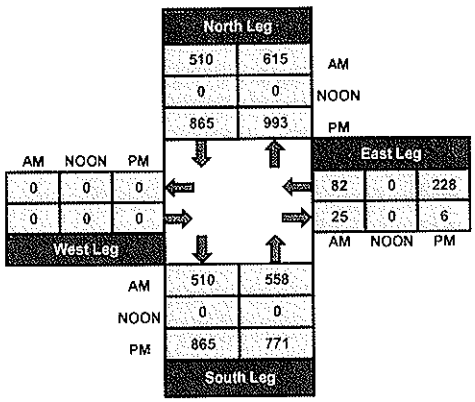
Prepared by:

National Data & Surveying Services

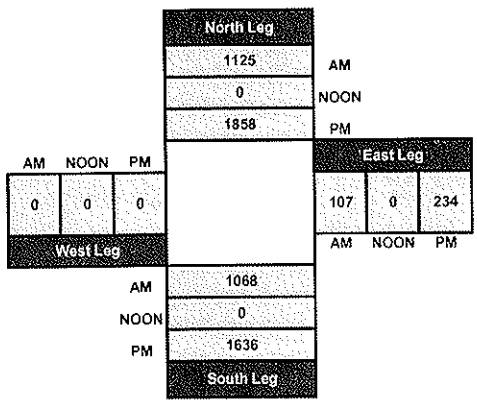
Midway Dr and Enterprise St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(10)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				65		21		160			380	84	710
7:15 AM				55		21		210			329	105	720
7:30 AM				95		21		186			248	115	665
7:45 AM				87		13		189			338	129	756
8:00 AM				89		19		210			314	119	751
8:15 AM				102		19		227			306	132	786
8:30 AM				119		28		210			253	152	762
8:45 AM				108		25		170			204	151	658

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	720	0	167	0	1562	0	0	2372	987	5808
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	81.17%	0.00%	18.83%	0.00%	100.00%	0.00%	0.00%	70.62%	29.38%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_007

Day: WEDNESDAY

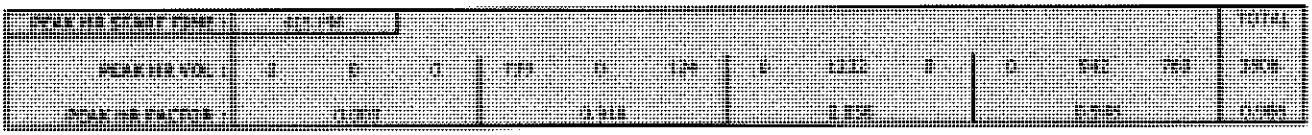
City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Midway Dr			Midway Dr			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				172		27		333			223	175	930
4:15 PM				159		27		359			230	190	965
4:30 PM				192		32		310			227	170	931
4:45 PM				187		31		293			255	188	954
5:00 PM				201		34		270			230	221	956
5:15 PM				157		25		278			211	189	860
5:30 PM				175		31		216			206	169	797
5:45 PM				148		17		180			193	149	687

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	1391	0	224	0	2239	0	0	1775	1451	7080
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	86.13%	0.00%	13.87%	0.00%	100.00%	0.00%	0.00%	55.02%	44.98%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

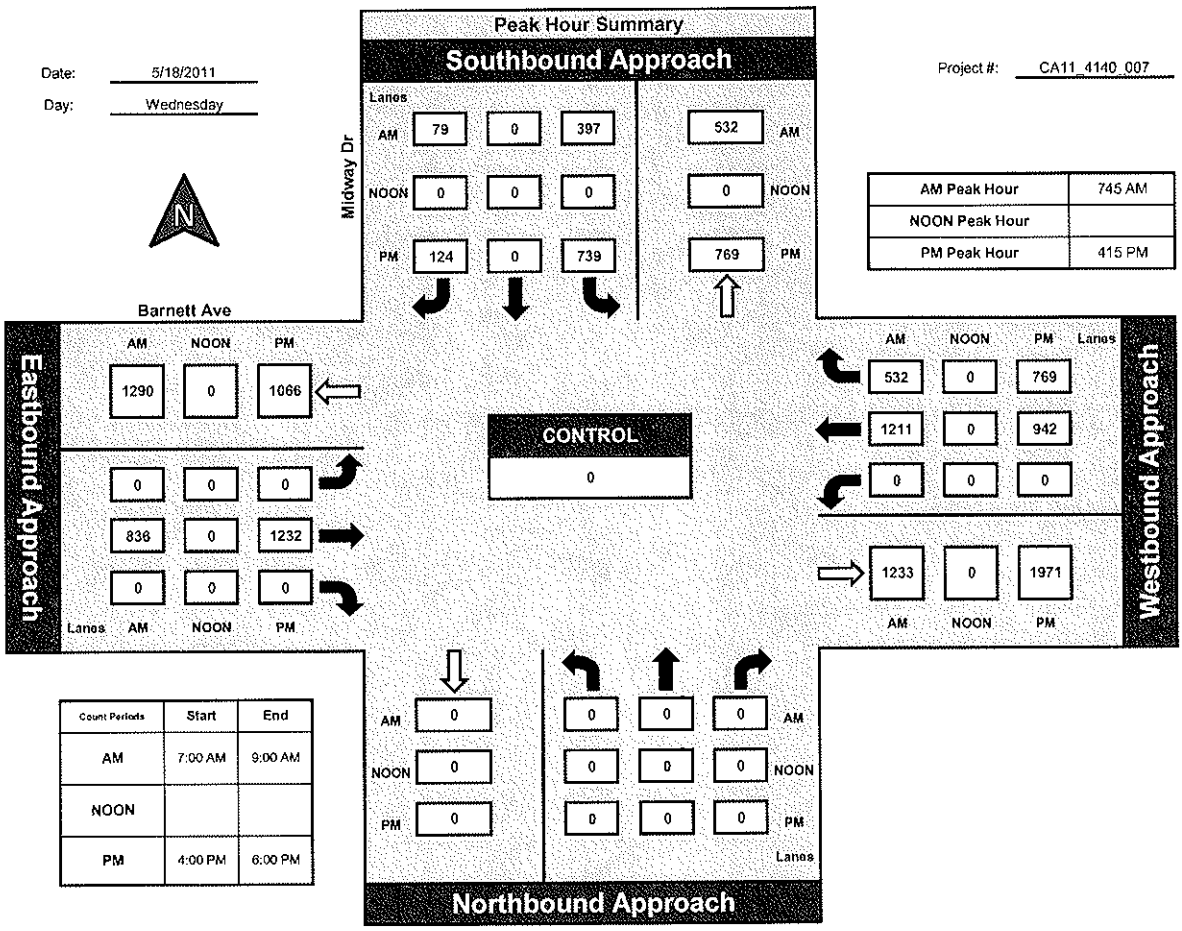
National Data & Surveying Services

Midway Dr and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

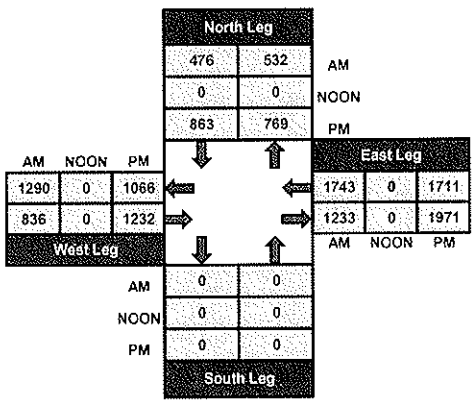
Project #: CA11_4140_007



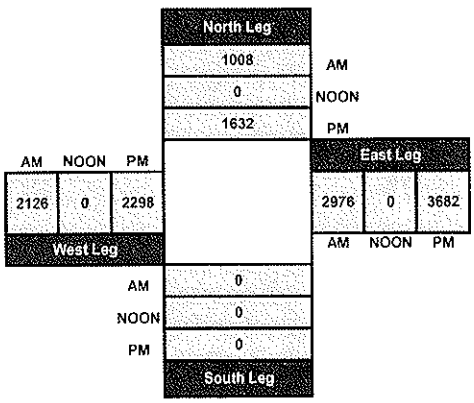
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

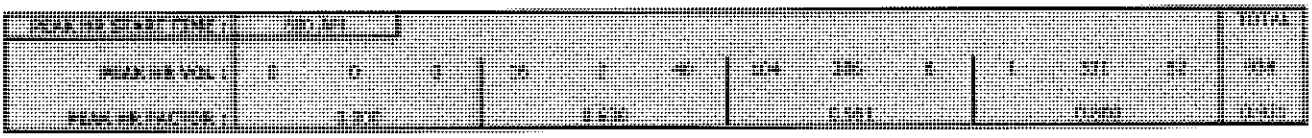
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				7	0	11	24	66	1	0	47	9	165
7:15 AM				7	1	18	30	83	0	0	36	6	181
7:30 AM				8	0	8	36	74	1	0	54	18	199
7:45 AM				3	0	16	32	99	2	0	68	15	235
8:00 AM				1	0	13	33	95	1	1	69	12	225
8:15 AM				8	1	14	25	99	0	0	78	14	239
8:30 AM				3	0	8	25	93	3	0	80	10	222
8:45 AM				4	1	5	21	99	2	0	104	16	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	41	3	93	226	708	10	1	536	100	1718
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	29.93%	2.19%	67.88%	23.94%	75.00%	1.06%	0.16%	84.14%	15.70%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

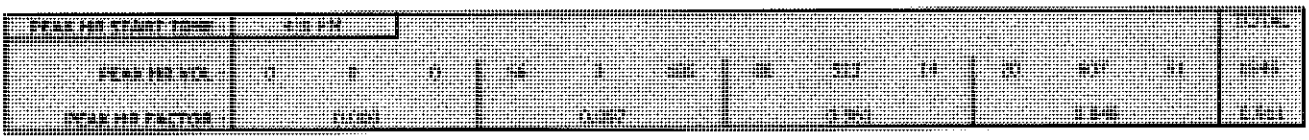
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				9	0	24	13	83	0	1	109	9	248
4:15 PM				12	0	36	13	105	2	4	121	11	304
4:30 PM				15	1	43	21	131	4	7	150	16	388
4:45 PM				14	0	48	25	130	7	5	177	18	424
5:00 PM				13	2	53	22	127	3	2	128	8	358
5:15 PM				14	0	41	18	135	0	6	152	9	375
5:30 PM				11	0	27	23	123	2	2	137	9	334
5:45 PM				12	2	35	28	136	5	3	149	8	378
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	100	5	307	163	970	23	30	1123	88	2809
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	24.27%	1.21%	74.51%	14.10%	83.91%	1.99%	2.42%	90.49%	7.09%	



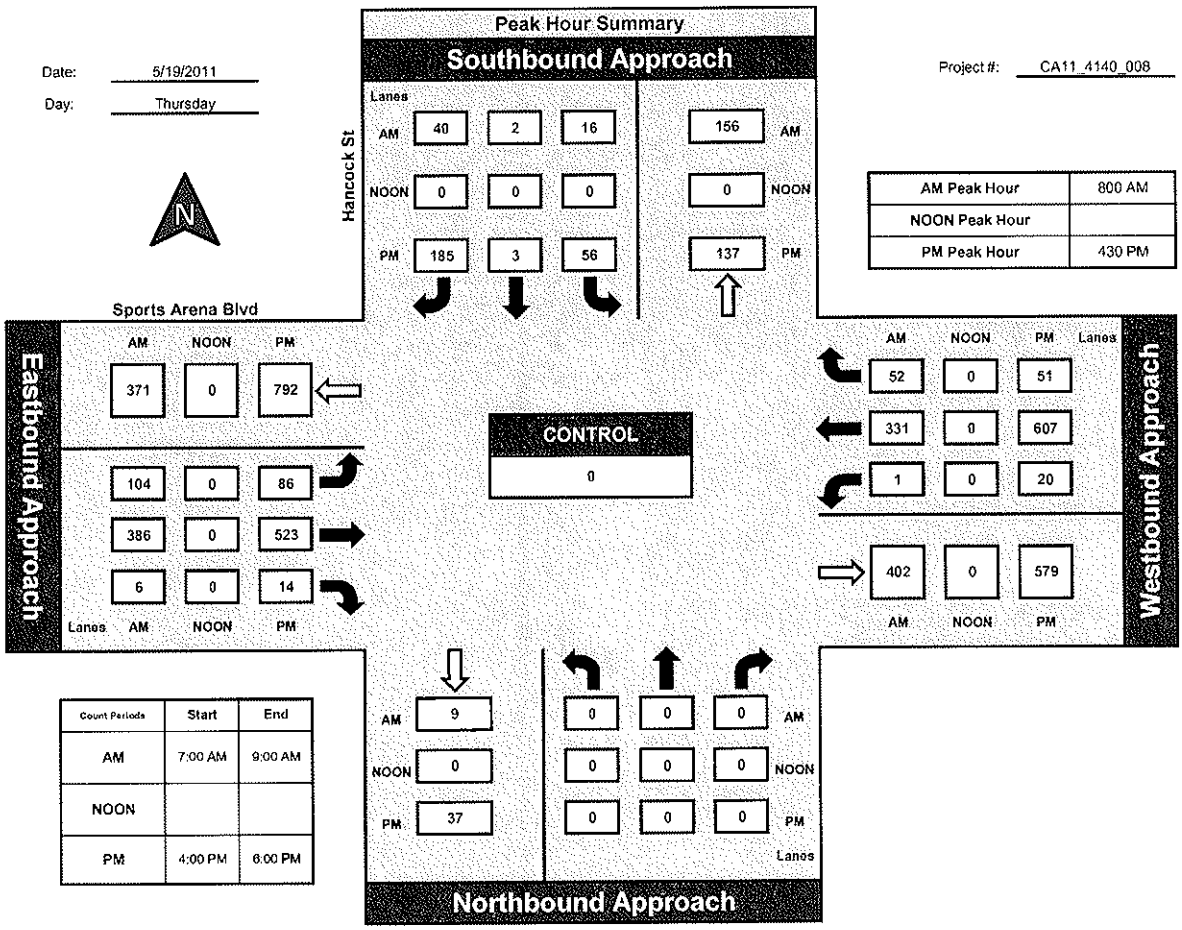
CONTROL :

ITM Peak Hour Summary

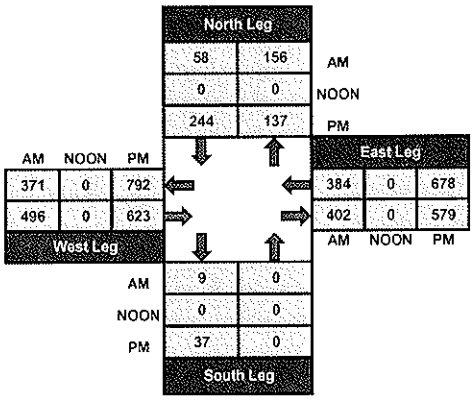
Prepared by:

National Data & Surveying Services

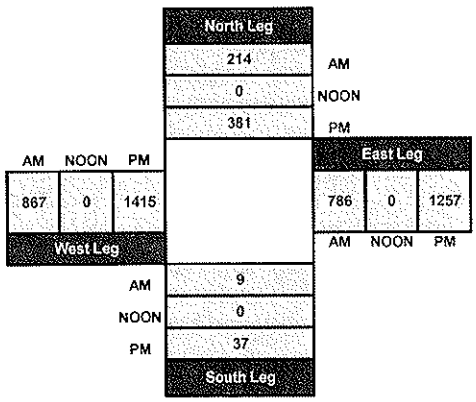
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(11)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_008

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		1		0				0	0			1
7:15 AM	0		1		0				0	0			1
7:30 AM	1		2		1				0	0			4
7:45 AM	0		1		0				0	0			1
8:00 AM	0		0		1				0	1			2
8:15 AM	0		2		1				1	0			4
8:30 AM	2		0		1				1	1			5
8:45 AM	0		0		0				0	0			

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	7	0	4	0	0	0	2	2	0	0	18
APPROACH %'s :	30.00%	0.00%	70.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

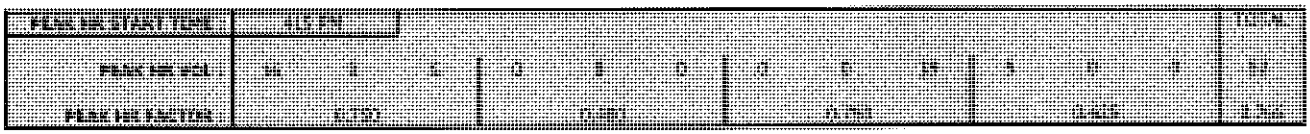
Project ID: CA11_4140_008 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		1		1				2	0			4
4:15 PM	5		2		0				2	2			11
4:30 PM	4		1		5				6	1			17
4:45 PM	4		2		0				5	2			13
5:00 PM	3		0		3				5	0			11
5:15 PM	2		0		0				1	1			4
5:30 PM	1		2		1				2	1			7
5:45 PM	3		2		2				3	2			12

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	22	0	10	0	12	0	0	0	26	9	0	0	79
APPROACH %'s :	68.75%	0.00%	31.25%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



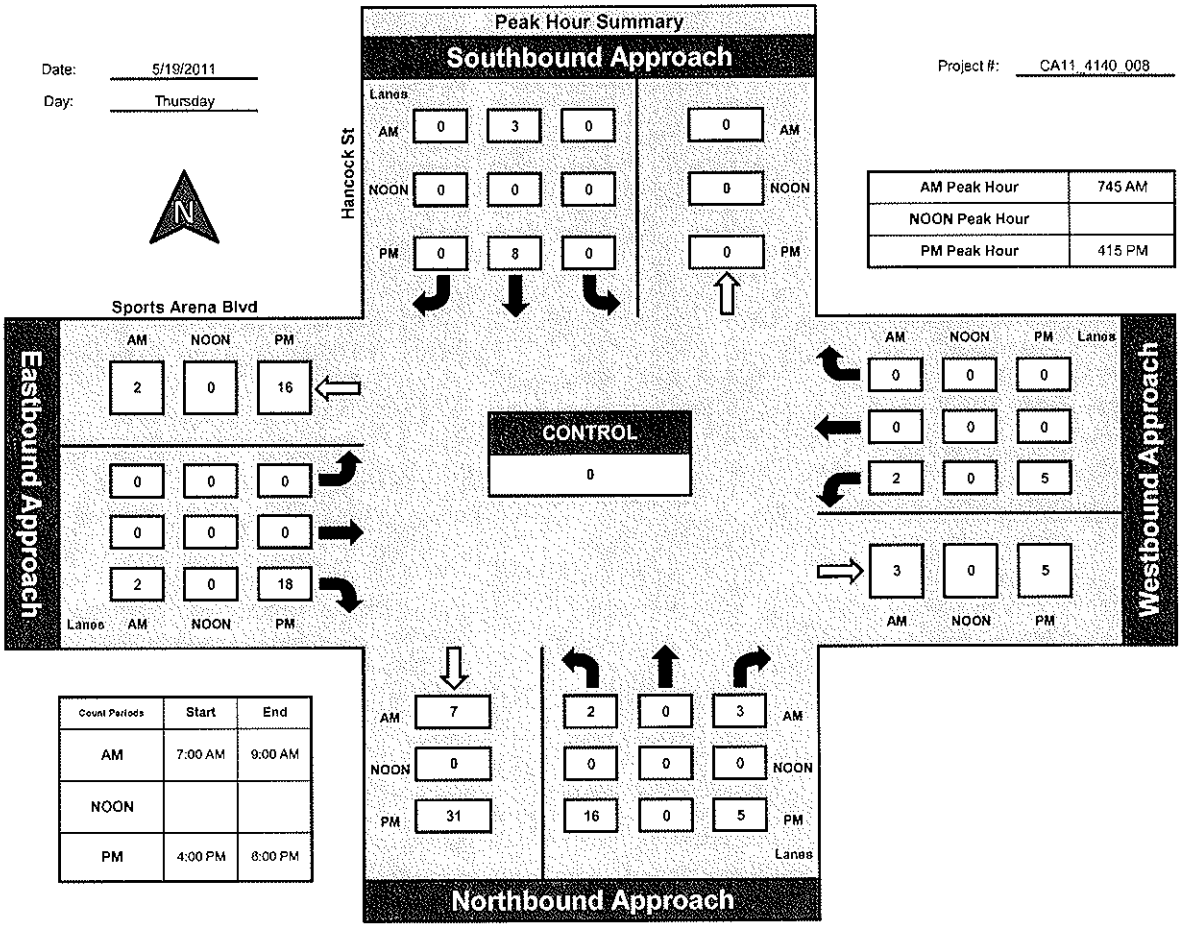
CONTROL :

ITM Peak Hour Summary

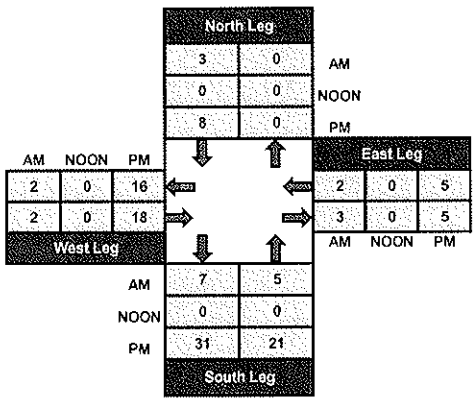
Prepared by:

National Data & Surveying Services

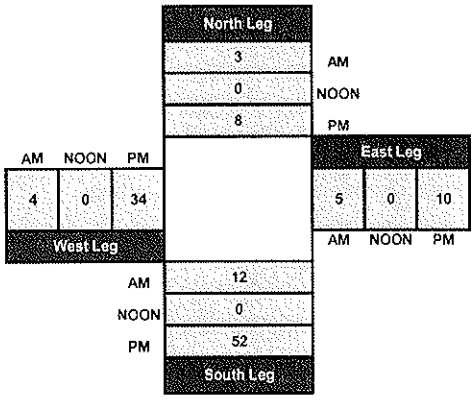
Hancock St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(12)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	1	30	1	2	5	7	79	6	20	57	6	229
7:15 AM	13	2	20	3	5	3	4	90	15	14	49	9	227
7:30 AM	17	6	39	4	3	6	9	74	7	29	74	11	279
7:45 AM	12	10	22	7	4	13	9	68	16	27	57	10	255
8:00 AM	12	6	15	11	4	15	19	64	17	28	50	22	263
8:15 AM	23	8	19	10	6	23	20	71	11	24	44	20	279
8:30 AM	16	15	34	8	6	32	17	65	28	34	51	23	329
8:45 AM	23	11	27	17	7	30	12	81	20	30	82	15	355
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	131	59	206	61	37	127	97	592	120	206	464	116	2216
APPROACH %'s :	33.08%	14.90%	52.02%	27.11%	16.44%	56.44%	11.99%	73.18%	14.83%	26.21%	59.03%	14.76%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	74	40	110	36	20	83	65	290	72	116	279	76	1261
PEAK HR FACTOR :	0.803			0.782			0.906			0.906			0.907

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_009

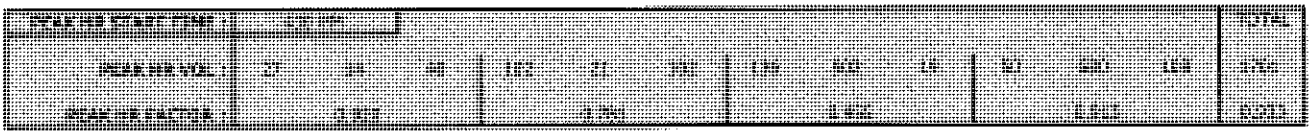
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kemper St			Kemper St			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	2	10	33	2	23	27	95	2	18	135	29	377
4:15 PM	6	3	8	28	5	23	35	106	10	8	139	29	400
4:30 PM	10	3	9	33	6	33	44	112	4	19	150	33	456
4:45 PM	6	5	10	22	5	19	25	125	6	9	158	18	408
5:00 PM	8	3	11	24	4	23	34	130	8	11	137	25	418
5:15 PM	3	3	10	23	6	27	33	135	1	11	135	32	419
5:30 PM	8	0	9	22	3	22	27	123	5	13	140	21	393
5:45 PM	5	5	8	28	6	21	21	136	5	10	119	35	399
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	47	24	75	213	37	191	246	962	41	99	1113	222	3270
APPROACH %'s :	32.19%	16.44%	51.37%	48.30%	8.39%	43.31%	19.70%	77.02%	3.28%	6.90%	77.62%	15.48%	



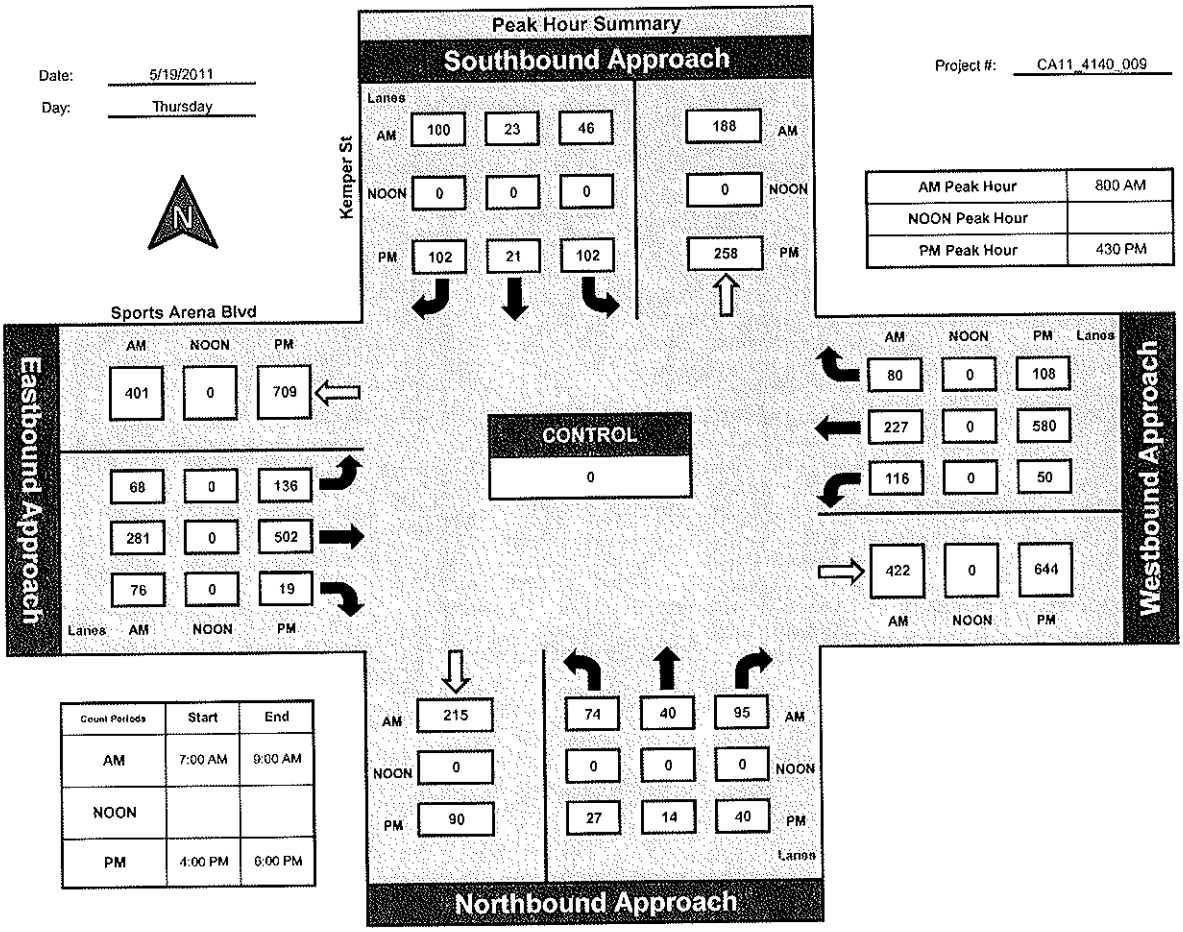
CONTROL :

ITM Peak Hour Summary

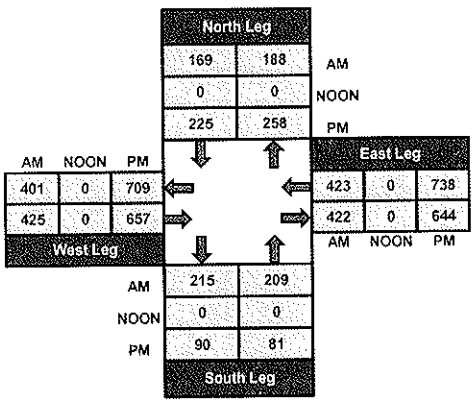
Prepared by:

National Data & Surveying Services

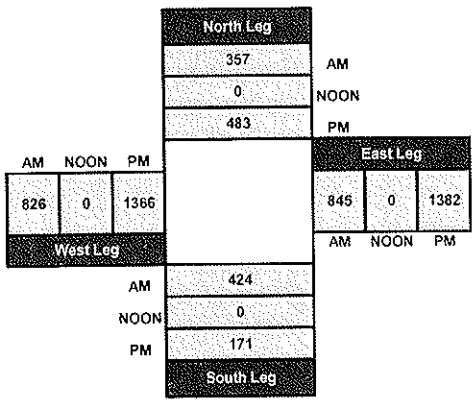
Kemper St and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(13)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_010

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	0	1	2	0	4	11	69	12	1	63	1	171
7:15 AM	4	0	4	2	2	4	16	74	11	2	73	5	197
7:30 AM	5	0	1	7	0	5	14	87	15	1	96	2	233
7:45 AM	7	0	3	1	0	8	12	81	10	2	87	3	214
8:00 AM	7	1	0	5	0	7	20	65	11	4	78	2	200
8:15 AM	4	0	3	4	1	10	23	75	7	2	82	5	216
8:30 AM	6	3	2	5	1	11	16	66	9	2	92	11	224
8:45 AM	9	1	3	11	1	12	13	76	12	2	106	7	253
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	49	5	17	37	5	61	125	593	87	16	677	36	1708
APPROACH %'s :	69.01%	7.04%	23.94%	35.92%	4.85%	59.22%	15.53%	73.66%	10.81%	2.19%	92.87%	4.94%	
PEAK HR START TIME	[illegible]												
PEAK HR VOL	[illegible]												
PEAK HR FACTOR	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

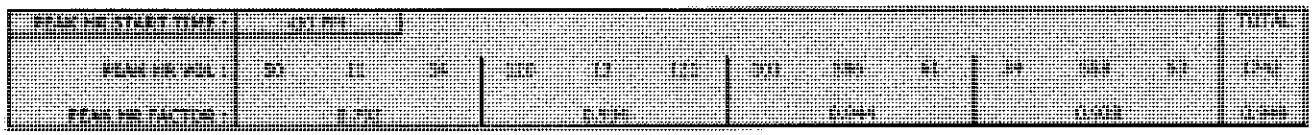
National Data & Surveying Services

Project ID: CA11_4140_010 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Sport Arena Driveway			Sport Arena Driveway			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	12	3	7	18	3	37	35	146	10	4	136	13	424
4:15 PM	8	9	8	22	3	40	25	139	17	9	131	14	425
4:30 PM	17	4	9	25	2	36	25	152	17	8	146	18	459
4:45 PM	7	2	4	33	3	32	24	129	15	7	138	8	402
5:00 PM	15	3	9	33	5	24	24	162	12	6	143	11	447
5:15 PM	11	2	12	29	3	29	28	143	17	13	131	16	434
5:30 PM	11	2	9	20	0	24	13	149	19	10	130	13	400
5:45 PM	13	0	10	33	3	23	25	131	21	9	131	17	416
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	94	25	68	213	22	245	199	1151	128	66	1086	110	3407
APPROACH %'s :	50.27%	13.37%	36.36%	44.38%	4.58%	51.04%	13.46%	77.88%	8.66%	5.23%	86.05%	8.72%	



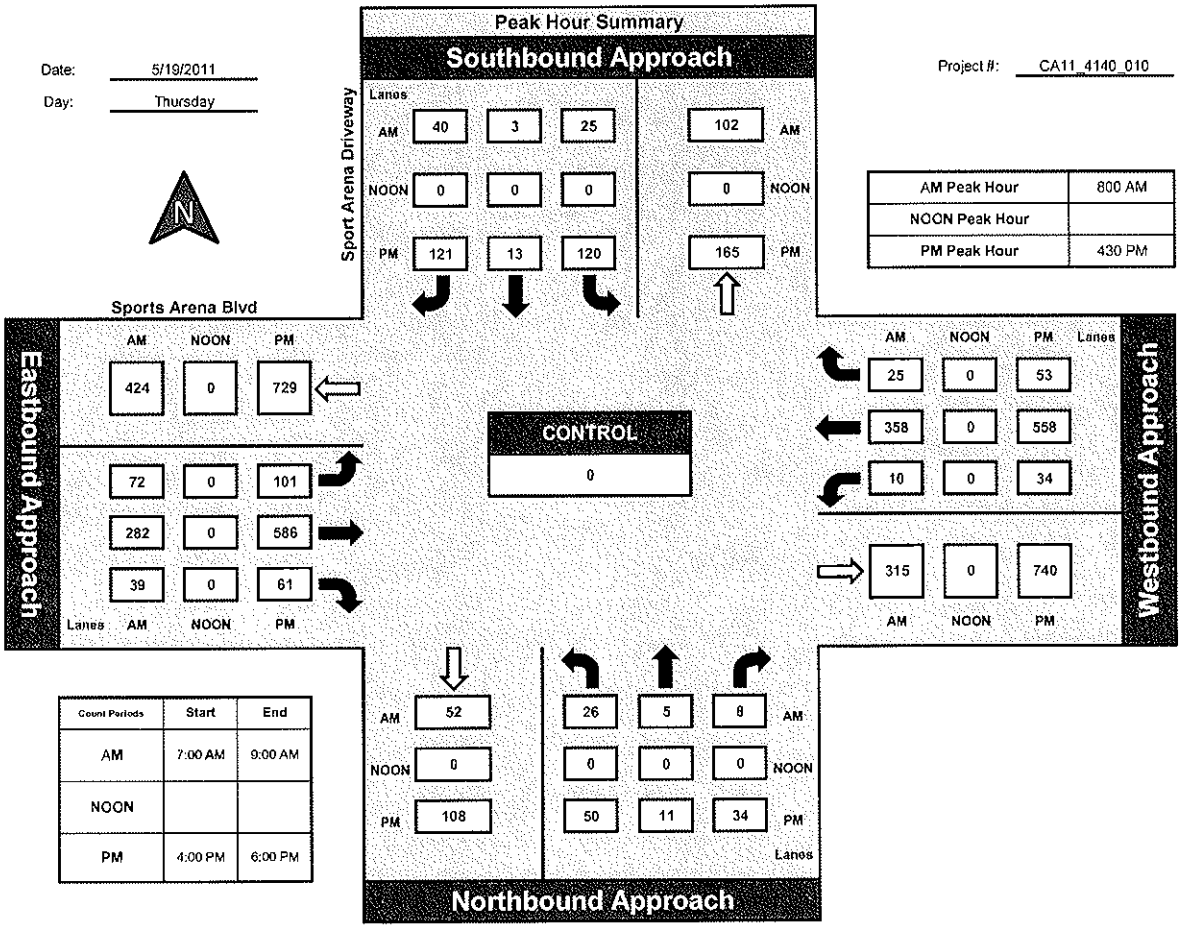
CONTROL :

ITM Peak Hour Summary

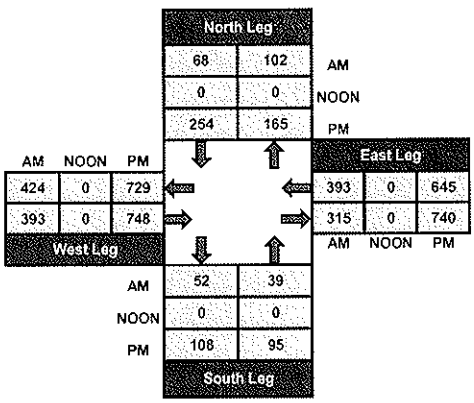
Prepared by:

National Data & Surveying Services

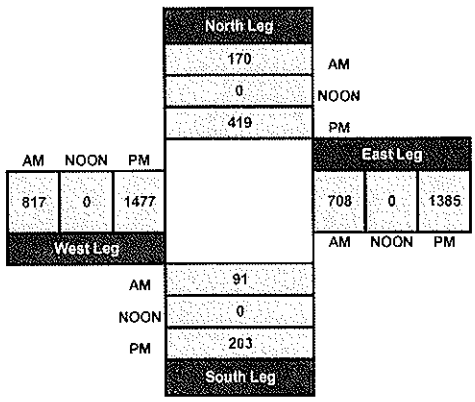
Sport Arena Driveway and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(14)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	2	0	5			0	3	77	1	7	98	10	203
7:15 AM	2	0	6			0	7	83	5	5	117	8	233
7:30 AM	1	0	2			0	7	122	9	8	121	9	279
7:45 AM	1	1	9			0	6	105	9	11	139	5	286
8:00 AM	3	0	10			1	5	108	6	6	135	10	284
8:15 AM	3	0	8			0	8	146	5	9	144	8	331
8:30 AM	3	0	5			0	11	131	6	8	161	9	334
8:45 AM	4	0	11			1	6	139	9	18	149	9	346
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	19	1	56	0	0	2	53	911	50	72	1064	68	2296
APPROACH %'s :	25.00%	1.32%	73.68%	0.00%	0.00%	100.00%	5.23%	89.84%	4.93%	5.98%	88.37%	5.65%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			[illegible]			[illegible]			[illegible]			[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_011 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	East Dr			East Dr			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	5	1	21			1	11	196	23	26	179	5	468
4:15 PM	8	1	14			4	5	183	25	26	198	3	467
4:30 PM	3	1	11			0	5	202	33	30	217	2	504
4:45 PM	8	2	10			0	1	193	29	41	177	1	462
5:00 PM	6	1	20			1	0	189	24	18	190	0	449
5:15 PM	7	0	19			0	1	175	22	25	221	0	470
5:30 PM	8	1	24			1	3	181	20	30	194	0	462
5:45 PM	12	1	20			3	0	193	15	24	194	1	463
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	57	8	139	0	0	10	26	1512	191	220	1570	12	3745
APPROACH %'s :	27.94%	3.92%	68.14%	0.00%	0.00%	100.00%	1.50%	87.45%	11.05%	12.21%	87.13%	0.67%	
PEAK HR START TIME :	4:0 PM												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

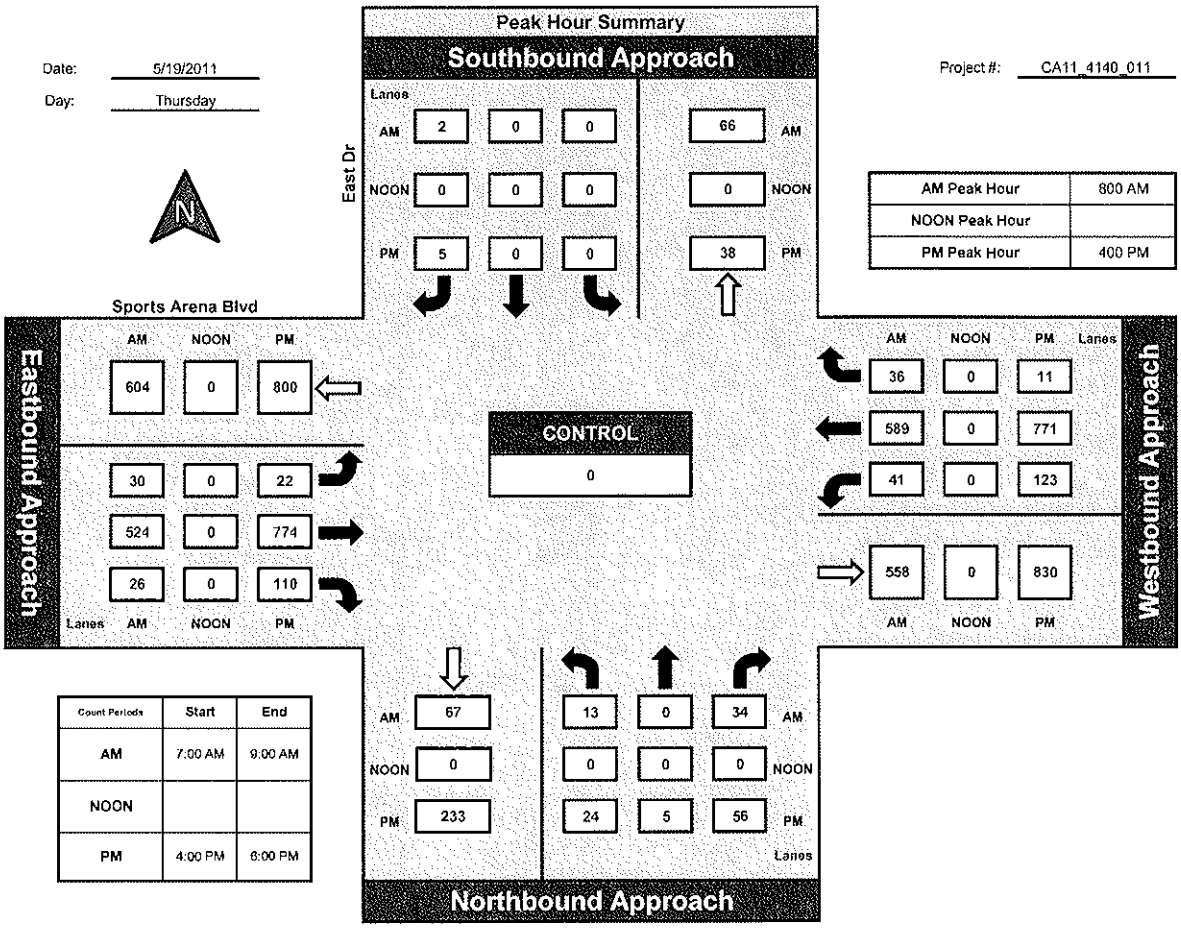
National Data & Surveying Services

East Dr and Sports Arena Blvd , City of San Diego

Date: 5/19/2011

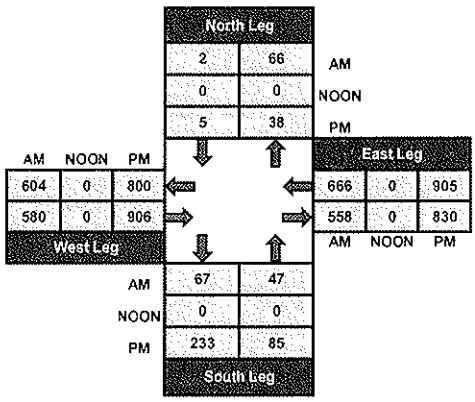
Day: Thursday

Project #: CA11_4140_011

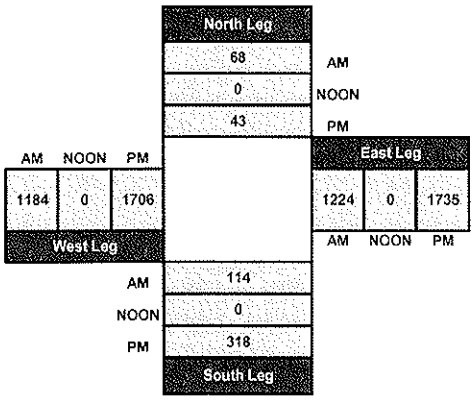


AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Total Ins & Outs



Total Volume Per Leg



(15)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

(15)

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

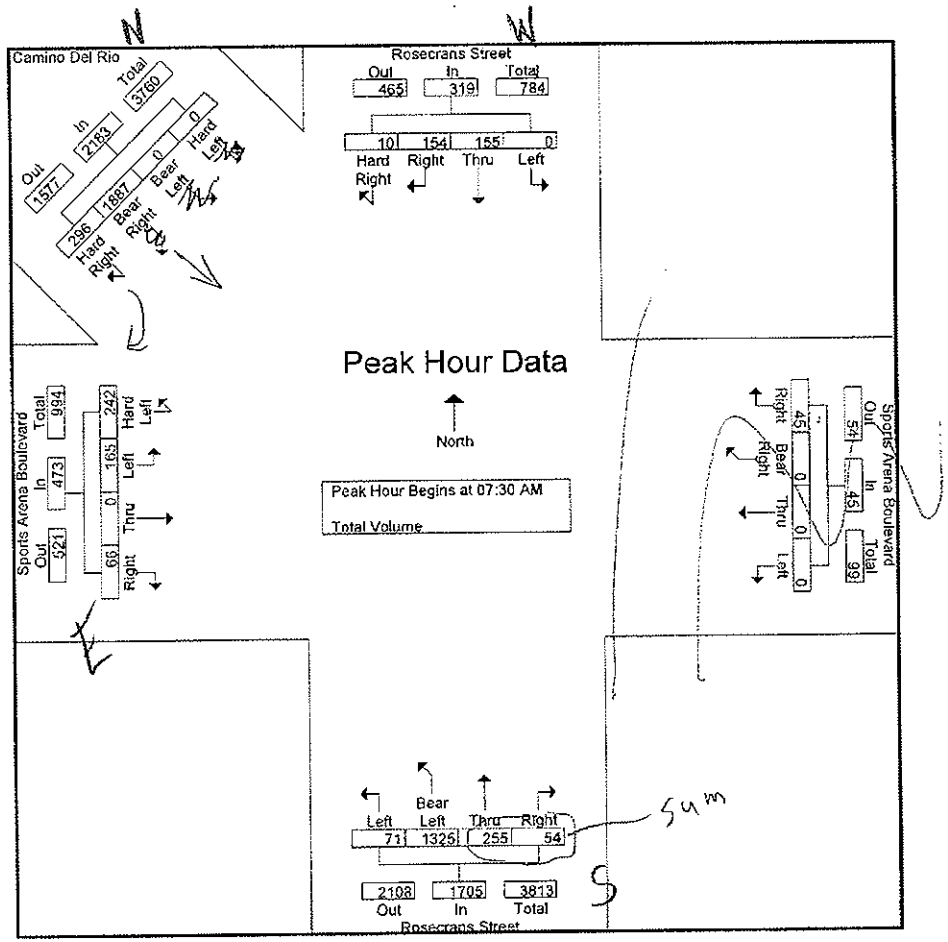
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
06:45 AM	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
Total	0	22	26	0	48	0	0	0	4	4	18	212	42	10	282	33	30	0	12	75	0	0	415	60	475	884
07:00 AM	0	25	23	1	49	0	0	0	8	8	20	227	39	4	290	42	30	0	15	87	0	0	504	54	558	992
07:15 AM	0	31	36	1	68	0	0	0	13	13	15	292	57	8	372	53	33	0	9	95	0	0	495	65	560	1108
07:30 AM	0	36	28	2	66	0	0	0	10	10	25	343	56	9	433	80	51	0	17	148	0	0	419	54	473	1130
07:45 AM	0	47	48	3	98	0	0	0	9	9	14	310	67	21	412	54	41	0	18	113	0	0	525	80	605	1237
Total	0	139	135	7	281	0	0	0	40	40	74	1172	219	42	1507	229	155	0	59	443	0	0	1943	253	2196	4467
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	74	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	15	15	23	351	58	13	445	50	43	0	18	111	0	0	454	88	542	1202
08:30 AM	0	45	44	4	93	0	0	0	18	18	27	322	64	9	422	62	37	0	16	115	0	0	352	67	419	1067
Grand Total	0	278	283	16	577	0	0	0	88	88	151	2378	457	85	3071	432	295	0	118	845	0	0	3653	542	4195	8776
Apprch %	0	48.2	49	2.8		0	0	0	100		4.9	77.4	14.9	2.8		51.1	34.9	0	14		0	0	87.1	12.9		
Total %	0	3.2	3.2	0.2	6.6	0	0	0	1	1	1.7	27.1	5.2	1	35	4.9	3.4	0	1.3	9.6	0	0	41.6	6.2	47.8	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 07:30 AM																										
07:30 AM	0	36	28	2	66	0	0	0	10	10	**25**	343	56	9	433	**80**	**51**	0	17	**148**	0	0	419	54	473	1130
07:45 AM	0	**47**	**48**	3	**98**	0	0	0	9	9	14	310	67	**21**	412	54	41	0	**18**	113	0	0	**525**	80	**605**	**1237**
08:00 AM	0	34	31	1	66	0	0	0	11	11	9	321	**74**	11	415	58	30	0	13	101	0	0	489	74	563	1156
08:15 AM	0	38	47	4	89	0	0	0	**15**	**15**	23	**351**	58	13	445	50	43	0	18	111	0	0	454	**88**	542	1202
Total Volume	0	155	154	10	319	0	0	0	45	45	71	1325	255	54	1705	242	165	0	66	473	0	0	1887	296	2183	4725
% App. Total	0	48.6	48.3	3.1		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	86.4	13.6		
PHF	.000	.824	.802	.625	.814	.000	.000	.000	.750	.750	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.899	.841	.902	.955

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAAM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM					07:45 AM					07:30 AM					07:30 AM					07:15 AM				
+0 mins.	0	47	48	3	98	0	0	0	9	9	25	343	56	9	433	80	51	0	17	148	0	0	495	65	560
+15 mins.	0	34	31	1	66	0	0	0	11	11	14	310	67	21	412	54	41	0	18	113	0	0	419	54	473
+30 mins.	0	38	47	4	89	0	0	0	15	15	9	321	74	11	415	58	30	0	13	101	0	0	525	80	605
+45 mins.	0	45	44	4	93	0	0	0	18	18	23	351	58	13	445	50	43	0	18	111	0	0	489	74	563
Total Volume	0	164	170	12	346	0	0	0	53	53	71	1325	255	54	1705	242	165	0	66	473	0	0	1928	273	2201
% App. Total	0	47.4	49.1	3.5		0	0	0	100		4.2	77.7	15	3.2		51.2	34.9	0	14		0	0	87.6	12.4	
PHF	.000	.872	.885	.750	.883	.000	.000	.000	.736	.736	.710	.944	.861	.643	.958	.756	.809	.000	.917	.799	.000	.000	.918	.853	.910

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

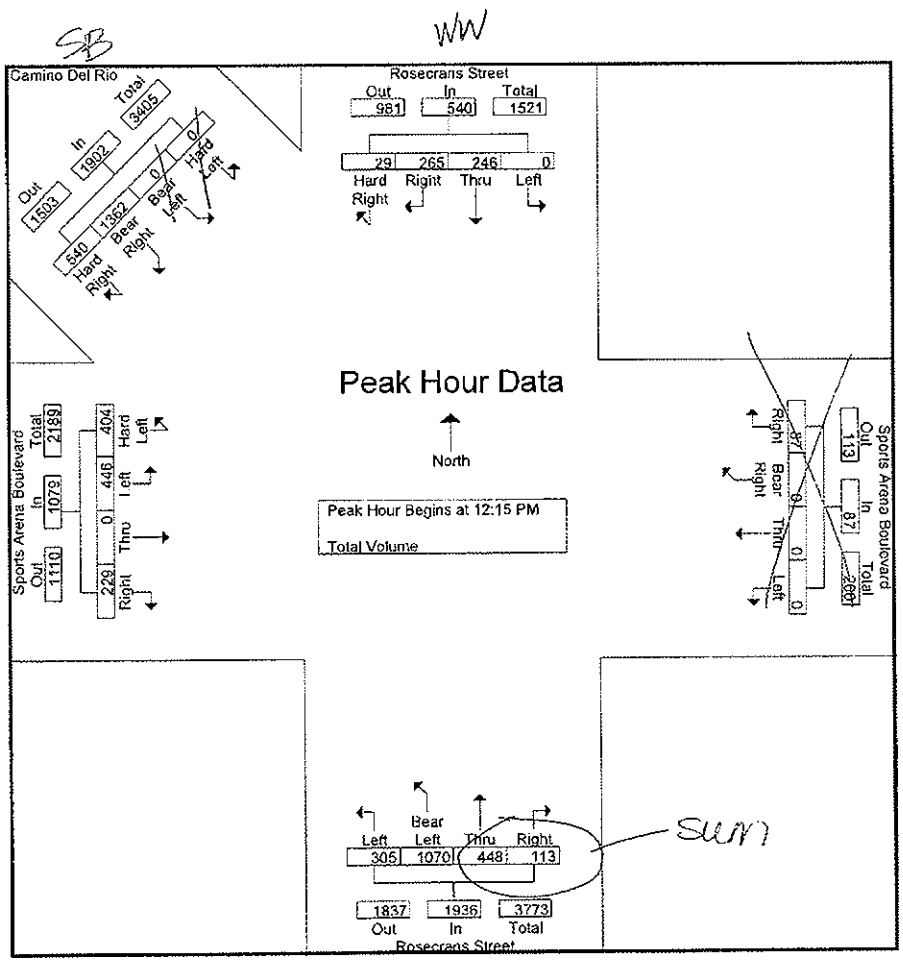
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
11:30 AM	0	55	87	6	148	0	0	0	25	25	81	228	100	26	435	86	79	0	48	213	0	0	328	132	460	1281
11:45 AM	0	47	93	7	147	0	0	0	23	23	79	246	104	18	447	84	86	0	53	223	0	0	377	161	538	1378
Total	0	102	180	13	295	0	0	0	48	48	160	474	204	44	882	170	165	0	101	436	0	0	705	293	998	2659
12:00 PM	0	73	90	2	165	0	0	0	19	19	71	252	99	9	431	93	105	0	59	257	0	0	328	146	474	1346
12:15 PM	0	66	70	7	143	0	0	0	17	17	93	231	105	23	452	78	93	0	68	239	0	0	353	159	512	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	299	122	27	525	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	10	118	0	0	0	23	23	75	241	116	38	470	95	105	0	43	243	0	0	339	119	458	1312
Total	0	245	284	21	550	0	0	0	81	81	316	1023	442	97	1878	376	418	0	224	1018	0	0	1364	556	1920	5447
01:00 PM	0	74	71	10	155	0	0	0	25	25	60	299	105	25	489	121	133	0	64	318	0	0	326	130	456	1443
01:15 PM	0	51	61	5	117	0	0	0	21	21	48	221	94	18	381	87	122	0	41	250	0	0	330	119	449	1218
Grand Total	0	472	596	49	1117	0	0	0	175	175	584	2017	845	184	3630	754	838	0	430	2022	0	0	2725	1098	3823	10767
Apprch %	0	42.3	53.4	4.4		0	0	0	100		16.1	55.6	23.3	5.1		37.3	41.4	0	21.3		0	0	71.3	28.7		
Total %	0	4.4	5.5	0.5	10.4	0	0	0	1.6	1.6	5.4	18.7	7.8	1.7	33.7	7	7.8	0	4	18.8	0	0	25.3	10.2	35.5	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Bear Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 12:15 PM																										
12:15 PM	0	66	70	7	143	0	0	0	17	17	**93**	231	105	23	452	78	93	0	**68**	239	0	0	**353**	**159**	**512**	1363
12:30 PM	0	54	68	2	124	0	0	0	22	22	77	**299**	**122**	27	**525**	110	115	0	54	279	0	0	344	132	476	1426
12:45 PM	0	52	56	**10**	118	0	0	0	23	23	75	241	116	**38**	470	95	105	0	43	243	0	0	339	119	458	1312
01:00 PM	0	**74**	**71**	10	**155**	0	0	0	**25**	**25**	60	299	105	25	489	**121**	**133**	0	64	**318**	0	0	326	130	456	**1443**
Total Volume	0	246	265	29	540	0	0	0	87	87	305	1070	448	113	1936	404	446	0	229	1079	0	0	1362	540	1902	5544
% App. Total	0	45.6	49.1	5.4		0	0	0	100		15.8	55.3	23.1	5.8		37.4	41.3	0	21.2		0	0	71.6	28.4		
PHF	.000	.831	.933	.725	.871	.000	.000	.000	.870	.870	.820	.895	.918	.743	.922	.835	.838	.000	.842	.848	.000	.000	.965	.849	.929	.960

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAMD
Site Code : 9102028
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:30 AM					12:30 PM					12:15 PM					12:30 PM					11:45 AM				
+0 mins.	0	55	87	6	148	0	0	0	22	22	**93**	231	105	23	452	110	115	0	54	279	0	0	377	**161**	**538**
+15 mins.	0	47	**93**	7	147	0	0	0	23	23	77	**299**	**122**	27	**525**	95	105	0	43	243	0	0	328	146	474
+30 mins.	0	**73**	90	2	**165**	0	0	0	**25**	**25**	75	241	116	38	470	**121**	**133**	0	**64**	**318**	0	0	353	159	512
+45 mins.	0	66	70	7	143	0	0	0	21	21	60	299	105	25	489	87	122	0	41	250	0	0	344	132	476
Total Volume	0	241	340	22	603	0	0	0	91	91	305	1070	448	113	1936	413	475	0	202	1090	0	0	1402	598	2000
% App. Total	0	40	56.4	3.6		0	0	0	100		15.8	55.3	23.1	5.8		37.9	43.6	0	18.5		0	0	70.1	29.9	
PHF	.000	.825	.914	.786	.914	.000	.000	.000	.910	.910	.820	.895	.918	.743	.922	.853	.893	.000	.789	.857	.000	.000	.930	.929	.929

Counts Unlimited Inc.
25286 Jadyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

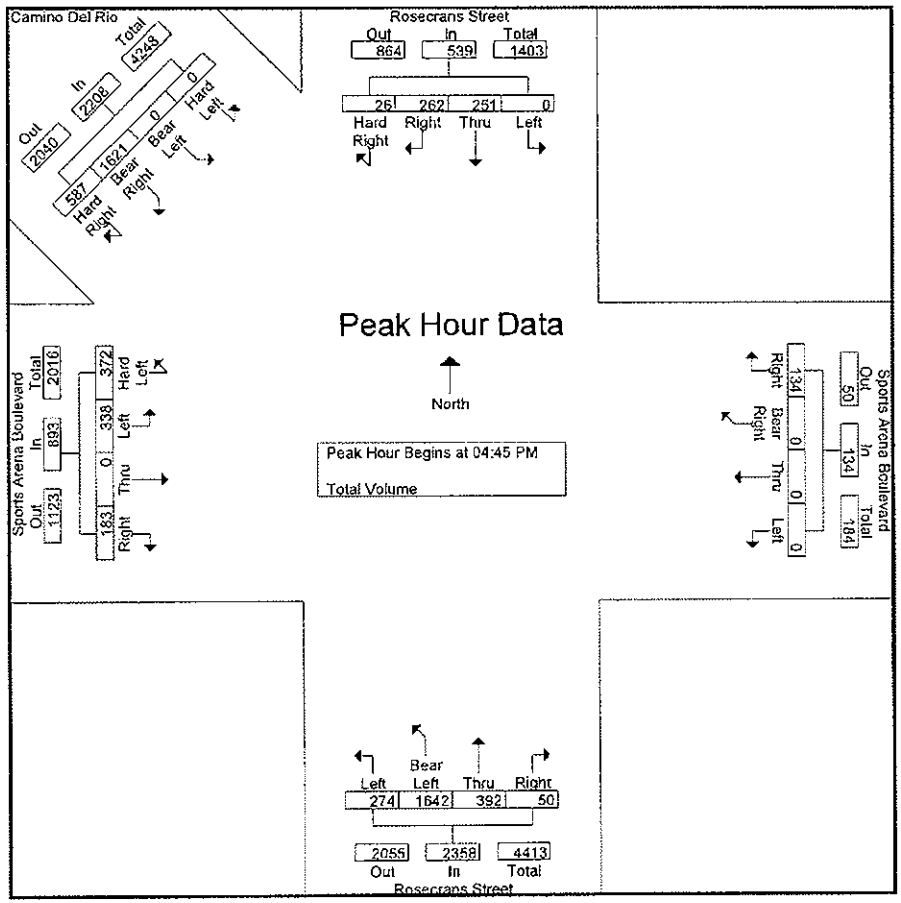
	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
04:00 PM	0	47	67	9	123	0	0	0	29	29	50	417	101	17	585	117	81	0	46	244	0	0	384	134	518	1499
04:15 PM	0	60	83	5	148	0	0	0	45	45	60	488	90	21	659	82	84	0	34	200	0	0	403	104	507	1559
04:30 PM	0	51	87	7	145	0	0	0	47	47	54	407	106	18	585	85	78	0	30	193	0	0	368	129	497	1467
04:45 PM	0	55	53	8	116	0	0	0	35	35	58	430	98	19	605	100	90	0	48	238	0	0	425	136	561	1555
Total	0	213	290	29	532	0	0	0	156	156	222	1742	395	75	2434	384	333	0	158	875	0	0	1580	503	2083	6080
05:00 PM	0	61	62	7	130	0	0	0	38	38	62	387	109	12	570	92	78	0	49	219	0	0	397	165	562	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	74	433	92	12	611	87	81	0	40	208	0	0	407	148	555	1557
05:30 PM	0	61	80	6	147	0	0	0	24	24	80	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
05:45 PM	0	62	74	9	145	0	0	0	24	24	63	338	83	16	500	87	85	0	51	223	0	0	381	134	515	1407
Total	0	258	283	27	568	0	0	0	123	123	279	1550	377	47	2253	359	333	0	186	878	0	0	1577	585	2162	5984
Grand Total	0	471	573	56	1100	0	0	0	279	279	501	3292	772	122	4687	743	666	0	344	1753	0	0	3157	1088	4245	12064
Apprch %	0	42.8	52.1	5.1		0	0	0	100		10.7	70.2	16.5	2.6		42.4	38	0	19.6		0	0	74.4	25.6		
Total %	0	3.9	4.7	0.5	9.1	0	0	0	2.3	2.3	4.2	27.3	6.4	1	38.9	6.2	5.5	0	2.9	14.5	0	0	26.2	9	35.2	

	Rosecrans Street Southbound					Sports Arena Boulevard Westbound					Rosecrans Street Northbound					Sports Arena Boulevard Eastbound					Camino Del Rio Southeastbound					
Start Time	Left	Thru	Right	Hard Right	App. Total	Left	Thru	Bear Right	Right	App. Total	Left	Bear Left	Thru	Right	App. Total	Hard Left	Left	Thru	Right	App. Total	Hard Left	Bear Left	Bear Right	Hard Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																										
Peak Hour for Entire Intersection Begins at 04:45 PM																										
04:45 PM	0	55	53	**8**	116	0	0	0	35	35	58	430	98	**19**	605	**100**	**90**	0	48	**238**	0	0	**425**	136	561	1555
05:00 PM	0	61	62	7	130	0	0	0	**38**	**38**	62	387	**109**	12	570	92	78	0	**49**	219	0	0	397	**165**	**562**	1519
05:15 PM	0	74	67	5	146	0	0	0	37	37	**74**	**433**	92	12	**611**	87	81	0	40	208	0	0	407	148	555	**1557**
05:30 PM	0	61	**80**	6	**147**	0	0	0	24	24	**80**	392	93	7	572	93	89	0	46	228	0	0	392	138	530	1501
Total Volume	0	251	262	26	539	0	0	0	134	134	274	1642	392	50	2358	372	338	0	183	893	0	0	1621	587	2208	6132
% App. Total	0	46.6	48.6	4.8		0	0	0	100		11.6	69.6	16.6	2.1		41.7	37.8	0	20.5		0	0	73.4	26.6		
PHF	.000	.848	.819	.813	.917	.000	.000	.000	.882	.882	.856	.948	.899	.658	.965	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982	.985

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Camino del Rio W
E/W: Sports Arena Boulevard
Weather: Sunny

File Name : SDCROSAPM
Site Code : 9102028
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					04:15 PM					04:00 PM					04:45 PM					04:45 PM				
+0 mins.	0	61	62	7	130	0	0	0	45	45	50	417	101	17	585	**100**	**90**	0	48	**238**	0	0	425	136	561
+15 mins.	0	**74**	67	5	146	0	0	0	**47**	**47**	**60**	**488**	90	**21**	**659**	92	78	0	**49**	219	0	0	397	**165**	**562**
+30 mins.	0	61	**80**	6	**147**	0	0	0	35	35	54	407	**106**	18	585	87	81	0	40	208	0	0	407	148	555
+45 mins.	0	62	74	9	145	0	0	0	38	38	58	430	98	19	605	93	89	0	46	228	0	0	392	138	530
Total Volume	0	258	283	27	568	0	0	0	165	165	222	1742	395	75	2434	372	338	0	183	893	0	0	1621	587	2208
% App. Total	0	45.4	49.8	4.8		0	0	0	100		9.1	71.6	16.2	3.1		41.7	37.8	0	20.5		0	0	73.4	26.6	
PHF	.000	.872	.884	.750	.966	.000	.000	.000	.878	.878	.925	.892	.932	.893	.923	.930	.939	.000	.934	.938	.000	.000	.954	.889	.982

(17)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		134			120	3			2				259
7:15 AM		137			103	5			7				252
7:30 AM		130			110	3			3				246
7:45 AM		182			135	5			10				332
8:00 AM		183			156	4			10				353
8:15 AM		175			134	6			7				322
8:30 AM		138			143	9			10				300
8:45 AM		147			130	6			14				297

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1226	0	0	1031	41	0	0	63	0	0	0	2361
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	96.18%	3.82%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_012 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Sports Arena Blvd			Sports Arena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		228			224	4			32				488
4:15 PM		210			202	6			26				444
4:30 PM		211			222	3			30				466
4:45 PM		203			196	6			29				434
5:00 PM		206			234	7			33				480
5:15 PM		190			181	1			32				404
5:30 PM		142			171	3			22				338
5:45 PM		125			180	2			13				320

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1515	0	0	1610	32	0	0	217	0	0	0	3374
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	98.05%	1.95%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[illegible]													
[illegible]	[illegible]												
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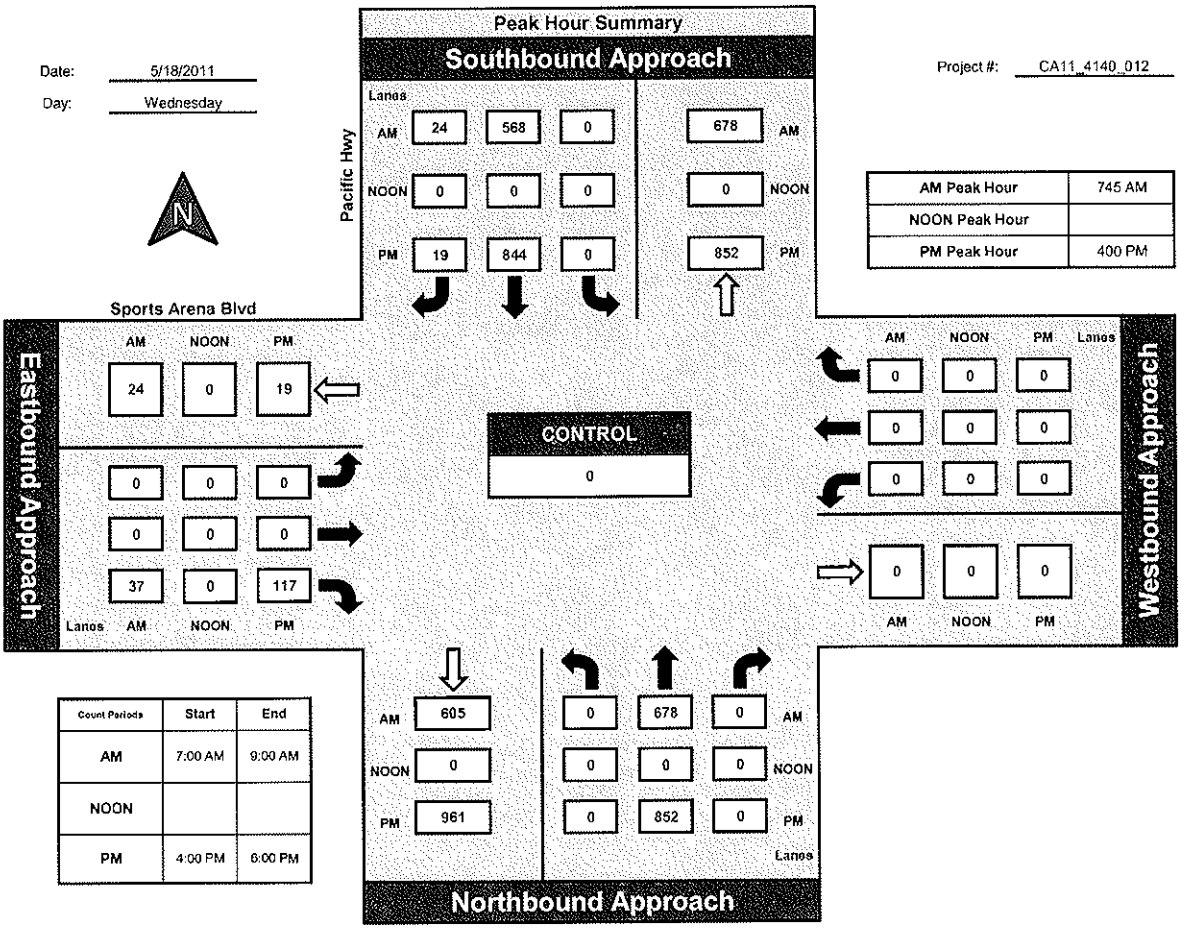
CONTROL :

ITM Peak Hour Summary

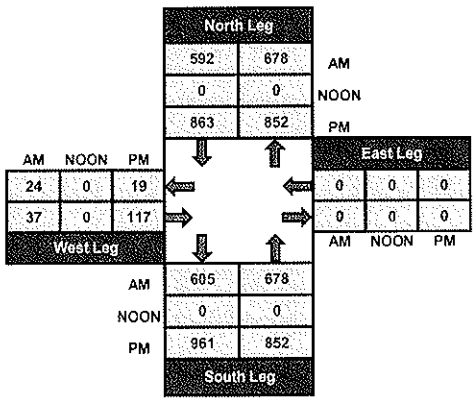
Prepared by:

National Data & Surveying Services

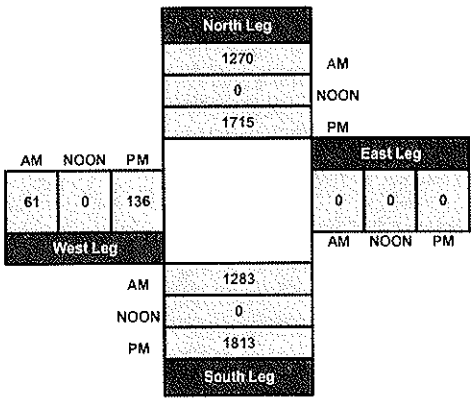
Pacific Hwy and Sports Arena Blvd , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(18)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

Day: THURSDAY

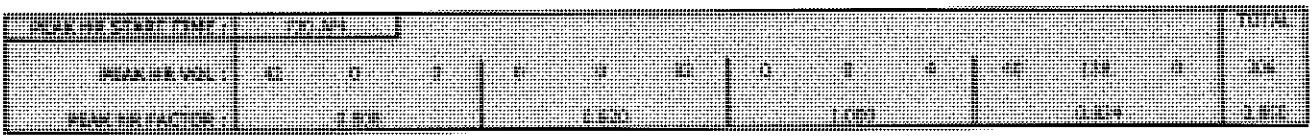
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0					5	0		0	0	6		11
7:15 AM	1					18	0		1	10	28		58
7:30 AM	13					18	0		1	13	32		77
7:45 AM	10					19	0		1	5	32		67
8:00 AM	10					25	0		1	16	38		90
8:15 AM	9					20	0		1	6	36		72
8:30 AM	17					14	1		2	12	30		76
8:45 AM	9					18	0		0	13	26		66

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	69	0	0	0	0	137	1	0	7	75	228	0	517
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	12.50%	0.00%	87.50%	24.75%	75.25%	0.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_013

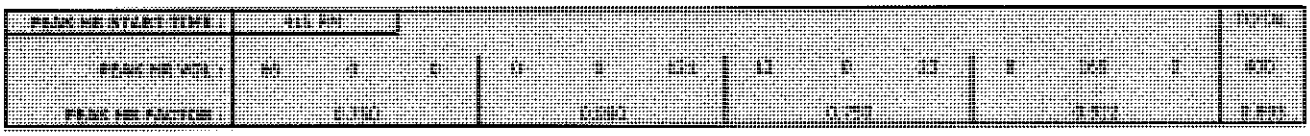
Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Kurtz St			Kurtz St			Hancock St			Hancock St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	8					13	1		0	0	21		43
4:15 PM	22					32	5		7	3	42		111
4:30 PM	22					34	2		6	2	46		112
4:45 PM	9					23	3		3	3	41		82
5:00 PM	13					32	3		7	0	40		95
5:15 PM	11					22	1		10	0	43		87
5:30 PM	10					16	2		8	1	26		63
5:45 PM	11					13	2		12	0	32		70
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	106	0	0	0	0	185	19	0	53	9	291	0	663
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	26.39%	0.00%	73.61%	3.00%	97.00%	0.00%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

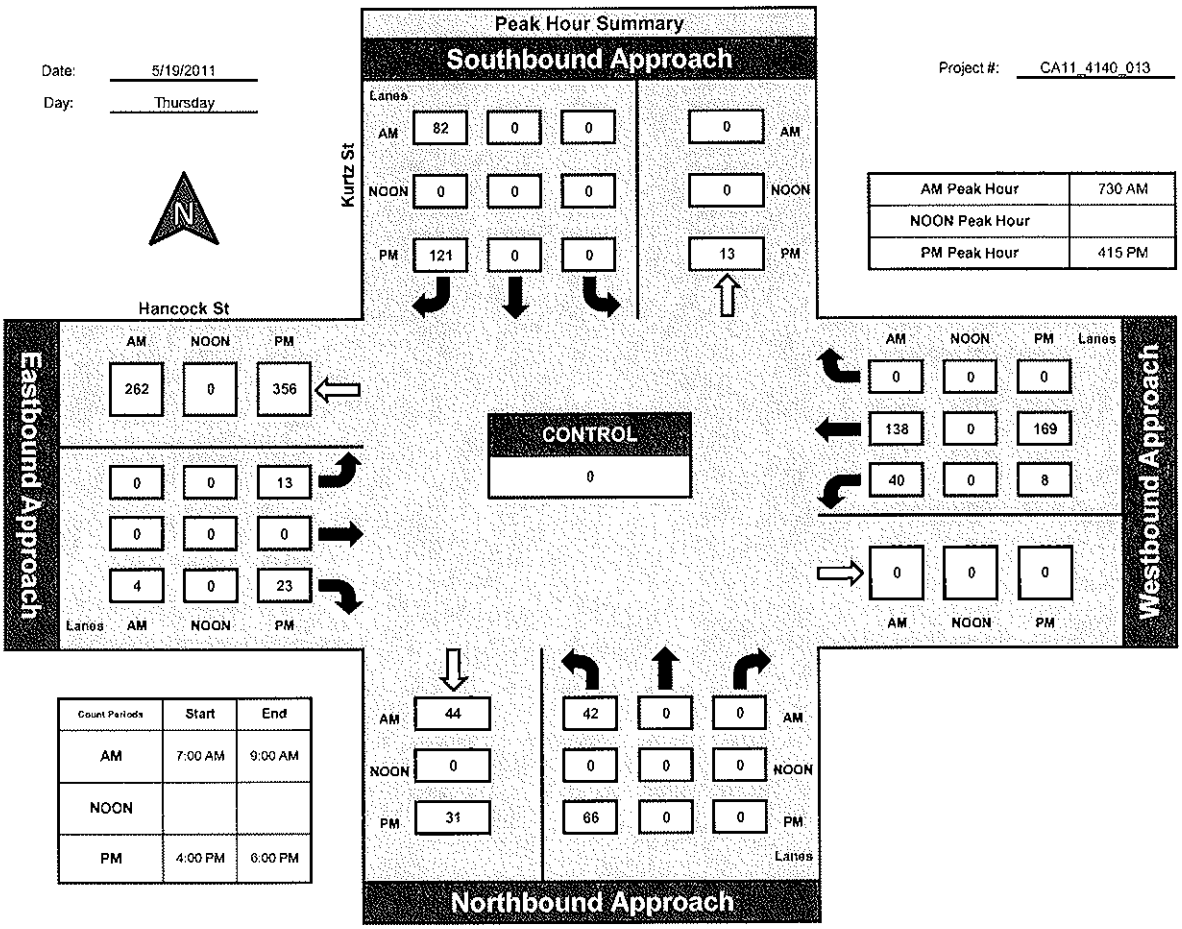
National Data & Surveying Services

Kurtz St and Hancock St , City of San Diego

Date: 5/19/2011

Day: Thursday

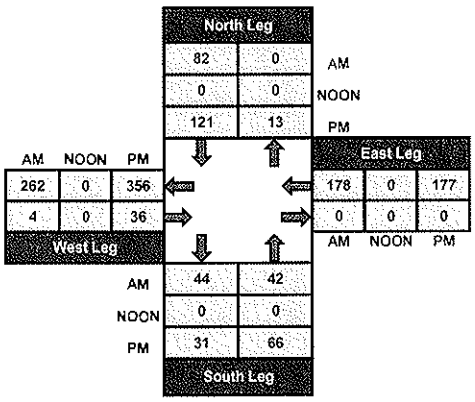
Project #: CA11_4140_013



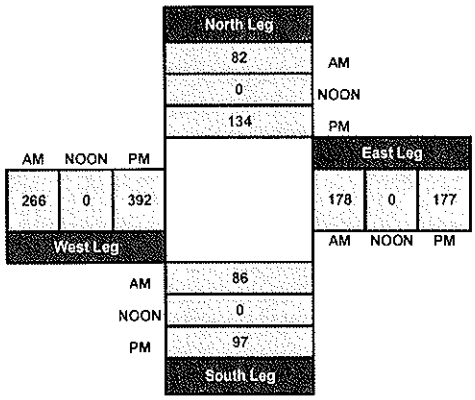
AM Peak Hour	730 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

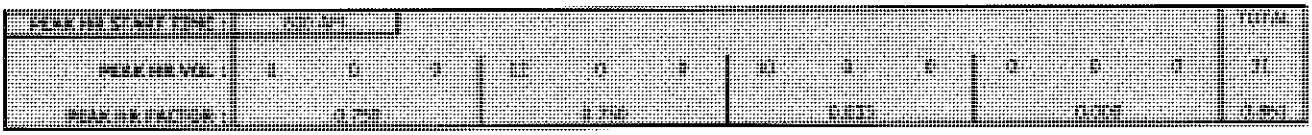
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM			3	0			1						4
7:15 AM			2	3			0						5
7:30 AM			1	1			3						5
7:45 AM			2	1			3						6
8:00 AM			1	4			1						6
8:15 AM			2	3			3						8
8:30 AM			3	3			3						9
8:45 AM			3	2			3						8

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	17	17	0	0	17	0	0	0	0	0	51
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM			4	2			3						9
4:15 PM			0	3			2						5
4:30 PM			2	1			1						4
4:45 PM			3	0			3						6
5:00 PM			2	1			2						5
5:15 PM			2	0			0						2
5:30 PM			2	1			0						3
5:45 PM			1	0			1						2

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	16	8	0	0	12	0	0	0	0	0	36
APPROACH %'s :	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

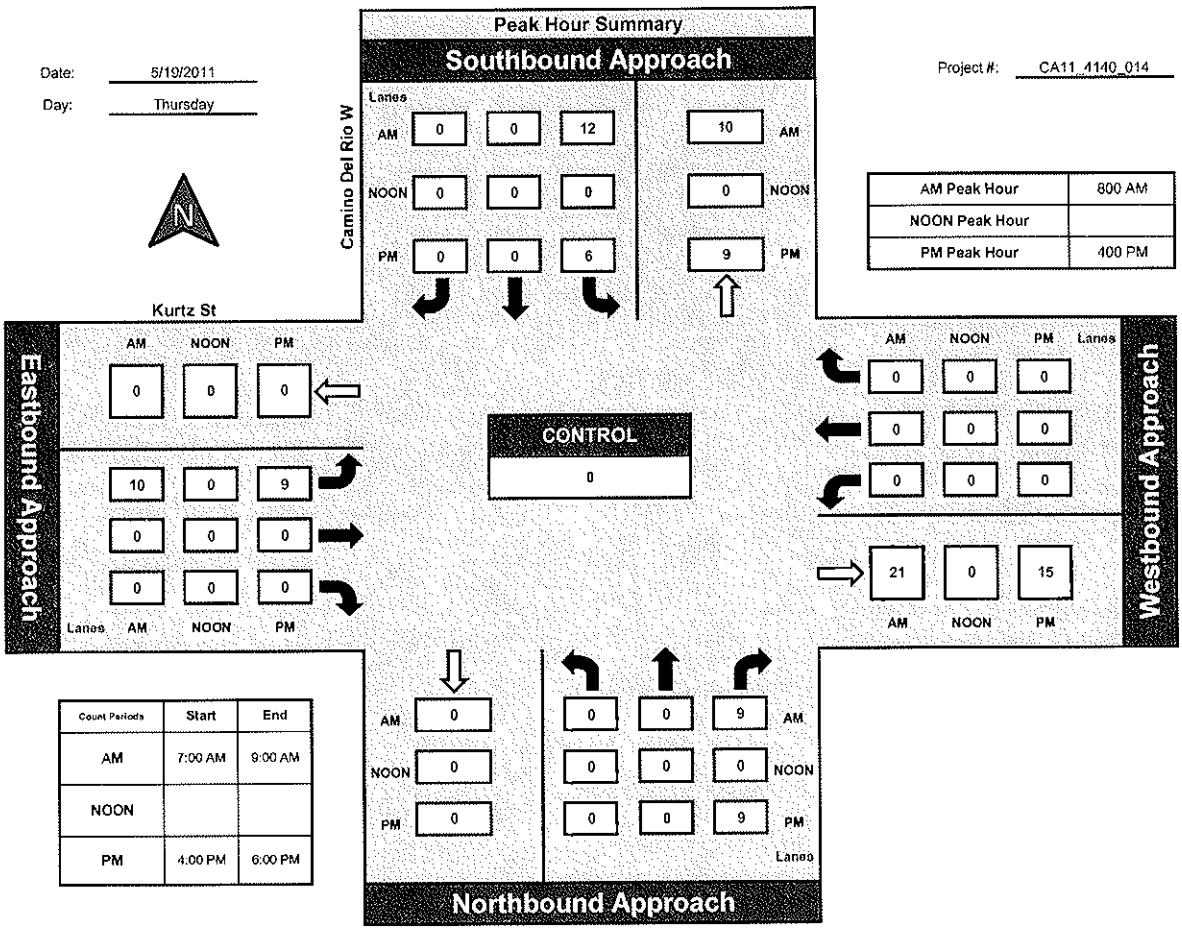
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

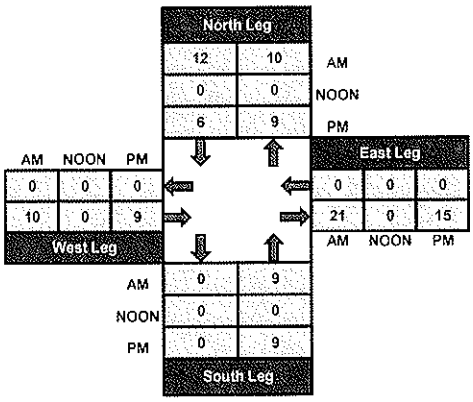
Project #: CA11_4140_014



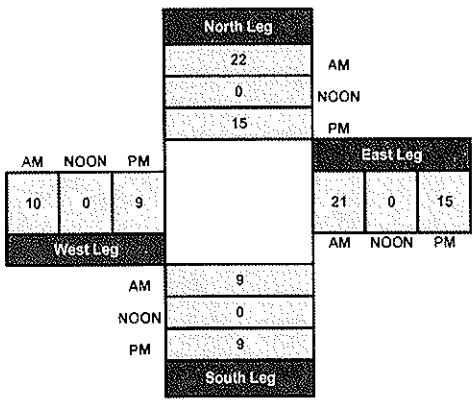
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				2									2
7:15 AM				1									1
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				2									2
8:15 AM				4									4
8:30 AM				2									2
8:45 AM				3									3
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	17	0	0	0	0	0	0	0	0	17
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

City: City of San Diego

Date: 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				5									5
4:15 PM				2									2
4:30 PM				3									3
4:45 PM				6									6
5:00 PM				0									
5:15 PM				3									3
5:30 PM				5									5
5:45 PM				4									4
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	28	0	0	0	0	0	0	0	0	28
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :													
PEAK HR VOL :													
PEAK HR FACTOR :													

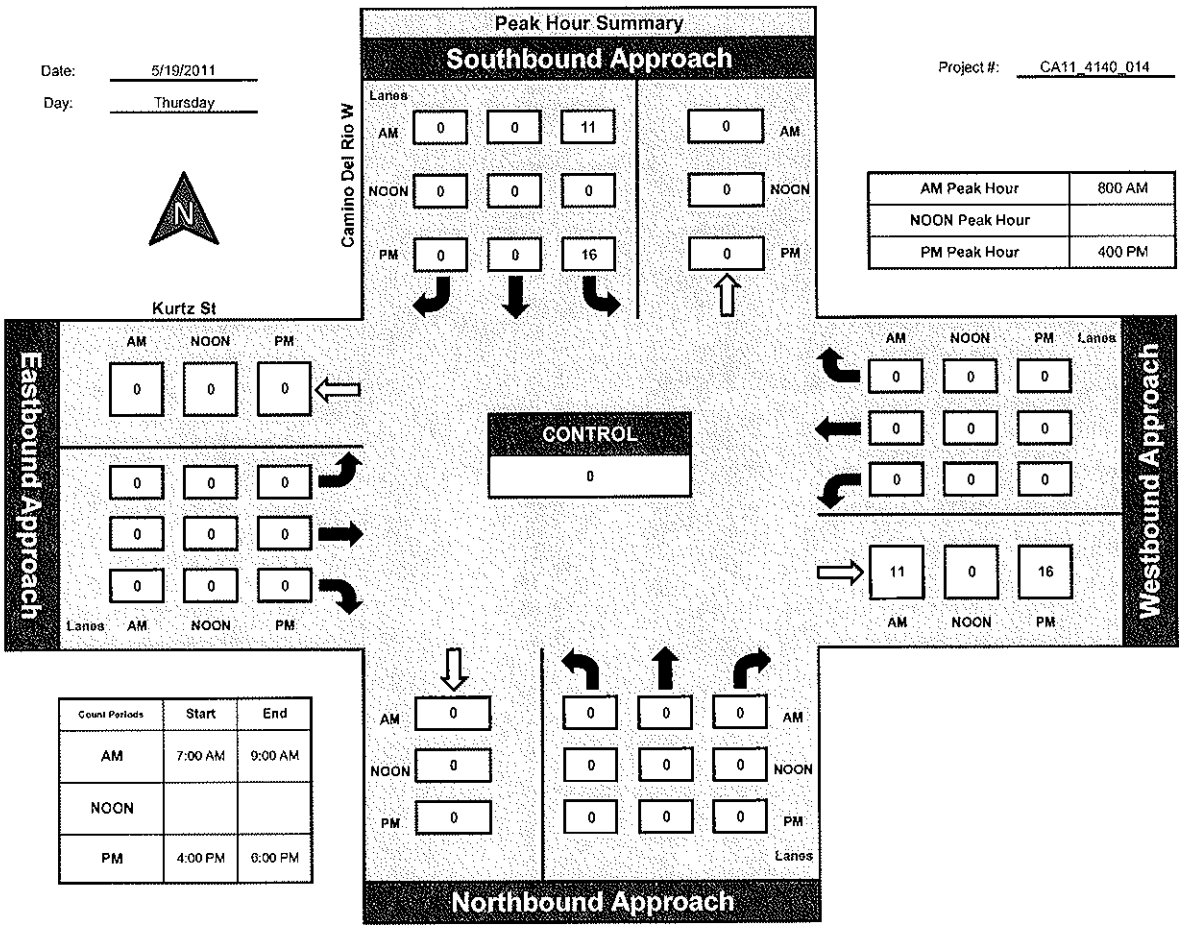
CONTROL :

ITM Peak Hour Summary

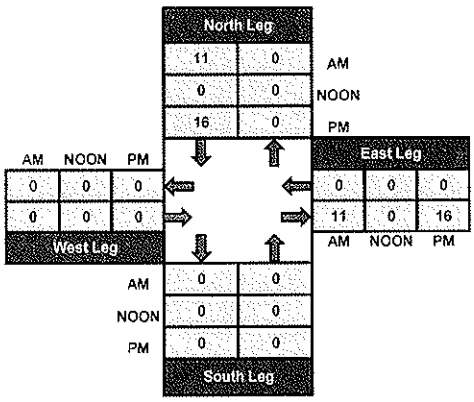
Prepared by:

National Data & Surveying Services

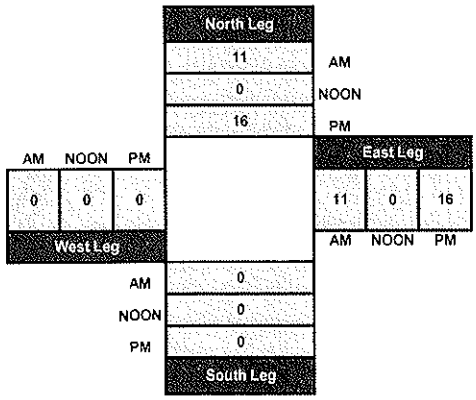
Camino Del Rio W and Kurtz St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(19)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_014

Day: THURSDAY

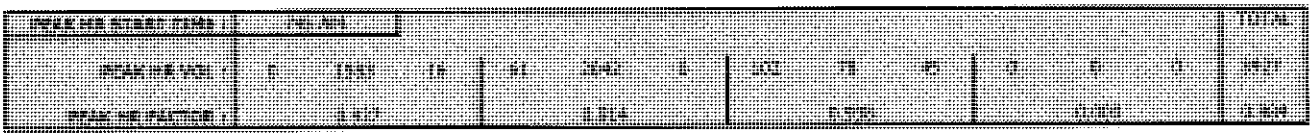
City: City of San Diego

Date: 5/19/2011

AM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		217	1	12	475		26	6	6				743
7:15 AM		330	2	8	521		18	13	9				901
7:30 AM		425	1	17	498		28	17	5				991
7:45 AM		386	5	5	524		22	15	17				974
8:00 AM		348	2	13	562		23	26	11				985
8:15 AM		427	4	18	468		25	20	8				970
8:30 AM		422	5	25	488		32	17	9				998
8:45 AM		368	4	23	479		38	23	18				953

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2923	24	121	4015	0	212	137	83	0	0	0	7515
APPROACH %'s :	0.00%	99.19%	0.81%	2.93%	97.07%	0.00%	49.07%	31.71%	19.21%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

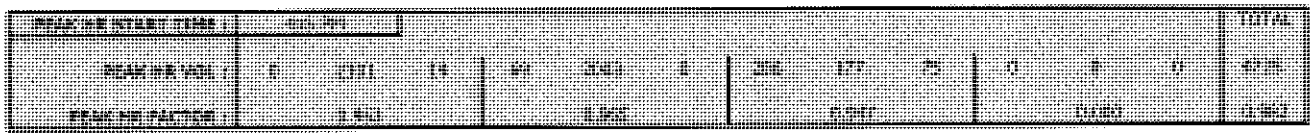
Project ID: CA11_4140_014 **Day:** THURSDAY

City: City of San Diego **Date:** 5/19/2011

PM

NS/EW Streets:	Camino Del Rio W			Camino Del Rio W			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		500	3	22	447		68	36	14				1090
4:15 PM		547	2	22	510		67	34	21				1203
4:30 PM		553	2	19	466		82	41	16				1179
4:45 PM		495	8	20	498		63	51	21				1156
5:00 PM		506	2	8	529		74	51	17				1187
5:15 PM		489	2	9	531		67	36	20				1154
5:30 PM		417	11	9	507		62	23	12				1041
5:45 PM		438	2	13	563		42	31	12				1101

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	3945	32	122	4051	0	525	303	133	0	0	0	9111
APPROACH %'s :	0.00%	99.20%	0.80%	2.92%	97.08%	0.00%	54.63%	31.53%	13.84%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

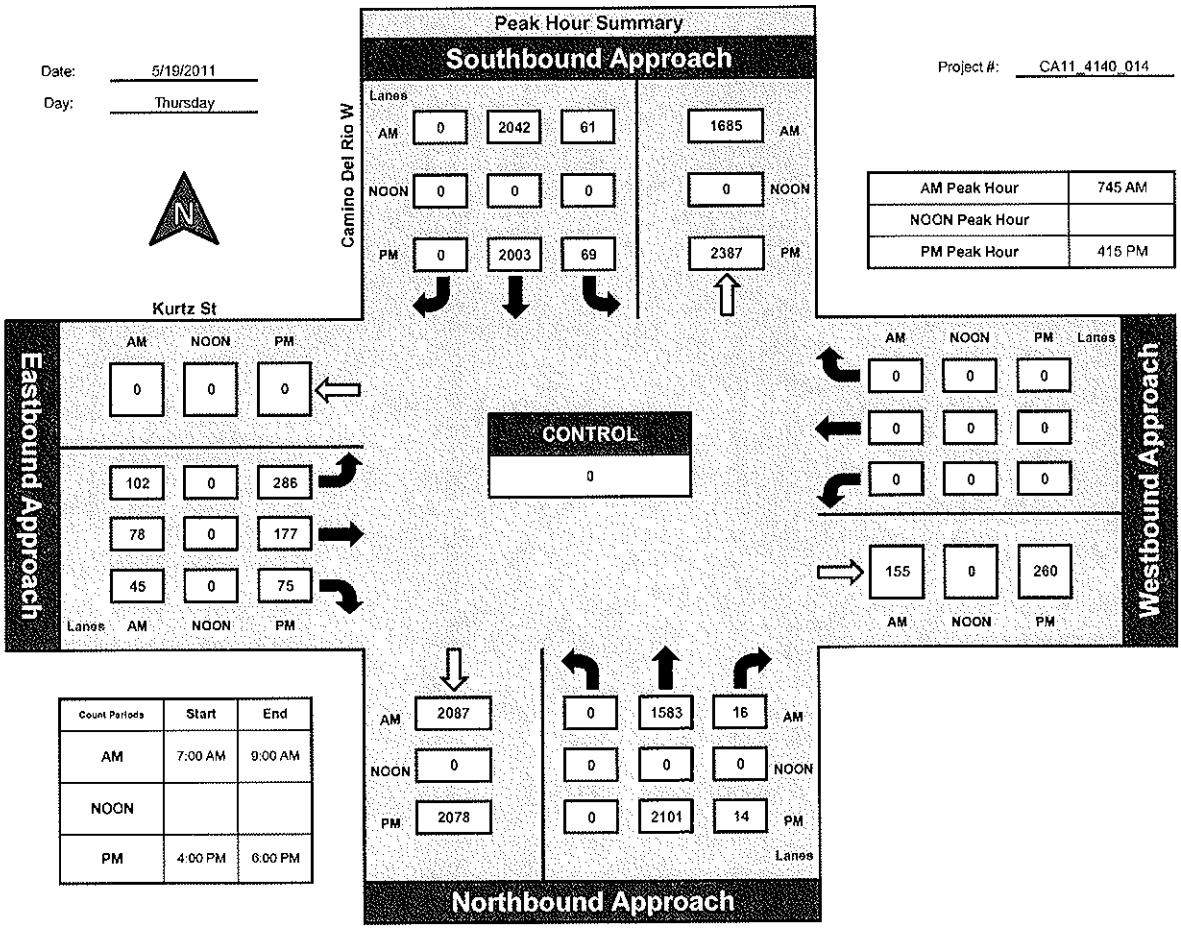
National Data & Surveying Services

Camino Del Rio W and Kurtz St , City of San Diego

Date: 5/19/2011

Day: Thursday

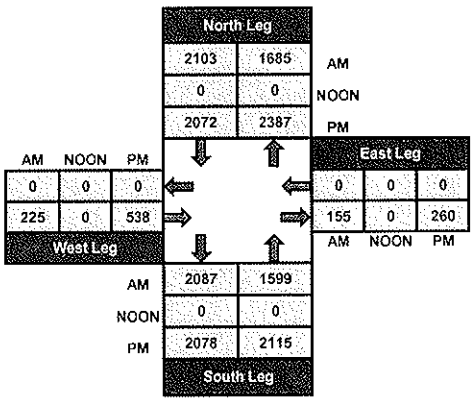
Project #: CA11_4140_014



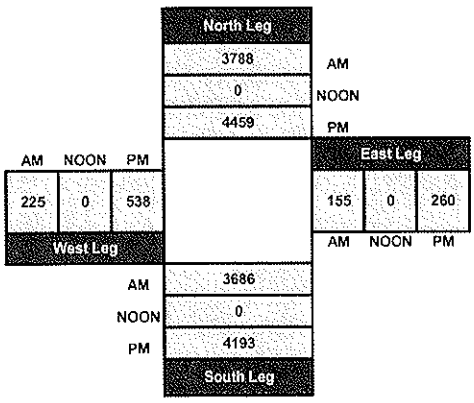
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(20)

6

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

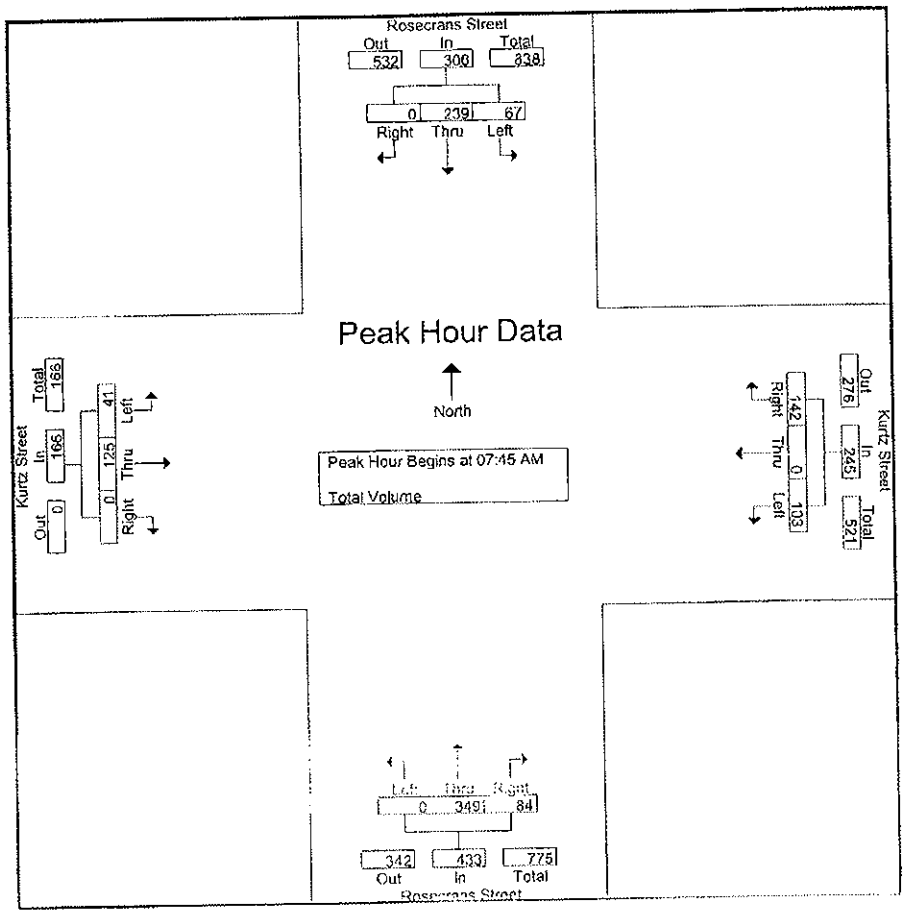
	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
Total	21	24	0	45	23	0	38	61	0	57	20	77	8	27	0	35	218
07:00 AM	18	36	0	54	17	0	28	45	0	50	23	73	6	26	0	32	204
07:15 AM	28	42	0	70	19	0	33	52	0	68	22	90	4	31	0	35	247
07:30 AM	19	58	0	77	16	0	35	51	0	77	29	106	10	35	0	45	279
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
Total	85	206	0	291	73	0	131	204	0	287	93	380	30	118	0	148	1023
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Grand Total	153	399	0	552	178	0	276	454	0	601	178	779	69	244	0	313	2098
Apprch %	27.7	72.3	0		39.2	0	60.8		0	77.2	22.8		22	78	0		
Total %	7.3	19	0	26.3	8.5	0	13.2	21.6	0	28.6	8.5	37.1	3.3	11.6	0	14.9	

	Rosecrans Street Southbound				Kurtz Street Westbound				Rosecrans Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	20	70	0	90	21	0	35	56	0	92	19	111	10	26	0	36	293
08:00 AM	18	44	0	62	18	0	38	56	0	80	23	103	11	26	0	37	258
08:15 AM	15	61	0	76	36	0	38	74	0	91	20	111	12	42	0	54	315
08:30 AM	14	64	0	78	28	0	31	59	0	86	22	108	8	31	0	39	284
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	41	125	0	166	1150
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		24.7	75.3	0		
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.946	.913	.975	.854	.744	.000	.767	.913

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUAM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	20	70	0	90	21	0	35	56	0	92	19	111	10	35	0	45
+15 mins.	18	44	0	62	18	0	38	56	0	80	23	103	10	26	0	36
+30 mins.	15	61	0	76	36	0	38	74	0	91	20	111	11	26	0	37
+45 mins.	14	64	0	78	28	0	31	59	0	86	22	108	12	42	0	54
Total Volume	67	239	0	306	103	0	142	245	0	349	84	433	43	129	0	172
% App. Total	21.9	78.1	0		42	0	58		0	80.6	19.4		25	75	0	
PHF	.838	.854	.000	.850	.715	.000	.934	.828	.000	.948	.913	.975	.896	.768	.000	.796

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

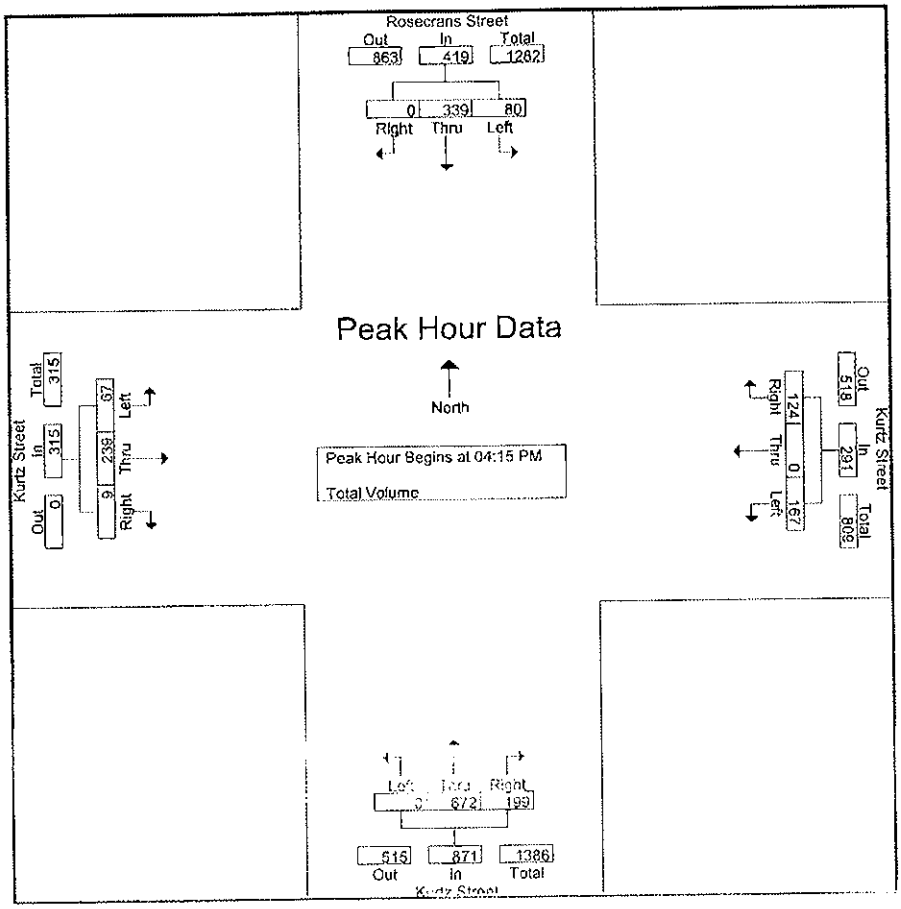
	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	19	88	0	107	34	0	32	66	0	167	48	215	12	60	3	75	463
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
Total	85	342	0	427	170	0	132	302	0	660	205	865	60	228	8	296	1890
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
05:15 PM	10	93	0	103	40	0	35	75	0	150	47	197	15	44	4	63	438
05:30 PM	17	100	0	117	36	0	27	63	0	151	49	200	23	40	2	65	445
05:45 PM	11	105	0	116	45	0	20	65	0	133	45	178	12	35	3	50	409
Total	52	383	0	435	152	0	106	258	0	613	183	796	69	190	13	272	1761
Grand Total	137	725	0	862	322	0	238	560	0	1273	388	1661	129	418	21	568	3651
Apprch %	15.9	84.1	0		57.5	0	42.5		0	76.6	23.4		22.7	73.6	3.7		
Total %	3.8	19.9	0	23.6	8.8	0	6.5	15.3	0	34.9	10.6	45.5	3.5	11.4	0.6	15.6	

	Rosecrans Street Southbound				Kurtz Street Westbound				Kurtz Street Northbound				Kurtz Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	15	98	0	113	49	0	36	85	0	165	51	216	12	60	2	74	488
04:30 PM	23	86	0	109	51	0	25	76	0	152	59	211	12	53	2	67	463
04:45 PM	28	70	0	98	36	0	39	75	0	176	47	223	24	55	1	80	476
05:00 PM	14	85	0	99	31	0	24	55	0	179	42	221	19	71	4	94	469
Total Volume	80	339	0	419	167	0	124	291	0	672	199	871	67	239	9	315	1896
% App. Total	19.1	80.9	0		57.4	0	42.6		0	77.2	22.8		21.3	75.9	2.9		
PHF	.714	.808	.000	.927	.819	.000	.800	.856	.000	.938	.843	.976	.698	.841	.563	.838	.971

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Kurtz Street
Weather: Sunny

File Name : SDCROKUPM
Site Code : 9102003
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM								04:15 PM							
+0 mins.	14	85	0	99	34	0	32	66	0	165	51	216	12	60	2	74
+15 mins.	10	93	0	103	49	0	36	85	0	152	59	211	13	53	2	68
+30 mins.	17	100	0	117	51	2	25	76	0	174	47	221	21	55	1	77
+45 mins.	11	105	0	116	36	0	39	75	0	179	42	221	19	71	4	94
Total Volume	52	383	0	435	170	0	132	302	0	672	199	871	67	239	9	315
% App. Total	12	88	0		56.3	0	43.7		0	77.2	22.8		21.3	75.9	2.9	
PHF	.765	.912	.000	.929	.833	.000	.846	.888	.000	.939	.843	.976	.698	.842	.563	.838

(21)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	54	78			77	3			43				255
7:15 AM	57	76			71	2			42				248
7:30 AM	55	84			69	1			44				253
7:45 AM	78	101			91	1			58				329
8:00 AM	68	107			95	1			67				338
8:15 AM	89	99			80	4			65				337
8:30 AM	59	84			87	3			57				290
8:45 AM	56	80			66	2			73				277

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	516	709	0	0	636	17	0	0	449	0	0	0	2327
APPROACH %'s :	42.12%	57.88%	0.00%	0.00%	97.40%	2.60%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_015

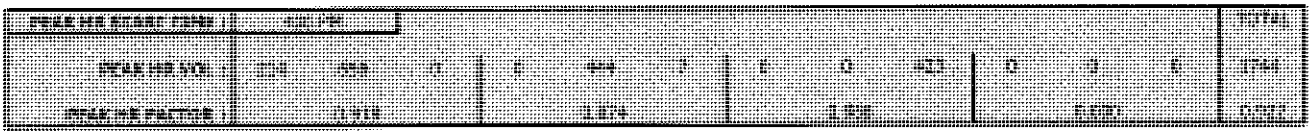
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Kurtz St			Kurtz St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	59	178			127	2			107				473
4:15 PM	38	185			100	3			106				432
4:30 PM	67	146			123	1			104				441
4:45 PM	50	147			94	1			106				398
5:00 PM	36	176			120	2			125				459
5:15 PM	47	137			69	3			110				366
5:30 PM	44	96			83	5			91				319
5:45 PM	39	90			86	1			103				319
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	380	1155	0	0	802	18	0	0	852	0	0	0	3207
APPROACH %'s :	24.76%	75.24%	0.00%	0.00%	97.80%	2.20%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

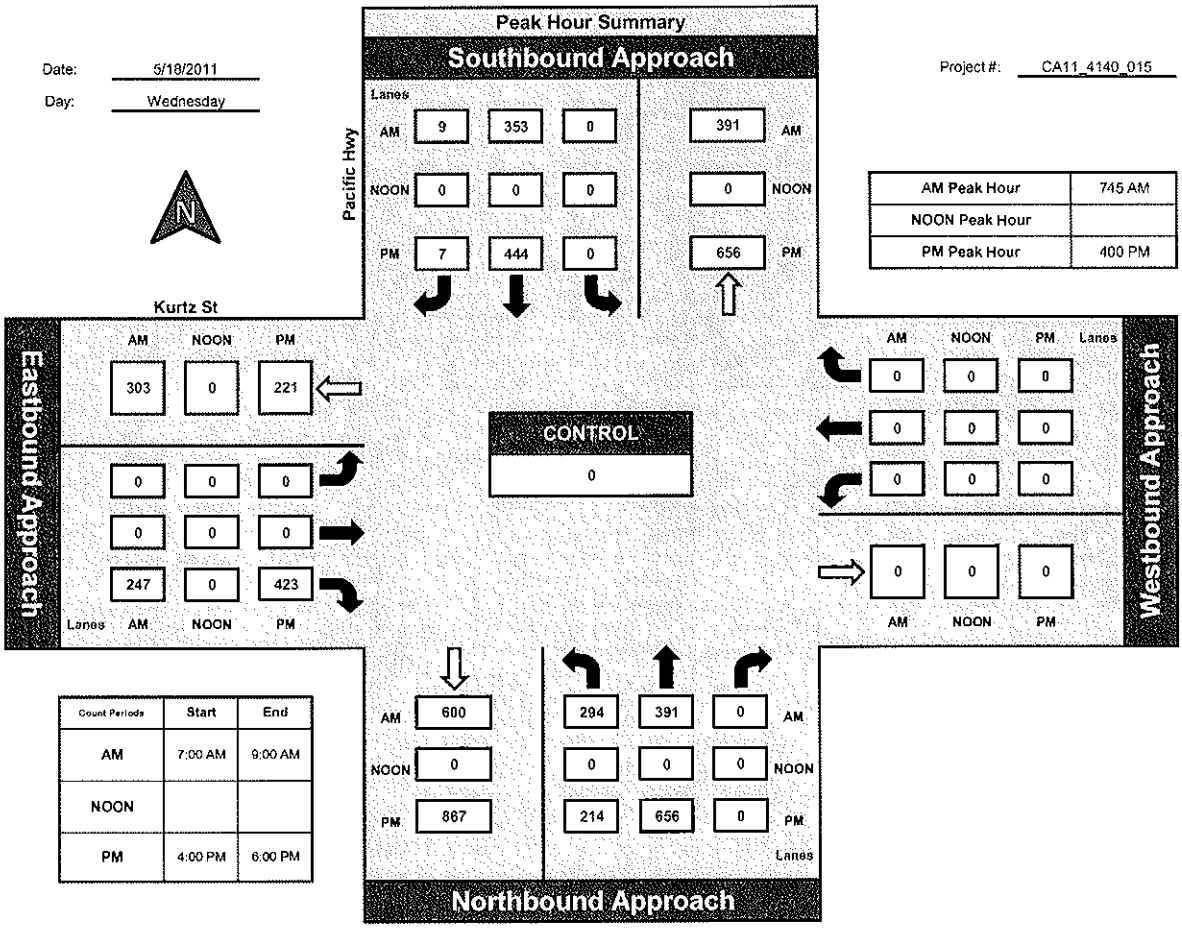
National Data & Surveying Services

Pacific Hwy and Kurtz St , City of San Diego

Date: 5/18/2011

Day: Wednesday

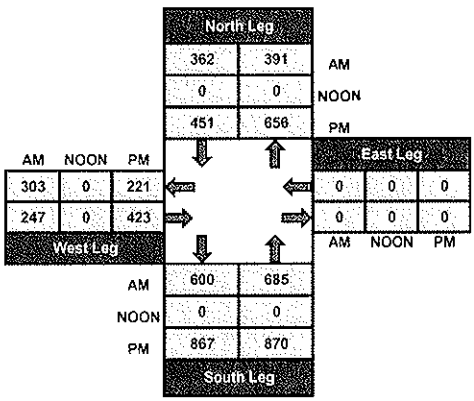
Project #: CA11_4140_015



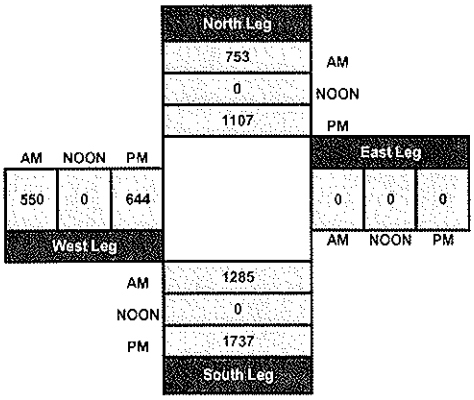
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	400 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(23)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

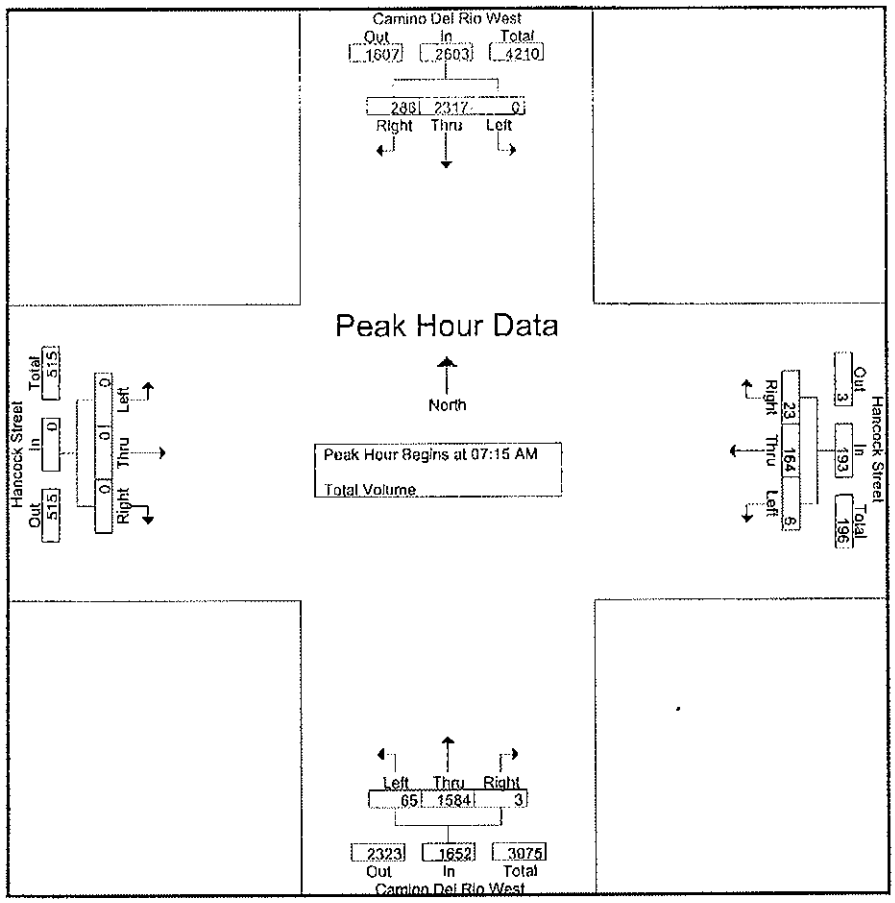
	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
Total	0	525	32	557	9	12	8	29	14	225	9	248	0	0	0	0	834
07:00 AM	0	589	35	624	9	12	8	29	15	279	9	303	0	0	0	0	956
07:15 AM	0	618	39	657	0	30	11	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	3	41	3	47	10	455	0	465	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	3	443	0	0	0	0	1146
Total	0	2311	214	2525	14	122	25	161	56	1498	12	1566	0	0	0	0	4252
08:00 AM	0	595	107	702	1	54	6	61	24	365	0	389	0	0	0	0	1152
08:15 AM	0	515	70	585	2	47	7	56	14	389	1	404	0	0	0	0	1045
08:30 AM	0	425	94	519	6	54	17	77	16	411	0	427	0	0	0	0	1023
Grand Total	0	4371	517	4888	32	289	63	384	124	2888	22	3034	0	0	0	0	8306
Apprch %	0	89.4	10.6		8.3	75.3	16.4		4.1	95.2	0.7		0	0	0		
Total %	0	52.6	6.2	58.8	0.4	3.5	0.8	4.6	1.5	34.8	0.3	36.5	0	0	0	0	

	Camino Del Rio West Southbound				Hancock Street Westbound				Camino Del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**618**	39	657	0	30	**11**	41	16	339	0	355	0	0	0	0	1053
07:30 AM	0	525	60	585	**3**	41	3	47	10	**455**	0	**465**	0	0	0	0	1097
07:45 AM	0	579	80	659	2	39	3	44	15	425	**3**	443	0	0	0	0	1146
08:00 AM	0	595	**107**	**702**	1	**54**	6	**61**	**24**	365	0	389	0	0	0	0	**1152**
Total Volume	0	2317	286	2603	6	164	23	193	65	1584	3	1652	0	0	0	0	4448
% App. Total	0	89	11		3.1	85	11.9		3.9	95.9	0.2		0	0	0		
PHF	.000	.937	.668	.927	.500	.759	.523	.791	.677	.870	.250	.888	.000	.000	.000	.000	.965

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino Del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAAM
Site Code : 9102111
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:45 AM				07:30 AM				06:45 AM			
+0 mins.	0	618	39	657	2	39	3	44	10	455	0	465	0	0	0	0
+15 mins.	0	525	60	585	1	54	6	61	15	425	3	443	0	0	0	0
+30 mins.	0	579	80	659	2	47	7	56	24	365	0	389	0	0	0	0
+45 mins.	0	595	107	702	6	54	17	77	14	389	1	404	0	0	0	0
Total Volume	0	2317	286	2603	11	194	33	238	63	1634	4	1701	0	0	0	0
% App. Total	0	89	11		4.6	81.5	13.9		3.7	96.1	0.2		0	0	0	
PHF	.000	.937	.668	.927	.458	.898	.485	.773	.656	.898	.333	.915	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 1

Groups Printed- Total Volume

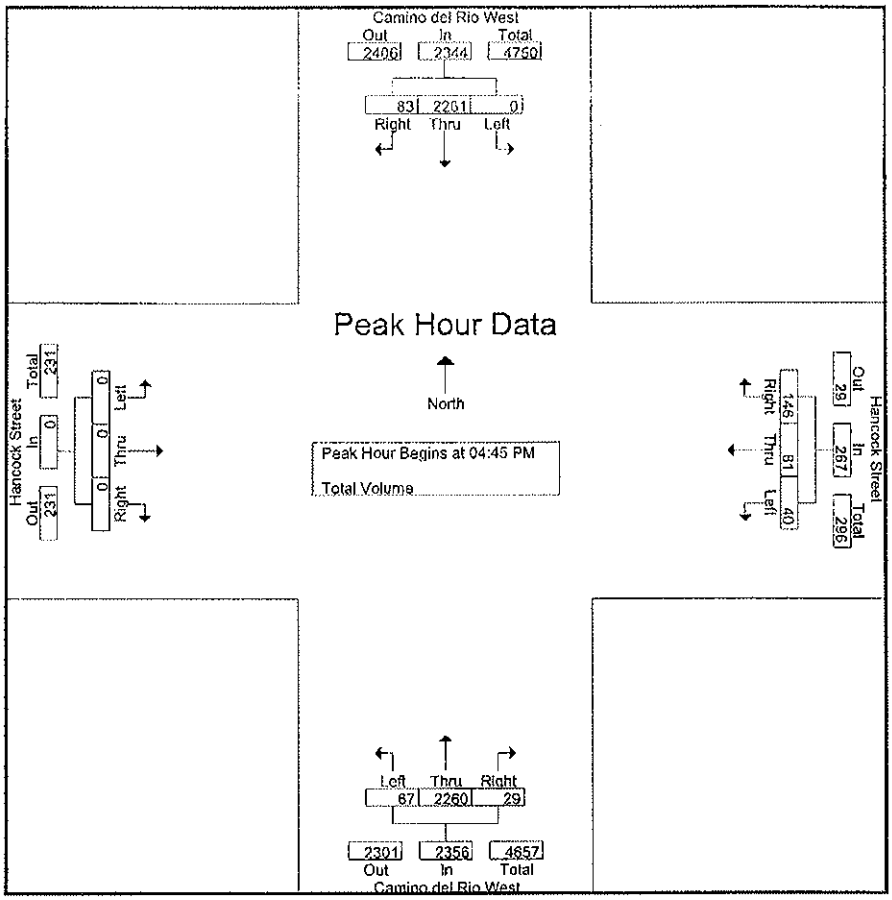
	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	476	31	507	1	34	14	49	17	585	5	607	0	0	0	0	1163
04:15 PM	0	523	30	553	5	23	34	62	11	525	5	541	0	0	0	0	1156
04:30 PM	0	532	25	557	9	21	33	63	11	569	2	582	0	0	0	0	1202
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
Total	0	2061	112	2173	29	97	118	244	68	2264	21	2353	0	0	0	0	4770
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
05:45 PM	0	538	23	561	8	21	27	56	15	489	7	511	0	0	0	0	1128
Total	0	2269	80	2349	34	83	136	253	53	2164	27	2244	0	0	0	0	4846
Grand Total	0	4330	192	4522	63	180	254	497	121	4428	48	4597	0	0	0	0	9616
Apprch %	0	95.8	4.2		12.7	36.2	51.1		2.6	96.3	1		0	0	0		
Total %	0	45	2	47	0.7	1.9	2.6	5.2	1.3	46	0.5	47.8	0	0	0	0	

	Camino del Rio West Southbound				Hancock Street Westbound				Camino del Rio West Northbound				Hancock Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	530	26	556	14	19	37	70	29	585	9	623	0	0	0	0	1249
05:00 PM	0	570	20	590	6	31	42	79	11	525	14	550	0	0	0	0	1219
05:15 PM	0	579	18	597	6	11	37	54	19	589	4	612	0	0	0	0	1263
05:30 PM	0	582	19	601	14	20	30	64	8	561	2	571	0	0	0	0	1236
Total Volume	0	2261	83	2344	40	81	146	267	67	2260	29	2356	0	0	0	0	4967
% App. Total	0	96.5	3.5		15	30.3	54.7		2.8	95.9	1.2		0	0	0		
PHF	.000	.971	.798	.975	.714	.653	.869	.845	.578	.959	.518	.945	.000	.000	.000	.000	.983

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Camino del Rio West
E/W: Hancock Street
Wather: Sunny

File Name : SDCDRWHAPM
Site Code : 9102099
Start Date : 5/27/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:15 PM				04:30 PM				04:00 PM			
+0 mins.	0	570	20	590	5	23	34	62	11	569	2	582	0	0	0	0
+15 mins.	0	579	18	597	9	21	33	63	29	585	9	623	0	0	0	0
+30 mins.	0	582	19	601	14	19	37	70	11	525	14	550	0	0	0	0
+45 mins.	0	538	23	561	6	31	42	79	19	589	4	612	0	0	0	0
Total Volume	0	2269	80	2349	34	94	146	274	70	2268	29	2367	0	0	0	0
% App. Total	0	96.6	3.4		12.4	34.3	53.3		3	95.8	1.2		0	0	0	
PHF	.000	.975	.870	.977	.607	.758	.869	.867	.603	.963	.518	.950	.000	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

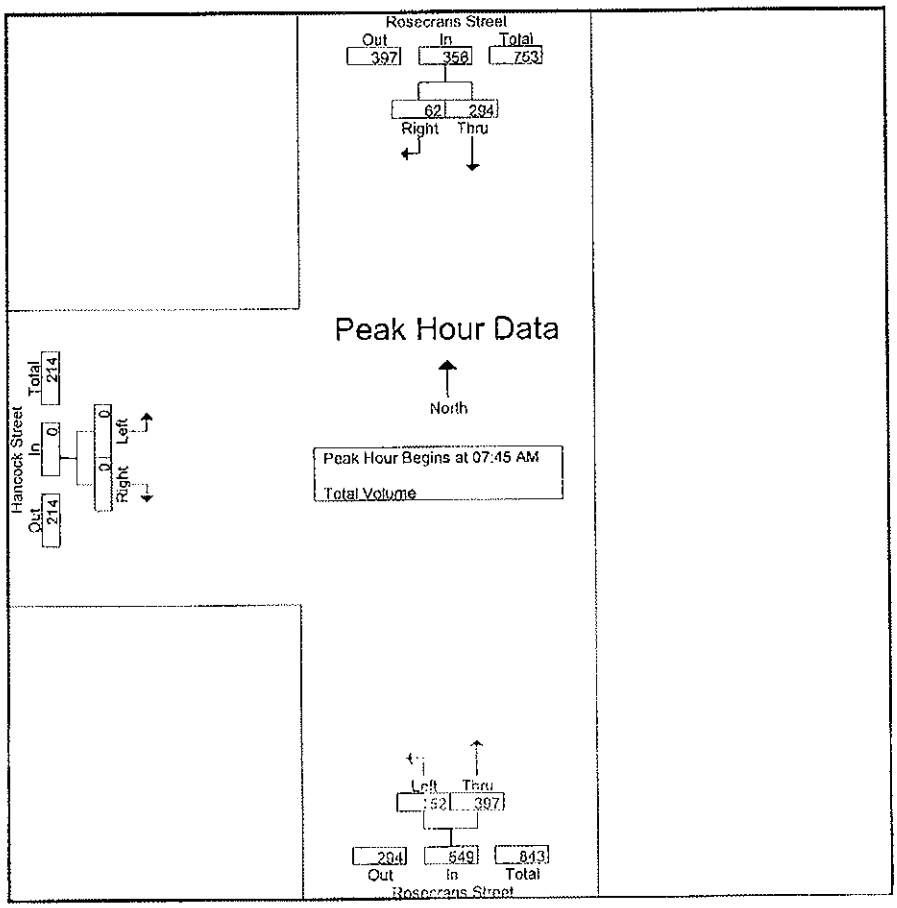
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
06:45 AM	46	6	52	40	70	110	0	0	0	162
Total	46	6	52	40	70	110	0	0	0	162
07:00 AM	50	5	55	23	59	82	0	0	0	137
07:15 AM	66	13	79	25	93	118	0	0	0	197
07:30 AM	72	19	91	27	101	128	0	0	0	219
07:45 AM	87	14	101	27	116	143	0	0	0	244
Total	275	51	326	102	369	471	0	0	0	797
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Grand Total	528	105	633	267	720	987	0	0	0	1620
Apprch %	83.4	16.6		27.1	72.9		0	0		
Total %	32.6	6.5	39.1	16.5	44.4	60.9	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	87	14	101	27	116	143	0	0	0	244
08:00 AM	60	18	78	45	85	130	0	0	0	208
08:15 AM	70	16	86	44	99	143	0	0	0	229
08:30 AM	77	14	91	36	97	133	0	0	0	224
Total Volume	294	62	356	152	397	549	0	0	0	905
% App. Total	82.6	17.4		27.7	72.3		0	0		
PHF	.845	.861	.881	.844	.856	.960	.000	.000	.000	.927

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAAM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:45 AM			06:45 AM		
+0 mins.	72	19	91	27	116	143	0	0	0
+15 mins.	87	14	101	45	85	130	0	0	0
+30 mins.	60	18	78	44	99	143	0	0	0
+45 mins.	70	16	86	36	97	133	0	0	0
Total Volume	289	67	356	152	397	549	0	0	0
% App. Total	81.2	18.8		27.7	72.3		0	0	
PHF	.830	.882	.881	.844	.856	.960	.000	.000	.000

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

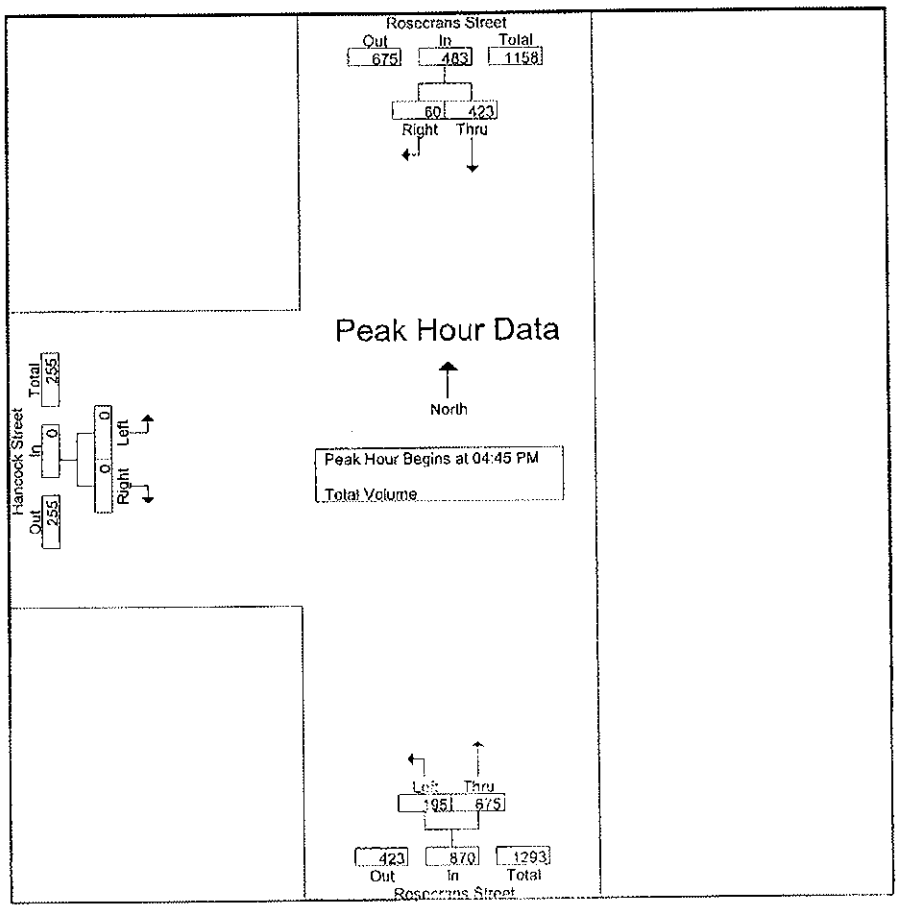
	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	104	18	122	48	157	205	0	0	0	327
04:15 PM	109	17	126	53	153	206	0	0	0	332
04:30 PM	106	20	126	44	158	202	0	0	0	328
04:45 PM	89	14	103	51	187	238	0	0	0	341
Total	408	69	477	196	655	851	0	0	0	1328
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
05:45 PM	117	12	129	31	138	169	0	0	0	298
Total	451	58	509	175	626	801	0	0	0	1310
Grand Total	859	127	986	371	1281	1652	0	0	0	2638
Apprch %	87.1	12.9		22.5	77.5		0	0		
Total %	32.6	4.8	37.4	14.1	48.6	62.6	0	0	0	

	Rosecrans Street Southbound			Rosecrans Street Northbound			Hancock Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	89	14	103	51	187	238	0	0	0	341
05:00 PM	107	17	124	51	167	218	0	0	0	342
05:15 PM	109	13	122	48	168	216	0	0	0	338
05:30 PM	118	16	134	45	153	198	0	0	0	332
Total Volume	423	60	483	195	675	870	0	0	0	1353
% App. Total	87.6	12.4		22.4	77.6		0	0		
PHF	.896	.882	.901	.956	.902	.914	.000	.000	.00	.990

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Hancock Street
Weather: Sunny

File Name : SDCROHAPM
Site Code : 91021234
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:30 PM			04:00 PM		
+0 mins.	107	17	124	44	158	202	0	0	0
+15 mins.	109	13	122	51	187	238	0	0	0
+30 mins.	118	16	134	51	167	218	0	0	0
+45 mins.	117	12	129	48	168	216	0	0	0
Total Volume	451	58	509	194	680	874	0	0	0
% App. Total	88.6	11.4		22.2	77.8		0	0	
PHF	.956	.853	.950	.951	.909	.918	.000	.000	.000

(25)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				12			37	101				14	164
7:15 AM				16			46	158				24	244
7:30 AM				15			58	111				31	215
7:45 AM				17			60	103				32	212
8:00 AM				12			86	117				23	238
8:15 AM				10			66	76				18	170
8:30 AM				14			43	62				37	156
8:45 AM				22			58	66				27	173
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	118	0	0	454	794	0	0	0	206	1572
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	36.38%	63.62%	0.00%	0.00%	0.00%	100.00%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_021

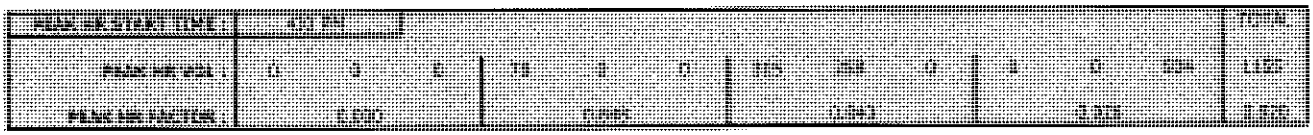
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Old Towne Ave			Old Towne Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				11			54	46				124	235
4:15 PM				18			66	63				107	254
4:30 PM				15			66	68				136	285
4:45 PM				17			78	58				116	269
5:00 PM				23			83	50				131	287
5:15 PM				23			88	82				121	314
5:30 PM				14			79	45				54	192
5:45 PM				23			124	38				75	260
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	144	0	0	638	450	0	0	0	864	2096
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	58.64%	41.36%	0.00%	0.00%	0.00%	100.00%	



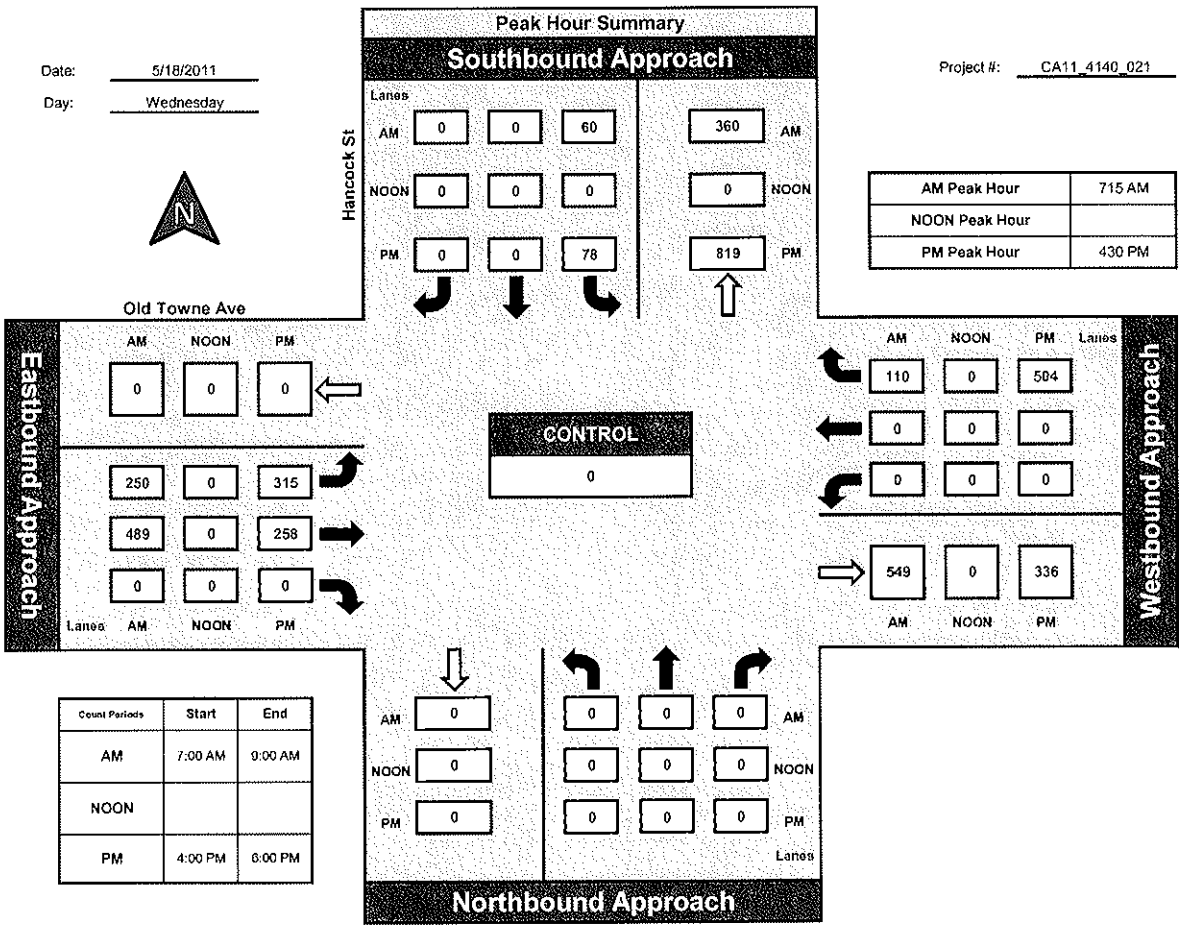
CONTROL :

ITM Peak Hour Summary

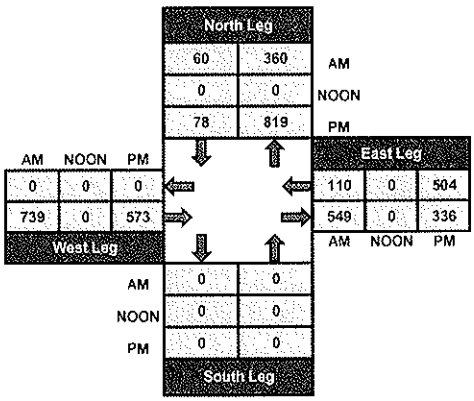
Prepared by:

National Data & Surveying Services

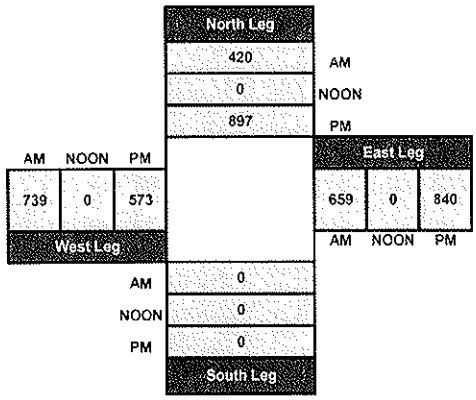
Hancock St and Old Towne Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(26)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	13	2	7	1	0	1	5	21	91	2	2	0	145
7:15 AM	19	1	9	0	1	0	1	21	141	2	3	2	200
7:30 AM	35	0	5	0	0	0	1	24	110	0	1	0	176
7:45 AM	23	1	8	0	0	1	2	33	81	0	3	1	153
8:00 AM	16	0	13	0	0	0	3	45	79	5	12	0	173
8:15 AM	9	0	10	0	1	0	0	21	67	4	4	0	116
8:30 AM	28	1	7	0	1	1	0	27	55	0	12	0	132
8:45 AM	14	1	7	0	2	2	1	33	47	1	7	0	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	157	6	66	1	5	5	13	225	671	14	44	3	1210
APPROACH %'s :	68.56%	2.62%	28.82%	9.09%	45.45%	45.45%	1.43%	24.75%	73.82%	22.95%	72.13%	4.92%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_022

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Hancock St			Hancock St			Witherby St			Witherby St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	120	0	18	0	0	0	2	27	31	1	8	0	207
4:15 PM	79	0	19	0	1	5	2	43	32	2	19	1	203
4:30 PM	116	1	14	0	1	5	1	42	39	4	19	0	242
4:45 PM	97	2	12	1	2	5	1	32	44	2	12	0	210
5:00 PM	100	2	7	1	1	3	1	33	41	2	26	0	217
5:15 PM	109	2	17	2	2	0	5	47	48	2	18	0	252
5:30 PM	42	0	11	0	1	1	1	30	28	2	5	0	121
5:45 PM	60	1	11	1	0	1	0	36	27	1	20	0	158
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	723	8	109	5	8	20	13	290	290	16	127	1	1610
APPROACH %'s :	86.07%	0.95%	12.98%	15.15%	24.24%	60.61%	2.19%	48.90%	48.90%	11.11%	88.19%	0.69%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

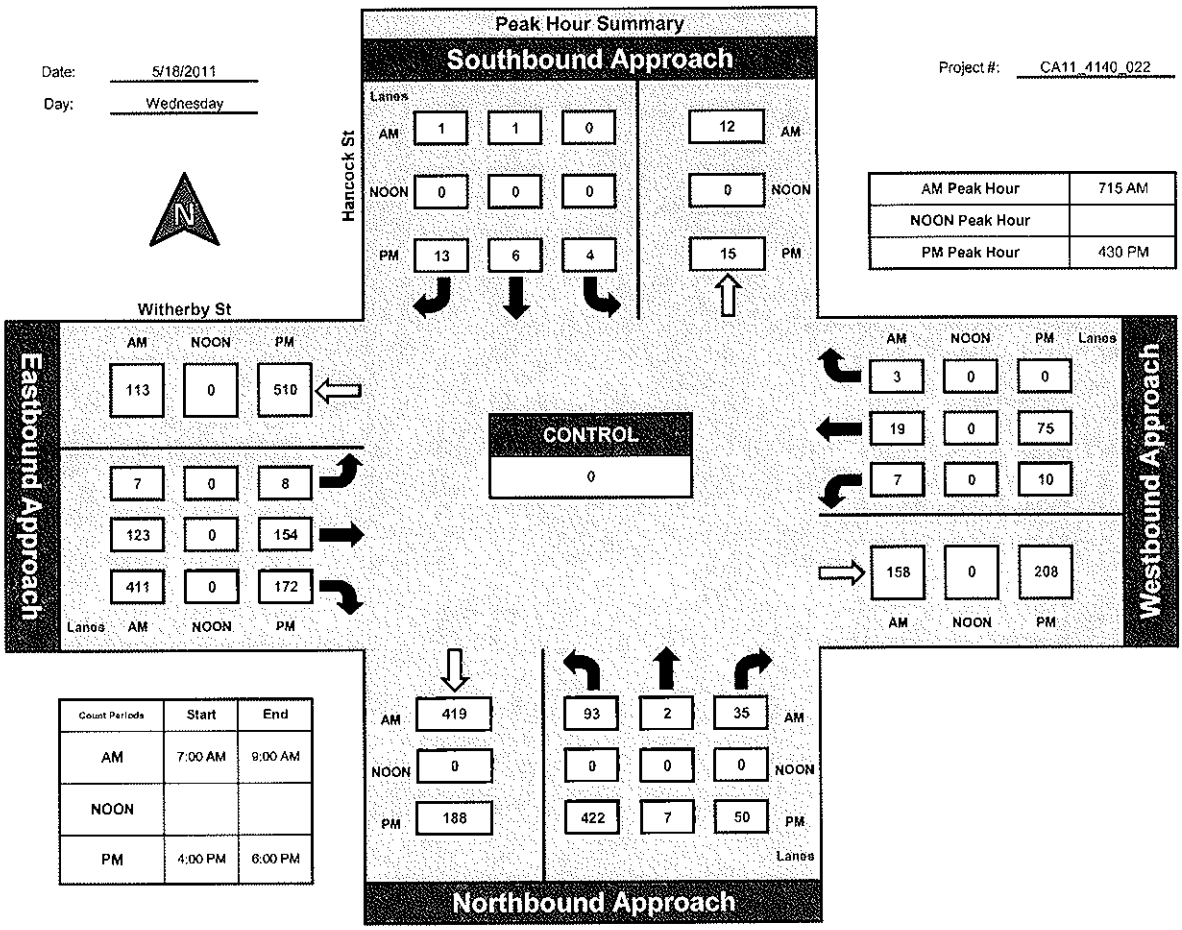
National Data & Surveying Services

Hancock St and Witherby St , City of San Diego

Date: 5/18/2011

Day: Wednesday

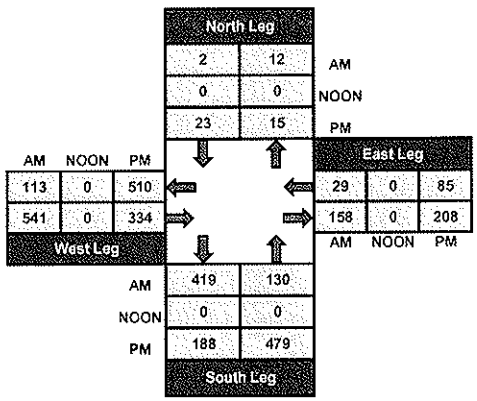
Project #: CA11_4140_022



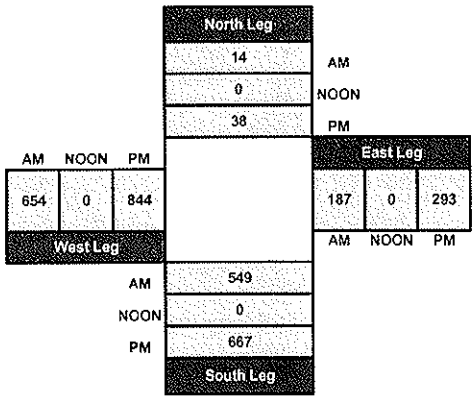
AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(28)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					235	2			1	6			244
7:15 AM					216	4			1	3			224
7:30 AM					268	1			4	5			278
7:45 AM					355	7			2	6			370
8:00 AM					323	1			2	5			331
8:15 AM					367	5			5	7			384
8:30 AM					359	1			1	10			371
8:45 AM					346	1			2	12			361

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	2469	22	0	0	18	54	0	0	2563
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.12%	0.88%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_023

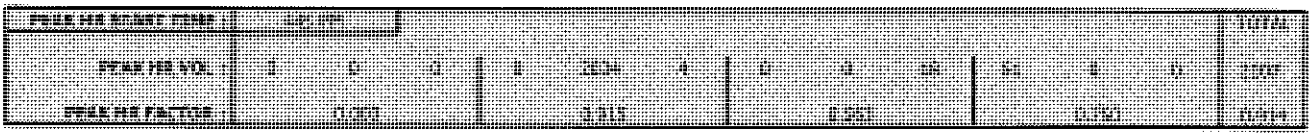
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			Vine St			Vine St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					291	1			1	9			302
4:15 PM					344	4			7	6			361
4:30 PM					388	2			7	10			407
4:45 PM					477	0			7	17			501
5:00 PM					556	1			8	11			576
5:15 PM					536	1			3	7			547
5:30 PM					465	2			0	16			483
5:45 PM					381	2			0	13			396
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	3438	13	0	0	33	89	0	0	3573
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	99.62%	0.38%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	



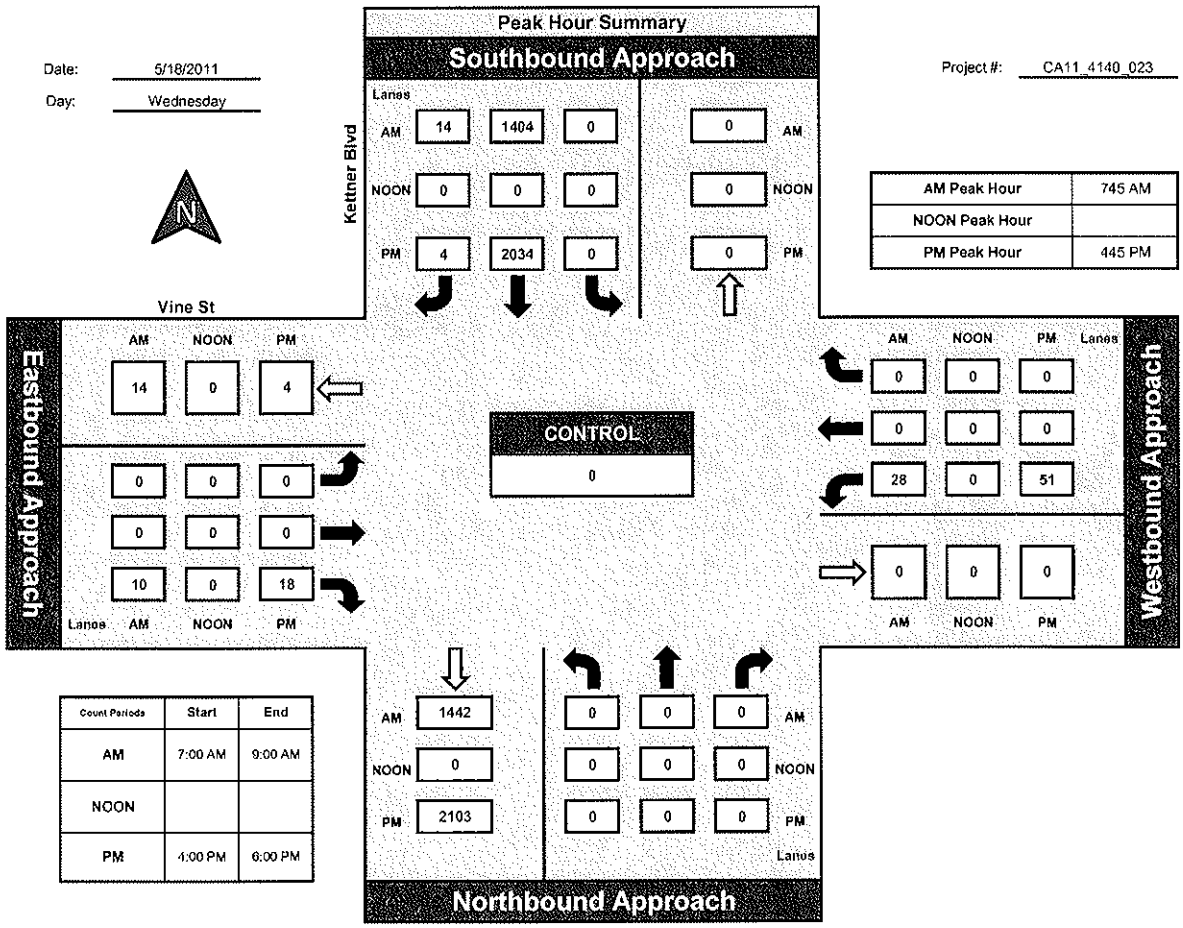
CONTROL :

ITM Peak Hour Summary

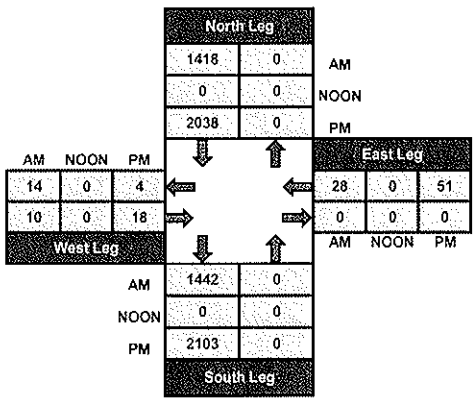
Prepared by:

National Data & Surveying Services

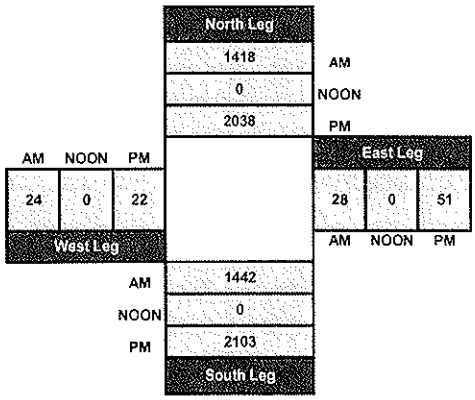
Kettner Blvd and Vine St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(31)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_018

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	450					19			222				691
7:15 AM	410					7			265				682
7:30 AM	358					15			272				645
7:45 AM	444					22			274				740
8:00 AM	413					18			286				717
8:15 AM	418					17			312				747
8:30 AM	390					16			309				715
8:45 AM	341					15			274				630

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3224	0	0	0	0	129	0	0	2214	0	0	0	5567
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	

[redacted]													
[redacted]													
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

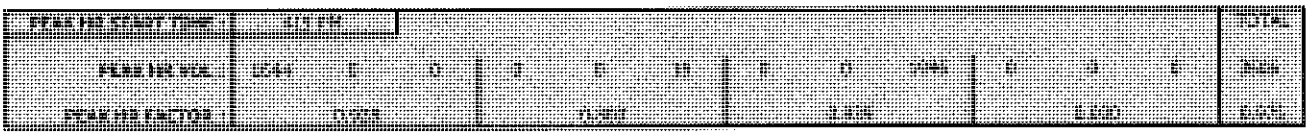
Project ID: CA11_4140_018 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			Barnett Ave			Barnett Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	376					1			501				878
4:15 PM	404					3			518				925
4:30 PM	371					4			498				873
4:45 PM	426					5			470				901
5:00 PM	443					4			460				907
5:15 PM	405					2			436				843
5:30 PM	351					2			384				737
5:45 PM	333					2			309				644

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3109	0	0	0	0	23	0	0	3576	0	0	0	6708
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and Barnett Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_018

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
	73	0	AM
	0	0	NOON
	16	0	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
1738	0	1660		0	0	0
1181	0	1946		0	0	0

	South Leg	
AM	1181	1665
NOON	0	0
PM	1946	1644

Total Volume Per Leg

	North Leg	
	73	AM
	0	NOON
	16	PM

West Leg AM	West Leg NOON	West Leg PM		East Leg AM	East Leg NOON	East Leg PM
2919	0	3606		0	0	0

	South Leg
AM	2846
NOON	0
PM	3590

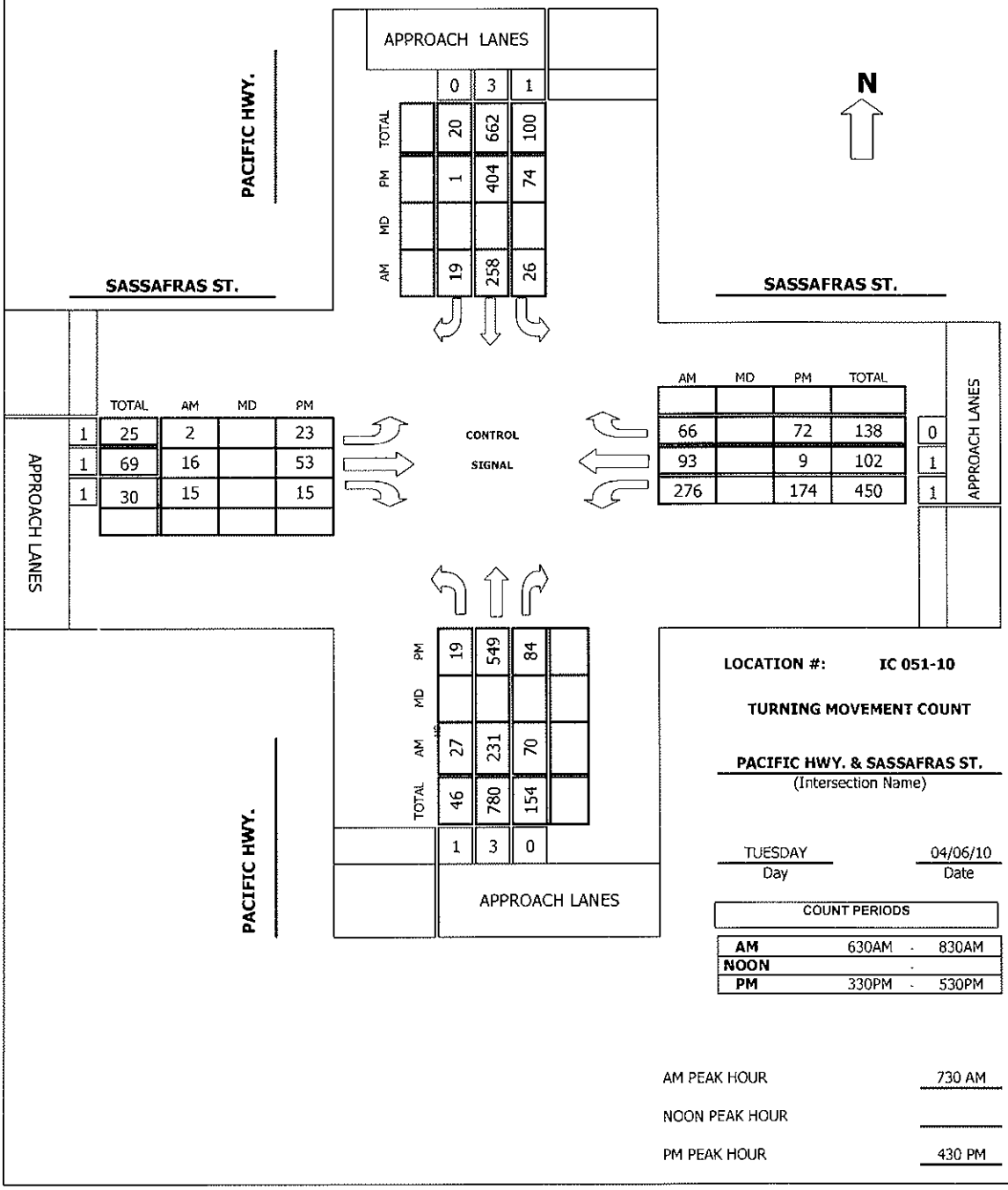
(34)

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

Project #: IC 051-10

TMC SUMMARY OF PACIFIC HWY. & SASSAFRAS ST.



LOCATION #: IC 051-10

TURNING MOVEMENT COUNT

PACIFIC HWY. & SASSAFRAS ST.
(Intersection Name)

TUESDAY (Day) 04/06/10 (Date)

COUNT PERIODS			
AM	630AM	-	830AM
NOON		-	
PM	330PM	-	530PM

AM PEAK HOUR 730 AM

NOON PEAK HOUR

PM PEAK HOUR 430 PM

Intersection Turning Movement
Prepared by:

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
6:00 AM													
6:15 AM													
6:30 AM	5	39	19	3	38	2	1	0	2	75	32	5	221
6:45 AM	6	47	9	4	63	1	1	1	1	104	15	7	259
7:00 AM	7	45	15	5	45	2	0	0	4	73	18	13	227
7:15 AM	8	55	16	4	67	3	0	0	1	50	21	8	233
7:30 AM	6	35	13	4	65	6	0	1	2	68	30	13	243
7:45 AM	7	72	12	7	69	4	0	3	2	77	20	19	292
8:00 AM	5	71	16	6	68	6	1	3	6	64	19	17	282
8:15 AM	9	53	29	9	56	3	1	9	5	67	24	17	282
8:30 AM													
8:45 AM													
9:00 AM													
9:15 AM													
9:30 AM													
9:45 AM													
10:00 AM													
10:15 AM													
10:30 AM													
10:45 AM													
11:00 AM													
11:15 AM													
11:30 AM													
11:45 AM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	53	417	129	42	471	27	4	17	23	578	179	99	2039
Approach %	8.85	69.62	21.54	7.78	87.22	5.00	9.09	38.64	52.27	67.52	20.91	11.57	
App/Depart	599	/	520	540	/	1072	44	/	188	856	/	259	

AM Peak Hr Begins at: 730 AM

PEAK													
Volumes	27	231	70	26	258	19	2	16	15	276	93	66	1099
Approach %	8.23	70.43	21.34	8.58	85.15	6.27	6.06	48.48	45.45	63.45	21.38	15.17	
PEAK HR. FACTOR:		0.891			0.947			0.550			0.938		0.941

CONTROL: SIGNAL
COMMENT 1:
COMMENT 2:

Intersection Turning Movement

FIELD DATA SERVICES OF ARIZONA, INC.
520.316.6745

N-S STREET: PACIFIC HWY. DATE: 04/06/10 LOCATION: SAN DIEGO

E-W STREET: SASSAFRAS ST. DAY: TUESDAY PROJECT# IC 051-10

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
LANES:	1	3	0	1	3	0	1	0.5	0.5	1	1	0	
1:00 PM													
1:15 PM													
1:30 PM													
1:45 PM													
2:00 PM													
2:15 PM													
2:30 PM													
2:45 PM													
3:00 PM													
3:15 PM													
3:30 PM	5	115	37	20	89	1	1	8	4	50	2	15	347
3:45 PM	6	127	26	16	90	1	2	2	3	42	1	19	335
4:00 PM	7	126	23	13	105	1	1	12	7	46	5	16	362
4:15 PM	5	98	23	18	105	1	2	11	4	59	4	17	347
4:30 PM	3	117	23	20	105	1	5	16	2	44	4	18	358
4:45 PM	6	130	19	17	99	0	3	7	3	42	1	17	344
5:00 PM	8	138	25	19	104	0	8	23	6	44	1	21	397
5:15 PM	2	164	17	18	96	0	7	7	4	44	3	16	378
5:30 PM													
5:45 PM													
6:00 PM													
6:15 PM													
6:30 PM													
6:45 PM													

TOTAL	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
Volumes	42	1015	193	141	793	5	29	86	33	371	21	139	2868
Approach %	3.36	81.20	15.44	15.02	84.45	0.53	19.59	58.11	22.30	69.87	3.95	26.18	
App/Depart	1250	/	1183	939	/	1197	148	/	420	531	/	68	

PM Peak Hr Begins at: 430 PM

PEAK													
Volumes	19	549	84	74	404	1	23	53	15	174	9	72	1477
Approach %	2.91	84.20	12.88	15.45	84.34	0.21	25.27	58.24	16.48	68.24	3.53	28.24	
PEAK HR. FACTOR:		0.891			0.950			0.615			0.966		0.930

CONTROL: SIGNAL
COMMENT 1: 0
COMMENT 2: 0

FIELD DATA SERVICES OF ARIZONA, INC.

520.316.6745

Pedestrian & Bicycle Study

Location: PACIFIC HWY. & SASSAFRAS ST.

Date: 04/06/10
Day: TUESDAY

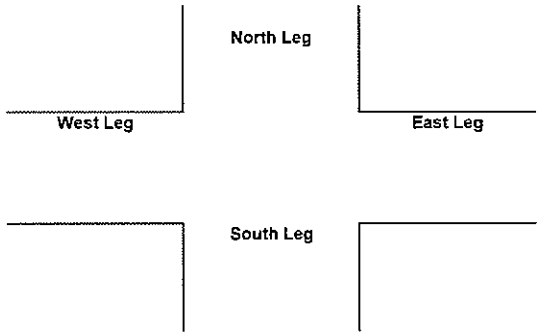
City: SAN DIEGO
Project #: IC 051-10

	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	2	2	0
6:45 AM	0	1	0	0
7:00 AM	0	1	1	0
7:15 AM	0	0	0	0
7:30 AM	0	1	0	0
7:45 AM	0	1	0	0
8:00 AM	0	1	0	1
8:15 AM	0	1	0	0
TOTAL	0	8	3	1

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
6:30 AM	0	0	1	2
6:45 AM	0	0	0	4
7:00 AM	0	0	0	2
7:15 AM	0	0	1	0
7:30 AM	0	0	1	0
7:45 AM	0	0	0	1
8:00 AM	0	0	0	2
8:15 AM	0	0	1	2
TOTAL	0	0	4	13

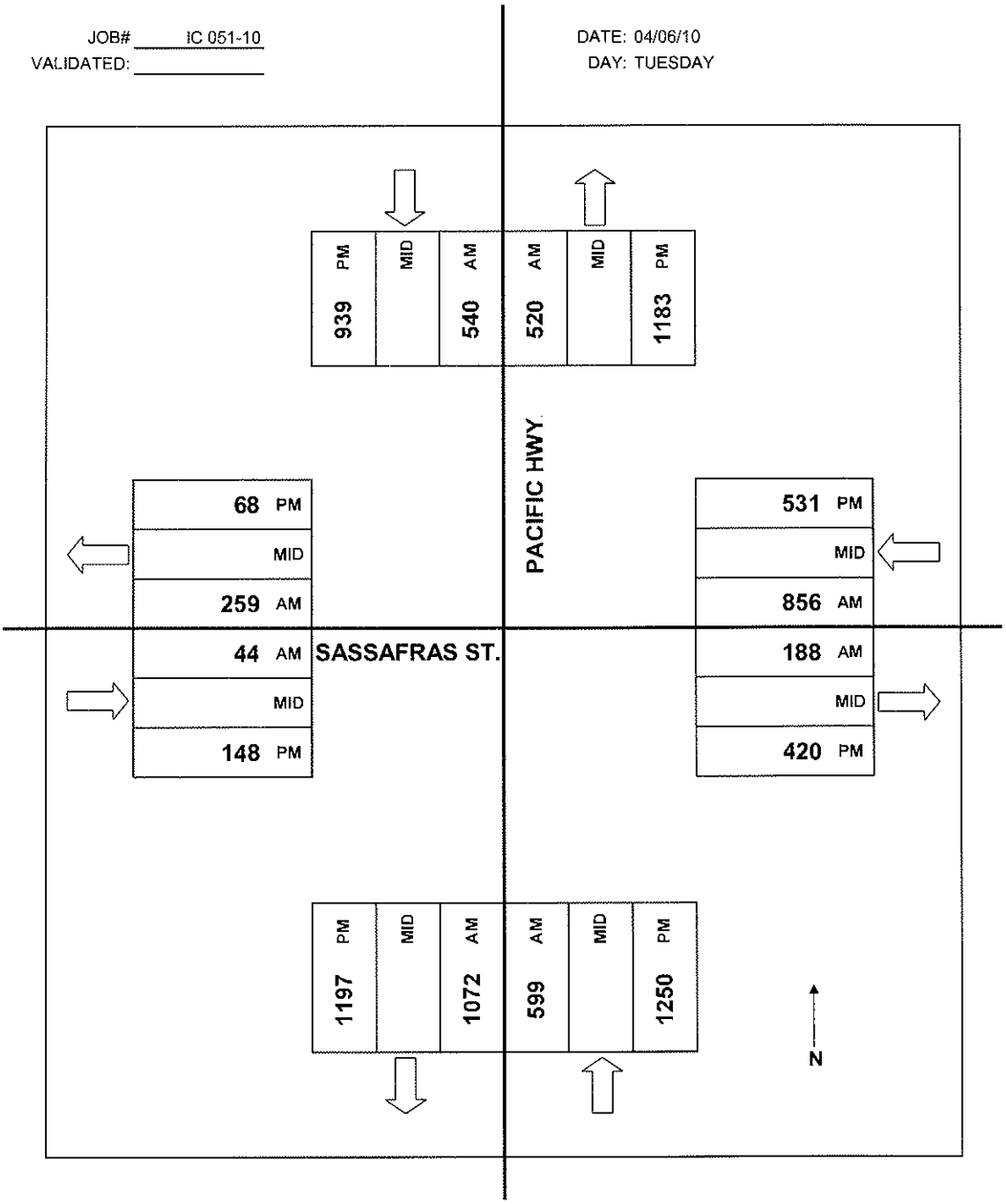
	PEDESTRIANS			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	0	1
3:45 PM	0	0	0	0
4:00 PM	0	3	0	0
4:15 PM	0	1	0	2
4:30 PM	0	6	0	0
4:45 PM	0	1	0	2
5:00 PM	0	2	0	0
5:15 PM	0	0	0	0
TOTAL	0	13	0	5

	BICYCLES			
	N-LEG	S-LEG	E-LEG	W-LEG
3:30 PM	0	0	2	0
3:45 PM	0	0	4	1
4:00 PM	0	0	2	2
4:15 PM	0	0	3	1
4:30 PM	0	0	1	2
4:45 PM	0	0	0	1
5:00 PM	0	0	2	1
5:15 PM	0	0	0	1
TOTAL	0	0	14	9



JOB# IC 051-10
VALIDATED: _____

DATE: 04/06/10
DAY: TUESDAY



(36)

2

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

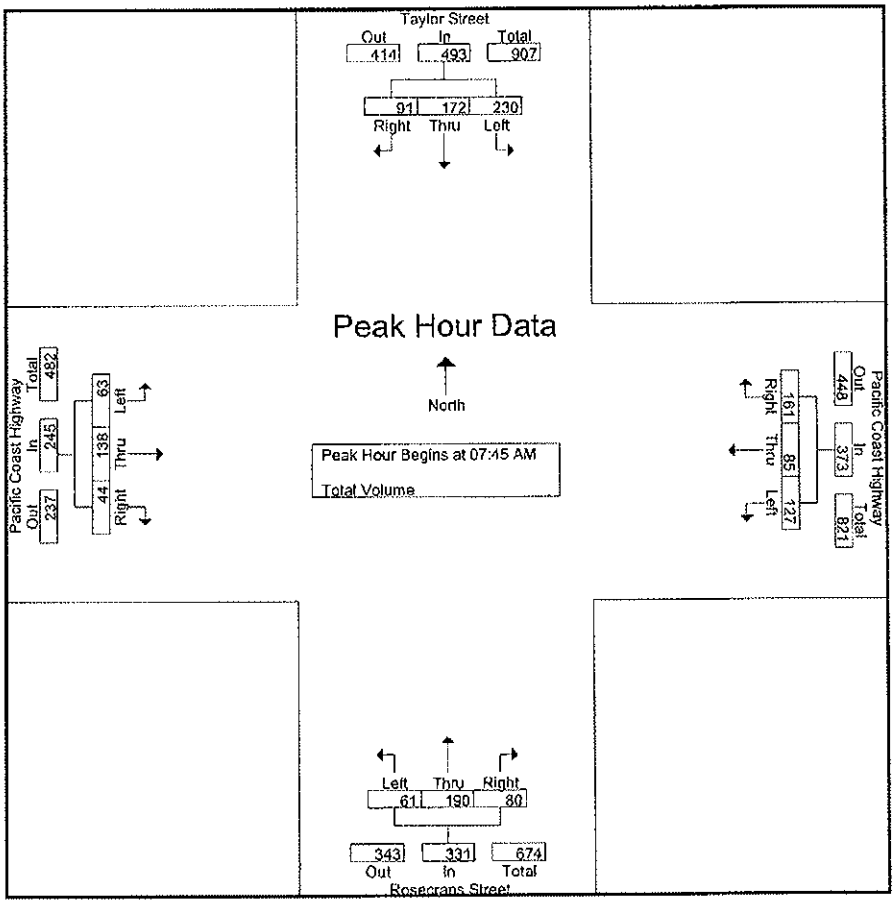
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:45 AM	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
Total	70	12	20	102	20	13	30	63	7	21	28	56	16	21	6	43	264
07:00 AM	76	19	16	111	23	11	18	52	10	23	27	60	15	26	12	53	276
07:15 AM	92	21	11	124	43	18	21	82	13	29	21	63	12	21	6	39	308
07:30 AM	65	44	24	133	37	19	31	87	10	41	30	81	8	30	14	52	353
07:45 AM	66	53	20	139	37	20	41	98	11	51	18	80	22	50	15	87	404
Total	299	137	71	507	140	68	111	319	44	144	96	284	57	127	47	231	1341
08:00 AM	58	31	19	108	36	21	45	102	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	29	118	24	20	33	77	19	68	19	106	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Grand Total	533	268	162	963	250	146	261	657	101	304	186	591	114	236	82	432	2643
Apprch %	55.3	27.8	16.8		38.1	22.2	39.7		17.1	51.4	31.5		26.4	54.6	19		
Total %	20.2	10.1	6.1	36.4	9.5	5.5	9.9	24.9	3.8	11.5	7	22.4	4.3	8.9	3.1	16.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**66**	**53**	20	**139**	37	20	41	98	11	51	18	80	**22**	**50**	**15**	**87**	**404**
08:00 AM	58	31	19	108	36	21	**45**	**102**	13	31	23	67	9	27	12	48	325
08:15 AM	53	36	**29**	118	24	20	33	77	**19**	**68**	19	**106**	13	31	7	51	352
08:30 AM	53	52	23	128	30	24	42	96	18	40	20	78	19	30	10	59	361
Total Volume	230	172	91	493	127	85	161	373	61	190	80	331	63	138	44	245	1442
% App. Total	46.7	34.9	18.5		34	22.8	43.2		18.4	57.4	24.2		25.7	56.3	18		
PHF	.871	.811	.784	.887	.858	.885	.894	.914	.803	.699	.870	.781	.716	.690	.733	.704	.892

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street/Taylor Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCAM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:45 AM				07:30 AM				07:45 AM			
+0 mins.	76	19	16	111	37	20	41	98	10	41	**30**	81	**22**	**50**	**15**	**87**
+15 mins.	**92**	21	11	124	36	21	**45**	**102**	11	51	18	80	9	27	12	48
+30 mins.	65	44	**24**	133	24	20	33	77	13	31	23	67	13	31	7	51
+45 mins.	66	**53**	20	**139**	30	**24**	42	96	**19**	**68**	19	**106**	19	30	10	59
Total Volume	299	137	71	507	127	85	161	373	53	191	90	334	63	138	44	245
% App. Total	59	27	14		34	22.8	43.2		15.9	57.2	26.9		25.7	56.3	18	
PHF	.813	.646	.740	.912	.858	.885	.894	.914	.697	.702	.750	.788	.716	.690	.733	.704

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009

Groups Printed- Total Volume

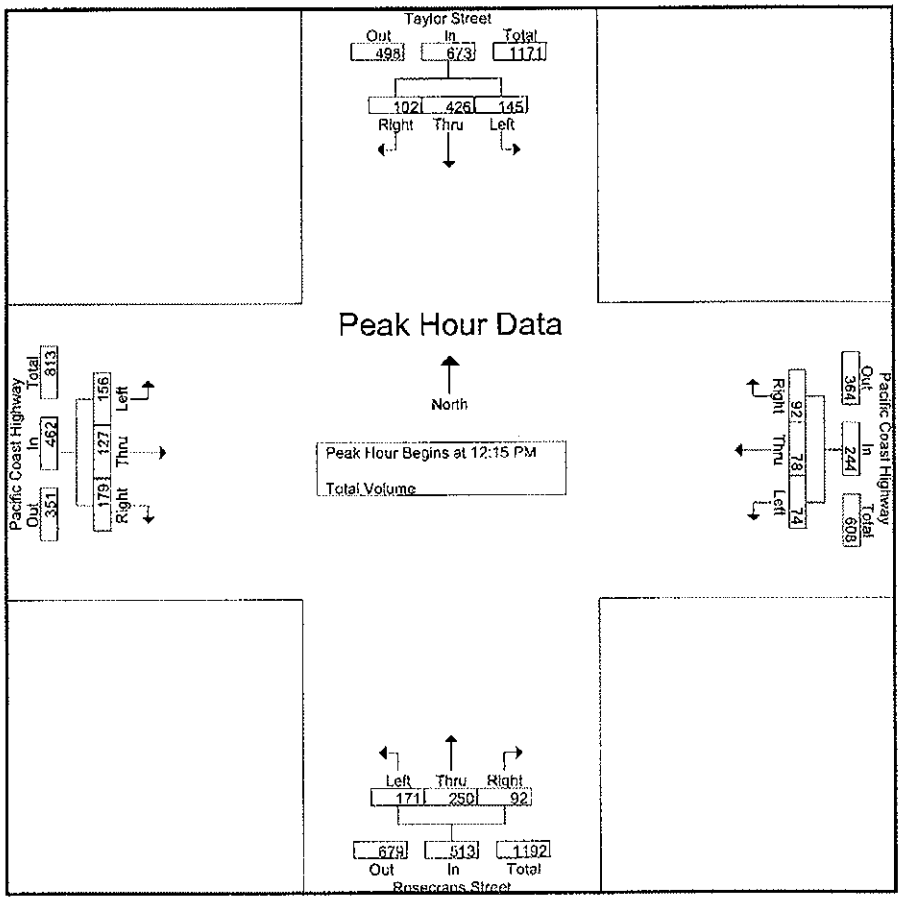
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	23	86	27	136	16	17	27	60	42	60	13	115	46	24	48	118	429
11:45 AM	21	94	29	144	16	23	13	52	27	77	21	125	45	28	54	127	448
Total	44	180	56	280	32	40	40	112	69	137	34	240	91	52	102	245	877
12:00 PM	30	70	19	119	13	28	32	73	33	62	12	107	41	32	41	114	413
12:15 PM	34	116	22	172	29	13	26	68	33	66	31	130	47	36	39	122	492
12:30 PM	34	110	33	177	14	20	18	52	45	58	25	128	38	26	54	118	475
12:45 PM	31	118	32	181	13	17	20	50	45	63	15	123	47	39	43	129	483
Total	129	414	106	649	69	78	96	243	156	249	83	488	173	133	177	483	1863
01:00 PM	46	82	15	143	18	28	28	74	48	63	21	132	24	26	43	93	442
01:15 PM	28	85	10	123	24	24	15	63	19	50	15	84	61	40	65	166	436
Grand Total	247	761	187	1195	143	170	179	492	292	499	153	944	349	251	387	987	3618
Apprch %	20.7	63.7	15.6		29.1	34.6	36.4		30.9	52.9	16.2		35.4	25.4	39.2		
Total %	6.8	21	5.2	33	4	4.7	4.9	13.6	8.1	13.8	4.2	26.1	9.6	6.9	10.7	27.3	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	34	116	22	172	**29**	13	26	68	33	**66**	**31**	130	**47**	36	39	122	**492**
12:30 PM	34	110	**33**	177	14	20	18	52	45	58	25	128	38	26	**54**	118	475
12:45 PM	31	**118**	32	**181**	13	17	20	50	45	63	15	123	47	**39**	43	**129**	483
01:00 PM	**46**	82	15	143	18	**28**	**28**	**74**	**48**	63	21	**132**	24	26	43	93	442
Total Volume	145	426	102	673	74	78	92	244	171	250	92	513	156	127	179	462	1892
% App. Total	21.5	63.3	15.2		30.3	32	37.7		33.3	48.7	17.9		33.8	27.5	38.7		
PHF	.788	.903	.773	.930	.638	.696	.821	.824	.891	.947	.742	.972	.830	.814	.829	.895	.961

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCMD
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:15 PM				11:30 AM				12:15 PM				12:30 PM			
+0 mins.	34	116	22	172	16	17	27	60	33	**66**	31	130	38	26	54	118
+15 mins.	34	110	**33**	177	16	23	13	52	45	58	25	128	47	39	43	129
+30 mins.	31	**118**	32	**181**	13	**28**	**32**	**73**	45	63	15	123	24	26	43	93
+45 mins.	**46**	82	15	143	**29**	13	26	68	**48**	63	21	**132**	**61**	**40**	**65**	**166**
Total Volume	145	426	102	673	74	81	98	253	171	250	92	513	170	131	205	506
% App. Total	21.5	63.3	15.2		29.2	32	38.7		33.3	48.7	17.9		33.6	25.9	40.5	
PHF	.788	.903	.773	.930	.638	.723	.766	.866	.891	.947	.742	.972	.697	.819	.788	.762

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

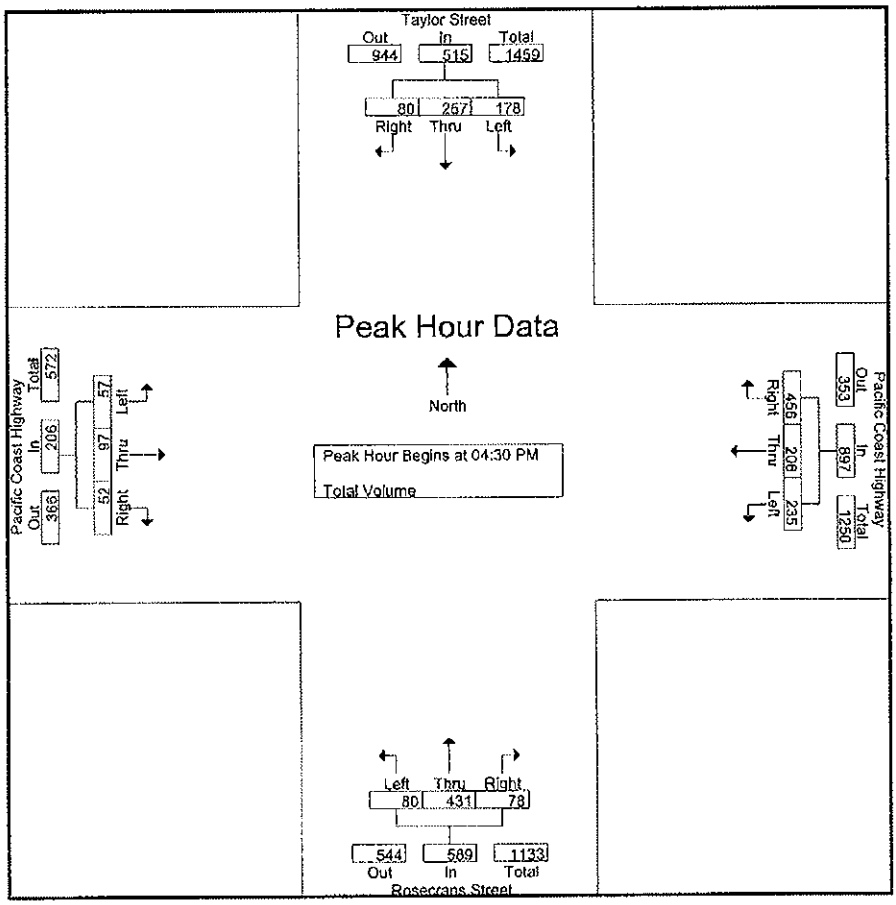
	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	57	49	27	133	70	65	123	258	19	87	19	125	22	23	17	62	578
04:15 PM	32	54	20	106	83	46	103	232	22	64	32	118	11	27	12	50	506
04:30 PM	51	56	15	122	60	48	127	235	25	113	30	168	19	27	13	59	584
04:45 PM	40	57	16	113	62	38	107	207	18	90	10	118	14	13	7	34	472
Total	180	216	78	474	275	197	460	932	84	354	91	529	66	90	49	205	2140
05:00 PM	46	79	21	146	57	61	115	233	20	133	16	169	16	27	14	57	605
05:15 PM	41	65	28	134	56	59	107	222	17	95	22	134	8	30	18	56	546
05:30 PM	42	78	17	137	70	32	103	205	19	102	24	145	14	15	12	41	528
05:45 PM	42	80	20	142	42	36	92	170	18	90	22	130	12	24	15	51	493
Total	171	302	86	559	225	188	417	830	74	420	84	578	50	96	59	205	2172
Grand Total	351	518	164	1033	500	385	877	1762	158	774	175	1107	116	186	108	410	4312
Apprch %	34	50.1	15.9		28.4	21.9	49.8		14.3	69.9	15.8		28.3	45.4	26.3		
Total %	8.1	12	3.8	24	11.6	8.9	20.3	40.9	3.7	17.9	4.1	25.7	2.7	4.3	2.5	9.5	

	Taylor Street Southbound				Pacific Coast Highway Westbound				Rosecrans Street Northbound				Pacific Coast Highway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**51**	56	15	122	60	48	**127**	**235**	**25**	113	**30**	168	**19**	27	13	**59**	584
04:45 PM	40	57	16	113	**62**	38	107	207	18	90	10	118	14	13	7	34	472
05:00 PM	46	**79**	21	**146**	57	**61**	115	233	20	**133**	16	**169**	16	27	14	57	**605**
05:15 PM	41	65	**28**	134	56	59	107	222	17	95	22	134	8	**30**	**18**	56	546
Total Volume	178	257	80	515	235	206	456	897	80	431	78	589	57	97	52	206	2207
% App. Total	34.6	49.9	15.5		26.2	23	50.8		13.6	73.2	13.2		27.7	47.1	25.2		
PHF	.873	.813	.714	.882	.948	.844	.898	.954	.800	.810	.650	.871	.750	.808	.722	.873	.912

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street/Rosecrans Street
E/W: Pacific Coast Highway
Weather: Sunny

File Name : SDCTAPCPM
Site Code : 9102037
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM				04:30 PM			
+0 mins.	**46**	79	21	**146**	70	**65**	123	**258**	**25**	113	**30**	168	**19**	27	13	**59**
+15 mins.	41	65	**28**	134	**83**	46	103	232	18	90	10	118	14	13	7	34
+30 mins.	42	78	17	137	60	48	**127**	235	20	**133**	16	**169**	16	27	14	57
+45 mins.	42	**80**	20	142	62	38	107	207	17	95	22	134	8	**30**	**18**	56
Total Volume	171	302	86	559	275	197	460	932	80	431	78	589	57	97	52	206
% App. Total	30.6	54	15.4		29.5	21.1	49.4		13.6	73.2	13.2		27.7	47.1	25.2	
PHF	.929	.944	.768	.957	.828	.758	.906	.903	.800	.810	.650	.871	.750	.808	.722	.873

(37)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	29	8	0	29	27	0	0	2	9	7	27	158
7:15 AM	27	35	2	0	32	33	1	0	0	7	11	31	179
7:30 AM	33	36	8	1	39	39	1	0	4	7	19	25	212
7:45 AM	37	43	9	1	31	38	1	0	6	9	35	45	255
8:00 AM	24	56	12	1	26	37	0	1	5	9	46	55	272
8:15 AM	27	37	7	0	21	69	1	0	3	7	51	42	265
8:30 AM	31	33	7	0	27	52	0	0	2	11	29	43	235
8:45 AM	24	43	5	5	28	61	1	0	5	11	28	41	252
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	223	312	58	8	233	356	5	1	27	70	226	309	1828
APPROACH %'s :	37.61%	52.61%	9.78%	1.34%	39.03%	59.63%	15.15%	3.03%	81.82%	11.57%	37.36%	51.07%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_033 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			Moore St			Moore St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	91	46	3	1	42	31	0	0	1	15	16	34	280
4:15 PM	97	66	2	1	41	28	0	1	6	21	22	45	330
4:30 PM	96	70	4	0	52	39	0	1	6	17	26	38	349
4:45 PM	104	67	2	0	45	29	0	0	5	21	20	50	343
5:00 PM	107	54	1	0	53	46	0	0	9	24	26	50	370
5:15 PM	99	69	2	0	52	23	1	1	1	9	16	57	330
5:30 PM	76	52	3	0	47	36	1	0	4	16	25	53	313
5:45 PM	42	39	1	0	33	27	0	0	2	10	17	38	209
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	712	463	18	2	365	259	2	3	34	133	168	365	2524
APPROACH %'s :	59.68%	38.81%	1.51%	0.32%	58.31%	41.37%	5.13%	7.69%	87.18%	19.97%	25.23%	54.80%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

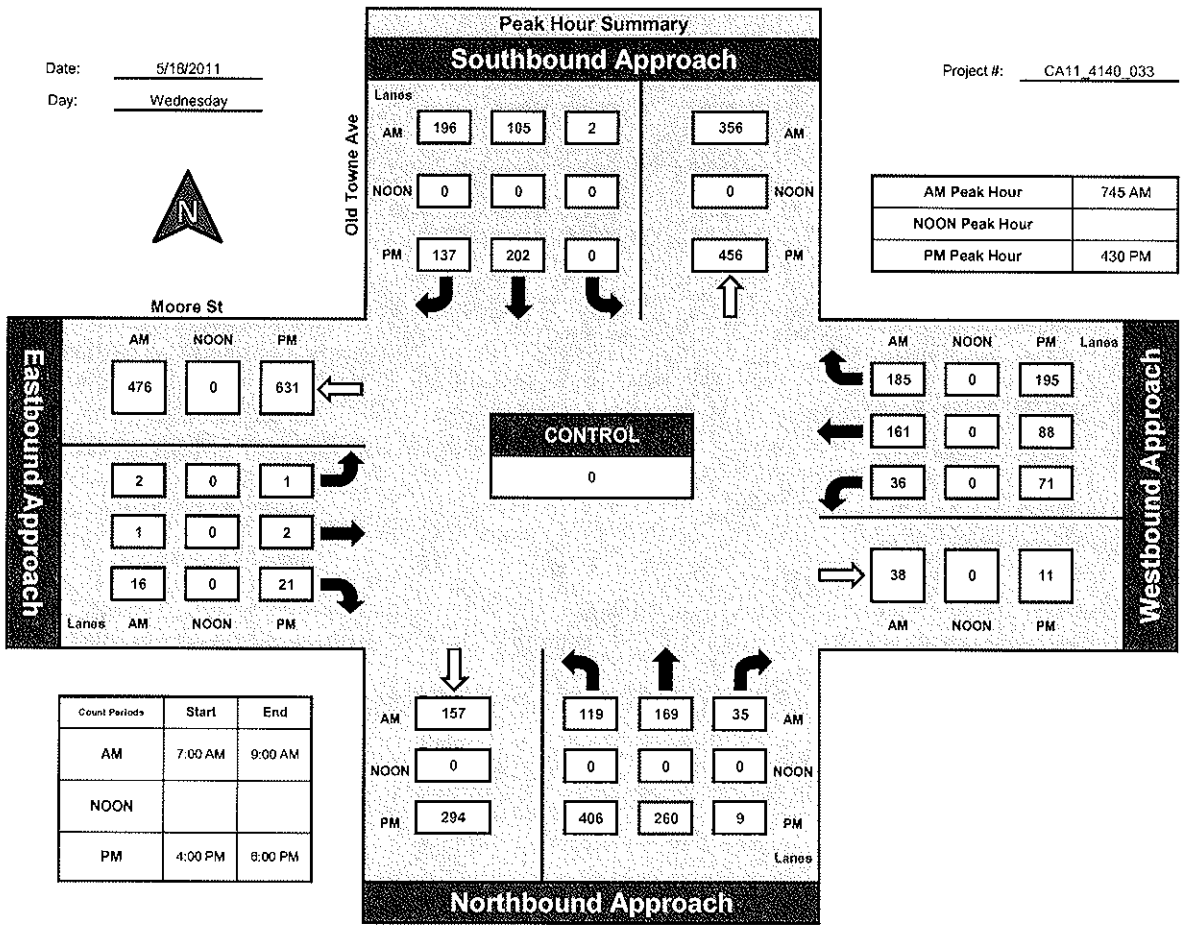
National Data & Surveying Services

Old Towne Ave and Moore St , City of San Diego

Date: 5/18/2011

Day: Wednesday

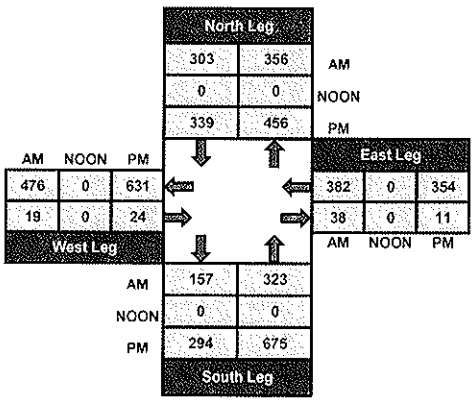
Project #: CA11_4140_033



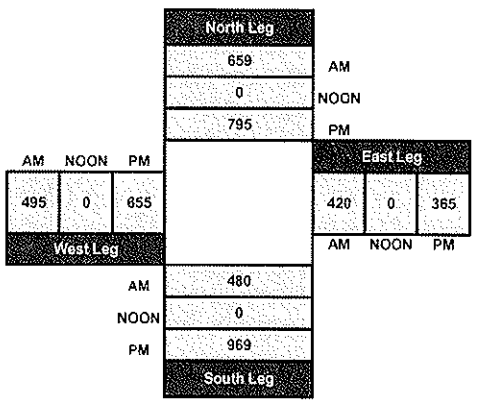
AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(38)

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

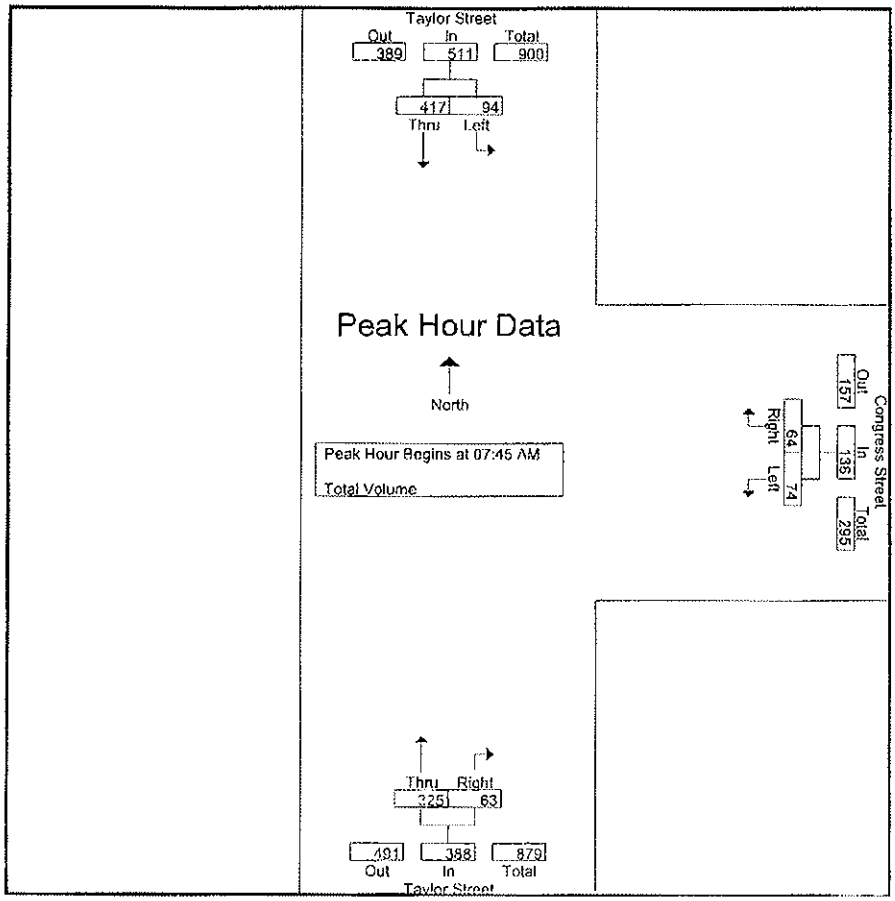
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
06:45 AM	10	92	102	13	4	17	42	11	53	172
Total	10	92	102	13	4	17	42	11	53	172
07:00 AM	14	108	122	7	11	18	58	6	64	204
07:15 AM	13	124	137	10	12	22	55	8	63	222
07:30 AM	21	121	142	9	17	26	63	8	71	239
07:45 AM	23	122	145	19	18	37	93	13	106	288
Total	71	475	546	45	58	103	269	35	304	953
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	19	32	80	18	98	252
08:30 AM	27	99	126	29	11	40	80	19	99	265
Grand Total	152	862	1014	113	108	221	543	96	639	1874
Apprch %	15	85		51.1	48.9		85	15		
Total %	8.1	46	54.1	6	5.8	11.8	29	5.1	34.1	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	23	**122**	**145**	19	18	37	**93**	13	**106**	**288**
08:00 AM	24	94	118	13	16	29	72	13	85	232
08:15 AM	20	102	122	13	**19**	32	80	18	98	252
08:30 AM	**27**	99	126	**29**	11	**40**	80	19	99	265
Total Volume	94	417	511	74	64	138	325	63	388	1037
% App. Total	18.4	81.6		53.6	46.4		83.8	16.2		
PHF	.870	.855	.881	.638	.842	.863	.874	.829	.915	.901

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOAM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 06:45 AM to 08:30 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM			07:45 AM			07:45 AM		
+0 mins.	14	108	122	19	18	37	93	13	106
+15 mins.	13	124	137	13	16	29	72	13	85
+30 mins.	21	121	142	13	19	32	80	18	98
+45 mins.	23	122	145	29	11	40	80	19	99
Total Volume	71	475	546	74	64	138	325	63	388
% App. Total	13	87		53.6	46.4		83.8	16.2	
PHF	.772	.958	.941	.638	.842	.863	.874	.82[illegible]	.915

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 1

Groups Printed- Total Volume

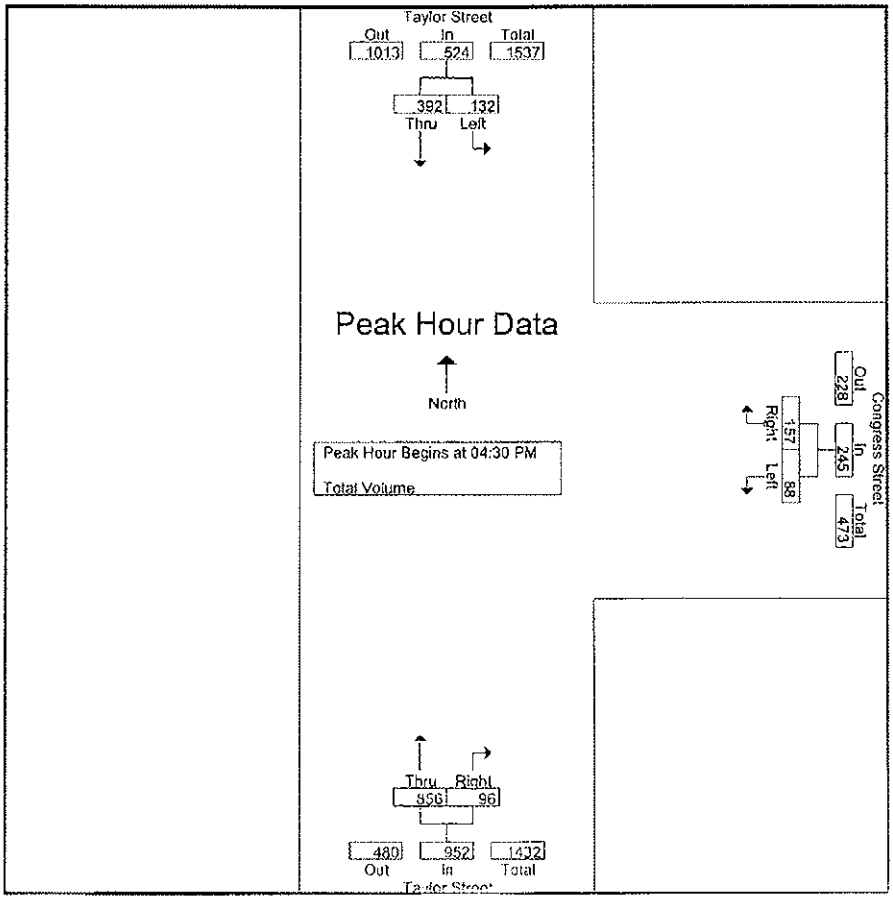
	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	33	104	137	21	37	58	197	16	213	408
04:15 PM	29	85	114	12	25	37	182	12	194	345
04:30 PM	52	93	145	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
Total	135	368	503	71	133	204	795	72	867	1574
05:00 PM	26	111	137	24	36	60	240	20	260	457
05:15 PM	33	102	135	26	50	76	200	32	232	443
05:30 PM	28	101	129	24	33	57	194	26	220	406
05:45 PM	31	95	126	16	35	51	173	22	195	372
Total	118	409	527	90	154	244	807	100	907	1678
Grand Total	253	777	1030	161	287	448	1602	172	1774	3252
Apprch %	24.6	75.4		35.9	64.1		90.3	9.7		
Total %	7.8	23.9	31.7	5	8.8	13.8	49.3	5.3	54.6	

	Taylor Street Southbound			Congress Street Westbound			Taylor Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	**52**	93	**145**	18	33	51	224	20	244	440
04:45 PM	21	86	107	20	38	58	192	24	216	381
05:00 PM	26	111	137	24	36	60	**240**	20	**260**	**457**
05:15 PM	33	102	135	26	50	76	200	32	232	443
Total Volume	132	392	524	88	157	245	856	96	952	1721
% App. Total	25.2	74.8		35.9	64.1		89.9	10.1		
PHF	.635	.883	.903	.846	.785	.806	.892	.750	.915	.941

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Taylor Street
E/W: Congress Street
Weather: Sunny

File Name : SDCTACOPM
Site Code : 9102139
Start Date : 4/23/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM			04:45 PM			04:30 PM		
+0 mins.	26	111	137	20	38	58	224	25	249
+15 mins.	33	102	135	24	36	60	192	24	216
+30 mins.	28	101	129	26	50	76	240	20	260
+45 mins.	31	95	126	24	33	57	200	32	232
Total Volume	118	409	527	94	157	251	856	96	952
% App. Total	22.4	77.6		37.5	62.5		89.9	10.1	
PHF	.894	.921	.962	.904	.785	.826	.893	.75	.915

(39)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

Day: WEDNESDAY

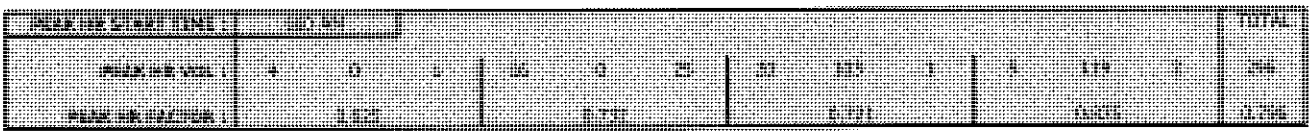
City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0	2		2	2	12	1	0	12	1	32
7:15 AM	0	0	0	3		4	4	15	2	0	25	0	53
7:30 AM	2	0	1	4		4	2	25	0	0	21	0	59
7:45 AM	0	1	0	3		3	6	25	0	0	23	1	62
8:00 AM	1	0	0	3		3	2	24	0	2	23	1	59
8:15 AM	0	0	1	4		4	4	18	0	1	28	0	60
8:30 AM	1	0	0	3		11	5	28	0	1	35	0	84
8:45 AM	2	0	0	6		7	9	33	1	1	33	1	93

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	1	2	28	0	38	34	180	4	5	200	4	502
APPROACH %'s :	66.67%	11.11%	22.22%	42.42%	0.00%	57.58%	15.60%	82.57%	1.83%	2.39%	95.69%	1.91%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_027

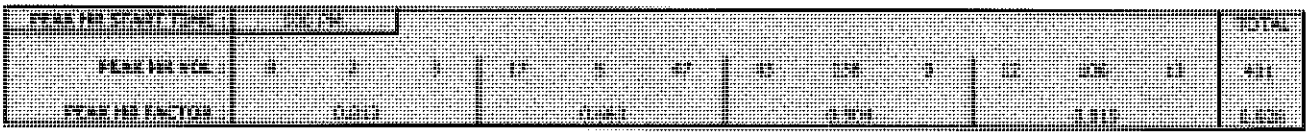
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	0	1	5	1	11	6	28	2	0	32	1	87
4:15 PM	0	2	1	7	0	5	6	28	2	0	34	4	89
4:30 PM	0	2	1	4	1	9	10	35	1	2	35	3	103
4:45 PM	1	0	2	3	0	6	10	26	0	1	27	4	80
5:00 PM	2	0	1	3	0	9	7	37	2	3	25	5	94
5:15 PM	2	0	0	2	0	11	10	32	2	4	31	5	99
5:30 PM	1	2	1	3	1	14	11	34	1	3	35	2	108
5:45 PM	3	0	1	9	4	13	15	33	4	2	15	1	100
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	6	8	36	7	78	75	253	14	15	234	25	760
APPROACH %'s :	39.13%	26.09%	34.78%	29.75%	5.79%	64.46%	21.93%	73.98%	4.09%	5.47%	85.40%	9.12%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

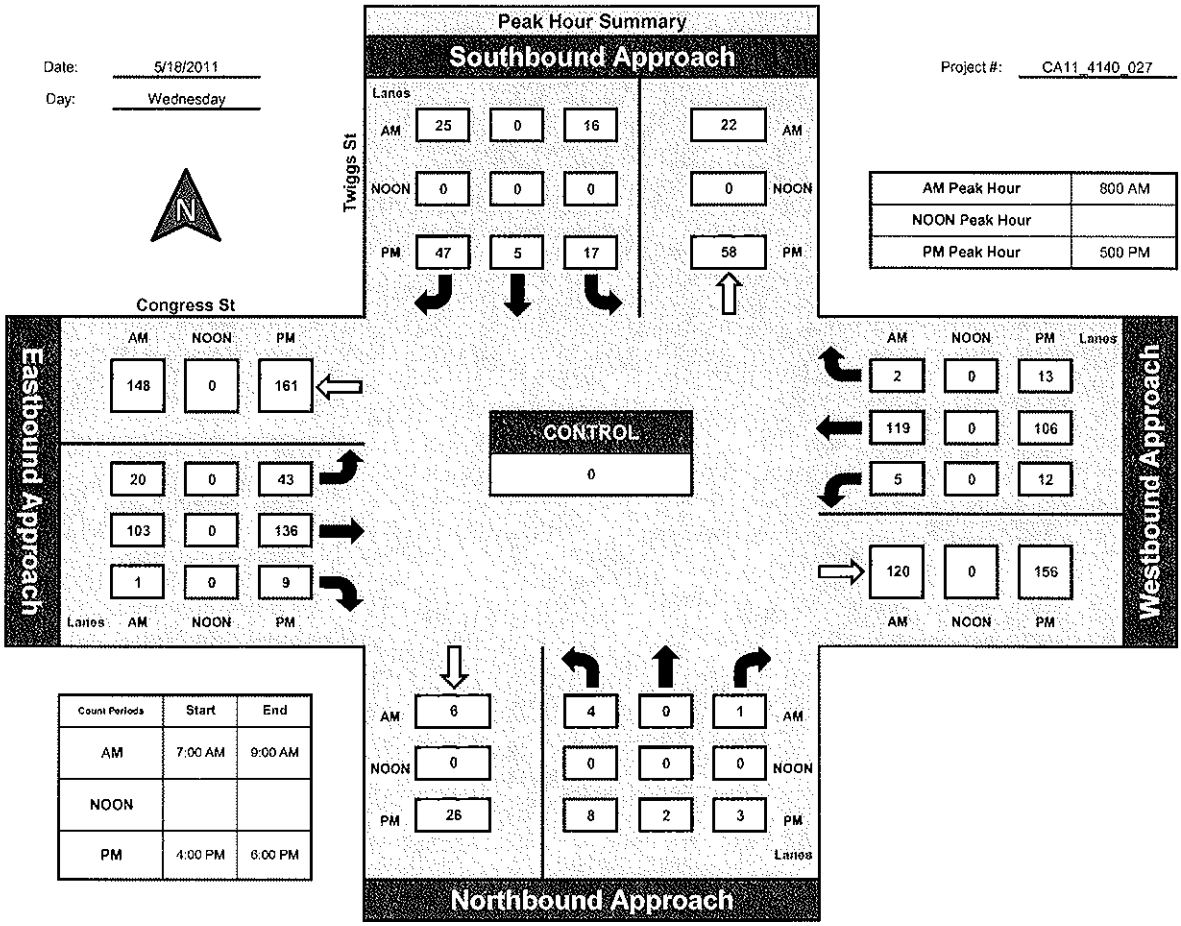
National Data & Surveying Services

Twiggs St and Congress St , City of San Diego

Date: 5/18/2011

Day: Wednesday

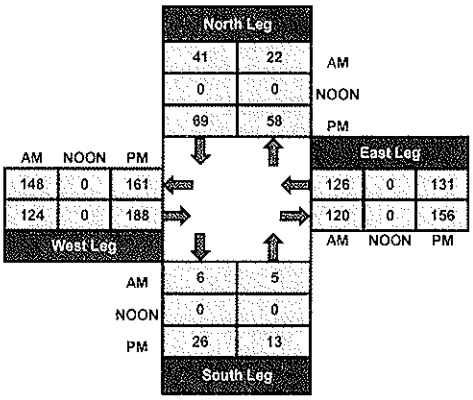
Project #: CA11_4140_027



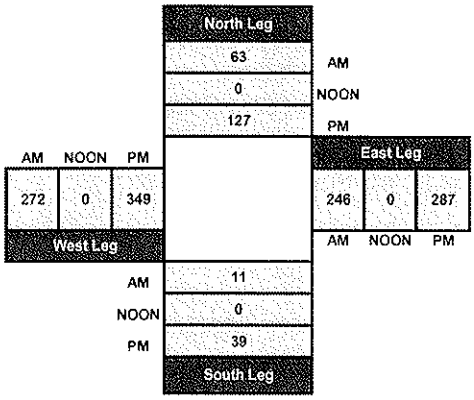
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(40)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	3	2	0	1	3	3	1	10	3	0	7	1	34
7:15 AM	7	1	0	3	3	1	0	12	6	1	17	0	51
7:30 AM	1	0	1	3	3	1	0	24	2	0	19	1	55
7:45 AM	2	2	1	2	3	0	2	27	1	0	19	0	59
8:00 AM	3	1	2	3	3	2	1	23	2	1	24	1	66
8:15 AM	0	0	0	2	3	1	1	19	1	0	27	4	58
8:30 AM	2	0	1	2	4	0	2	22	3	2	35	1	74
8:45 AM	3	1	0	3	4	2	1	27	12	2	30	2	87
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	21	7	5	19	26	10	8	164	30	6	178	10	484
APPROACH %'s :	63.64%	21.21%	15.15%	34.55%	47.27%	18.18%	3.96%	81.19%	14.85%	3.09%	91.75%	5.15%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_028

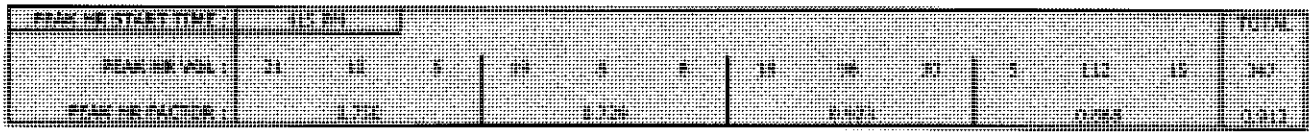
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Congress St			Congress St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	2	1	2	6	0	2	4	28	2	2	30	3	82
4:15 PM	5	2	1	7	2	3	5	26	6	1	33	4	95
4:30 PM	4	2	3	5	2	1	5	29	5	0	28	4	88
4:45 PM	6	5	1	5	0	1	2	20	7	3	26	5	81
5:00 PM	6	1	0	2	4	3	6	21	12	1	25	2	83
5:15 PM	4	1	2	4	3	7	2	24	7	2	30	1	87
5:30 PM	9	0	0	5	2	0	5	34	2	0	28	2	87
5:45 PM	6	3	3	9	1	2	3	27	10	0	16	6	86
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	42	15	12	43	14	19	32	209	51	9	216	27	689
APPROACH %'s :	60.87%	21.74%	17.39%	56.58%	18.42%	25.00%	10.96%	71.58%	17.47%	3.57%	85.71%	10.71%	



CONTROL :

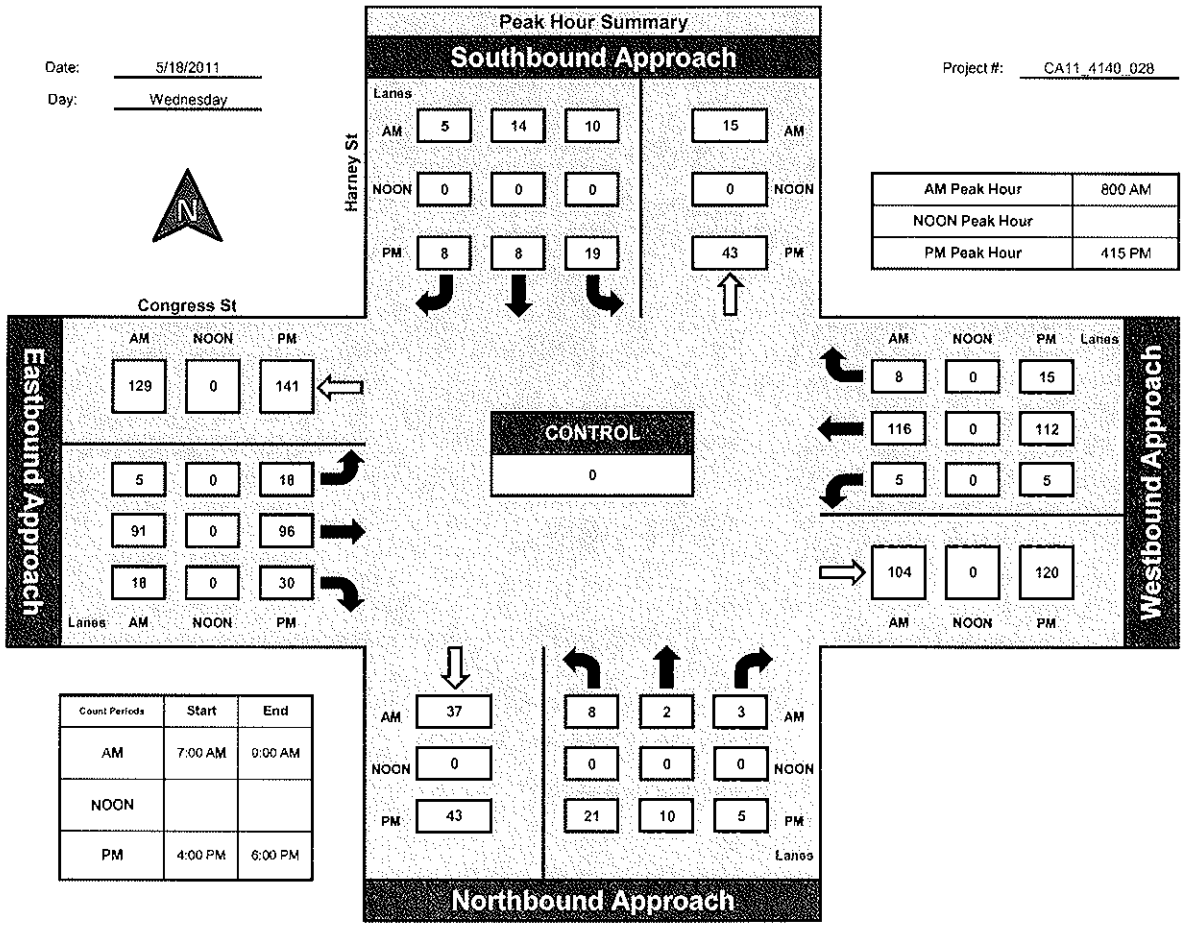
ITM Peak Hour Summary

Prepared by:

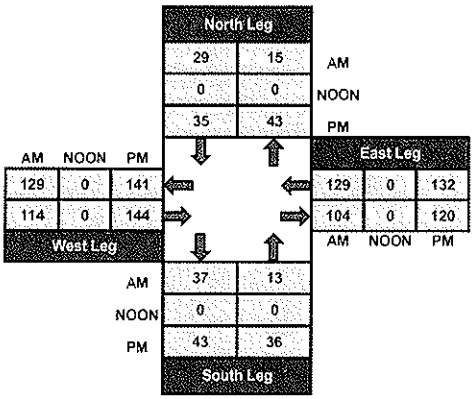
NDS

National Data & Surveying Services

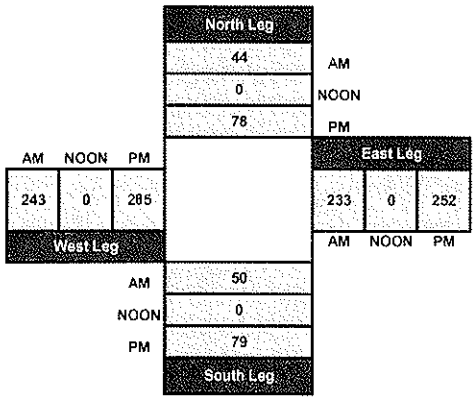
Harney St and Congress St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0	0	0			0			2	0			2
7:15 AM	1	0	1			0			2	1			5
7:30 AM	0	0	1			2			3	2			8
7:45 AM	0	0	1			4			1	1			7
8:00 AM	0	2	2			0			2	2			8
8:15 AM	2	3	3			2			3	6			19
8:30 AM	0	0	2			0			2	3			7
8:45 AM	0	3	2			5			1	4			15
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	8	12	0	0	13	0	0	16	19	0	0	71
APPROACH %'s :	13.04%	34.78%	52.17%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	
[illegible]	[illegible]												

CONTROL :

Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

See Legend Below **PM**

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	1	3			0			2	2			9
4:15 PM	2	2	1			3			4	1			13
4:30 PM	1	2	0			0			0	2			5
4:45 PM	1	1	0			2			5	0			9
5:00 PM	1	1	1			2			2	1			8
5:15 PM	0	1	1			3			1	3			9
5:30 PM	1	1	4			3			1	3			13
5:45 PM	2	2	0			2			3	2			11

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	9	11	10	0	0	15	0	0	18	14	0	0	77
APPROACH %'s :	30.00%	36.67%	33.33%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	100.00%	0.00%	0.00%	

[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

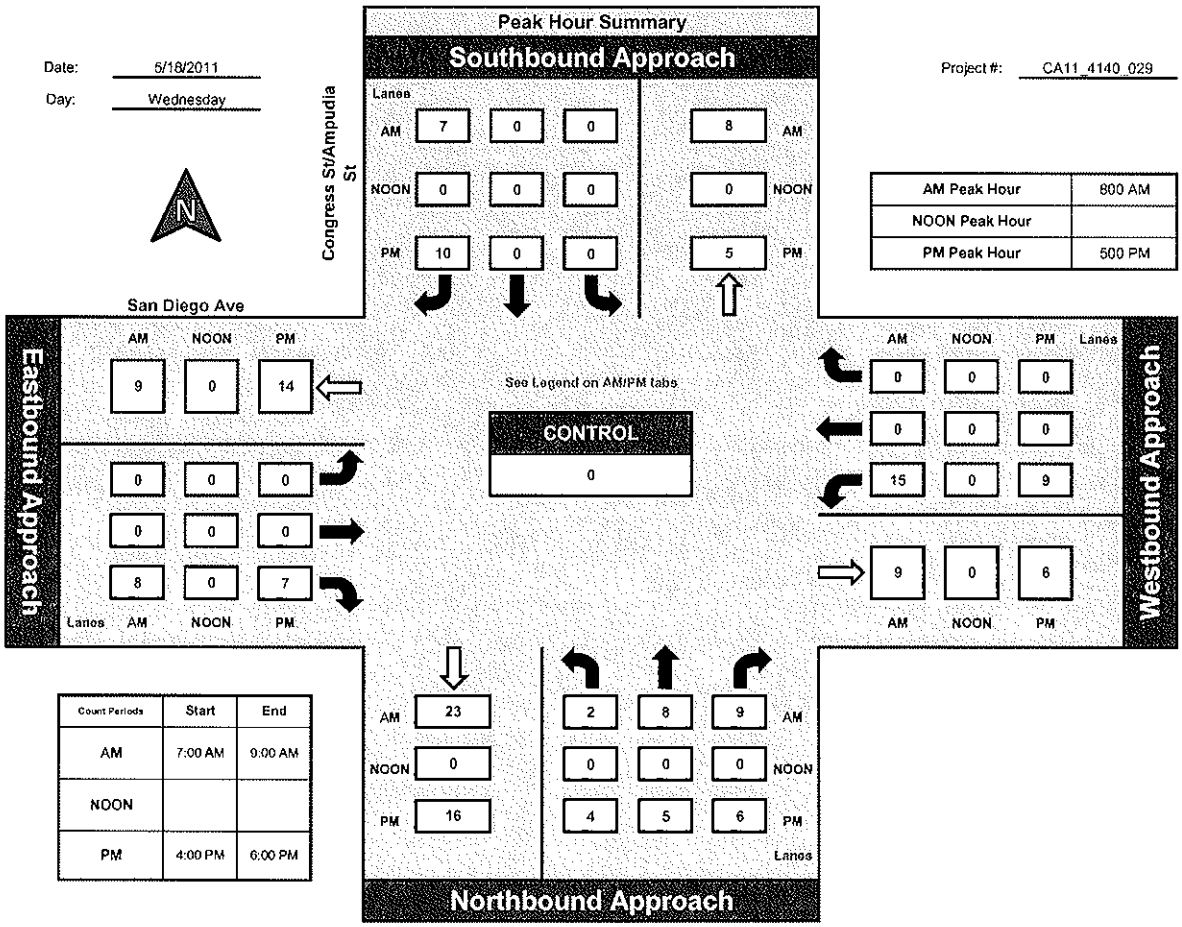
Legend
NL from NB Ampudia St to WB Congress St
NT from NB Ampudia St to WB San Diego Ave
NR from NB Ampudia St to EB San Diego Ave
SR from EB Congress St to SB Ampudia St

ITM Peak Hour Summary

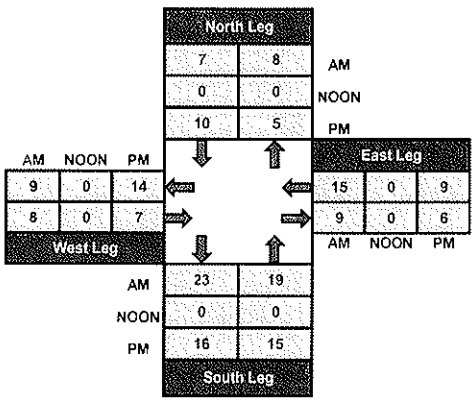
Prepared by:

National Data & Surveying Services

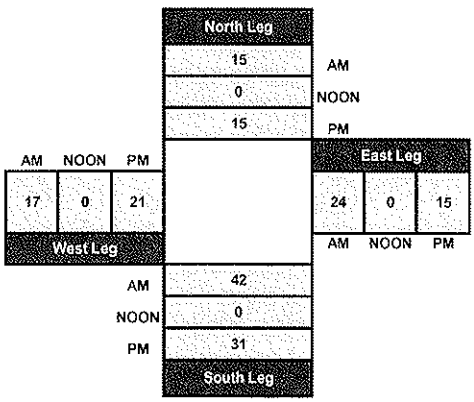
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(41)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		5	2	0			13	0	8	21	0	49
7:15 AM	0		6	0	0			8	3	17	22	1	57
7:30 AM	0		20	0	0			17	3	20	27	0	87
7:45 AM	0		18	0	1			16	0	30	33	2	100
8:00 AM	1		16	1	1			8	1	34	41	1	104
8:15 AM	1		14	1	0			14	0	27	63	0	120
8:30 AM	0		18	0	0			14	0	37	57	0	126
8:45 AM	0		19	0	0			13	0	30	61	0	123
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	2	0	116	4	2	0	0	103	7	203	325	4	766
APPROACH %'s :	1.69%	0.00%	98.31%	66.67%	33.33%	0.00%	0.00%	93.64%	6.36%	38.16%	61.09%	0.75%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_029

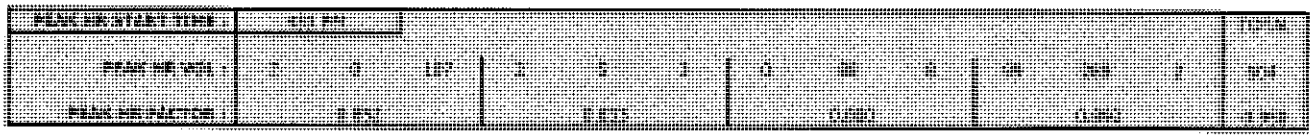
Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Congress St/Ampudia St			Congress St/Ampudia St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0		28	0	3	1		44	1	19	52	0	148
4:15 PM	1		24	0	1	0		22	1	20	49	1	119
4:30 PM	1		31	1	0	2		23	2	24	73	1	158
4:45 PM	0		24	0	2	0		19	2	22	69	0	138
5:00 PM	1		25	0	2	0		26	4	29	61	1	149
5:15 PM	0		27	1	1	1		20	0	24	85	0	159
5:30 PM	0		21	0	2	0		22	0	24	72	1	142
5:45 PM	0		31	0	0	0		25	2	16	76	0	150
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	3	0	211	2	11	4	0	201	12	178	537	4	1163
APPROACH %'s :	1.40%	0.00%	98.60%	11.76%	64.71%	23.53%	0.00%	94.37%	5.63%	24.76%	74.69%	0.56%	



CONTROL :

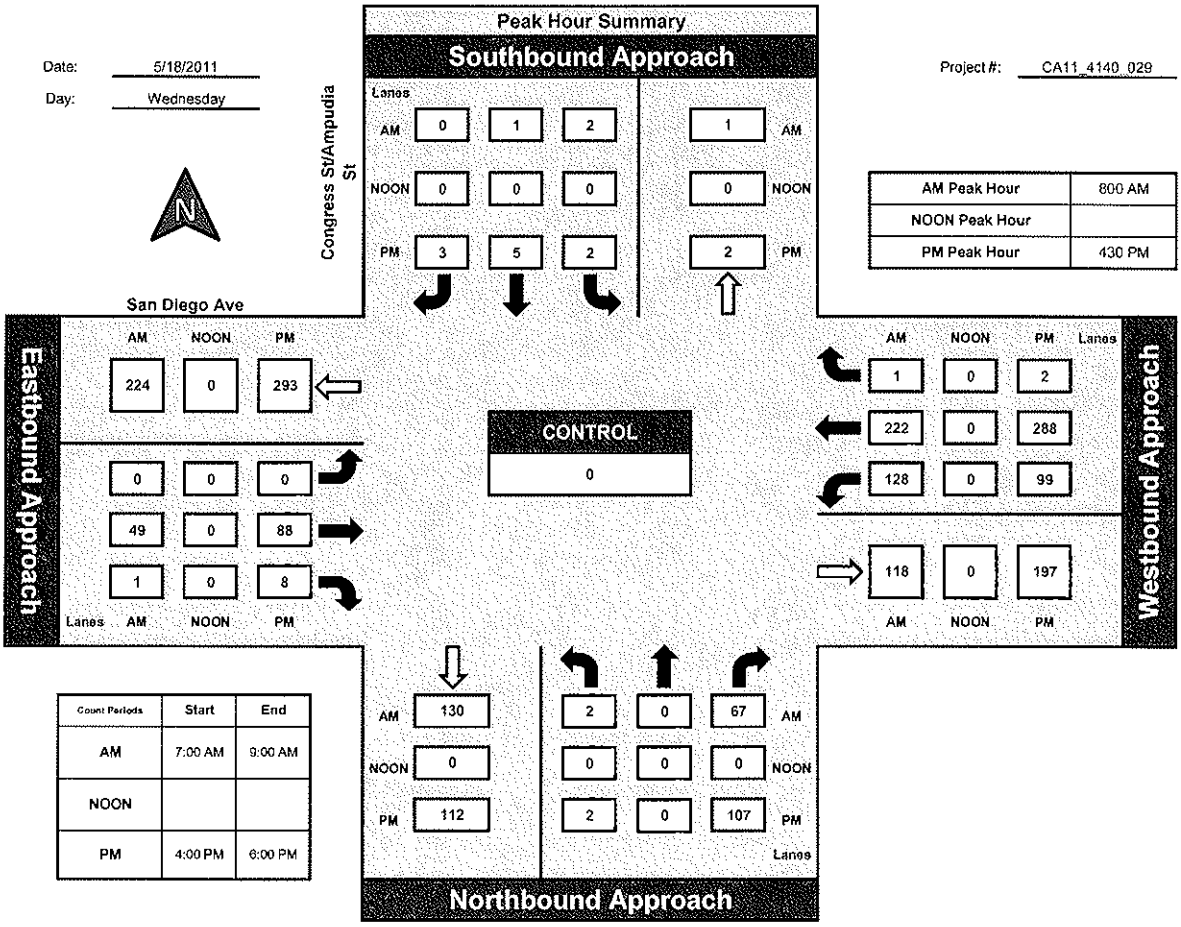
ITM Peak Hour Summary

Prepared by:

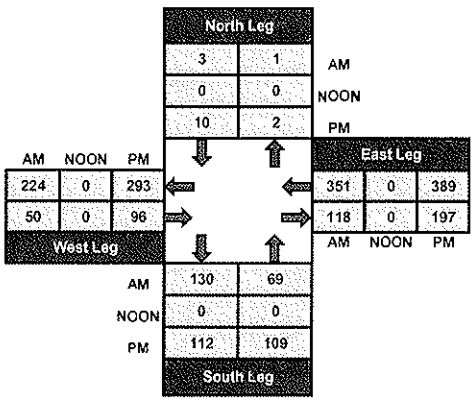
NDS

National Data & Surveying Services

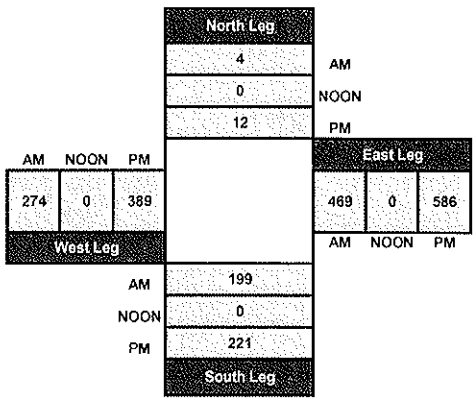
Congress St/Ampudia St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(42)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		2	0	5	3					3		6	19
7:15 AM		3	2	4	6					2		8	25
7:30 AM		3	3	7	5					1		11	30
7:45 AM		3	3	10	4					3		19	42
8:00 AM		1	1	5	4					2		21	34
8:15 AM		4	0	3	8					2		35	52
8:30 AM		8	2	8	7					6		35	66
8:45 AM		6	1	9	10					8		37	71

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	30	12	51	47	0	0	0	0	27	0	172	339
APPROACH %'s :	0.00%	71.43%	28.57%	52.04%	47.96%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	13.57%	0.00%	86.43%	
PEAK HR START TIME													
PEAK HR VOL													
PEAK HR FACTOR :													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_030 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		6	3	10	5					9		15	48
4:15 PM		9	5	12	7					8		16	57
4:30 PM		6	8	5	4					13		29	65
4:45 PM		7	6	10	2					9		21	55
5:00 PM		8	2	10	5					5		23	53
5:15 PM		9	4	14	4					8		31	70
5:30 PM		6	8	7	4					12		30	67
5:45 PM		7	6	10	2					9		20	54

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	58	42	78	33	0	0	0	0	73	0	185	469
APPROACH %'s :	0.00%	58.00%	42.00%	70.27%	29.73%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	28.29%	0.00%	71.71%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

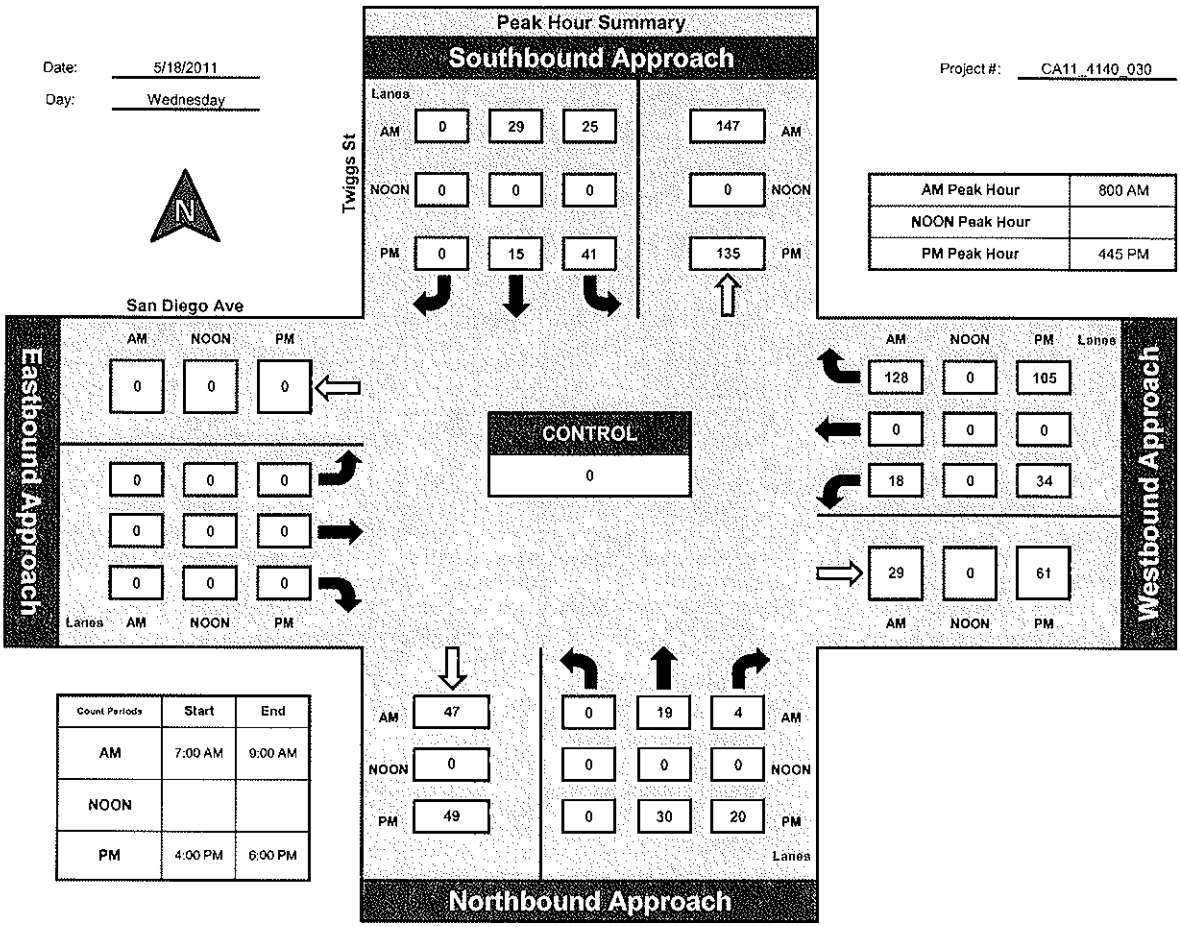
National Data & Surveying Services

Twiggs St and San Diego Ave , City of San Diego

Date: 5/18/2011

Day: Wednesday

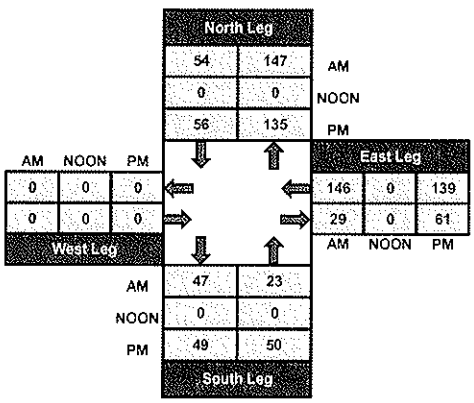
Project #: CA11_4140_030



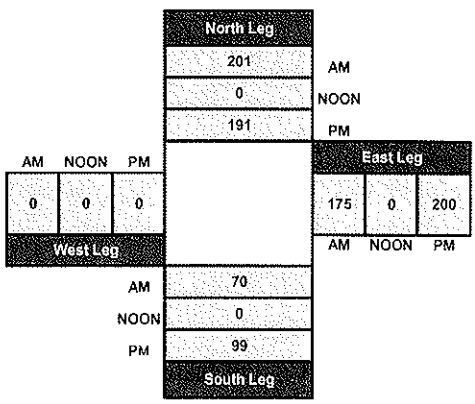
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	445 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(43)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	1	2	0	11	8	1	0	4	0	0	8	8	43
7:15 AM	1	0	0	8	5	1	0	6	1	1	6	9	38
7:30 AM	0	0	0	13	6	0	1	8	0	0	7	15	50
7:45 AM	1	3	0	15	6	2	1	7	1	0	26	13	75
8:00 AM	1	0	1	7	6	2	1	6	2	0	20	17	63
8:15 AM	1	3	0	14	5	2	0	1	0	2	31	26	85
8:30 AM	2	0	2	9	5	1	0	9	1	1	39	19	88
8:45 AM	1	0	0	7	2	7	0	8	1	0	35	21	82
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	8	8	3	84	43	16	3	49	6	4	172	128	524
APPROACH %'s :	42.11%	42.11%	15.79%	58.74%	30.07%	11.19%	5.17%	84.48%	10.34%	1.32%	56.58%	42.11%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_031 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	0	1	3	17	9	2	1	11	3	1	22	23	93
4:15 PM	0	4	1	15	6	1	0	15	3	3	29	22	99
4:30 PM	1	4	3	16	5	2	2	16	2	5	31	19	106
4:45 PM	0	4	2	14	1	1	1	14	0	5	29	27	98
5:00 PM	0	7	4	24	7	0	0	16	1	8	34	23	124
5:15 PM	3	3	5	21	7	1	0	19	5	6	39	25	134
5:30 PM	1	6	3	16	9	3	1	17	0	9	36	27	128
5:45 PM	1	2	1	29	5	2	2	15	2	7	28	21	115
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	6	31	22	152	49	12	7	123	16	44	248	187	897
APPROACH %'s :	10.17%	52.54%	37.29%	71.36%	23.00%	5.63%	4.79%	84.25%	10.96%	9.19%	51.77%	39.04%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

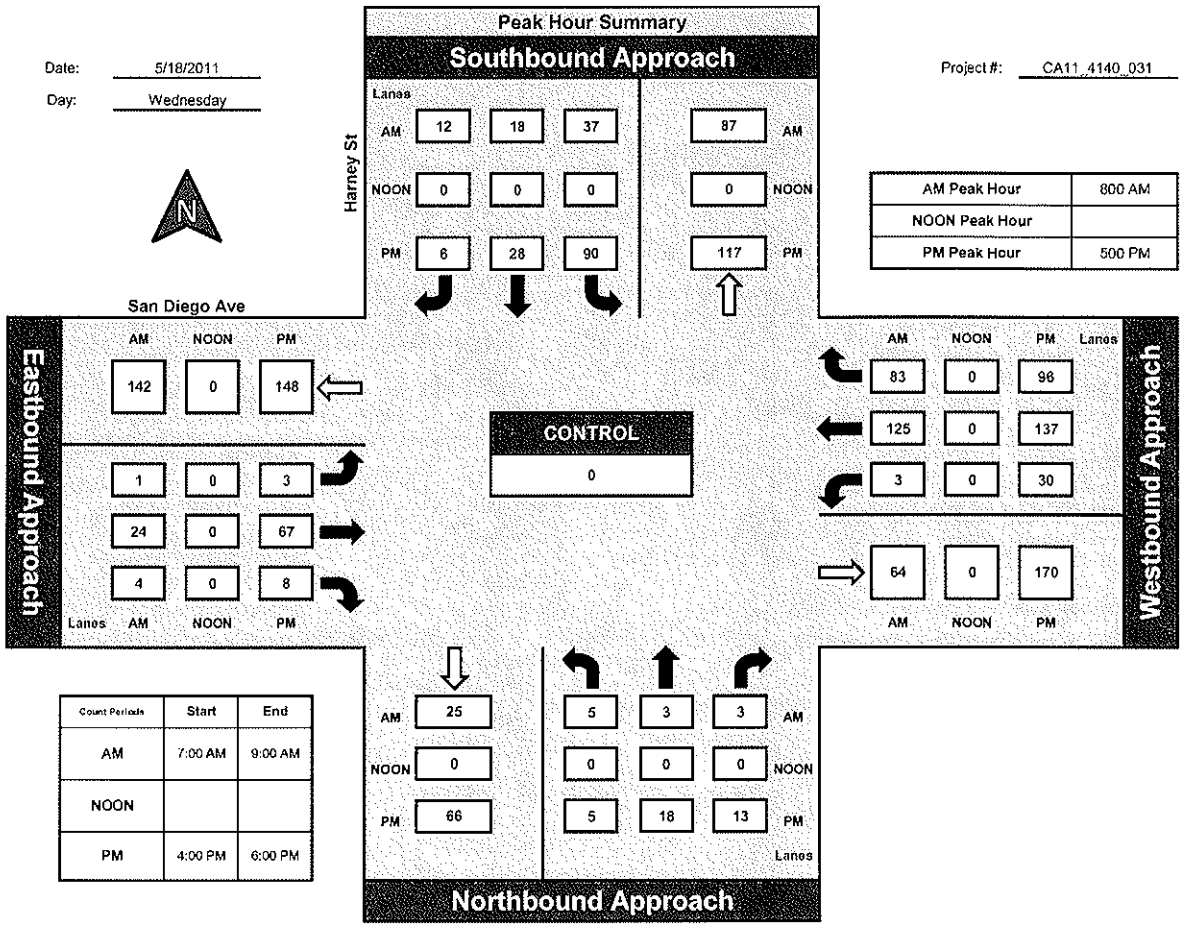
CONTROL :

ITM Peak Hour Summary

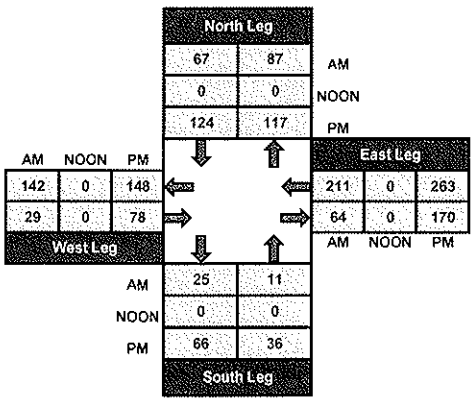
Prepared by:

National Data & Surveying Services

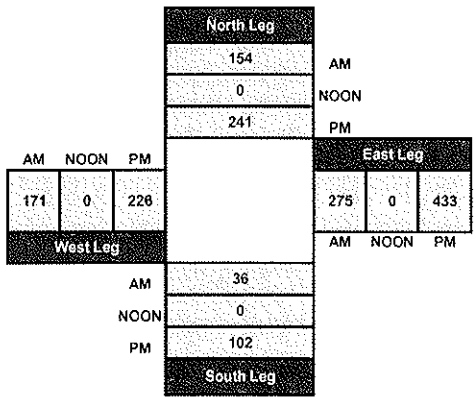
Harney St and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(44)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	24	8	10	0	3	0	0	1	18	27	5	0	96
7:15 AM	31	7	11	0	8	2	0	6	14	30	9	0	118
7:30 AM	33	14	8	1	12	0	1	4	30	40	17	3	163
7:45 AM	51	4	10	1	4	1	4	5	24	38	12	0	154
8:00 AM	63	12	12	0	5	1	0	10	14	38	15	1	171
8:15 AM	53	8	7	0	5	1	2	7	22	55	42	1	203
8:30 AM	39	5	13	0	7	1	4	7	21	65	55	2	219
8:45 AM	43	2	13	0	5	1	3	16	16	63	47	2	211
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	337	60	84	2	49	7	14	56	159	356	202	9	1335
APPROACH %'s :	70.06%	12.47%	17.46%	3.45%	84.48%	12.07%	6.11%	24.45%	69.43%	62.79%	35.63%	1.59%	
[illegible]	[illegible]												TOTAL
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_032 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Old Towne Ave			Old Towne Ave			San Diego Ave			San Diego Ave			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	46	3	15	1	18	1	2	7	63	32	28	1	217
4:15 PM	50	7	18	0	11	2	2	12	30	14	18	0	164
4:30 PM	55	7	22	1	10	3	0	15	40	24	38	4	219
4:45 PM	66	6	25	2	15	3	2	14	29	18	20	2	202
5:00 PM	62	11	18	0	12	2	0	11	44	28	30	3	221
5:15 PM	73	6	24	2	8	7	2	8	41	18	31	1	221
5:30 PM	64	2	30	3	16	5	2	13	27	21	32	0	215
5:45 PM	60	9	19	2	9	3	4	16	36	33	28	0	219
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	476	51	171	11	99	26	14	96	310	188	225	11	1678
APPROACH %'s :	68.19%	7.31%	24.50%	8.09%	72.79%	19.12%	3.33%	22.86%	73.81%	44.34%	53.07%	2.59%	
PEAK HR START TIME :	[illegible]												[illegible]
PEAK HR VOL :	[illegible]												[illegible]
PEAK HR FACTOR :	[illegible]												[illegible]

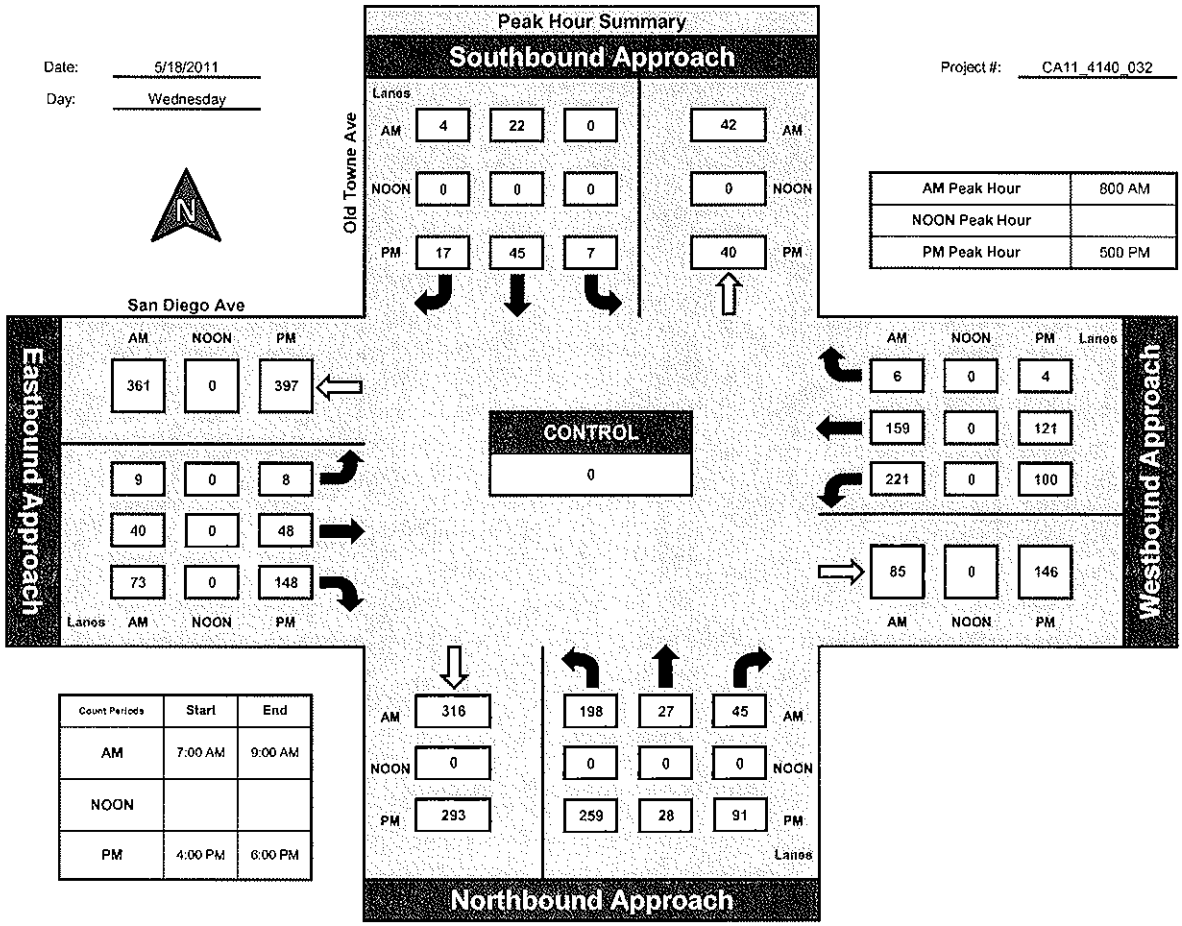
CONTROL :

ITM Peak Hour Summary

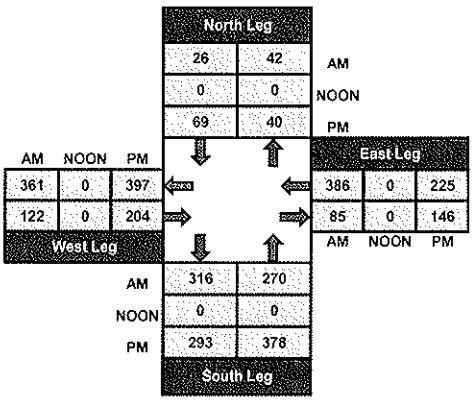
Prepared by:

National Data & Surveying Services

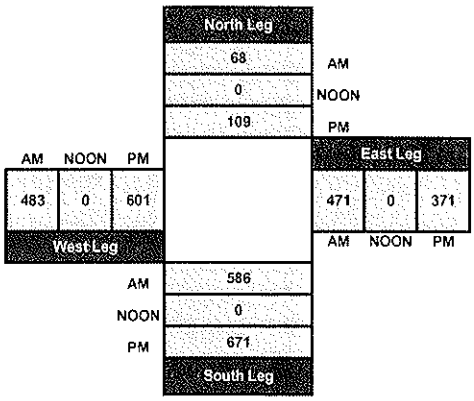
Old Towne Ave and San Diego Ave , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(45)

Intersection Turning Movement

Prepared by:

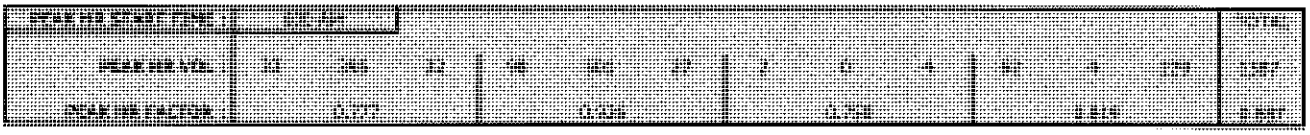
National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	5	44	6	16	108	3	1	1	2	10	2	14	212
7:15 AM	8	73	8	21	105	3	0	0	0	12	0	18	248
7:30 AM	12	81	6	18	131	3	0	0	1	14	0	38	304
7:45 AM	14	74	9	37	155	4	1	0	1	22	2	45	364
8:00 AM	15	63	11	25	134	9	0	0	2	16	2	38	315
8:15 AM	3	84	5	17	113	7	1	0	0	16	1	57	304
8:30 AM	9	128	11	23	125	4	0	0	2	11	1	63	377
8:45 AM	6	120	5	33	129	7	1	0	0	19	0	71	391
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	72	667	61	190	1000	40	4	1	8	120	8	344	2515
APPROACH %'s :	9.00%	83.38%	7.63%	15.45%	81.30%	3.25%	30.77%	7.69%	61.54%	25.42%	1.69%	72.88%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_017 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	1	206	24	32	66	3	5	0	3	23	0	31	394
4:15 PM	0	190	16	42	90	0	5	0	2	19	2	41	407
4:30 PM	4	211	27	49	98	2	5	0	1	20	0	38	455
4:45 PM	3	195	15	45	69	2	1	1	2	16	2	47	398
5:00 PM	5	214	22	42	84	1	3	1	1	15	0	43	431
5:15 PM	3	189	14	52	86	1	6	0	1	14	0	51	417
5:30 PM	1	175	24	39	81	2	3	0	3	17	1	31	377
5:45 PM	1	121	30	44	89	0	0	1	0	19	0	37	342
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	18	1501	172	345	663	11	28	3	13	143	5	319	3221
APPROACH %'s :	1.06%	88.76%	10.17%	33.86%	65.06%	1.08%	63.64%	6.82%	29.55%	30.62%	1.07%	68.31%	

[illegible]													
[illegible]													
[illegible]													

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Taylor St and Juan St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_017

AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs

	North Leg		
AM	626	626	AM
NOON	0	0	NOON
PM	531	1003	PM

West Leg				East Leg			
AM	NOON	PM		AM	NOON	PM	
64	0	23		295	0	246	AM
6	0	22		130	0	268	NOON
							PM

	South Leg	
AM	567	460
NOON	0	0
PM	407	902

Total Volume Per Leg

	North Leg
AM	1252
NOON	0
PM	1534

West Leg			East Leg		
AM	NOON	PM			
70	0	45	425	0	514
			AM	NOON	PM

	South Leg
AM	1027
NOON	0
PM	1309

(46)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7	1	1	0	0	0	0	14	5	0	19	0	47
7:15 AM	7	0	3	0	0	1	1	21	7	0	27	1	68
7:30 AM	8	0	1	0	0	0	0	20	9	1	34	1	74
7:45 AM	9	0	5	0	0	2	0	23	9	0	42	0	90
8:00 AM	6	1	0	1	1	0	0	29	18	0	24	0	80
8:15 AM	14	1	2	0	1	0	0	18	15	1	29	0	81
8:30 AM	11	1	2	1	0	1	0	20	7	0	26	0	69
8:45 AM	23	2	2	0	1	0	0	25	14	0	38	1	106
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	85	6	16	2	3	4	1	170	84	2	239	3	615
APPROACH %'s :	79.44%	5.61%	14.95%	22.22%	33.33%	44.44%	0.39%	66.67%	32.94%	0.82%	97.95%	1.23%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

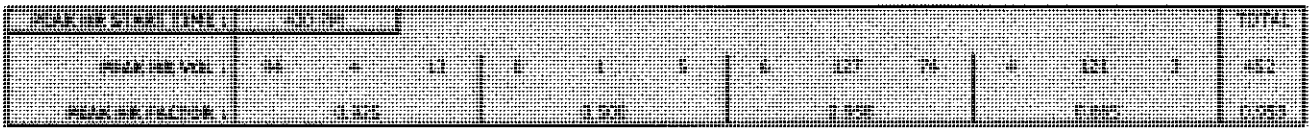
Project ID: CA11_4140_034 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Twiggs St			Twiggs St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	23	0	3	0	0	0	1	36	15	2	23	0	103
4:15 PM	18	0	6	0	0	0	1	32	15	6	17	1	96
4:30 PM	23	3	4	0	1	2	1	37	13	1	26	1	112
4:45 PM	28	0	2	0	0	1	2	30	20	1	34	0	118
5:00 PM	22	1	3	0	0	1	0	31	23	0	26	2	109
5:15 PM	21	0	4	0	0	1	3	29	18	2	35	0	113
5:30 PM	20	1	2	1	1	1	0	33	15	1	32	0	107
5:45 PM	21	0	4	0	0	0	0	26	26	2	23	1	103

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	176	5	28	1	2	6	8	254	145	15	216	5	861
APPROACH %'s :	84.21%	2.39%	13.40%	11.11%	22.22%	66.67%	1.97%	62.41%	35.63%	6.36%	91.53%	2.12%	



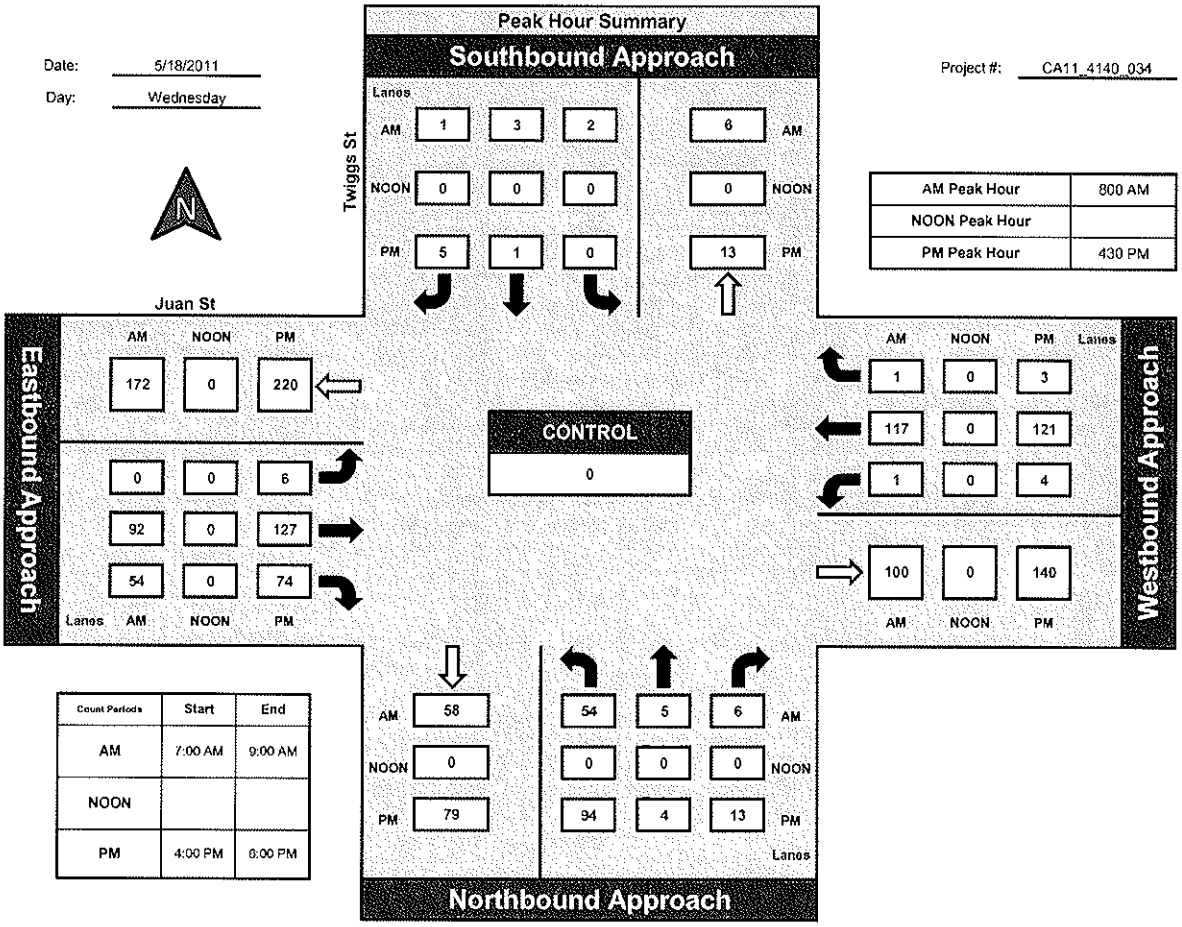
CONTROL :

ITM Peak Hour Summary

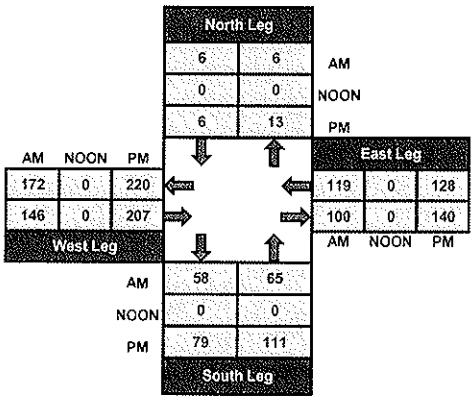
Prepared by:

National Data & Surveying Services

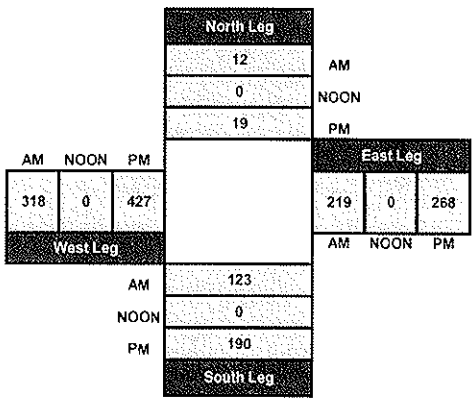
Twiggs St and Juan St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(47)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	6	1	6	0	1	1	1	10	0	9	15	0	50
7:15 AM	5	1	6	0	0	1	1	14	3	8	19	0	58
7:30 AM	8	1	6	0	0	3	1	9	6	15	38	0	87
7:45 AM	9	1	5	0	0	0	2	16	13	12	28	0	86
8:00 AM	4	1	9	0	0	1	4	15	11	6	24	0	75
8:15 AM	0	1	5	2	1	0	1	0	0	5	1	1	17
8:30 AM	13	0	4	0	0	1	0	17	8	8	23	0	74
8:45 AM	19	1	2	0	0	0	1	18	7	9	22	2	81

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	7	43	2	2	7	11	99	48	72	170	3	528
APPROACH %'s :	56.14%	6.14%	37.72%	18.18%	18.18%	63.64%	6.96%	62.66%	30.38%	29.39%	69.39%	1.22%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_035

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Harney St			Harney St			Juan St			Juan St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	11	0	3	0	0	0	0	26	10	10	23	0	83
4:15 PM	11	2	3	2	0	1	1	28	11	9	10	0	78
4:30 PM	11	1	11	0	0	2	1	30	9	4	16	1	86
4:45 PM	15	2	7	0	0	2	2	25	9	2	18	0	82
5:00 PM	14	0	13	0	0	2	1	22	13	3	16	2	86
5:15 PM	17	0	5	0	3	3	0	19	10	5	17	1	80
5:30 PM	24	2	8	0	1	0	3	18	12	4	11	0	83
5:45 PM	13	0	6	0	0	1	2	29	6	6	16	2	81
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	116	7	56	2	4	11	10	197	80	43	127	6	659
APPROACH %'s :	64.80%	3.91%	31.28%	11.76%	23.53%	64.71%	3.48%	68.64%	27.87%	24.43%	72.16%	3.41%	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Harney St and Juan St , City of San Diego

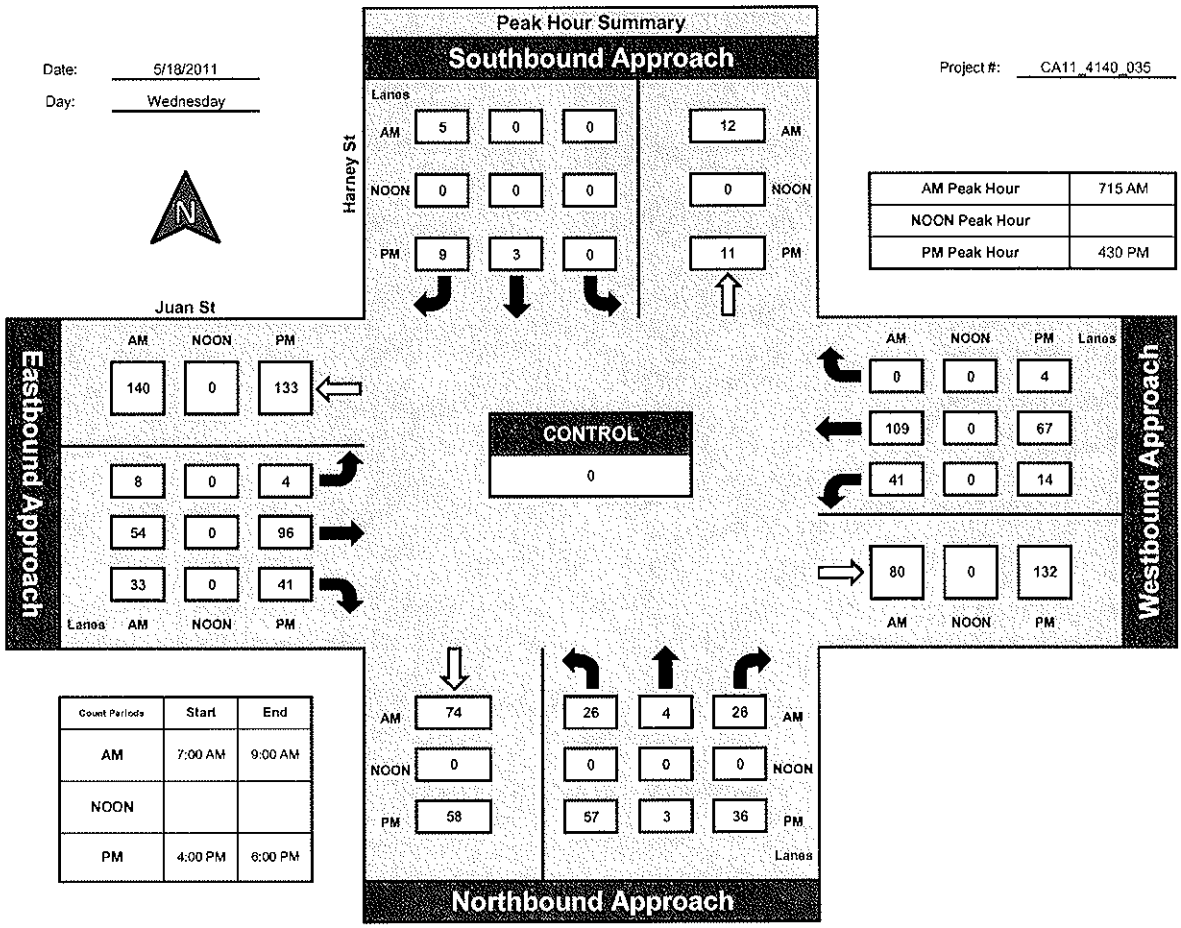
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

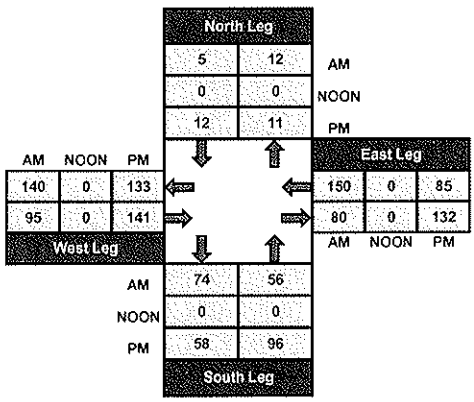
Project #: CA11_4140_035

AM Peak Hour	715 AM
NOON Peak Hour	
PM Peak Hour	430 PM

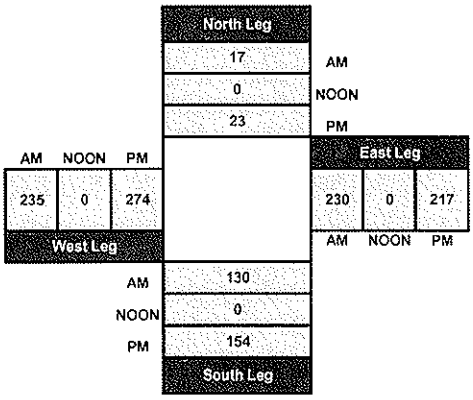


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(48)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	30	30	0	0	118	13	7	0	44			2	244
7:15 AM	49	34	0	0	100	18	9	0	46			0	256
7:30 AM	66	48	1	1	135	39	13	0	51			1	355
7:45 AM	73	38	1	0	152	64	18	0	74			2	422
8:00 AM	57	38	0	0	137	36	27	0	67			0	362
8:15 AM	77	56	0	0	119	50	17	0	36			0	355
8:30 AM	119	63	0	0	125	49	8	3	58			2	427
8:45 AM	111	76	0	0	141	57	7	2	53			2	449
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	582	383	2	1	1027	326	106	5	429	0	0	9	2870
APPROACH %'s :	60.19%	39.61%	0.21%	0.07%	75.85%	24.08%	19.63%	0.93%	79.44%	0.00%	0.00%	100.00%	
PEAK HR START TIME :	8:00 AM												
PEAK HR VOL :	364	233	1	1	533	199	65	3	274	0	0	5	1676
PEAK HR FACTOR :	0.788			0.250			0.778			0.000			0.945

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_016 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Taylor St			Taylor St			Morena Blvd			Morena Blvd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	104	167	2	0	57	37	16	0	36			3	422
4:15 PM	95	152	4	0	68	18	14	0	58			3	412
4:30 PM	120	164	1	2	70	32	20	4	56			4	473
4:45 PM	115	131	1	0	73	34	19	1	40			3	417
5:00 PM	120	165	4	1	68	23	23	2	48			3	457
5:15 PM	113	146	4	0	83	18	16	0	56			4	440
5:30 PM	103	114	1	0	74	16	18	0	57			1	384
5:45 PM	81	87	2	1	72	24	14	1	48			3	333
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	851	1126	19	4	565	202	140	8	399	0	0	24	3338
APPROACH %'s :	42.64%	56.41%	0.95%	0.52%	73.28%	26.20%	25.59%	1.46%	72.94%	0.00%	0.00%	100.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

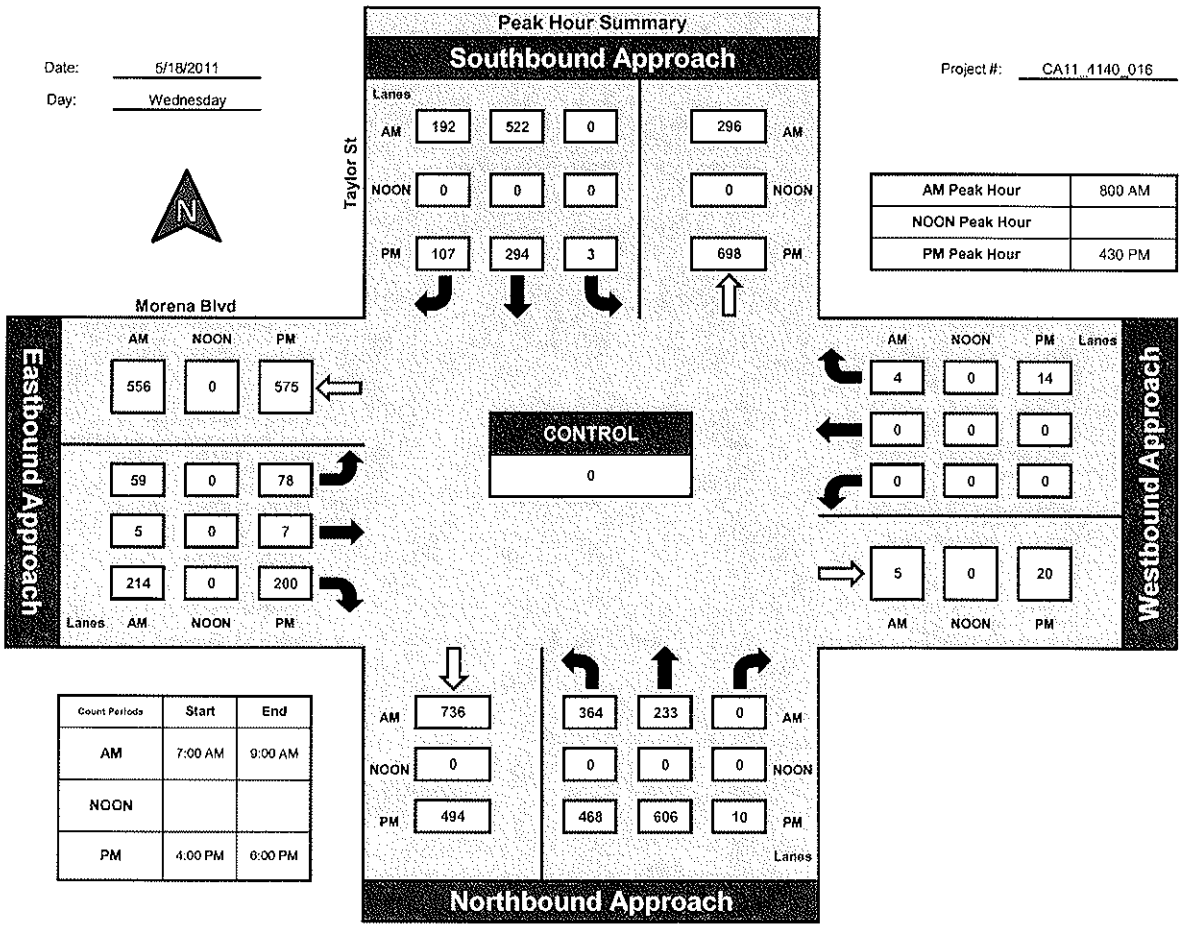
National Data & Surveying Services

Taylor St and Morena Blvd , City of San Diego

Date: 5/18/2011

Day: Wednesday

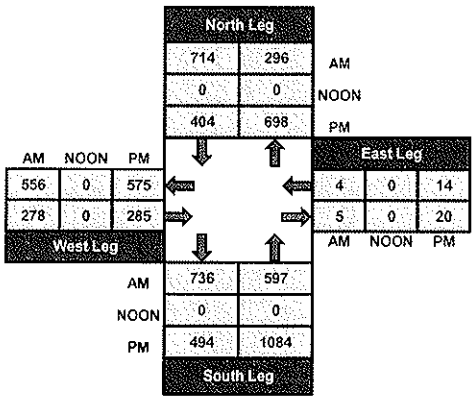
Project #: CA11_4140_016



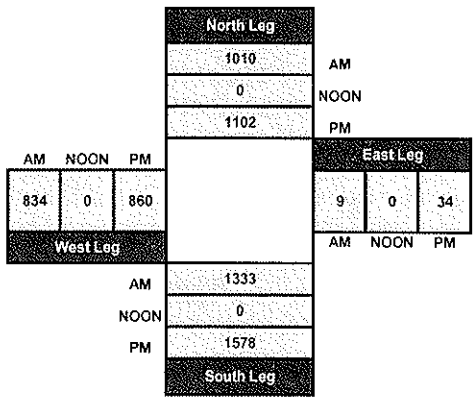
AM Peak Hour	800 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

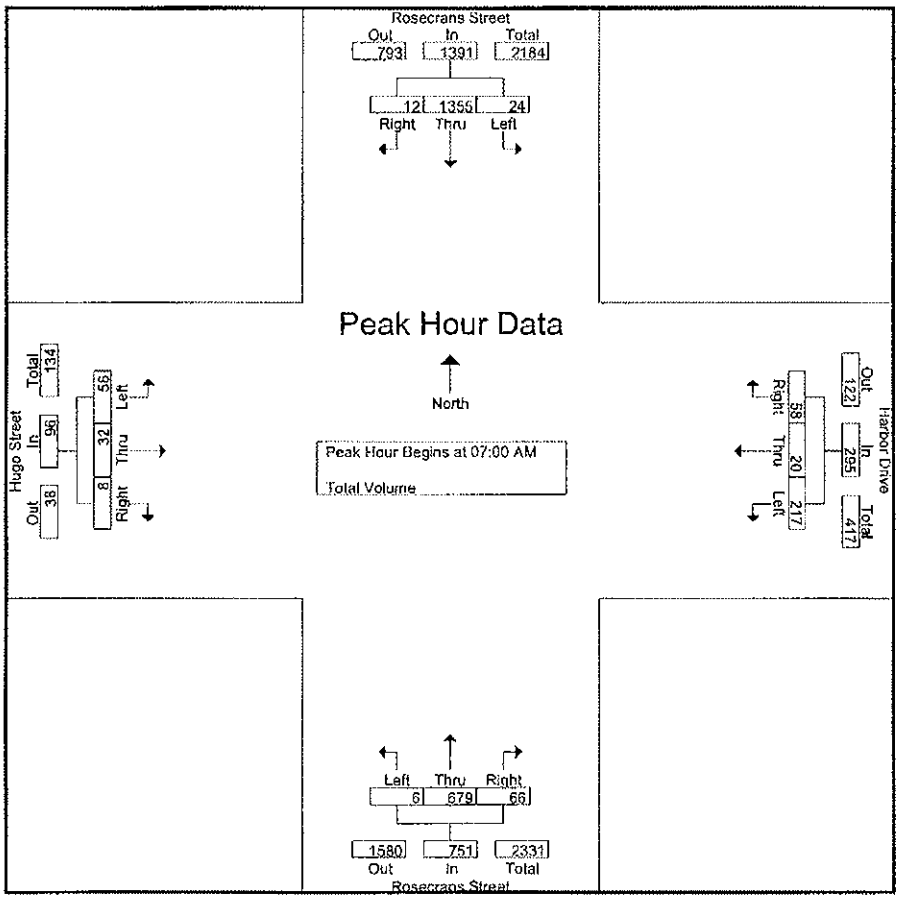
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	4	315	1	320	57	9	9	75	0	86	17	103	6	3	1	10	508
06:45 AM	3	387	5	395	43	7	9	59	0	101	9	110	10	5	3	18	582
Total	7	702	6	715	100	16	18	134	0	187	26	213	16	8	4	28	1090
07:00 AM	4	366	4	374	40	2	18	60	3	138	17	158	13	7	2	22	614
07:15 AM	4	340	1	345	74	12	15	101	1	181	21	203	14	11	2	27	676
07:30 AM	7	330	5	342	46	5	9	60	0	179	16	195	18	9	3	30	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
08:00 AM	5	277	1	283	40	16	11	67	0	183	18	201	15	14	1	30	581
08:15 AM	5	283	2	290	56	7	10	73	0	160	19	179	22	4	0	26	568
Grand Total	41	2617	21	2679	413	59	97	569	6	1209	129	1344	109	58	13	180	4772
Apprch %	1.5	97.7	0.8		72.6	10.4	17		0.4	90	9.6		60.6	32.2	7.2		
Total %	0.9	54.8	0.4	56.1	8.7	1.2	2	11.9	0.1	25.3	2.7	28.2	2.3	1.2	0.3	3.8	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	4	**366**	4	**374**	40	2	**18**	60	**3**	138	17	158	**13**	7	2	22	614
07:15 AM	4	340	1	345	74	**12**	15	**101**	1	**181**	**21**	**203**	14	**11**	2	27	**676**
07:30 AM	7	330	**5**	342	46	5	9	60	0	179	16	195	**18**	9	**3**	**30**	627
07:45 AM	9	319	2	330	57	1	16	74	2	181	12	195	11	5	1	17	616
Total Volume	24	1355	12	1391	217	20	58	295	6	679	66	751	56	32	8	96	2533
% App. Total	1.7	97.4	0.9		73.6	6.8	19.7		0.8	90.4	8.8		58.3	33.3	8.3		
PHF	.667	.926	.600	.930	.733	.417	.806	.730	.500	.938	.786	.925	.778	.727	.667	.800	.937

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUAM
Site Code : 9102099
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	3	387	5	395	74	12	15	101	1	181	21	203	14	11	2	27
+15 mins.	4	366	4	374	46	5	9	60	0	179	16	195	18	9	3	30
+30 mins.	4	340	1	345	57	1	16	74	2	181	12	195	11	5	1	17
+45 mins.	7	330	5	342	40	16	11	67	0	183	18	201	15	14	1	30
Total Volume	18	1423	15	1456	217	34	51	302	3	724	67	794	58	39	7	104
% App. Total	1.2	97.7	1		71.9	11.3	16.9		0.4	91.2	8.4		55.8	37.5	6.7	
PHF	.643	.919	.750	.922	.733	.531	.797	.748	.375	.989	.798	.978	.806	.696	.583	.867

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

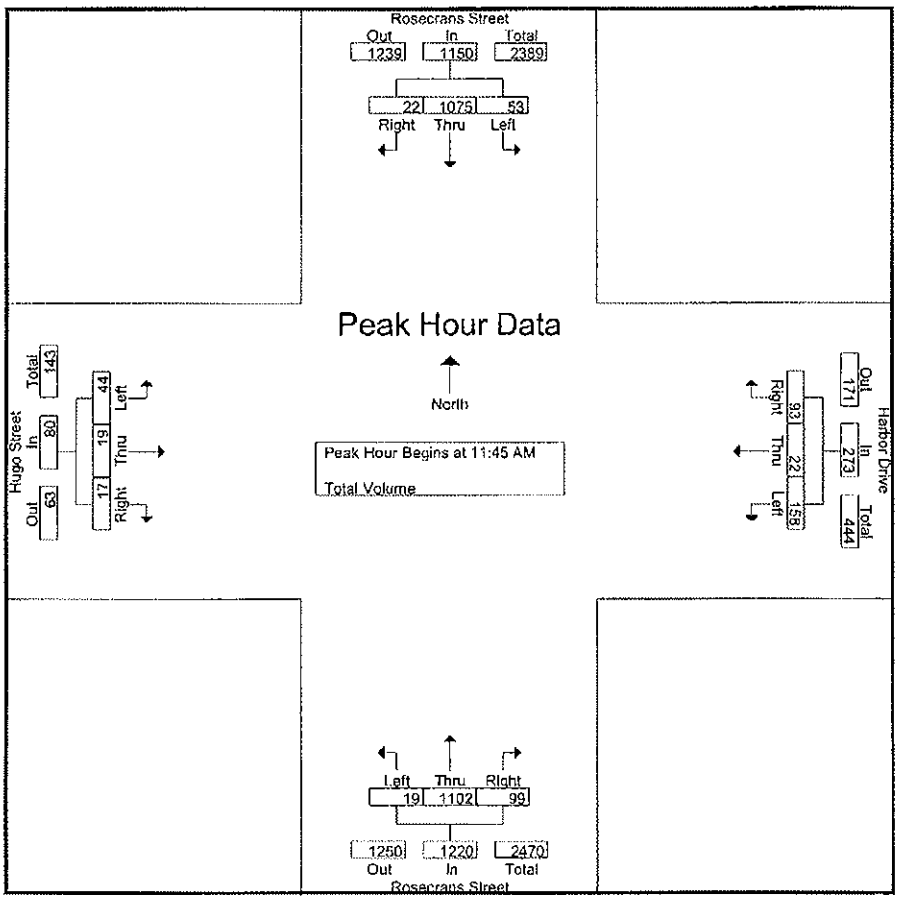
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	10	242	4	256	43	8	24	75	5	287	27	319	15	10	2	27	677
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
Total	21	521	10	552	71	12	43	126	10	597	54	661	29	14	7	50	1389
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
12:45 PM	12	280	8	300	37	7	27	71	4	264	24	292	13	9	6	28	691
Total	54	1076	24	1154	167	25	101	293	18	1056	96	1170	43	24	18	85	2702
01:00 PM	12	244	4	260	41	7	26	74	3	270	32	305	11	6	4	21	660
01:15 PM	10	214	5	229	36	5	19	60	2	280	29	311	13	6	0	19	619
Grand Total	97	2055	43	2195	315	49	189	553	33	2203	211	2447	96	50	29	175	5370
Apprch %	4.4	93.6	2		57	8.9	34.2		1.3	90	8.6		54.9	28.6	16.6		
Total %	1.8	38.3	0.8	40.9	5.9	0.9	3.5	10.3	0.6	41	3.9	45.6	1.8	0.9	0.5	3.3	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	11	279	6	296	28	4	19	51	5	310	27	342	14	4	5	23	712
12:00 PM	10	255	6	271	44	6	25	75	5	245	26	276	10	4	3	17	639
12:15 PM	23	233	5	261	44	7	18	69	5	262	25	292	9	7	5	21	643
12:30 PM	9	308	5	322	42	5	31	78	4	285	21	310	11	4	4	19	729
Total Volume	53	1075	22	1150	158	22	93	273	19	1102	99	1220	44	19	17	80	2723
% App. Total	4.6	93.5	1.9		57.9	8.1	34.1		1.6	90.3	8.1		55	23.8	21.2		
PHF	.576	.873	.917	.893	.898	.786	.750	.875	.950	.889	.917	.892	.786	.679	.850	.870	.934

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUMD
Site Code : 9102011
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	12:00 PM				12:00 PM				11:30 AM				12:15 PM			
+0 mins.	10	255	6	271	**44**	6	25	75	**5**	287	**27**	319	9	7	5	21
+15 mins.	**23**	233	5	261	44	**7**	18	69	5	**310**	27	**342**	11	4	4	19
+30 mins.	9	**308**	5	**322**	42	5	**31**	**78**	5	245	26	276	**13**	**9**	**6**	**28**
+45 mins.	12	280	**8**	300	37	7	27	71	5	262	25	292	11	6	4	21
Total Volume	54	1076	24	1154	167	25	101	293	20	1104	105	1229	44	26	19	89
% App. Total	4.7	93.2	2.1		57	8.5	34.5		1.6	89.8	8.5		49.4	29.2	21.3	
PHF	.587	.873	.750	.896	.949	.893	.815	.939	1.000	.890	.972	.898	.846	.722	.792	.795

Counts Unlimited Inc.
26286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

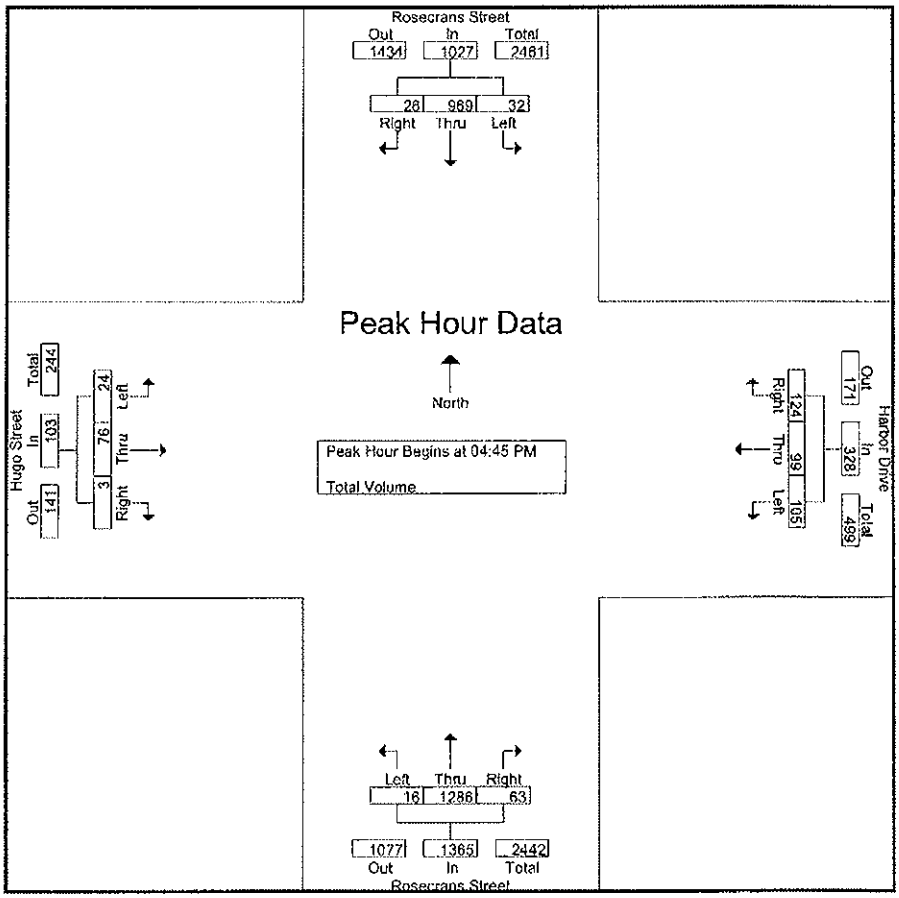
	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	198	5	211	33	10	22	65	5	351	17	373	12	8	3	23	672
04:15 PM	3	200	11	214	37	12	27	76	8	319	9	336	13	9	2	24	650
04:30 PM	7	221	8	236	45	23	39	107	8	228	6	242	10	12	7	29	614
04:45 PM	9	241	4	254	28	21	37	86	7	251	12	270	9	13	0	22	632
Total	27	860	28	915	143	66	125	334	28	1149	44	1221	44	42	12	98	2568
05:00 PM	10	247	16	273	21	22	31	74	5	401	13	419	5	15	0	20	786
05:15 PM	5	251	5	261	29	27	29	85	2	322	28	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	29	27	83	2	312	10	324	2	27	2	31	677
05:45 PM	5	229	1	235	29	28	24	81	1	245	6	252	2	7	4	13	581
Total	28	957	23	1008	106	106	111	323	10	1280	57	1347	17	70	7	94	2772
Grand Total	55	1817	51	1923	249	172	236	657	38	2429	101	2568	61	112	19	192	5340
Apprch %	2.9	94.5	2.7		37.9	26.2	35.9		1.5	94.6	3.9		31.8	58.3	9.9		
Total %	1	34	1	36	4.7	3.2	4.4	12.3	0.7	45.5	1.9	48.1	1.1	2.1	0.4	3.6	

	Rosecrans Street Southbound				Harbor Drive Westbound				Rosecrans Street Northbound				Hugo Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	9	241	4	254	28	21	**37**	**86**	**7**	251	12	270	9	13	0	22	632
05:00 PM	**10**	247	**16**	**273**	21	22	31	74	5	**401**	13	**419**	5	15	0	20	**786**
05:15 PM	5	**251**	5	261	**29**	27	29	85	2	322	**28**	352	8	21	1	30	728
05:30 PM	8	230	1	239	27	**29**	27	83	2	312	10	324	2	**27**	2	**31**	677
Total Volume	32	969	26	1027	105	99	124	328	16	1286	63	1365	24	76	3	103	2823
% App. Total	3.1	94.4	2.5		32	30.2	37.8		1.2	94.2	4.6		23.3	73.8	2.9		
PHF	.800	.965	.406	.940	.905	.853	.838	.953	.571	.802	.563	.814	.667	.704	.375	.831	.898

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Harbor Drive/Hugo Street
Weather: Sunny

File Name : SDCROHUPM
Site Code : 9102104
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:30 PM				04:45 PM				04:45 PM			
+0 mins.	9	241	4	254	**45**	23	**39**	**107**	7	251	12	270	9	13	0	22
+15 mins.	**10**	247	**16**	**273**	28	21	37	86	5	**401**	13	**419**	5	15	0	20
+30 mins.	5	**251**	5	261	21	22	31	74	2	322	28	352	8	21	1	30
+45 mins.	8	230	1	239	29	**27**	29	85	2	312	10	324	2	**27**	**2**	**31**
Total Volume	32	969	26	1027	123	93	136	352	16	1286	63	1365	24	76	3	103
% App. Total	3.1	94.4	2.5		34.9	26.4	38.6		1.2	94.2	4.6		23.3	73.8	2.9	
PHF	.800	.965	.406	.940	.683	.861	.872	.822	.571	.802	.563	.814	.667	.704	.375	.831

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

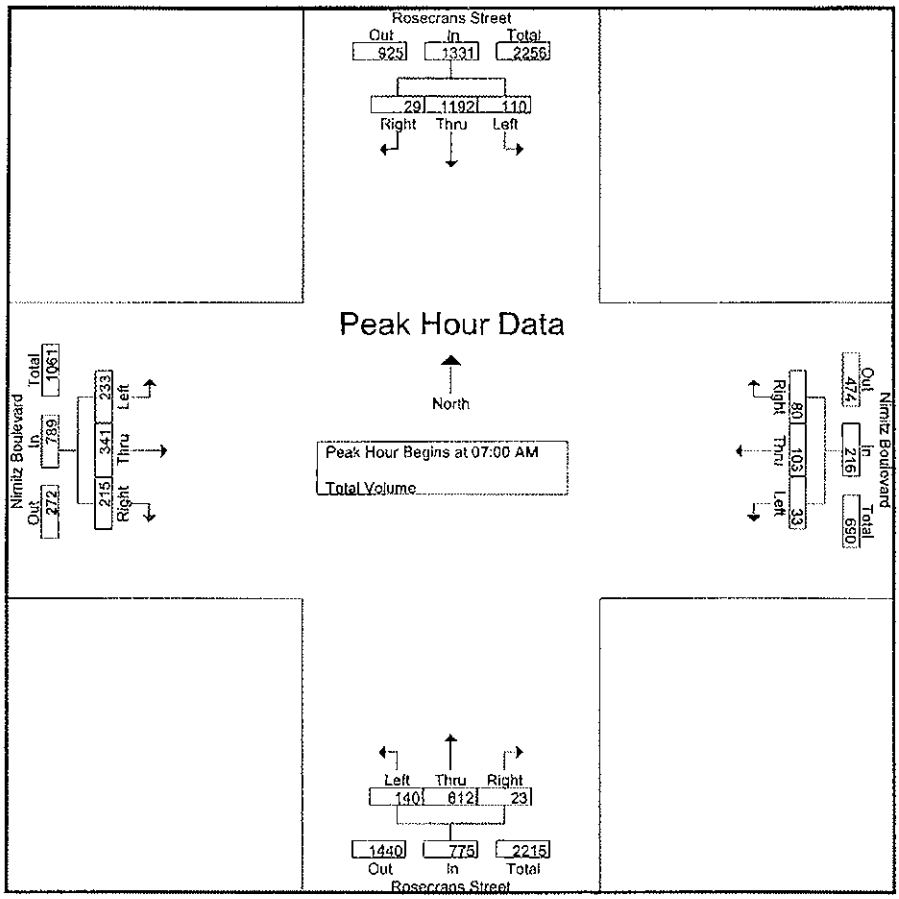
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	38	254	22	314	6	38	22	66	30	69	10	109	62	66	47	175	664
06:45 AM	28	322	19	369	5	33	24	62	45	89	3	137	62	71	60	193	761
Total	66	576	41	683	11	71	46	128	75	158	13	246	124	137	107	368	1425
07:00 AM	25	324	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	8	359	9	26	20	55	34	151	7	192	74	74	58	206	812
07:30 AM	28	272	8	308	13	29	23	65	37	158	6	201	49	103	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	39	166	8	213	66	100	49	215	782
Total	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
08:00 AM	34	230	8	272	4	27	12	43	38	161	8	207	85	54	43	182	704
08:15 AM	28	250	22	300	6	24	20	50	49	149	10	208	61	65	56	182	740
Grand Total	238	2248	100	2586	54	225	158	437	302	1080	54	1436	503	597	421	1521	5980
Apprch %	9.2	86.9	3.9		12.4	51.5	36.2		21	75.2	3.8		33.1	39.3	27.7		
Total %	4	37.6	1.7	43.2	0.9	3.8	2.6	7.3	5.1	18.1	0.9	24	8.4	10	7	25.4	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	25	**324**	6	355	7	23	21	51	30	137	2	169	44	64	55	163	738
07:15 AM	37	314	**8**	**359**	9	26	20	55	34	151	7	192	**74**	74	**58**	206	**812**
07:30 AM	28	272	8	308	**13**	**29**	**23**	**65**	37	158	6	201	49	**103**	53	205	779
07:45 AM	20	282	7	309	4	25	16	45	**39**	**166**	**8**	**213**	66	100	49	**215**	782
Total Volume	110	1192	29	1331	33	103	80	216	140	612	23	775	233	341	215	789	3111
% App. Total	8.3	89.6	2.2		15.3	47.7	37		18.1	79	3		29.5	43.2	27.2		
PHF	.743	.920	.906	.927	.635	.888	.870	.831	.897	.922	.719	.910	.787	.828	.927	.917	.958

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIAM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:30 AM				06:30 AM				07:30 AM				07:15 AM			
+0 mins.	**38**	254	**22**	314	6	**38**	22	**66**	37	158	6	201	74	74	**58**	206
+15 mins.	28	322	19	**369**	5	33	**24**	62	39	**166**	8	**213**	49	**103**	53	205
+30 mins.	25	**324**	6	355	7	23	21	51	38	161	8	207	66	100	49	**215**
+45 mins.	37	314	8	359	9	26	20	55	**49**	149	**10**	208	**85**	54	43	182
Total Volume	128	1214	55	1397	27	120	87	234	163	634	32	829	274	331	203	808
% App. Total	9.2	86.9	3.9		11.5	51.3	37.2		19.7	76.5	3.9		33.9	41	25.1	
PHF	.842	.937	.625	.946	.750	.789	.906	.886	.832	.955	.800	.973	.806	.803	.875	.940

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

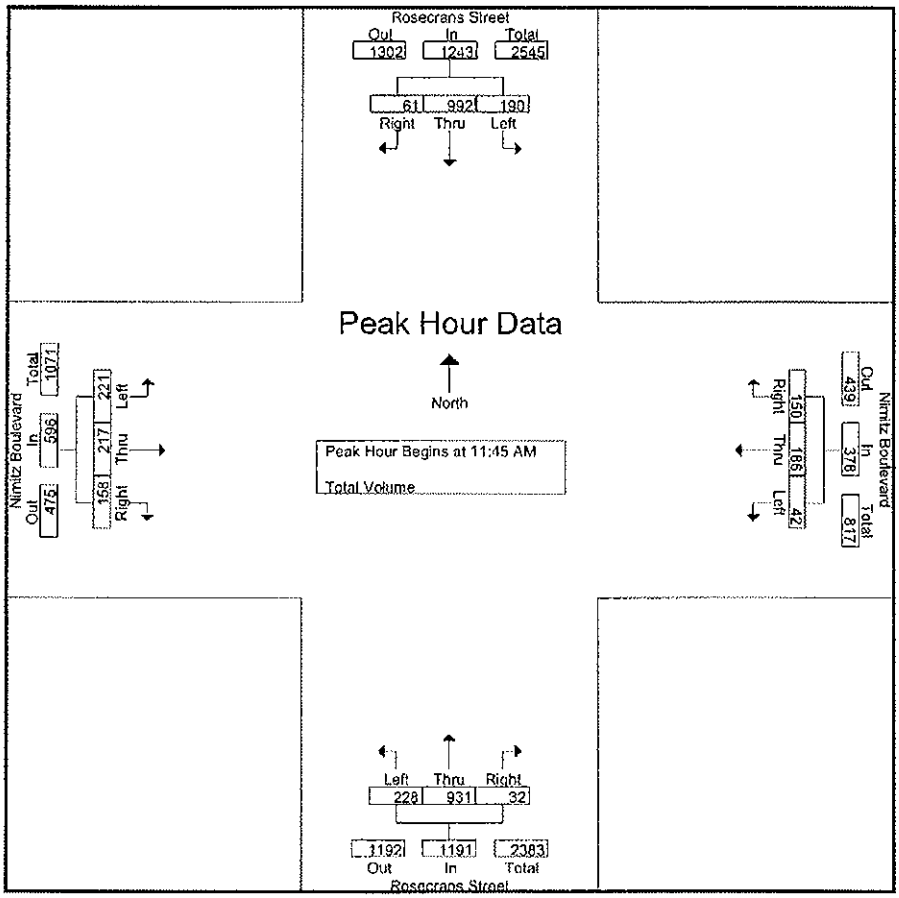
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
11:30 AM	43	201	17	261	16	36	49	101	53	229	9	291	52	56	33	141	794
11:45 AM	43	272	15	330	13	51	43	107	62	266	11	339	64	45	37	146	922
Total	86	473	32	591	29	87	92	208	115	495	20	630	116	101	70	287	1716
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	63	46	163	766
12:15 PM	56	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	17	323	16	48	36	100	55	239	9	303	50	59	40	149	875
12:45 PM	42	249	22	313	11	41	35	87	62	258	10	330	37	45	62	144	874
Total	189	969	68	1226	40	176	142	358	228	923	31	1182	194	217	183	594	3360
01:00 PM	44	184	34	262	6	56	43	105	56	208	10	274	29	36	38	103	744
01:15 PM	35	195	25	255	6	59	36	101	69	230	11	310	36	45	34	115	781
Grand Total	354	1821	159	2334	81	378	313	772	468	1856	72	2396	375	399	325	1099	6601
Apprch %	15.2	78	6.8		10.5	49	40.5		19.5	77.5	3		34.1	36.3	29.6		
Total %	5.4	27.6	2.4	35.4	1.2	5.7	4.7	11.7	7.1	28.1	1.1	36.3	5.7	6	4.9	16.6	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	43	**272**	15	**330**	13	**51**	**43**	**107**	**62**	**266**	**11**	**339**	**64**	45	37	146	**922**
12:00 PM	45	214	13	272	7	43	29	79	54	191	7	252	54	**63**	**46**	**163**	766
12:15 PM	**56**	246	16	318	6	44	42	92	57	235	5	297	53	50	35	138	845
12:30 PM	46	260	**17**	323	**16**	48	36	100	55	239	9	303	50	59	40	149	875
Total Volume	190	992	61	1243	42	186	150	378	228	931	32	1191	221	217	158	596	3408
% App. Total	15.3	79.8	4.9		11.1	49.2	39.7		19.1	78.2	2.7		37.1	36.4	26.5		
PHF	.848	.912	.897	.942	.656	.912	.872	.883	.919	.875	.727	.878	.863	.861	.859	.914	.924

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIMD
Site Code : 9102139
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 11:30 AM to 01:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	11:45 AM				12:30 PM				12:30 PM				11:45 AM			
+0 mins.	43	**272**	15	**330**	**16**	48	36	100	55	239	9	303	**64**	45	37	146
+15 mins.	45	214	13	272	11	41	35	87	62	**258**	10	**330**	54	**63**	**46**	**163**
+30 mins.	**56**	246	16	318	6	56	**43**	**105**	56	208	10	274	53	50	35	138
+45 mins.	46	260	**17**	323	6	59	36	101	69	230	**11**	310	50	59	40	149
Total Volume	190	992	61	1243	39	204	150	393	242	935	40	1217	221	217	158	596
% App. Total	15.3	79.8	4.9		9.9	51.9	38.2		19.9	76.8	3.3		37.1	36.4	26.5	
PHF	.848	.912	.897	.942	.609	.864	.872	.936	.877	.906	.909	.922	.863	.861	.859	.914

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 1

Groups Printed- Total Volume

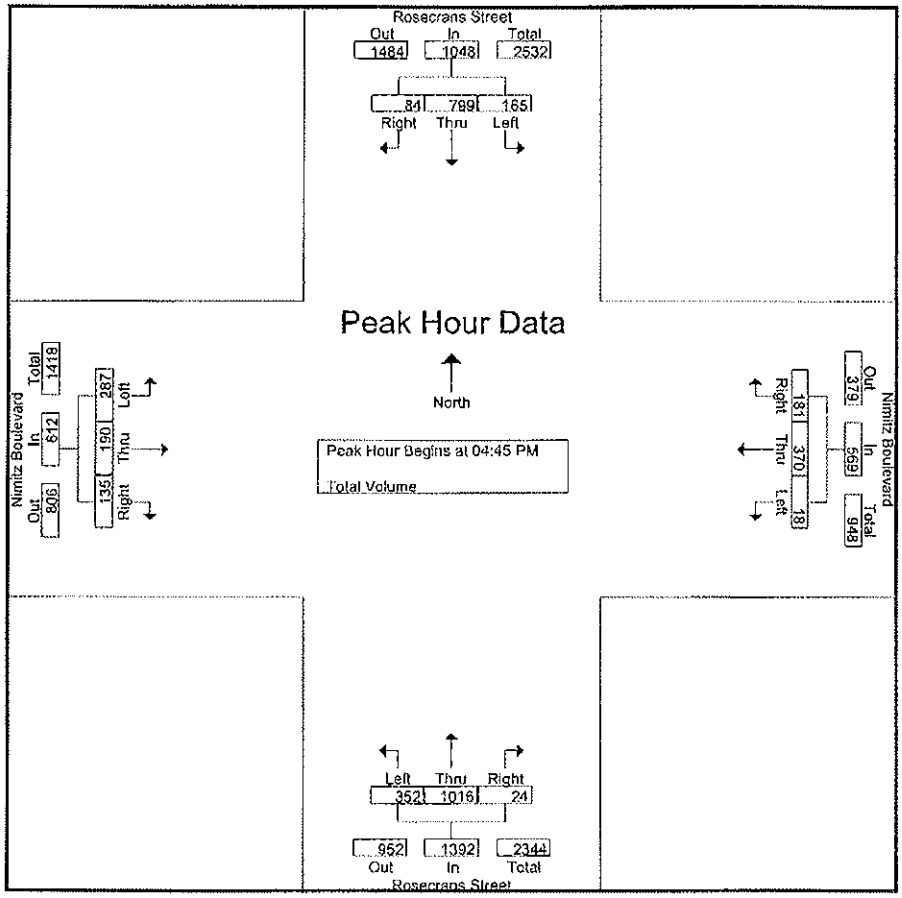
	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	35	181	30	246	2	83	42	127	82	278	11	371	75	48	34	157	901
04:15 PM	45	199	25	269	3	92	42	137	67	259	7	333	61	67	37	165	904
04:30 PM	37	191	20	248	4	110	50	164	58	211	7	276	72	50	37	159	847
04:45 PM	47	216	22	285	6	92	56	154	79	205	6	290	81	51	37	169	898
Total	164	787	97	1048	15	377	190	582	286	953	31	1270	289	216	145	650	3550
05:00 PM	48	168	18	234	3	114	43	160	110	283	11	404	77	40	35	152	950
05:15 PM	38	208	23	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
05:45 PM	48	196	26	270	4	59	37	100	72	208	6	286	50	42	34	126	782
Total	166	779	88	1033	16	337	162	515	345	1019	24	1388	256	181	132	569	3505
Grand Total	330	1566	185	2081	31	714	352	1097	631	1972	55	2658	545	397	277	1219	7055
Apprch %	15.9	75.3	8.9		2.8	65.1	32.1		23.7	74.2	2.1		44.7	32.6	22.7		
Total %	4.7	22.2	2.6	29.5	0.4	10.1	5	15.5	8.9	28	0.8	37.7	7.7	5.6	3.9	17.3	

	Rosecrans Street Southbound				Nimitz Boulevard Westbound				Rosecrans Street Northbound				Nimitz Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	47	**216**	22	**285**	**6**	92	**56**	154	79	205	6	290	**81**	**51**	37	**169**	898
05:00 PM	**48**	168	18	234	**3**	**114**	43	**160**	**110**	**283**	**11**	**404**	77	40	35	152	**950**
05:15 PM	38	208	**23**	269	3	77	47	127	96	269	6	371	72	51	31	154	921
05:30 PM	32	207	21	260	6	87	35	128	67	259	1	327	57	48	32	137	852
Total Volume	165	799	84	1048	18	370	181	569	352	1016	24	1392	287	190	135	612	3621
% App. Total	15.7	76.2	8		3.2	65	31.8		25.3	73	1.7		46.9	31	22.1		
PHF	.859	.925	.913	.919	.750	.811	.808	.889	.800	.898	.545	.861	.886	.931	.912	.905	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Nimitz Boulevard
Weather: Sunny

File Name : SDCRONIPM
Site Code : 9102139
Start Date : 4/29/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	35	181	**30**	246	3	92	42	137	79	205	6	290	75	48	34	157
+15 mins.	45	199	25	269	4	110	50	**164**	**110**	**283**	11	**404**	61	**67**	**37**	165
+30 mins.	37	191	20	248	**6**	92	**56**	154	96	269	6	371	72	50	37	159
+45 mins.	**47**	**216**	22	**285**	3	**114**	43	160	67	259	1	327	**81**	51	37	**169**
Total Volume	164	787	97	1048	16	408	191	615	352	1016	24	1392	289	216	145	650
% App. Total	15.6	75.1	9.3		2.6	66.3	31.1		25.3	73	1.7		44.5	33.2	22.3	
PHF	.872	.911	.808	.919	.667	.895	.853	.938	.800	.898	.545	.861	.892	.806	.980	.962

(51)

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Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

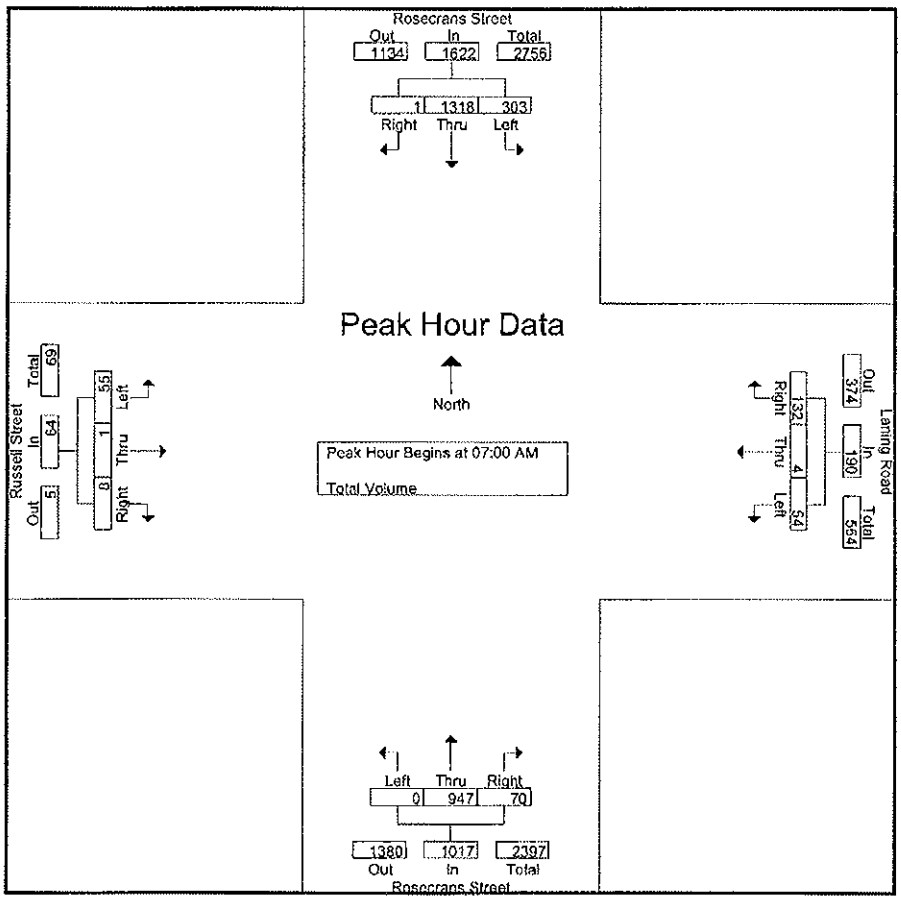
	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
06:30 AM	46	248	0	294	15	0	34	49	0	127	1	128	14	2	0	16	487
06:45 AM	68	350	0	418	11	0	29	40	0	155	12	167	7	0	0	7	632
Total	114	598	0	712	26	0	63	89	0	282	13	295	21	2	0	23	1119
07:00 AM	58	411	1	470	13	1	42	56	0	227	10	237	16	0	7	23	786
07:15 AM	109	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	21	2	35	58	0	221	12	233	18	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	251	36	287	6	0	0	6	645
Total	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
08:00 AM	65	270	0	335	32	1	30	63	0	252	46	298	11	0	0	11	707
08:15 AM	53	371	0	424	32	0	32	64	0	243	20	263	10	2	0	12	763
Grand Total	535	2557	1	3093	144	5	257	406	0	1724	149	1873	97	5	8	110	5482
Apprch %	17.3	82.7	0		35.5	1.2	63.3		0	92	8		88.2	4.5	7.3		
Total %	9.8	46.6	0	56.4	2.6	0.1	4.7	7.4	0	31.4	2.7	34.2	1.8	0.1	0.1	2	

	Rosecrans Street Southbound				Laning Road Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	58	**411**	**1**	**470**	13	1	**42**	56	**0**	227	10	237	16	0	**7**	**23**	**786**
07:15 AM	**109**	356	0	465	8	1	31	40	0	248	12	260	15	1	0	16	781
07:30 AM	82	289	0	371	**21**	**2**	35	**58**	0	221	12	233	**18**	0	1	19	681
07:45 AM	54	262	0	316	12	0	24	36	0	**251**	**36**	**287**	6	0	0	6	645
Total Volume	303	1318	1	1622	54	4	132	190	0	947	70	1017	55	1	8	64	2893
% App. Total	18.7	81.3	0.1		28.4	2.1	69.5		0	93.1	6.9		85.9	1.6	12.5		
PHF	.695	.802	.250	.863	.643	.500	.786	.819	.000	.943	.486	.886	.764	.250	.286	.696	.920

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Road
Weather: Sunny

File Name : SDCRORUAM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 06:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	06:45 AM				07:30 AM				07:30 AM				06:45 AM			
+0 mins.	68	350	0	418	21	2	35	58	0	221	12	233	7	0	0	7
+15 mins.	58	411	1	470	12	0	24	36	0	251	36	287	16	0	7	23
+30 mins.	109	356	0	465	32	1	30	63	0	252	46	298	15	1	0	16
+45 mins.	82	289	0	371	32	0	32	64	0	243	20	263	18	0	1	19
Total Volume	317	1406	1	1724	97	3	121	221	0	967	114	1081	56	1	8	65
% App. Total	18.4	81.6	0.1		43.9	1.4	54.8		0	89.5	10.5		86.2	1.5	12.3	
PHF	.727	.855	.250	.917	.758	.375	.864	.863	.000	.959	.620	.907	.778	.250	.286	.707

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Street
Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 1

Groups Printed- Total Volume

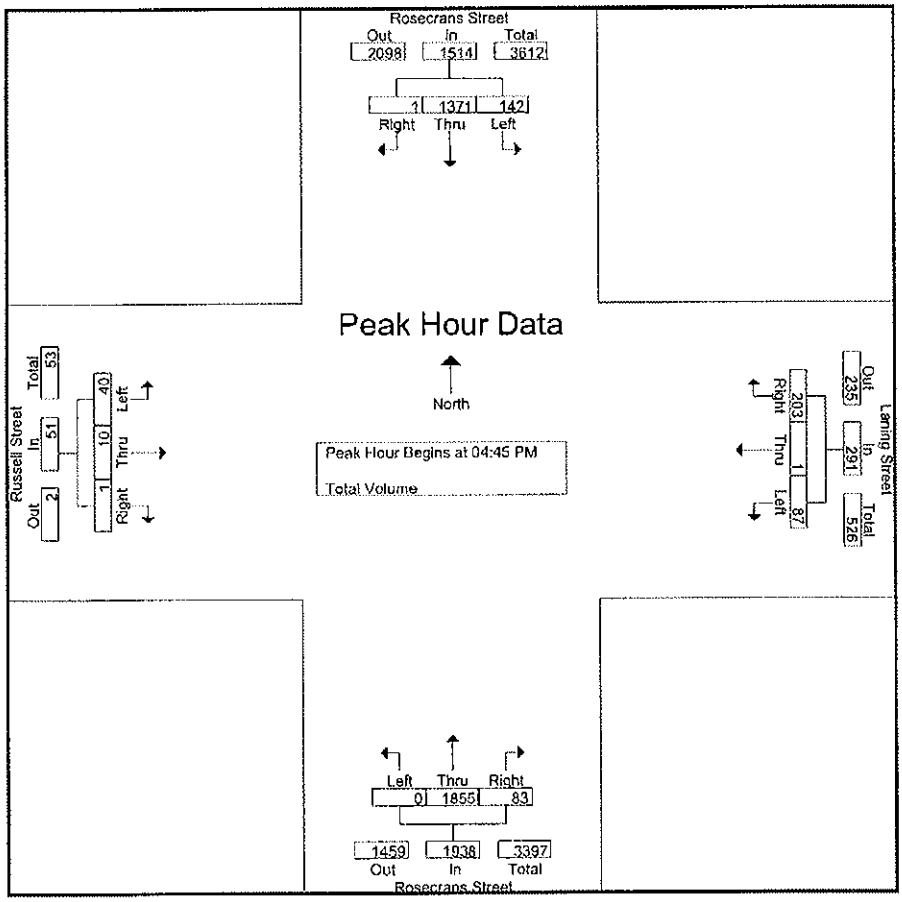
	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	28	280	0	308	21	4	56	81	1	374	26	401	11	0	0	11	801
04:15 PM	41	268	2	311	29	0	54	83	1	394	30	425	8	1	1	10	829
04:30 PM	38	266	1	305	22	0	63	85	0	404	14	418	8	1	1	10	818
04:45 PM	45	348	0	393	21	0	67	88	0	430	21	451	5	1	1	7	939
Total	152	1162	3	1317	93	4	240	337	2	1602	91	1695	32	3	3	38	3387
05:00 PM	39	310	1	350	15	0	71	86	0	528	22	550	8	1	0	9	995
05:15 PM	31	342	0	373	27	1	41	69	0	457	22	479	12	4	0	16	937
05:30 PM	27	371	0	398	24	0	24	48	0	440	18	458	15	4	0	19	923
05:45 PM	27	327	4	358	18	0	27	45	0	356	30	386	4	1	0	5	794
Total	124	1350	5	1479	84	1	163	248	0	1781	92	1873	39	10	0	49	3649
Grand Total	276	2512	8	2796	177	5	403	585	2	3383	183	3568	71	13	3	87	7036
Apprch %	9.9	89.8	0.3		30.3	0.9	68.9		0.1	94.8	5.1		81.6	14.9	3.4		
Total %	3.9	35.7	0.1	39.7	2.5	0.1	5.7	8.3	0	48.1	2.6	50.7	1	0.2	0	1.2	

	Rosecrans Street Southbound				Laning Street Westbound				Rosecrans Street Northbound				Russell Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**45**	348	0	393	21	0	67	**88**	0	430	21	451	5	1	**1**	7	939
05:00 PM	39	310	1	350	15	0	71	86	0	**528**	**22**	**550**	8	1	0	9	**995**
05:15 PM	31	342	0	373	**27**	1	41	69	0	457	22	479	12	**4**	0	16	937
05:30 PM	27	371	0	**398**	24	0	24	48	0	440	18	458	**15**	4	0	**19**	923
Total Volume	142	1371	1	1514	87	1	203	291	0	1855	83	1938	40	10	1	51	3794
% App. Total	9.4	90.6	0.1		29.9	0.3	69.8		0	95.7	4.3		78.4	19.6	2		
PHF	.789	.924	.250	.951	.806	.250	.715	.827	.000	.878	.943	.881	.667	.625	.250	.671	.953

Counts Unlimited Inc.
25286 Jaclyn Avenue
Moreno Valley, CA 92557
951-485-7934

City of San Diego
N/S: Rosecrans Street
E/W: Russell Street/Laning Street
Weather: Sunny

File Name : SDCRORUPM
Site Code : 9102111
Start Date : 4/28/2009
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				04:45 PM			
+0 mins.	**45**	348	0	393	29	0	54	83	0	430	21	451	5	1	1	7
+15 mins.	39	310	1	350	22	0	63	85	0	**528**	**22**	**550**	8	1	0	9
+30 mins.	31	342	0	373	21	0	67	**88**	0	457	22	479	12	4	0	16
+45 mins.	27	**371**	0	**398**	15	0	**71**	86	0	440	18	458	15	4	0	19
Total Volume	142	1371	1	1514	87	0	255	342	0	1855	83	1938	40	10	1	51
% App. Total	9.4	90.6	0.1		25.4	0	74.6		0	95.7	4.3		78.4	19.6	2	
PHF	.789	.924	.250	.951	.750	.000	.898	.972	.000	.878	.943	.881	.667	.625	.250	.671

(S2)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM					28	20				26	447		521
7:15 AM					20	12				38	434		504
7:30 AM					30	11				42	382		465
7:45 AM					45	19				62	433		559
8:00 AM					33	20				51	378		482
8:15 AM					46	22				48	373		489
8:30 AM					42	17				66	351		476
8:45 AM					57	15				47	346		465
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	301	136	0	0	0	380	3144	0	3961
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	68.88%	31.12%	#DIV/0!	#DIV/0!	#DIV/0!	10.78%	89.22%	0.00%	
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_024

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM					80	11				36	222		349
4:15 PM					82	12				39	221		354
4:30 PM					74	20				51	219		364
4:45 PM					95	17				43	256		411
5:00 PM					101	20				52	211		384
5:15 PM					97	14				50	223		384
5:30 PM					100	16				52	227		395
5:45 PM					89	20				45	250		404

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	0	718	130	0	0	0	368	1829	0	3045
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	0.00%	84.67%	15.33%	#DIV/0!	#DIV/0!	#DIV/0!	16.75%	83.25%	0.00%	



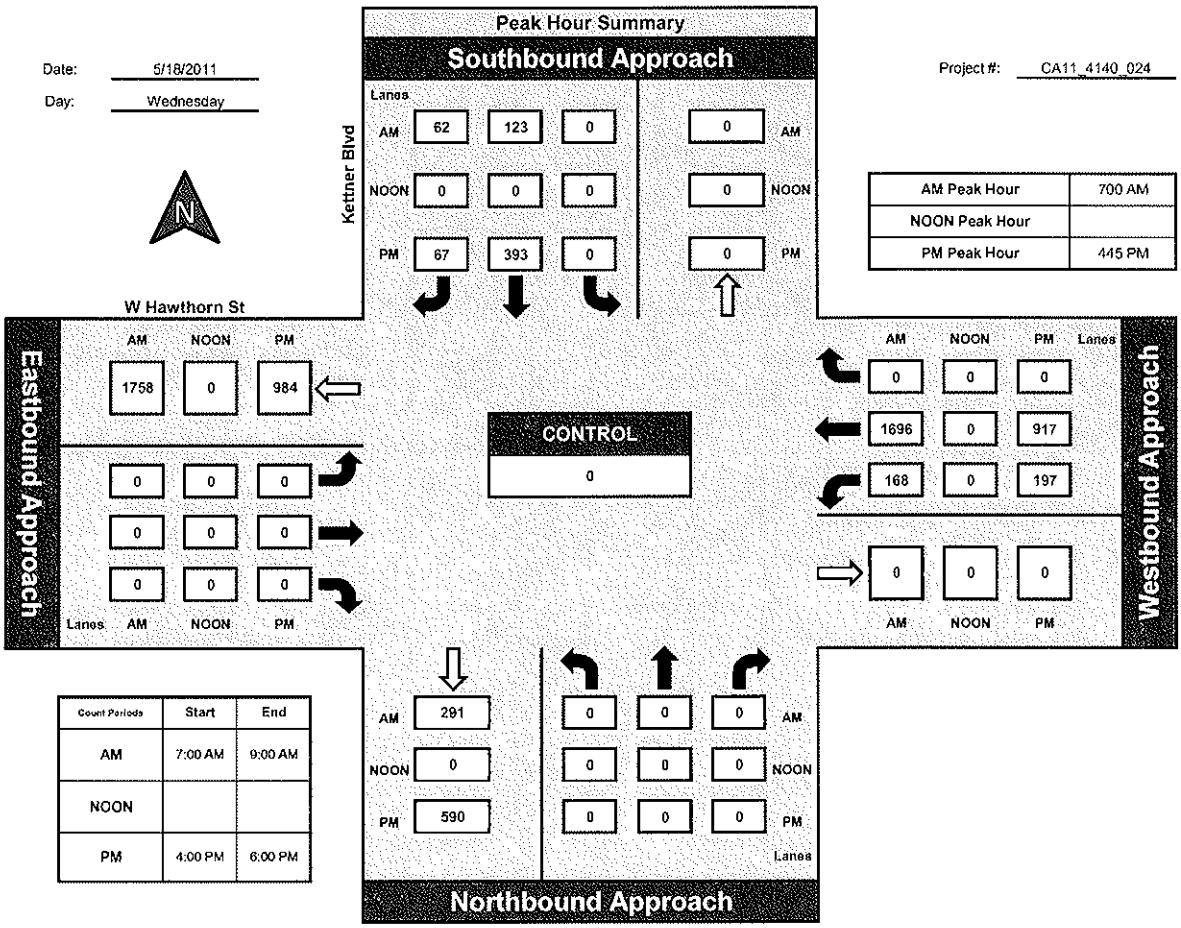
CONTROL :

ITM Peak Hour Summary

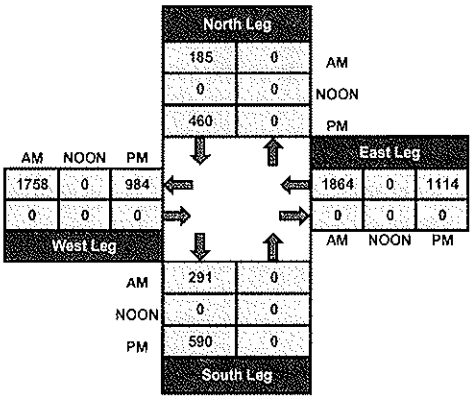
Prepared by:

National Data & Surveying Services

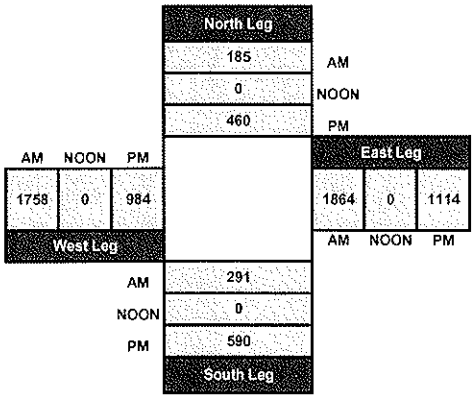
Kettner Blvd and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(53)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				20	31			201	5				257
7:15 AM				18	47			179	6				250
7:30 AM				24	47			200	5				276
7:45 AM				34	76			209	5				324
8:00 AM				24	61			199	5				289
8:15 AM				19	72			213	7				311
8:30 AM				31	77			220	8				336
8:45 AM				36	66			229	10				341
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	206	477	0	0	1650	51	0	0	0	2384
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	30.16%	69.84%	0.00%	0.00%	97.00%	3.00%	#DIV/0!	#DIV/0!	#DIV/0!	
[redacted]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_025

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

PM

NS/EW Streets:	Kettner Blvd			Kettner Blvd			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				54	63			362	4				483
4:15 PM				53	66			366	14				499
4:30 PM				53	74			428	4				559
4:45 PM				65	76			353	13				507
5:00 PM				70	79			385	7				541
5:15 PM				52	89			367	15				523
5:30 PM				69	85			326	14				494
5:45 PM				42	91			312	9				454
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	458	623	0	0	2899	80	0	0	0	4060
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	42.37%	57.63%	0.00%	0.00%	97.31%	2.69%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

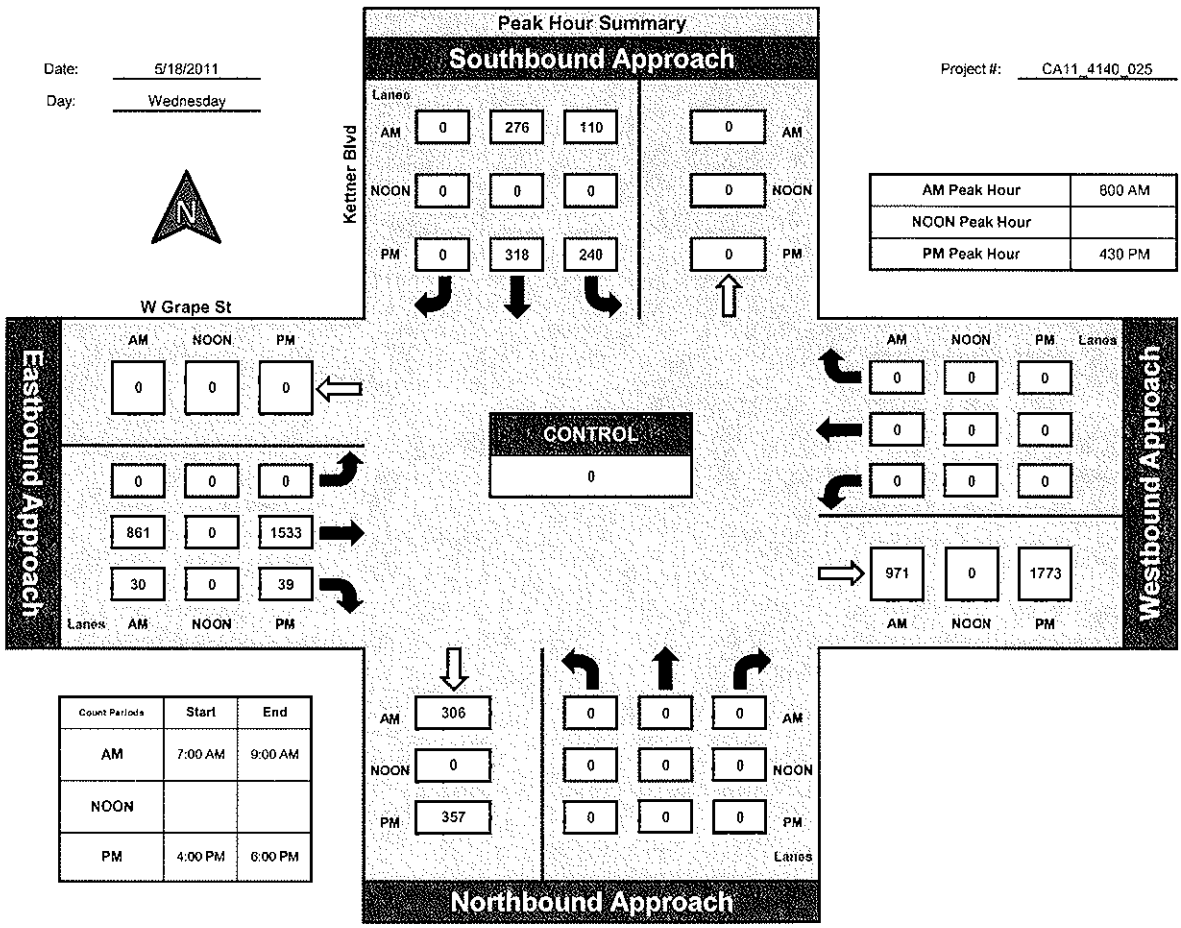
ITM Peak Hour Summary

Prepared by:

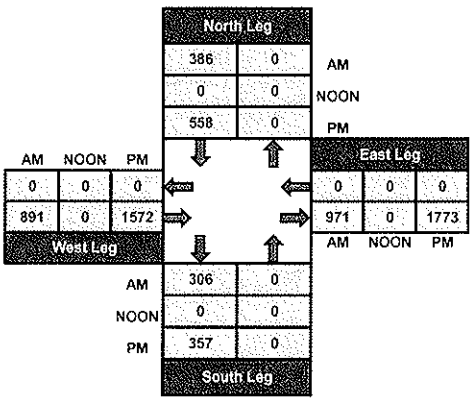
NDS

National Data & Surveying Services

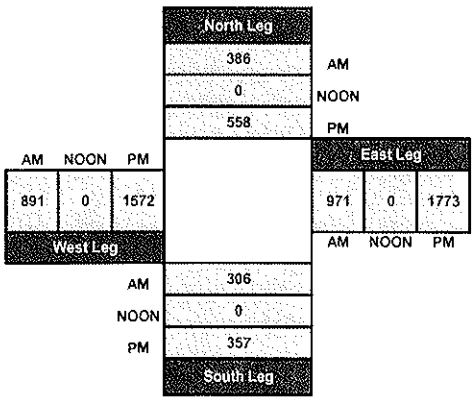
Kettner Blvd and W Grape St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(54)

Intersection Turning Movement

Prepared by:

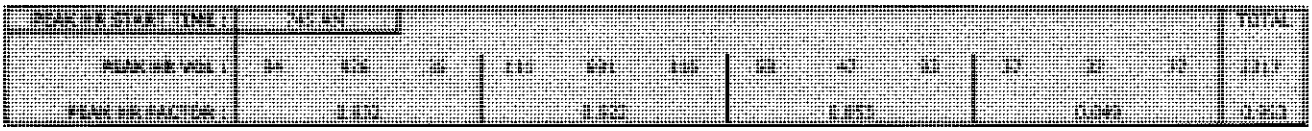
National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	15	189	8	29	120	16	7	8	15	4	5	8	424
7:15 AM	27	220	11	30	141	25	18	3	10	4	10	6	505
7:30 AM	21	228	15	34	167	29	12	9	15	8	5	20	563
7:45 AM	19	240	10	32	185	32	13	14	20	4	4	15	588
8:00 AM	32	209	12	28	160	31	11	11	22	11	10	19	556
8:15 AM	22	218	10	27	174	25	12	7	30	9	12	19	565
8:30 AM	21	259	3	24	172	28	22	15	21	13	6	24	608
8:45 AM	11	226	11	25	176	19	17	12	18	12	10	22	559
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	168	1789	80	229	1295	205	112	79	151	65	62	133	4368
APPRDACH %'s :	8.25%	87.83%	3.93%	13.24%	74.90%	11.86%	32.75%	23.10%	44.15%	25.00%	23.85%	51.15%	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_037 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Pacific Hwy			Pacific Hwy			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	19	291	21	28	313	3	13	13	32	19	5	21	778
4:15 PM	21	294	24	36	309	5	10	17	35	24	8	22	805
4:30 PM	28	261	36	38	327	1	10	11	38	17	8	19	794
4:45 PM	17	265	28	41	330	1	11	16	42	23	7	20	801
5:00 PM	19	267	25	26	313	2	17	25	51	34	11	43	833
5:15 PM	6	284	27	37	306	6	21	18	58	28	15	34	840
5:30 PM	17	245	36	37	301	9	11	11	39	31	14	26	777
5:45 PM	14	203	37	57	306	9	9	14	37	34	10	20	750
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	141	2110	234	300	2505	36	102	125	332	210	78	205	6378
APPROACH %'s :	5.67%	84.91%	9.42%	10.56%	88.17%	1.27%	18.25%	22.36%	59.39%	42.60%	15.82%	41.58%	
[illegible]	[illegible]												
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]												

CONTROL :

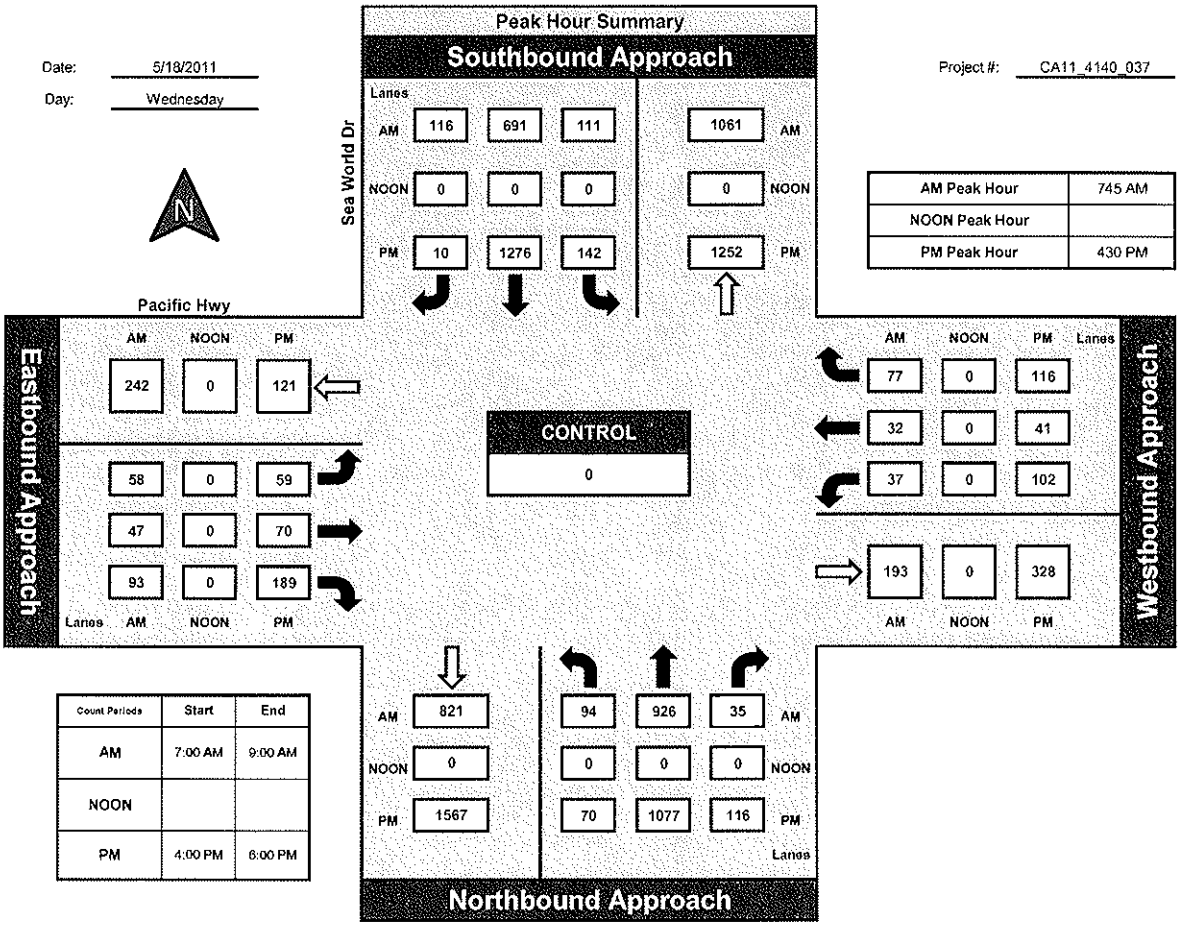
ITM Peak Hour Summary

Prepared by:

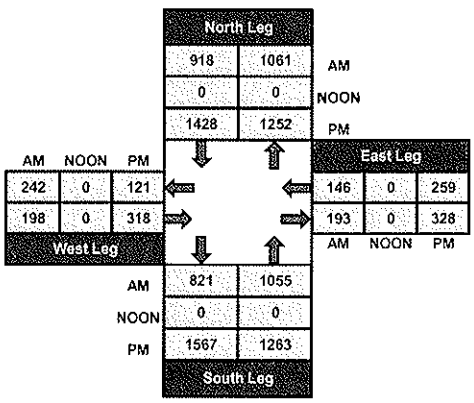
NDS

National Data & Surveying Services

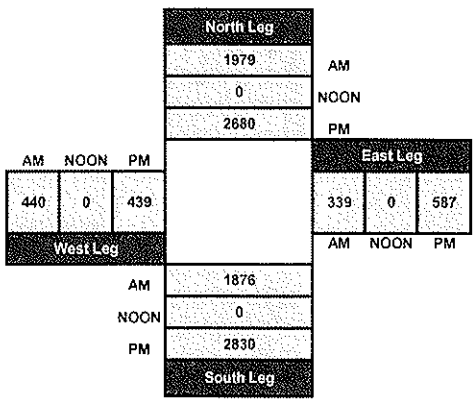
Sea World Dr and Pacific Hwy , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	7												7
7:15 AM	12												12
7:30 AM	10												10
7:45 AM	15												15
8:00 AM	4												4
8:15 AM	7												7
8:30 AM	8												8
8:45 AM	13												13
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	76	0	0	0	0	0	0	0	0	0	0	0	76
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

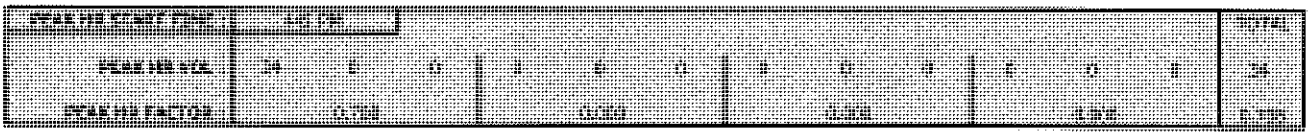
National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	9												9
4:15 PM	9												9
4:30 PM	7												7
4:45 PM	8												8
5:00 PM	7												7
5:15 PM	7												7
5:30 PM	12												12
5:45 PM	5												5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	64	0	0	0	0	0	0	0	0	0	0	0	64
APPROACH %'s :	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	



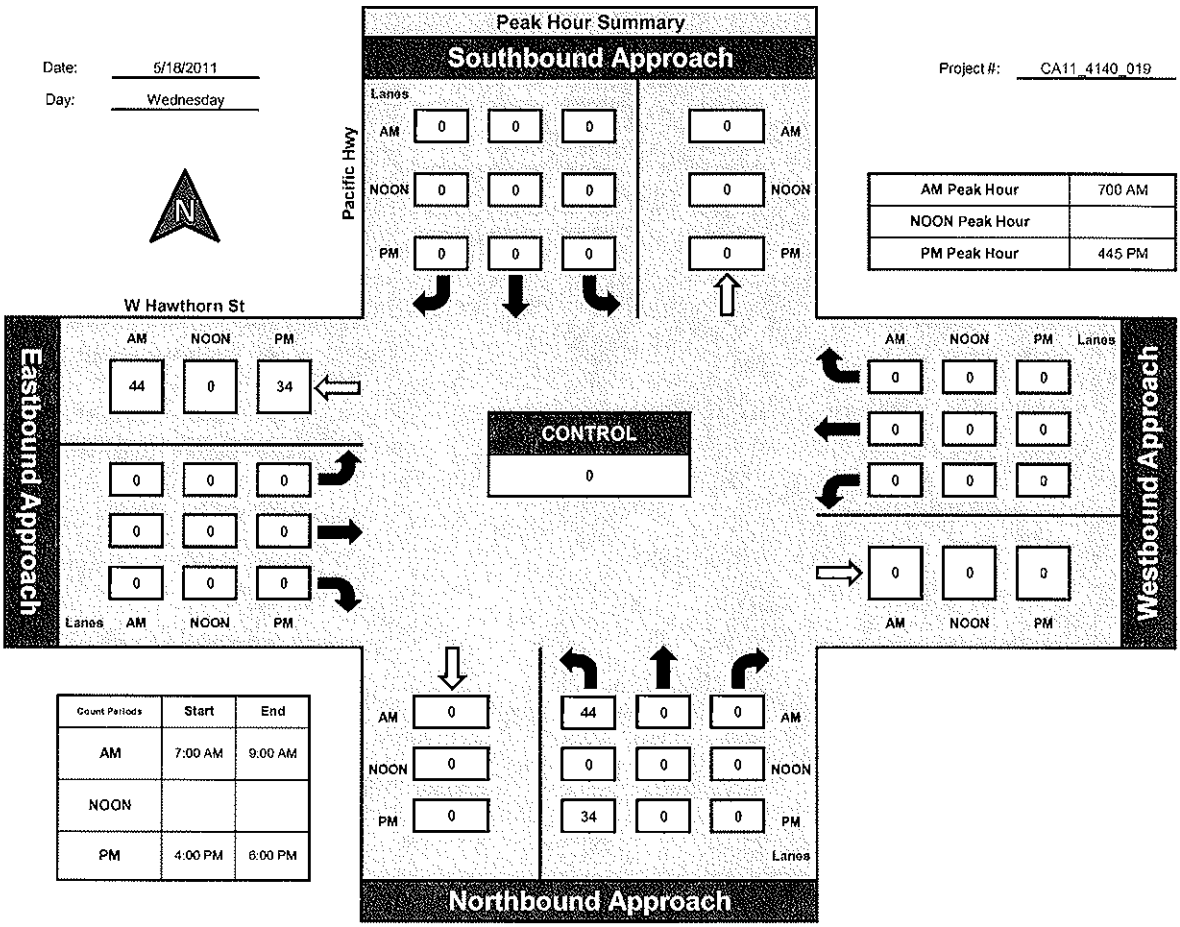
CONTROL :

ITM Peak Hour Summary

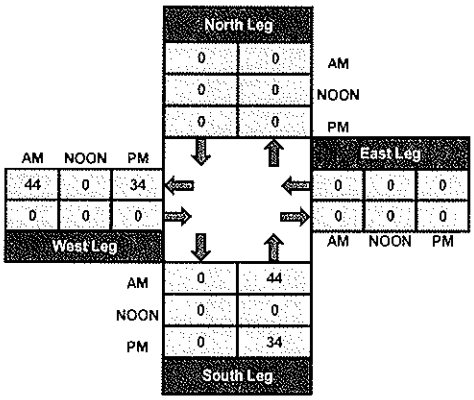
Prepared by:

National Data & Surveying Services

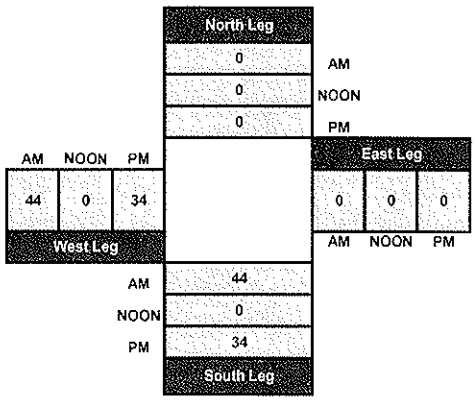
Pacific Hwy and W Hawthorn St , City of San Diego



Total Ins & Outs



Total Volume Per Leg



(55)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	20	36			24	7				86	360	12	545
7:15 AM	19	41			37	4				72	341	20	534
7:30 AM	13	45			35	5				90	284	18	490
7:45 AM	12	36			43	3				114	327	20	555
8:00 AM	12	41			35	7				83	294	15	487
8:15 AM	17	42			43	3				54	316	19	494
8:30 AM	13	47			52	9				70	269	16	476
8:45 AM	11	55			43	4				59	279	27	478
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	117	343	0	0	312	42	0	0	0	628	2470	147	4059
APPROACH %'s :	25.43%	74.57%	0.00%	0.00%	88.14%	11.86%	#DIV/0!	#DIV/0!	#DIV/0!	19.35%	76.12%	4.53%	
PEAK HR START TIME :	[illegible]												
PEAK HR VOL :	[illegible]												
PEAK HR FACTOR :	[illegible]												

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_019 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Hawthorn St			W Hawthorn St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	16	63			61	1				36	170	16	363
4:15 PM	23	70			61	5				34	173	22	388
4:30 PM	15	69			65	5				24	188	17	383
4:45 PM	21	70			54	5				30	222	17	419
5:00 PM	14	101			65	5				21	191	18	415
5:15 PM	13	108			51	3				26	190	20	411
5:30 PM	12	86			48	7				30	178	22	383
5:45 PM	13	80			53	3				33	216	22	420
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	127	647	0	0	458	34	0	0	0	234	1528	154	3182
APPROACH %'s :	16.41%	83.59%	0.00%	0.00%	93.09%	6.91%	#DIV/0!	#DIV/0!	#DIV/0!	12.21%	79.75%	8.04%	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Hawthorn St , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_019

AM Peak Hour	700 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Southbound Approach (Pacific Hwy)

Lanes				
AM	19	139	0	228 AM
NOON	0	0	0	0 NOON
PM	18	217	0	457 PM

Eastbound Approach (W Hawthorn St)

	AM	NOON	PM
	1395	0	845
	0	0	0
	0	0	0
	0	0	0
Lanes	AM	NOON	PM

CONTROL: 0

Westbound Approach

Lanes	AM	NOON	PM
	70	0	82
	1312	0	775
	362	0	110
	0	0	0
	AM	NOON	PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

AM	501	64	158	0 AM
NOON	0	0	0	0 NOON
PM	327	52	375	0 PM
				Lanes

Total Ins & Outs

	North Leg		
	158	228	AM
	0	0	NOON
	235	457	PM

West Leg				East Leg		
AM	NOON	PM		AM	NOON	PM
1395	0	845		1744	0	967
0	0	0		0	0	0

	South Leg	
AM	501	222
NOON	0	0
PM	327	427

Total Volume Per Leg

North Leg	
386	AM
0	NOON
692	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1395	0	845	1744	0	967

South Leg	
AM	723
NOON	0
PM	754

(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM				0									
7:15 AM				4									4
7:30 AM				1									1
7:45 AM				2									2
8:00 AM				0									
8:15 AM				1									1
8:30 AM				1									1
8:45 AM				5									5
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	14	0	0	0	0	0	0	0	0	14
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]													
[illegible]													
[illegible]													

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				1									1
4:15 PM				3									3
4:30 PM				2									2
4:45 PM				0									
5:00 PM				3									3
5:15 PM				1									1
5:30 PM				4									4
5:45 PM				2									2
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	16	0	0	0	0	0	0	0	0	16
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	100.00%	0.00%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]
[illegible]	[illegible]												[illegible]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

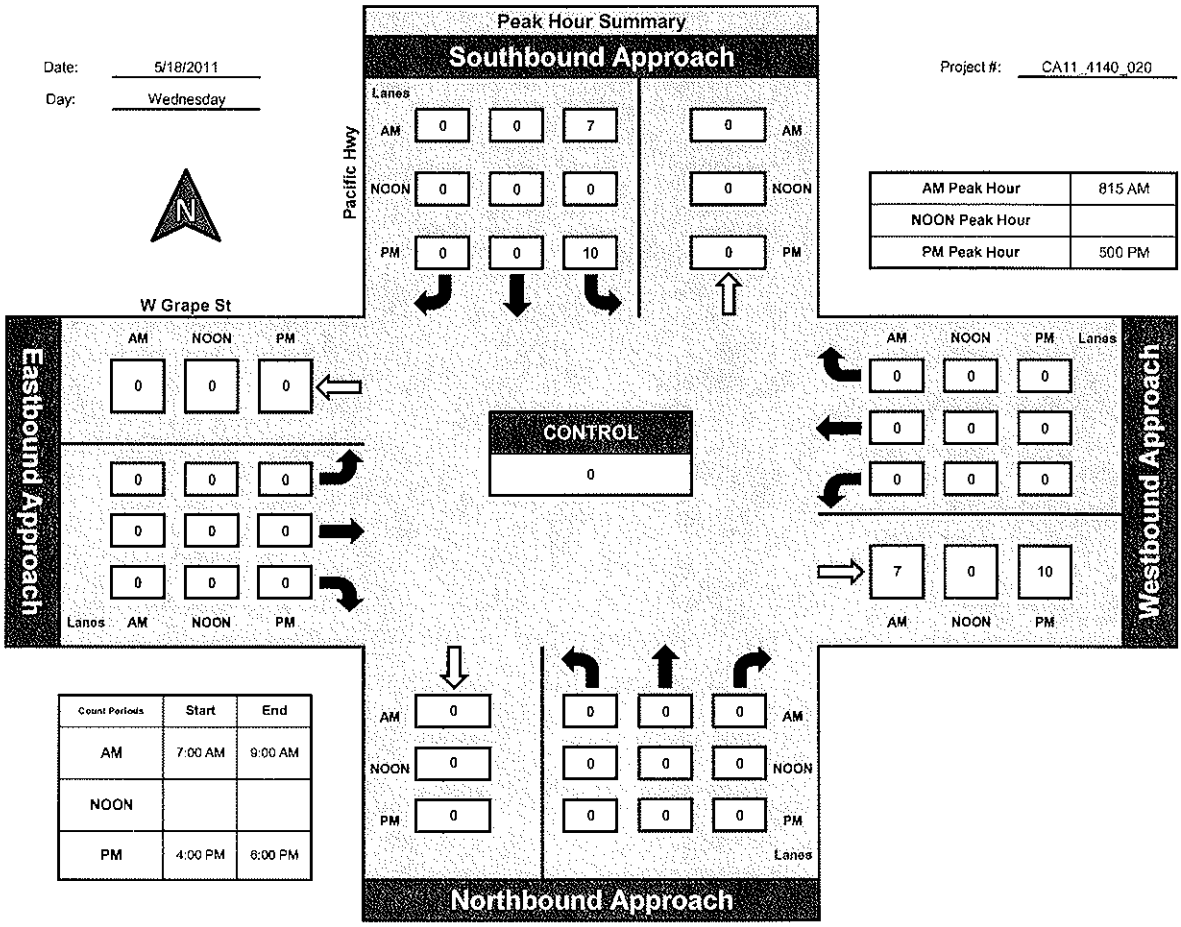
National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

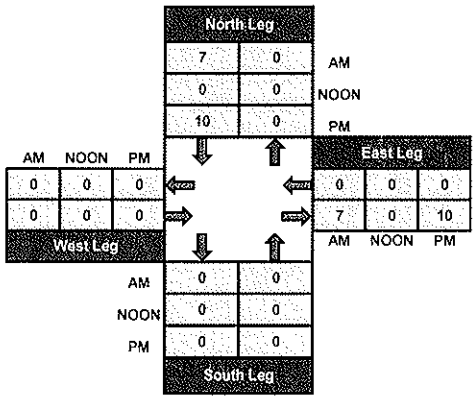
Project #: CA11_4140_020



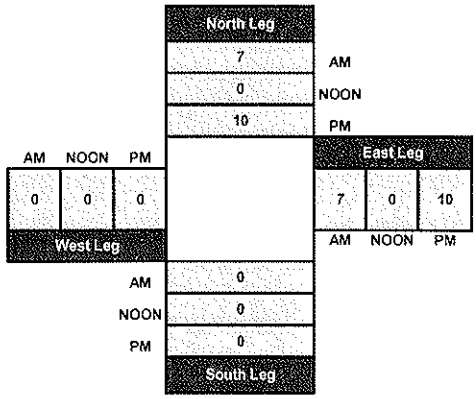
AM Peak Hour	815 AM
NOON Peak Hour	
PM Peak Hour	500 PM

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(56)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

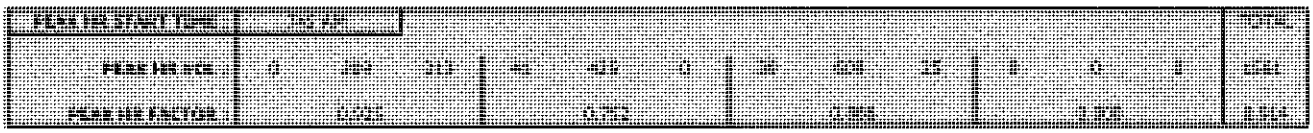
Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		51	41	6	79		15	166	7				365
7:15 AM		50	47	5	92		12	122	3				331
7:30 AM		56	51	11	112		8	137	5				380
7:45 AM		48	66	9	146		14	138	6				427
8:00 AM		55	42	8	107		8	148	8				376
8:15 AM		52	52	11	84		4	155	2				360
8:30 AM		54	53	13	88		13	168	9				398
8:45 AM		65	41	17	100		13	177	9				422

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	431	393	80	808	0	87	1211	49	0	0	0	3059
APPROACH %'s :	0.00%	52.31%	47.69%	9.01%	90.99%	0.00%	6.46%	89.90%	3.64%	#DIV/0!	#DIV/0!	#DIV/0!	



CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_020 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Pacific Hwy			Pacific Hwy			W Grape St			W Grape St			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		87	95	21	77		7	260	6				553
4:15 PM		95	87	29	76		5	243	9				544
4:30 PM		76	96	23	71		8	297	7				578
4:45 PM		86	79	23	69		6	257	6				526
5:00 PM		112	84	19	73		17	276	5				586
5:15 PM		113	73	17	63		12	311	6				595
5:30 PM		91	70	21	69		6	232	11				500
5:45 PM		85	57	19	69		10	242	10				492
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	745	641	172	567	0	71	2118	60	0	0	0	4374
APPROACH %'s :	0.00%	53.75%	46.25%	23.27%	76.73%	0.00%	3.16%	94.18%	2.67%	#DIV/0!	#DIV/0!	#DIV/0!	
[illegible]	[illegible]												
[illegible]	[illegible]												
[illegible]	[illegible]												

CONTROL :

ITM Peak Hour Summary

Prepared by:

National Data & Surveying Services

Pacific Hwy and W Grape St , City of San Diego

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_020

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

Peak Hour Summary

Southbound Approach

Lanes					
AM	0	425	41	248	AM
NOON	0	0	0	0	NOON
PM	0	276	82	430	PM

Pacific Hwy

W Grape St

Eastbound Approach

Lanes	AM	NOON	PM
	0	0	0
	39	0	43
	609	0	1141
	25	0	24

Westbound Approach

Lanes	AM	NOON	PM
	0	0	0
	0	0	0
	0	0	0
	863	0	1555

CONTROL

0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	450	0	209	213	AM
NOON	0	0	0	0	NOON
PM	300	0	387	332	PM

Total Ins & Outs

	North Leg	
AM	466	248
NOON	0	0
PM	358	430

West Leg	AM	NOON	PM
AM	0	0	0
NOON	673	0	1208
PM			

East Leg	AM	NOON	PM
AM	0	0	0
NOON	863	0	1555
PM			

	South Leg	
AM	450	422
NOON	0	0
PM	300	719

Total Volume Per Leg

	North Leg
AM	714
NOON	0
PM	788

West Leg	AM	NOON	PM
AM	673	0	1208
NOON			
PM			

East Leg	AM	NOON	PM
AM	863	0	1555
NOON			
PM			

	South Leg
AM	872
NOON	0
PM	1019

(57)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM		204	28	21	125					34		14	426
7:15 AM		234	55	33	116					38		19	495
7:30 AM		238	57	43	156					42		29	565
7:45 AM		240	74	56	145					40		25	580
8:00 AM		246	49	22	173					38		19	547
8:15 AM		211	59	29	183					59		28	569
8:30 AM		266	62	31	184					60		26	629
8:45 AM		214	67	26	171					51		25	554
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	1853	451	261	1253	0	0	0	0	362	0	185	4365
APPROACH %'s :	0.00%	80.43%	19.57%	17.24%	82.76%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	66.18%	0.00%	33.82%	

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_036 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			Friars Rd			Friars Rd			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM		296	82	64	304					74		36	856
4:15 PM		304	82	63	301					61		34	845
4:30 PM		295	82	67	319					72		31	866
4:45 PM		285	82	69	328					78		35	877
5:00 PM		275	122	80	316					72		25	890
5:15 PM		298	105	64	334					79		27	907
5:30 PM		256	78	63	302					74		34	807
5:45 PM		238	99	56	328					75		26	822
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	2247	732	526	2532	0	0	0	0	585	0	248	6870
APPROACH %'s :	0.00%	75.43%	24.57%	17.20%	82.80%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	70.23%	0.00%	29.77%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and Friars Rd , City of San Diego

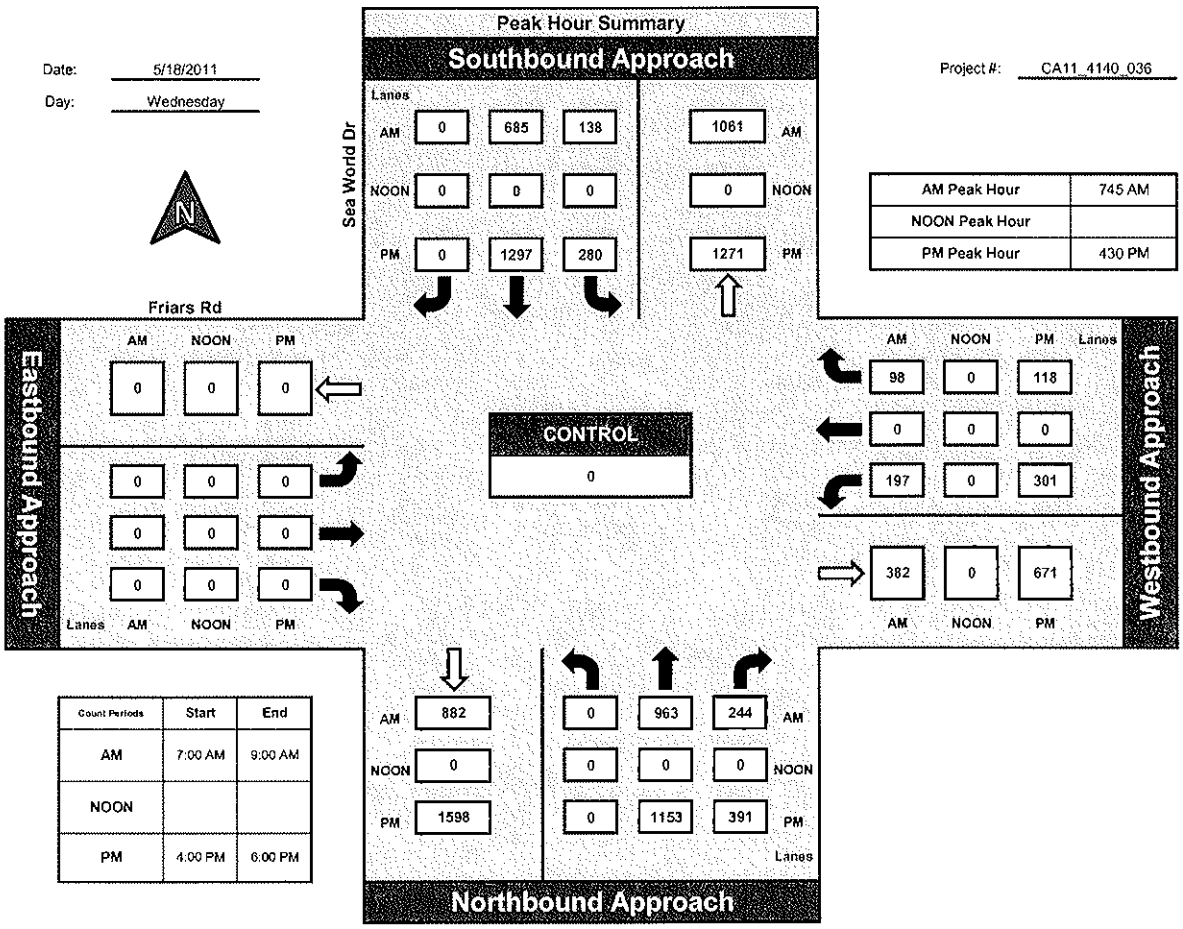
Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

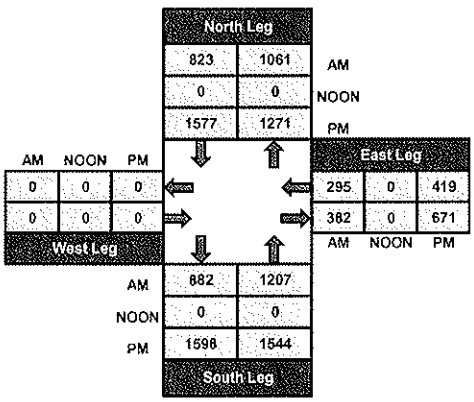
Project #: CA11_4140_036

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	430 PM

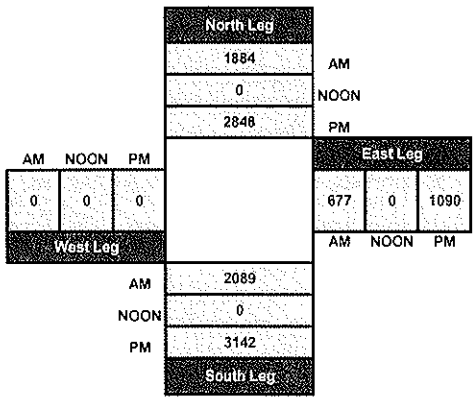


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



(58)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038

Day: WEDNESDAY

City: City of San Diego

Date: 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	0		0	32	0	113		198	5	55	45		448
7:15 AM	0		0	48	0	153		226	19	57	50		553
7:30 AM	0		1	67	0	167		238	19	73	55		620
7:45 AM	0		0	75	1	183		258	13	78	57		665
8:00 AM	0		0	78	0	126		226	9	88	85		612
8:15 AM	0		0	68	1	178		235	18	79	57		636
8:30 AM	0		0	77	0	123		282	20	70	92		664
8:45 AM	1		0	68	0	162		249	19	61	67		627
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	1	0	1	513	2	1205	0	1912	122	561	508	0	4825
APPROACH %'s :	50.00%	0.00%	50.00%	29.83%	0.12%	70.06%	0.00%	94.00%	6.00%	52.48%	47.52%	0.00%	

[redacted]

CONTROL :

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: CA11_4140_038 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 SB Ramps			I-5 SB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM				65	1	257		270	51	76	76	1	797
4:15 PM				86	2	279		268	53	60	81	1	830
4:30 PM				85	0	272		239	47	90	83	1	817
4:45 PM				83	0	295		234	51	77	71	1	812
5:00 PM				76	1	279		275	63	65	69	0	828
5:15 PM				66	0	282		272	57	75	65	0	817
5:30 PM				74	0	282		239	53	53	68	0	769
5:45 PM				62	1	303		168	61	51	63	0	709
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	0	0	0	597	5	2249	0	1965	436	547	576	4	6379
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	20.94%	0.18%	78.88%	0.00%	81.84%	18.16%	48.54%	51.11%	0.35%	

[redacted]

CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 SB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_038

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach

Sea World Dr

Lanes					
AM	610	2	298	0	AM
NOON	0	0	0	0	NOON
PM	1125	3	330	3	PM

Eastbound Approach

I-5 SB Ramps

Lanes	AM	NOON	PM
	901	0	1429
	0	0	0
	1001	0	1016
	60	0	214

Westbound Approach

Lanes	AM	NOON	PM
	0	0	3
	291	0	304
	315	0	292
	1299	0	1346

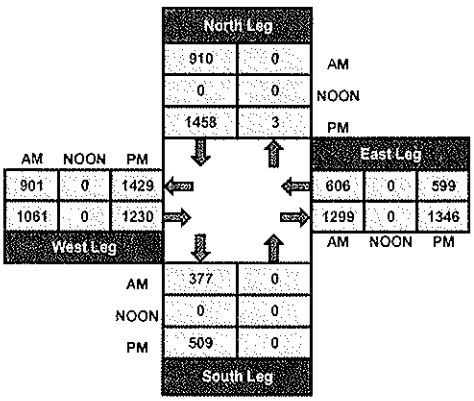
CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

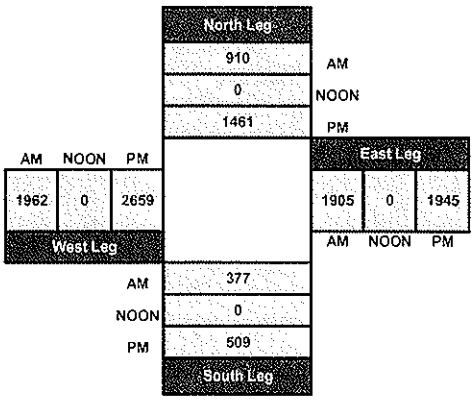
Northbound Approach

Lanes					
AM	377	0	0	0	AM
NOON	0	0	0	0	NOON
PM	509	0	0	0	PM

Total Ins & Outs



Total Volume Per Leg



(59)

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

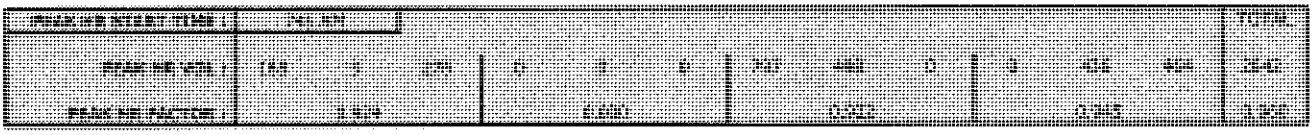
Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

AM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
7:00 AM	21	0	45				174	50	0		72	77	439
7:15 AM	33	0	49				205	74	0		81	93	535
7:30 AM	31	0	65				193	108	0		92	117	606
7:45 AM	33	0	88				180	157	0		107	120	685
8:00 AM	44	0	67				186	113	0		122	116	648
8:15 AM	35	3	61				202	106	0		108	106	621
8:30 AM	56	0	60				229	122	0		99	122	688
8:45 AM	54	0	71				193	131	1		82	105	637

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	307	3	506	0	0	0	1562	861	1	0	763	856	4859
APPROACH %'s :	37.62%	0.37%	62.01%	#DIV/0!	#DIV/0!	#DIV/0!	64.44%	35.52%	0.04%	0.00%	47.13%	52.87%	



CONTROL :

Intersection Turning Movement

Prepared by:

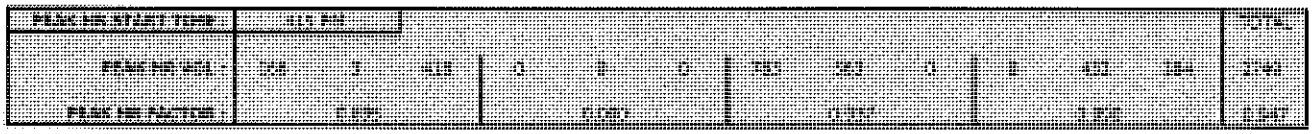
National Data & Surveying Services

Project ID: CA11_4140_039 **Day:** WEDNESDAY

City: City of San Diego **Date:** 5/18/2011

PM

NS/EW Streets:	Sea World Dr			Sea World Dr			I-5 NB Ramps			I-5 NB Ramps			
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
4:00 PM	43	1	69				195	137			111	102	658
4:15 PM	44	0	120				208	149			100	105	726
4:30 PM	57	0	98				196	125			114	92	682
4:45 PM	31	0	96				183	126			110	96	642
5:00 PM	34	3	104				196	163			108	91	699
5:15 PM	36	0	109				210	127			99	90	671
5:30 PM	38	0	98				197	117			88	67	605
5:45 PM	37	1	69				144	79			70	61	461
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	320	5	763	0	0	0	1529	1023	0	0	800	704	5144
APPROACH %'s :	29.41%	0.46%	70.13%	#DIV/0!	#DIV/0!	#DIV/0!	59.91%	40.09%	0.00%	0.00%	53.19%	46.81%	



CONTROL :

ITM Peak Hour Summary

Prepared by:

NDS

National Data & Surveying Services

Sea World Dr and I-5 NB Ramps , City of San Diego

Peak Hour Summary

Date: 5/18/2011

Day: Wednesday

Project #: CA11_4140_039

AM Peak Hour	745 AM
NOON Peak Hour	
PM Peak Hour	415 PM

Southbound Approach (Sea World Dr)

Lanes					
AM	0	0	0	1264	AM
NOON	0	0	0	0	NOON
PM	0	0	0	1170	PM

Eastbound Approach (I-5 NB Ramps)

Lanes	AM	NOON	PM
	604	0	598
	797	0	783
	498	0	563
	0	0	0

Westbound Approach

Lanes	AM	NOON	PM
	464	0	384
	436	0	432
	0	0	0
	774	0	981

CONTROL: 0

Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON		
PM	4:00 PM	6:00 PM

Northbound Approach

Lanes					
AM	0	168	3	276	AM
NOON	0	0	0	0	NOON
PM	0	166	3	418	PM

Total Ins & Outs

North Leg		
0	1264	AM
0	0	NOON
0	1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
604	0	598	900	0	816
1295	0	1346	774	0	981

South Leg		
0	447	AM
0	0	NOON
0	587	PM

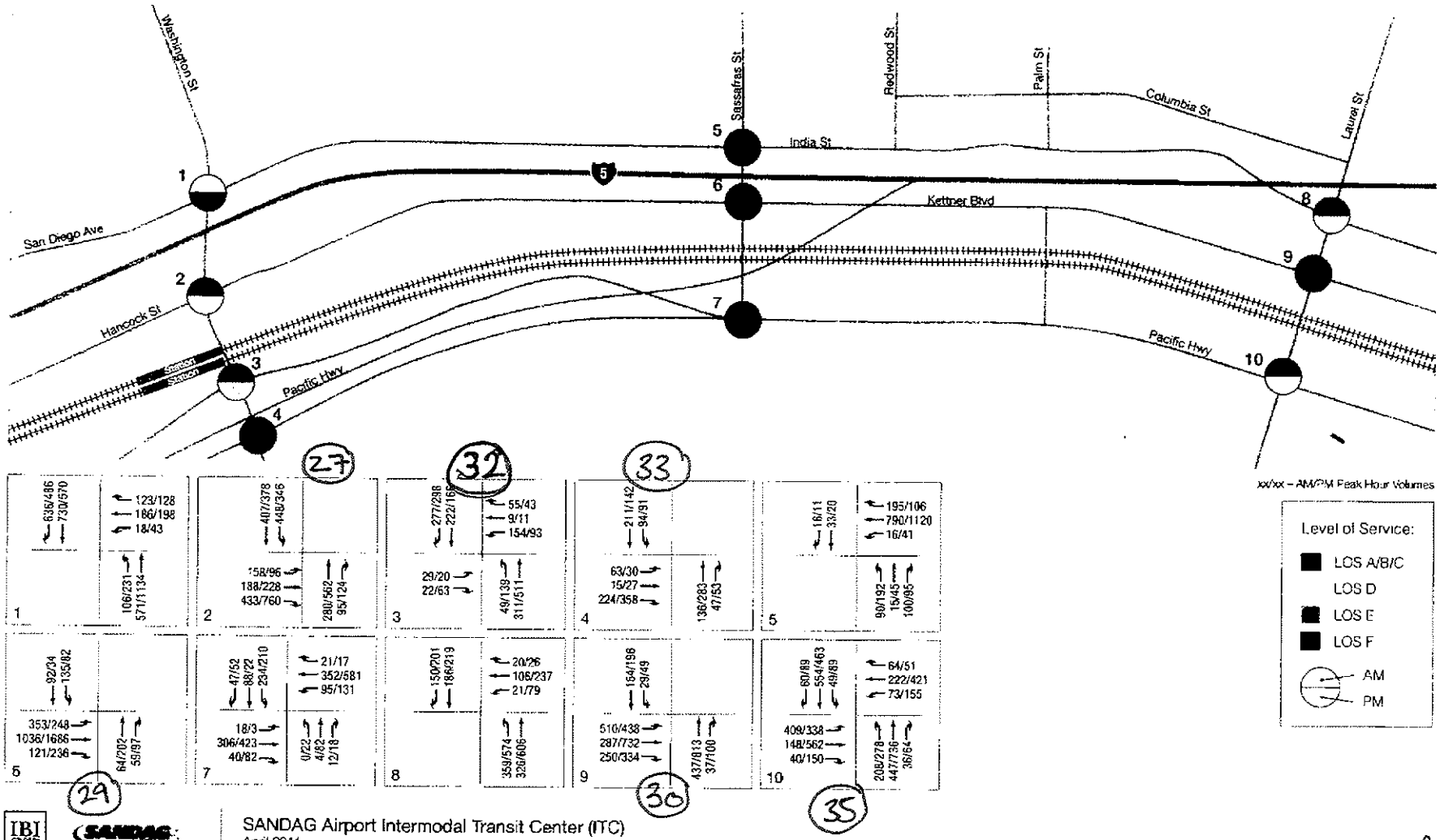
Total Volume Per Leg

North Leg	
1264	AM
0	NOON
1170	PM

West Leg			East Leg		
AM	NOON	PM	AM	NOON	PM
1899	0	1944	1674	0	1797

South Leg	
447	AM
0	NOON
587	PM

Existing AM/PM Peak Hour Traffic Volumes and Level of Service



Cyclists and Pedestrian Counts

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

2

PROJECT#: 11-4140-001
N/S Street: W Mission Bay Dr
E/W Street: I-8 WB Off-Ramp
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	0	2	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	0
7:45 AM	0	0	0	0	1	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**
	0	0	0	0	2	2	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	0	2	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	1	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	1	0	0	0
5:15 PM	0	0	0	0	1	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4167-001
N/S Street: West Mission Bay Dr
E/W Street: Channel Way
DATE: 6/9/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0
TOTALS	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	2	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

4

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-003
N/S Street: Midway Dr
E/W Street: Sport Arena Blvd/W Point Loma Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	2	1	2	0	0	0
7:15 AM	4	3	0	1	0	1	1	0
7:30 AM	0	0	0	0	1	0	0	0
7:45 AM	0	0	1	1	2	0	0	1
8:00 AM	1	0	0	0	0	0	0	1
8:15 AM	2	2	3	0	0	1	1	0
8:30 AM	1	1	2	0	1	0	1	1
8:45 AM	0	1	0	0	1	0	0	0
TOTALS	**9**	**7**	**8**	**3**	**7**	**2**	**3**	**3**
	4	4	5	0	2	1	2	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	3
7:30 AM	0	0	0	1	3	0	0	2
7:45 AM	0	0	0	0	1	0	0	3
8:00 AM	0	0	2	2	0	0	0	5
8:15 AM	0	0	2	2	0	0	0	2
8:30 AM	0	0	1	2	0	0	0	6
8:45 AM	0	0	0	0	1	0	0	2
TOTALS	**0**	**1**	**5**	**7**	**5**	**0**	**0**	**23**
	0	0	5	6	1	0	0	15

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	3	0	0	0	0	2
4:15 PM	3	2	1	0	0	2	1	0
4:30 PM	0	2	2	0	0	0	1	0
4:45 PM	0	0	4	0	0	0	3	1
5:00 PM	1	2	2	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	1	2	0	0	0	0	1	1
5:45 PM	0	0	1	0	0	0	2	1
TOTALS	**5**	**9**	**13**	**0**	**0**	**2**	**9**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	3
4:15 PM	1	1	0	0	1	0	1	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	3	1	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	1
5:45 PM	0	0	2	0	0	0	0	0
TOTALS	**1**	**5**	**5**	**1**	**1**	**0**	**2**	**4**

5

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-004
N/S Street: Kemper St
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	1
7:15 AM	0	0	1	0	0	1	1	2
7:30 AM	0	0	0	2	0	0	0	1
7:45 AM	0	0	0	0	0	0	1	0
8:00 AM	0	0	0	2	0	0	0	2
8:15 AM	0	0	0	1	0	2	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	0	1	1	5	5	3
TOTALS	**0**	**0**	**2**	**6**	**2**	**8**	**8**	**10**
	0	0	1	4	1	7	6	6

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	1	0	0	0	0
8:45 AM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**4**	**2**	**2**	**0**	**0**	**0**
	0	0	4	2	1	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	5	2	2	2	0	1	2
4:15 PM	0	5	5	5	1	1	1	1
4:30 PM	2	1	7	0	0	0	1	4
4:45 PM	0	4	2	4	3	6	0	1
5:00 PM	2	0	1	2	0	1	2	2
5:15 PM	3	2	2	3	0	2	2	0
5:30 PM	1	0	1	0	0	0	1	2
5:45 PM	0	0	2	2	0	0	1	1
TOTALS	**8**	**17**	**22**	**18**	**6**	**10**	**9**	**13**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**

6

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-005
N/S Street: East Dr
E/W Street: Midway Dr
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	2	1	0	0	0	0
7:15 AM	0	0	1	0	0	0	2	1
7:30 AM	1	0	0	0	0	0	2	3
7:45 AM	0	0	1	0	0	0	0	1
8:00 AM	0	0	2	0	0	1	3	1
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	3	0
8:45 AM	0	0	1	0	0	0	2	1
TOTALS	**1**	**0**	**7**	**1**	**0**	**1**	**12**	**7**
	0	0	3	0	0	1	8	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	1	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**1**	**0**	**1**	**1**
	0	0	1	0	0	0	1	0

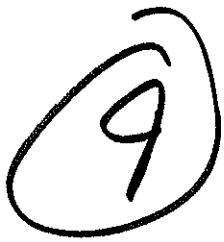
P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	9	3
4:15 PM	1	0	0	0	0	0	2	5
4:30 PM	1	0	0	0	0	0	5	3
4:45 PM	0	0	0	0	0	0	3	4
5:00 PM	1	0	0	0	0	0	7	2
5:15 PM	0	1	0	0	0	0	5	4
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	8	0	0	0	0	0	5	5
TOTALS	**11**	**1**	**0**	**0**	**0**	**1**	**38**	**28**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	2	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	1	0	0	0	0
5:45 PM	0	0	1	1	0	0	0	0
TOTALS	**1**	**2**	**4**	**2**	**1**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-006
N/S Street: Midway Dr
E/W Street: Enterprise St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	3	0	0	0	0	0	0	0
TOTALS	**3**	**1**	**0**	**0**	**1**	**1**	**0**	**0**
	3	0	0	0	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	3	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	1	1	0	0	0	0	0	0
8:15 AM	1	3	0	0	0	0	0	0
8:30 AM	0	4	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**12**	**0**	**0**	**0**	**0**	**0**	**0**
	2	8	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	1	1	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**3**	**1**	**0**	**0**

10

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-007
N/S Street: Midway Dr
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	2	0	0	1	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	1	0	0	0	0	0	0
8:30 AM	1	2	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**5**	**0**	**0**	**1**	**0**	**0**	**0**
	3	5	0	0	1	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	6	0	0	3	1	0	0
7:15 AM	4	2	0	0	2	2	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	2	3	0	0	0	2	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	3	5	0	0	1	3	0	0
8:30 AM	0	1	0	0	2	0	0	0
8:45 AM	1	2	0	0	1	1	0	0
TOTALS	**12**	**19**	**0**	**0**	**9**	**10**	**0**	**0**
	5	9	0	0	3	5	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	2	1	0	0	0	0	0	0
4:15 PM	1	2	0	0	1	0	0	0
4:30 PM	1	0	0	0	0	0	0	0
4:45 PM	2	0	0	0	1	1	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	1	0	0
5:45 PM	1	0	0	0	0	0	0	0
TOTALS	**7**	**4**	**0**	**0**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	1	0	0
4:15 PM	0	1	0	0	0	1	0	0
4:30 PM	0	1	0	0	0	0	0	0
4:45 PM	1	3	0	0	1	0	0	0
5:00 PM	2	1	0	0	1	0	0	0
5:15 PM	0	2	0	0	1	0	0	0
5:30 PM	0	1	0	0	1	1	0	0
5:45 PM	1	1	0	0	0	1	0	0
TOTALS	**5**	**10**	**0**	**0**	**4**	**4**	**0**	**0**

11

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-008
N/S Street: Hancock St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	1	2	0	0
7:15 AM	0	1	0	0	0	1	0	1
7:30 AM	0	1	1	0	0	0	1	2
7:45 AM	2	2	1	1	0	2	1	2
8:00 AM	0	2	1	1	0	0	1	2
8:15 AM	2	2	2	5	0	1	0	3
8:30 AM	0	2	1	0	0	0	0	3
8:45 AM	0	1	1	3	0	3	2	0
TOTALS	**4**	**11**	**7**	**11**	**1**	**9**	**5**	**13**
	2	7	5	9	0	4	3	8

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	1	0	1	0	0	0	0	0
8:00 AM	0	1	2	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**5**	**0**	**0**	**0**	**0**	**0**
	0	1	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	3	1	1	3	1	0	1
4:15 PM	1	1	1	3	1	2	2	4
4:30 PM	1	4	0	2	1	0	2	2
4:45 PM	3	1	2	1	2	2	2	3
5:00 PM	5	2	0	1	0	1	1	1
5:15 PM	0	2	0	4	1	4	0	5
5:30 PM	1	1	0	2	2	2	2	3
5:45 PM	0	4	1	3	0	1	1	1
TOTALS	**11**	**18**	**5**	**17**	**10**	**13**	**10**	**20**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	1	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**1**	**3**	**1**	**0**	**0**	**0**	**0**

12

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-009
N/S Street: Kemper St
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	2	2	3	0	0	0
7:15 AM	1	0	0	0	1	2	0	0
7:30 AM	0	0	0	1	0	1	0	0
7:45 AM	3	0	1	1	3	2	0	1
8:00 AM	0	0	0	0	1	2	1	0
8:15 AM	2	0	2	1	4	2	0	1
8:30 AM	1	0	2	2	2	0	0	0
8:45 AM	1	1	2	1	2	1	0	1
TOTALS	**8**	**2**	**9**	**8**	**16**	**10**	**1**	**3**
	4	1	6	4	9	S	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	2	1	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0
7:30 AM	0	2	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	2	0	0	1	0	0
8:15 AM	0	0	2	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	1	0
8:45 AM	0	0	3	0	1	1	0	0
TOTALS	**1**	**5**	**9**	**0**	**2**	**3**	**1**	**1**
	0	0	8	0	1	2	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	1	4	3	1	0	0	0	0
4:45 PM	1	2	2	2	3	0	1	0
5:00 PM	3	1	1	2	5	1	0	1
5:15 PM	2	0	3	0	0	0	1	0
5:30 PM	2	1	1	2	2	0	0	0
5:45 PM	1	0	0	1	0	0	0	0
TOTALS	**10**	**8**	**11**	**8**	**10**	**2**	**2**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	1	1	1	0	0	0	0
4:45 PM	0	0	2	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**3**	**6**	**1**	**0**	**0**	**0**	**0**

13

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-010
N/S Street: Sport Arena Driveway
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	1	0	1	0	0	0
7:15 AM	0	0	0	0	1	0	0	0
7:30 AM	0	0	1	1	1	0	0	0
7:45 AM	1	0	0	0	1	0	0	0
8:00 AM	0	0	0	1	0	0	0	0
8:15 AM	1	0	0	2	3	0	0	0
8:30 AM	2	0	0	2	1	0	0	0
8:45 AM	1	0	2	2	1	2	0	0
TOTALS	**5**	**0**	**4**	**8**	**9**	**2**	**0**	**0**
	4	0	2	7	5	2	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	1	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	1	1	1	0	0	0	0
8:15 AM	0	1	1	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**1**	**4**	**3**	**3**	**0**	**0**	**0**	**0**
	0	3	3	2	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	1	1	1	0	0	0
4:15 PM	3	1	1	0	0	1	0	0
4:30 PM	4	0	1	1	1	1	0	0
4:45 PM	4	1	0	0	0	2	0	0
5:00 PM	2	5	0	1	0	1	0	0
5:15 PM	1	2	3	1	0	1	0	0
5:30 PM	1	0	2	2	0	0	0	0
5:45 PM	1	0	2	1	1	0	0	0
TOTALS	**17**	**9**	**10**	**7**	**3**	**6**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	2	0	0	0	0	0
4:45 PM	0	0	3	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	3	0	0	0	0	0
5:45 PM	1	1	0	0	0	0	0	0
TOTALS	**1**	**3**	**10**	**0**	**0**	**0**	**0**	**0**

14

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-011
N/S Street: East Dr
E/W Street: Sports Arena Blvd
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	3	3	0	1	1	2	0	0
7:15 AM	3	2	0	2	0	1	0	0
7:30 AM	2	1	2	0	0	1	0	0
7:45 AM	1	0	2	2	0	0	0	0
8:00 AM	0	2	1	0	1	1	0	0
8:15 AM	4	2	0	1	1	4	0	0
8:30 AM	5	3	3	4	1	4	0	0
8:45 AM	4	1	3	3	4	5	0	0
TOTALS	**22**	**14**	**11**	**13**	**8**	**18**	**0**	**0**
	13	8	7	8	7	14	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	3	1	0	0	0	0	0
7:15 AM	0	0	1	2	1	1	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	2	2	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	1	1	0	0	0	0	0
8:45 AM	1	1	0	0	0	0	0	0
TOTALS	**3**	**10**	**5**	**2**	**1**	**1**	**0**	**0**
	3	4	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	2	0	0	0	0	0	0
4:15 PM	3	1	3	1	0	0	0	0
4:30 PM	2	2	4	6	1	0	0	0
4:45 PM	1	2	3	2	0	0	0	0
5:00 PM	3	3	1	4	1	0	0	0
5:15 PM	2	5	0	3	0	2	0	0
5:30 PM	4	6	1	2	0	0	0	0
5:45 PM	3	2	0	5	0	0	0	0
TOTALS	**24**	**23**	**12**	**23**	**2**	**2**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	2	0	0	1	0	0	0	0
4:45 PM	3	1	0	1	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	2	0	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	0	0	0
TOTALS	**7**	**1**	**1**	**6**	**0**	**0**	**0**	**0**

17

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-012
N/S Street: Pacific Hwy
E/W Street: Sports Arena Blvd
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	2	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**5**
	0	0	0	0	0	0	1	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	7
7:15 AM	0	0	0	0	0	0	0	8
7:30 AM	0	0	0	0	0	0	1	3
7:45 AM	0	0	0	0	0	0	1	8
8:00 AM	0	0	0	0	0	0	0	6
8:15 AM	0	0	0	0	0	0	1	5
8:30 AM	0	0	0	0	0	0	1	9
8:45 AM	0	0	0	0	0	0	0	5
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**51**
	0	0	0	0	0	0	3	28

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	1	3
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**

18

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-013
N/S Street: Kurtz St
E/W Street: Hancock St
DATE: 5/19/2011 DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	1	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**
	0	0	3	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	2	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**
	0	0	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	2	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

19

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-014
N/S Street: Camino Del Rio W
E/W Street: Kurtz St
DATE: 5/19/2011
CITY: San Diego

DAY: Thursday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	2	0	0	0	0
7:15 AM	0	0	2	2	1	0	0	0	0	0
7:30 AM	0	0	2	3	2	1	1	0	1	1
7:45 AM	0	0	0	3	0	0	1	0	0	1
8:00 AM	0	0	1	3	0	0	0	0	0	0
8:15 AM	0	0	2	3	1	1	0	1	1	0
8:30 AM	0	0	0	1	1	1	1	0	1	0
8:45 AM	0	0	2	1	4	2	0	1	1	1
TOTALS	**0**	**0**	**9**	**21**	**9**	**7**	**3**	**2**	**4**	**3**
	0	0	5	8	6	4	1	2	3	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	2	1	0	0	0	0
8:15 AM	0	0	2	0	0	0	0	0
8:30 AM	0	0	1	0	0	0	0	0
8:45 AM	0	0	1	2	0	0	0	1
TOTALS	**0**	**0**	**8**	**3**	**1**	**0**	**0**	**2**
	0	0	6	3	0	0	0	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		EAST LEG (GAINES)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	1	5	0	1	0	0	0	0
4:15 PM	0	0	4	6	0	2	0	0	0	0
4:30 PM	0	0	2	2	2	0	1	5	0	0
4:45 PM	0	0	1	3	2	2	0	0	1	1
5:00 PM	0	0	3	3	7	3	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	2	7	0	1	0	0	0	0
5:45 PM	0	0	0	2	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	1	0	1	0	1
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0
4:45 PM	0	0	2	2	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0
5:30 PM	0	0	2	1	0	0	0	0
5:45 PM	0	0	0	1	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

21

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-015
N/S Street: Pacific Hwy
E/W Street: Kurtz St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**
	0	0	0	0	0	0	0	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	8
7:15 AM	0	0	0	0	0	0	0	9
7:30 AM	0	0	0	0	0	0	1	5
7:45 AM	0	0	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	11
8:15 AM	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	0	0	1	5
8:45 AM	0	0	0	0	0	0	0	2
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**51**
	0	0	0	0	0	0	1	27

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	1
5:15 PM	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	3
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

22

PROJECT#: 11-4167-002
N/S Street: Hancock St
E/W Street: Channel Way
DATE: 6/9/2011
DAY: Thursday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	1	0	0	0	0	0	0
5:45 PM	1	0	0	0	0	0	1	0
TOTALS	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

25

PROJECT#: 11-4140-021
N/S Street: Hancock St
E/W Street: Old Towne Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	2	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
	2	1	0	0	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	1	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	0	0	0	0	0	0	0
4:15 PM	2	0	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-022
N/S Street: Hancock St
E/W Street: Witherby St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	2	0	0	0	0	0
7:30 AM	0	0	1	0	0	1	0	0
7:45 AM	0	0	1	0	1	0	0	0
8:00 AM	0	0	2	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	1	1	0	0
TOTALS	**0**	**0**	**6**	**1**	**2**	**2**	**0**	**1**
	0	0	6	0	1	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	0	1	0	0
7:45 AM	0	0	0	0	0	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**
	0	0	0	1	0	2	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	2	0
4:30 PM	0	0	1	1	0	0	2	1
4:45 PM	0	0	0	1	0	0	2	0
5:00 PM	0	0	1	0	1	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	2	1	1	0	1	4
TOTALS	**0**	**0**	**4**	**3**	**2**	**0**	**9**	**6**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0
4:30 PM	0	0	0	2	0	2	0	0
4:45 PM	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0
5:30 PM	0	0	0	0	0	2	0	0
5:45 PM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

28

PROJECT#: 11-4140-023
N/S Street: Kettner Blvd
E/W Street: Vine St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
	0	0	0	0	0	0	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
	0	0	0	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**

31

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-018
N/S Street: Pacific Hwy
E/W Street: Barnett Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	1	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**
	0	0	0	0	0	0	2	1

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	1	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**
	0	0	0	0	0	0	1	1

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	2	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	1
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**



PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-016
N/S Street: Taylor St
E/W Street: Morena Blvd
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	1	0
7:45 AM	0	0	0	0	1	1	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	1	0	0	1	0	0
8:30 AM	0	0	0	0	3	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**4**	**2**	**1**	**0**
	0	0	1	0	3	1	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	2
7:15 AM	0	0	1	0	0	0	1	5
7:30 AM	0	0	1	1	2	0	1	0
7:45 AM	0	0	2	1	0	0	2	0
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	1	1	0	1	0
8:30 AM	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	1
TOTALS	**0**	**0**	**5**	**3**	**3**	**0**	**5**	**11**
	0	0	1	1	1	0	1	4

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	1	0	0
4:15 PM	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	1	0	0	1	0
4:45 PM	0	0	0	0	0	1	0	0
5:00 PM	0	0	0	0	2	0	0	0
5:15 PM	0	0	0	1	1	0	2	2
5:30 PM	0	0	0	0	1	0	0	0
5:45 PM	0	0	0	0	0	0	1	0
TOTALS	**0**	**0**	**1**	**2**	**4**	**2**	**5**	**2**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	1	2	0	1	1
4:30 PM	0	0	1	0	2	0	1	1
4:45 PM	0	0	1	0	2	0	1	0
5:00 PM	0	0	1	1	1	0	1	4
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	2	3	0	0	1
5:45 PM	0	0	0	1	1	0	0	0
TOTALS	**0**	**0**	**3**	**5**	**12**	**0**	**4**	**9**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

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PROJECT#: 11-4140-033
N/S Street: Old Towne Ave
E/W Street: Moore St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	1	0	0	0	0	0	0
7:15 AM	0	2	0	0	1	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	2	0	0	0	0	2	0	0
8:00 AM	2	1	0	0	0	0	0	0
8:15 AM	2	1	0	0	0	1	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**6**	**5**	**0**	**0**	**1**	**3**	**0**	**0**
	6	2	0	0	0	3	0	0

0 1.3541667

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**
	0	0	0	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	0	2	0	0	0
4:15 PM	1	1	0	0	1	1	0	0
4:30 PM	0	1	0	0	2	0	0	0
4:45 PM	0	1	0	0	1	0	0	0
5:00 PM	2	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	1	0	1	0	0	1	0	0
5:45 PM	0	1	0	0	0	0	0	0
TOTALS	**4**	**5**	**2**	**0**	**6**	**2**	**1**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES



PROJECT#: 11-4140-027
N/S Street: Twiggs St
E/W Street: Congress St
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	2	7	0	0	0	0
7:15 AM	0	1	2	1	0	1	0	0
7:30 AM	1	1	3	1	0	0	0	0
7:45 AM	1	0	2	0	0	0	0	0
8:00 AM	0	0	5	0	0	0	0	0
8:15 AM	0	2	1	1	0	0	0	0
8:30 AM	2	1	9	3	0	0	0	0
8:45 AM	1	2	10	1	0	0	0	0
TOTALS	**6**	**8**	**34**	**14**	**0**	**1**	**0**	**0**
	3	5	25	5	0	0	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	2	0	0	0	0	0	0	0
8:15 AM	1	0	1	0	0	0	0	0
8:30 AM	0	3	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**3**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	3	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	6	8	9	7	0	0	1	8
4:15 PM	0	4	15	7	0	2	0	7
4:30 PM	1	2	6	9	5	5	0	2
4:45 PM	4	10	4	9	0	4	0	2
5:00 PM	5	3	16	5	1	1	2	0
5:15 PM	8	9	13	8	2	5	6	4
5:30 PM	7	5	12	4	4	0	2	8
5:45 PM	3	3	10	9	3	6	0	5
TOTALS	**34**	**44**	**85**	**58**	**15**	**23**	**11**	**36**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	1	2	1	0	0	0	0	0
4:45 PM	0	2	4	0	0	4	0	0
5:00 PM	1	2	0	0	0	0	0	0
5:15 PM	1	1	1	0	0	2	0	0
5:30 PM	1	0	1	0	0	0	0	0
5:45 PM	0	5	0	0	0	0	0	0
TOTALS	**4**	**14**	**8**	**0**	**0**	**6**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

40

PROJECT#: 11-4140-028
N/S Street: Harney St
E/W Street: Congress St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	5	0	0	0	0
7:15 AM	0	1	2	2	0	0	1	0
7:30 AM	1	0	2	2	1	1	0	0
7:45 AM	0	0	2	0	0	0	0	0
8:00 AM	0	0	4	0	0	0	0	0
8:15 AM	0	2	2	1	2	0	0	1
8:30 AM	2	1	5	2	0	0	0	0
8:45 AM	3	0	3	1	0	0	1	0
TOTALS	**6**	**4**	**20**	**13**	**3**	**1**	**2**	**1**
	5	3	14	4	2	0	1	1 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	1	0	0	0	0	0
7:45 AM	0	3	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	2	0	0	0	0	0
8:30 AM	1	3	0	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**7**	**4**	**0**	**0**	**0**	**0**	**0**
	2	3	3	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	4	0	2	0	0	6	1
4:15 PM	0	0	6	4	4	3	2	1
4:30 PM	0	2	2	1	0	0	4	2
4:45 PM	2	4	5	3	1	3	4	0
5:00 PM	0	4	3	4	0	0	4	0
5:15 PM	0	0	6	2	0	0	3	2
5:30 PM	3	5	3	5	1	1	2	1
5:45 PM	2	1	3	2	0	0	3	0
TOTALS	**8**	**20**	**28**	**23**	**6**	**7**	**28**	**7**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0
4:30 PM	0	2	1	0	0	0	0	0
4:45 PM	0	1	3	0	0	0	0	0
5:00 PM	0	2	1	0	0	0	0	0
5:15 PM	0	1	2	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	3	0	0	0	0	0	0
TOTALS	**0**	**11**	**8**	**0**	**0**	**0**	**0**	**0**

41

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-029
N/S Street: Congress St/Ampudia St
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0
7:30 AM	0	2	0	0	1	0	1	0	0	0
7:45 AM	0	0	1	0	2	0	0	1	0	0
8:00 AM	2	0	0	0	3	2	0	0	0	0
8:15 AM	2	1	0	0	1	2	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	1	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0
TOTALS	**4**	**3**	**1**	**0**	**8**	**4**	**1**	**3**	**1**	**0**
	4	1	0	0	5	4	0	1	1	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	1	1	0	0	1	0
7:45 AM	0	0	1	1	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	3	0	0	0	1	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**5**	**2**	**0**	**0**	**2**	**0**
	0	0	3	0	0	0	1	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)		WEST LEG (Congress)	
	EB	WB	EB	WB	NB	SB	NB	SB	NB	SB
4:00 PM	0	0	0	0	1	0	1	2	0	2
4:15 PM	0	0	0	0	3	0	1	4	0	3
4:30 PM	0	1	0	0	4	1	3	5	1	4
4:45 PM	0	0	0	0	3	2	2	3	2	2
5:00 PM	2	4	0	0	3	1	1	0	4	0
5:15 PM	1	0	0	0	2	2	2	0	2	0
5:30 PM	2	1	1	0	3	0	2	3	2	3
5:45 PM	0	2	0	0	0	1	1	2	0	1
TOTALS	**5**	**8**	**1**	**0**	**19**	**7**	**13**	**19**	**11**	**15**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG (Ampudia)	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	1	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	1	0	0	1	0
4:45 PM	0	0	1	0	0	0	0	0
5:00 PM	0	0	1	0	1	0	1	0
5:15 PM	0	0	1	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	3	0	0	0	0	0
TOTALS	**0**	**0**	**7**	**1**	**1**	**0**	**4**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

42

PROJECT#: 11-4140-030
N/S Street: Twiggs St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	1	3	0	1	0	0	0
7:15 AM	3	6	5	3	1	1	0	0
7:30 AM	4	8	9	5	0	4	0	0
7:45 AM	10	15	13	13	2	0	0	0
8:00 AM	12	22	12	8	5	9	0	0
8:15 AM	15	10	11	7	6	6	0	0
8:30 AM	18	11	9	15	3	11	0	0
8:45 AM	25	21	15	11	8	14	0	0
TOTALS	**88**	**94**	**77**	**62**	**26**	**45**	**0**	**0**
	70	64	47	41	22	40	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**
	0	0	0	0	0	1	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	22	26	25	8	5	8	0	0
4:15 PM	12	12	25	29	5	11	0	0
4:30 PM	33	16	22	8	4	11	0	0
4:45 PM	15	26	37	19	11	21	0	0
5:00 PM	25	29	21	16	3	10	0	0
5:15 PM	15	12	29	27	3	11	0	0
5:30 PM	34	13	17	10	4	10	0	0
5:45 PM	19	23	41	29	8	19	0	0
TOTALS	**175**	**157**	**217**	**146**	**43**	**101**	**0**	**0**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	0	0	0	0
4:45 PM	0	0	0	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0
TOTALS	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-031
N/S Street: Harney St
E/W Street: San Diego Ave
DATE: 5/18/2011
CITY: San Diego

DAY: Wednesday

43

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	5	1	2	3	0	1	0
7:15 AM	7	12	9	2	2	2	1	2
7:30 AM	14	8	12	10	10	13	11	6
7:45 AM	14	21	15	17	7	9	10	10
8:00 AM	13	29	14	11	12	10	8	7
8:15 AM	21	18	14	10	10	7	12	4
8:30 AM	18	15	12	19	2	11	2	9
8:45 AM	31	25	13	11	14	16	12	11
TOTALS	**118**	**133**	**90**	**82**	**60**	**68**	**57**	**49**
	83	87	53	51	38	44	34	31

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	1	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	1	0	0	0	0
8:30 AM	2	0	0	0	0	0	0	0
8:45 AM	0	0	2	0	0	0	0	0
TOTALS	**4**	**0**	**2**	**2**	**0**	**0**	**0**	**0**
	3	0	2	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	52	28	36	28	17	9	0	9
4:15 PM	48	32	24	17	7	3	5	12
4:30 PM	48	28	24	16	7	10	14	5
4:45 PM	40	25	30	23	13	5	7	2
5:00 PM	30	26	37	25	5	7	15	4
5:15 PM	31	26	26	16	14	6	6	23
5:30 PM	36	39	17	35	7	12	1	16
5:45 PM	46	58	16	33	11	9	7	12
TOTALS	**331**	**262**	**210**	**193**	**81**	**61**	**55**	**83**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	3	1	0	1	0	0	0	0
4:30 PM	3	3	0	3	1	0	0	0
4:45 PM	0	1	2	0	0	0	0	0
5:00 PM	3	0	2	0	2	0	0	0
5:15 PM	0	1	0	2	0	0	0	0
5:30 PM	0	1	1	0	0	0	0	0
5:45 PM	0	3	1	0	0	1	0	0
TOTALS	**9**	**10**	**6**	**6**	**3**	**1**	**0**	**0**

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

44

PROJECT#: 11-4140-032
N/S Street: Old Towne Ave
E/W Street: San Diego Ave
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	2	0	0	0	0	0	0	0
7:15 AM	0	1	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	2	1	0	0	0	1	0
8:00 AM	0	4	0	0	0	0	2	2
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	1	1	0	0	1	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**4**	**7**	**4**	**1**	**0**	**0**	**4**	**2**
	0	4	2	1	0	0	3	2

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	2	1	0	0	0	0	0
7:45 AM	0	2	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	1	1	0	0	0	0	0
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**
	0	1	2	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	3	0	0	0	0	1	0	0
4:15 PM	0	2	3	2	2	0	0	1
4:30 PM	2	2	2	3	0	1	2	0
4:45 PM	1	0	2	1	0	0	0	1
5:00 PM	0	0	0	1	0	0	0	0
5:15 PM	1	2	1	0	0	0	0	0
5:30 PM	1	4	1	1	0	2	2	3
5:45 PM	2	0	1	1	0	1	0	0
TOTALS	**10**	**10**	**10**	**9**	**2**	**5**	**4**	**5**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0
4:30 PM	0	1	1	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	0	0
5:15 PM	0	2	0	0	0	0	0	0
5:30 PM	1	1	0	0	0	0	0	1
5:45 PM	0	2	0	0	0	0	0	0
TOTALS	**1**	**10**	**2**	**0**	**0**	**0**	**0**	**1**

45

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-017
N/S Street: Taylor St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	1	0	0	0
7:15 AM	0	1	0	0	1	1	2	0
7:30 AM	1	0	0	0	1	1	0	0
7:45 AM	1	1	0	0	3	1	0	0
8:00 AM	0	1	0	0	1	2	0	0
8:15 AM	1	0	0	0	2	1	0	0
8:30 AM	0	0	0	0	5	2	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**3**	**3**	**0**	**0**	**14**	**8**	**2**	**0**
	1	1	0	0	8	5	0	0

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	1	1
7:15 AM	0	0	1	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	1	0	1	1
8:00 AM	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	1
8:45 AM	0	0	1	0	0	0	0	0
TOTALS	**2**	**0**	**3**	**0**	**1**	**0**	**2**	**5**
	0	0	2	0	0	0	0	3

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	0	1	2	1	0	0
4:15 PM	1	1	0	1	1	4	0	0
4:30 PM	0	0	0	0	0	3	1	0
4:45 PM	0	0	1	4	2	0	0	1
5:00 PM	0	0	0	1	1	2	2	0
5:15 PM	0	2	0	0	0	4	9	0
5:30 PM	0	0	0	1	0	3	0	0
5:45 PM	1	0	0	2	1	0	4	0
TOTALS	**2**	**4**	**1**	**10**	**7**	**17**	**16**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	2
4:15 PM	0	0	1	0	0	0	1	0
4:30 PM	2	0	0	0	0	0	1	2
4:45 PM	0	0	1	0	1	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	2	2
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**2**	**0**	**2**	**0**	**1**	**0**	**4**	**6**

46

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-034
N/S Street: Twiggs St
E/W Street: Juan St
DATE: 5/18/2011 DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	1	0	0	0	0
7:15 AM	0	4	2	0	0	2	0	0
7:30 AM	0	1	0	1	0	0	0	0
7:45 AM	1	0	1	1	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0
8:30 AM	0	0	0	1	0	0	0	0
8:45 AM	0	5	2	2	1	1	0	0
TOTALS	**1**	**12**	**5**	**6**	**1**	**3**	**0**	**0**
	0	7	2	3	1	1	0	0 0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	1
7:45 AM	2	0	0	0	1	0	0	0
8:00 AM	1	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0
8:45 AM	0	0	0	1	0	0	0	0
TOTALS	**6**	**0**	**0**	**1**	**1**	**1**	**0**	**1**
	3	0	0	1	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	0	0	0	0	3	0	0
4:45 PM	0	0	2	6	0	18	2	0
5:00 PM	0	0	1	0	1	11	0	0
5:15 PM	0	0	2	0	2	4	0	0
5:30 PM	0	0	1	0	0	0	1	1
5:45 PM	0	0	6	0	6	1	8	0
TOTALS	**0**	**0**	**14**	**6**	**9**	**37**	**11**	**1**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0
TOTALS	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

47

PREPARED BY NATIONAL DATA & SURVEYING SERVICES

PROJECT#: 11-4140-035
N/S Street: Harney St
E/W Street: Juan St
DATE: 5/18/2011
DAY: Wednesday
CITY: San Diego

A M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	1	7	0	0	0	0	1	3
7:15 AM	0	1	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	1	0	0
7:45 AM	0	0	1	0	0	0	0	0
8:00 AM	0	0	0	1	0	1	0	4
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	1	0	1	0	0	0	0	0
TOTALS	**3**	**8**	**2**	**1**	**0**	**2**	**1**	**7**
	1	1	1	1	0	2	0	4

0

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
7:00 AM	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0
TOTALS	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**
	0	2	1	0	0	0	0	0

P M

PEDESTRIANS

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	1	1	0	3	0	2	2	2
4:15 PM	0	0	2	1	2	0	2	1
4:30 PM	0	0	0	0	0	0	2	0
4:45 PM	1	2	0	0	1	0	5	0
5:00 PM	2	4	2	1	3	4	3	0
5:15 PM	3	1	2	4	0	2	2	2
5:30 PM	0	0	0	2	0	1	0	0
5:45 PM	0	2	1	0	2	0	3	4
TOTALS	**7**	**10**	**7**	**11**	**8**	**9**	**19**	**9**

BIKES

TIME	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG	
	EB	WB	EB	WB	NB	SB	NB	SB
4:00 PM	0	1	1	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1
4:45 PM	0	2	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0
5:15 PM	0	0	1	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	0	0	0	0	0
TOTALS	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**1**

Table 3.1
Rosecrans Corridor 2-Hour AM Peak Period Pedestrian Counts

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Taylor Street / Congress Street	61	82 (Taylor St.)	29 (Congress St.)	15 (Taylor St.)	187
Rosecrans Street-Taylor Street / Pacific Highway	34 (PCH)	129 (Taylor St.)	21 (PCH)	61 (Rosecrans St.)	245
Rosecrans Street / Jefferson Street	69 (Jefferson St.)	1 (Rosecrans St.)	0 (Jefferson St.)	0 (Rosecrans St.)	70
Rosecrans Street / Moore Street	37 (Moore St.)	4 (Rosecrans St.)	0 (Moore St.)	4 (Rosecrans St.)	45
Rosecrans Street / Hancock Street	30 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	30
Rosecrans Street / Kurtz Street	47 (Kurtz St.)	4 (Rosecrans St.)	21 (Kurtz St.)	2 (Rosecrans St.)	74
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	9 (Sports Arena Blvd.)	9 (Rosecrans St.)	45 (Sports Arena Blvd.)	18 (Rosecrans St.)	100
Rosecrans Street / Midway Drive	18 (Midway Dr.)	14 (Rosecrans St.)	27 (Midway Dr.)	25 (Rosecrans St.)	84
Rosecrans Street / N. Evergreen Street	8 (Evergreen St.)	6 (Rosecrans St.)	5 (Evergreen St.)	0 (Rosecrans St.)	19
Rosecrans Street / Lytton Street	8 (Lytton St.)	0 (Rosecrans St.)	0 (Lytton St.)	3 (Rosecrans St.)	11
Rosecrans Street / Roosevelt Road	0	15 (Rosecrans St.)	11 (Roosevelt Rd.)	2 (Rosecrans St.)	28
Rosecrans Street / Curtis Street	9 (Curtis St.)	0 (Rosecrans St.)	0	0 (Rosecrans St.)	9
Rosecrans Street / Womble Road		82 (Rosecrans St.)	12 (Womble Rd.)	0 (Rosecrans St.)	94
Rosecrans Street / Xenophon Street	17 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	17
Rosecrans Street / Farragut Road-Voltaire Street	4 (Voltaire St.)	5 (Rosecrans St.)	17 (Farragut Rd.)	12 (Rosecrans St.)	38
Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	1 (Laning Rd.)	1 (Rosecrans St.)	2
Rosecrans Street / Oliphant Street	8 (Oliphant St.)	0 (Rosecrans St.)	8	0 (Rosecrans St.)	16
Rosecrans Street / Macualay Street	18 (Macualay St.)	1 (Rosecrans St.)	5 (DW)	3 (Rosecrans St.)	27
Rosecrans Street / Nimitz Boulevard	23 (Nimitz Blvd.)	14 (Rosecrans St.)	24 (Nimitz Blvd.)	19 (Rosecrans St.)	80
Rosecrans Street / Jarvis Street	23 (Jarvis St.)	8 (Rosecrans St.)	9 (Jarvis St.)	11 (Rosecrans St.)	51
Rosecrans Street / N. Harbor Drive-Hugo Street	14 (Hugo St.)	13 (Rosecrans St.)	16 (Harbor Dr.)	13 (Rosecrans St.)	56
Rosecrans Street / Garrison Street	11 (Garrison St.)	0 (Rosecrans St.)	0 (Garrison St.)	0 (Rosecrans St.)	11
Rosecrans Street / Carleton Street	25 (Carleton St.)	16 (Rosecrans St.)	11 (Carleton St.)	13 (Rosecrans St.)	65
Rosecrans Street / Shelter Island Drive-Byron Street	10 (Byron St.)	11 (Rosecrans St.)	14 (Shelter Island Dr.)	13 (Rosecrans St.)	48

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	15 (Canon St.)	23 (Rosecrans St.)	24 (Canon St.)	10 (Rosecrans St.)	72
Rosecrans Street / Talbot Street	10 (Talbot St.)	14 (Rosecrans St.)	5 (Talbot St.)	13 (Rosecrans St.)	42
Camino del Rio W. / Moore Street	1 (Moore St.)	0 (Camino del Rio)	0 (Moore St.)	3 (Camino del Rio)	4
#23 Camino del Rio W. / Hancock Street	0 (Hancock St.)	0 (Rosecrans St.)	0 (Hancock St.)	0 (Rosecrans St.)	0
#19 Camino del Rio W. / Kurtz Street	0 (Kurtz St.)	0 (Rosecrans St.)	0 (Kurtz St.)	0 (Rosecrans St.)	0
TOTAL	509	451	305	241	1,525

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 4 pedestrians along the northwest leg of the intersection (Camino del Rio) and 15 pedestrians along the south leg (Rosecrans St.).

Table 3.2
Rosecrans Corridor 2-Hour PM Peak Period Pedestrian Counts

	Intersection	West Leg	North Leg	East Leg	South Leg	Total
#38	Taylor Street / Congress Street	46	26 (Taylor St.)	81 (Congress St.)	53 (Taylor St.)	206
#36	Rosecrans Street-Taylor Street / Pacific Highway	23 (PCH)	170 (Taylor St.)	15 (PCH)	27 (Rosecrans St.)	235
	Rosecrans Street / Jefferson Street	86 (Jefferson St.)	0 (Rosecrans St.)	0 (Jefferson St.)	2 (Rosecrans St.)	88
	Rosecrans Street / Moore Street	57 (Moore St.)	7 (Rosecrans St.)	2 (Moore St.)	0 (Rosecrans St.)	66
#24	Rosecrans Street / Hancock Street	66 (Hancock St.)	0 (Rosecrans St.)	145 (Hancock St.)	0 (Rosecrans St.)	211
#20	Rosecrans Street / Kurtz Street	51 (Kurtz St.)	17 (Rosecrans St.)	43 (Kurtz St.)	3 (Rosecrans St.)	114
#15	Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	31 (Sports Arena Blvd.)	10 (Rosecrans St.)	29 (Sports Arena Blvd.)	63 (Rosecrans St.)	156
#7	Rosecrans Street / Midway Drive	48 (Midway Dr.)	40 (Rosecrans St.)	65 (Midway Dr.)	42 (Rosecrans St.)	195
	Rosecrans Street / N. Evergreen Street	11 (Evergreen St.)	11 (Rosecrans St.)	8 (Evergreen St.)	1 (Rosecrans St.)	31
#1	Rosecrans Street / Lytton Street	6 (Lytton St.)	6 (Rosecrans St.)	1 (Lytton St.)	0 (Rosecrans St.)	13
	Rosecrans Street / Roosevelt Road	0	7 (Rosecrans St.)	4 (Roosevelt Rd.)	0 (Rosecrans St.)	11
	Rosecrans Street / Curtis Street	5 (Curtis St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	5
	Rosecrans Street / Womble Road		32 (Rosecrans St.)	7 (Womble Rd.)	0 (Rosecrans St.)	39
	Rosecrans Street / Xenophon Street	6 (Xenophon St.)	0 (Rosecrans St.)		0 (Rosecrans St.)	6
	Rosecrans Street / Farragut Road-Voltaire Street	1 (Voltaire St.)	5 (Rosecrans St.)	13 (Farragut Rd.)	20 (Rosecrans St.)	39
#51	Rosecrans Street / Russell Street-Laning Road	0 (Russell St.)	0 (Rosecrans St.)	3 (Laning Rd.)	0 (Rosecrans St.)	3
	Rosecrans Street / Oliphant Street	34 (Oliphant St.)	0 (Rosecrans St.)	47	0 (Rosecrans St.)	81
	Rosecrans Street / Macualay Street	8 (Macualay St.)	0 (Rosecrans St.)	12 (DW)	1 (Rosecrans St.)	21
#50	Rosecrans Street / Nimitz Boulevard	26 (Nimitz Blvd.)	25 (Rosecrans St.)	26 (Nimitz Blvd.)	41 (Rosecrans St.)	118
	Rosecrans Street / Jarvis Street	19 (Jarvis St.)	2 (Rosecrans St.)	20 (Jarvis St.)	5 (Rosecrans St.)	46
#49	Rosecrans Street / N. Harbor Drive-Hugo Street	4 (Hugo St.)	5 (Rosecrans St.)	3 (Harbor Dr.)	6 (Rosecrans St.)	18
	Rosecrans Street / Garrison Street	34 (Garrison St.)	0 (Rosecrans St.)	47 (Garrison St.)	0 (Rosecrans St.)	81
	Rosecrans Street / Carleton Street	15 (Carleton St.)	22 (Rosecrans St.)	10 (Carleton St.)	11 (Rosecrans St.)	58
	Rosecrans Street / Shelter Island Drive-Byron Street	9 (Byron St.)	8 (Rosecrans St.)	15 (Shelter Island Dr.)	19 (Rosecrans St.)	51

Intersection	West Leg	North Leg	East Leg	South Leg	Total
Rosecrans Street / Canon Street	11 (Canon St.)	25 (Rosecrans St.)	28 (Canon St.)	11 (Rosecrans St.)	75
Rosecrans Street / Talbot Street	9 (Talbot St.)	20 (Rosecrans St.)	13 (Talbot St.)	19 (Rosecrans St.)	61
Camino del Rio W. / Moore Street	0 (Moore St.)	0 (Camino del Rio)	1 (Moore St.)	0 (Camino del Rio)	1
#23 Camino del Rio W. / Hancock Street	15 (Hancock St.)	20 (Rosecrans St.)	2 (Hancock St.)	1 (Rosecrans St.)	38
#19 Camino del Rio W. / Kurtz Street	15 (Kurtz St.)	20 (Rosecrans St.)	2 (Kurtz St.)	1 (Rosecrans St.)	38
TOTAL	636	478	642	326	2,105

Source: RBF Consulting, Inc.; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 9 pedestrians along the northwest leg of the intersection (Camino del Rio) and 14 pedestrians along the south leg (Rosecrans St.).

Table 5.1
Rosecrans Corridor 2-Hour AM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	3/9	0/0 (Taylor St.)	7/0 (Congress St.)	0/0 (Taylor St.)	19
Rosecrans Street - Taylor Street / Pacific Coast Highway	3/10 (PCH)	5/0 (Taylor St.)	7/0 (PCH)	0/5 (Rosecrans St.)	30
Rosecrans Street / Jefferson Street	2/13 (Jefferson St.)	0/0 (Rosecrans St.)	0/0 (Jefferson St.)	0/0 (Rosecrans St.)	15
Rosecrans Street / Moore Street	4/12 (Moore St.)	0/0 (Rosecrans St.)	10/2 (Moore St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Hancock Street	4/12 (Hancock St.)	0/0 (Rosecrans St.)	10/2 (Hancock St.)	0/0 (Rosecrans St.)	28
Rosecrans Street / Kurtz Street	1/8 (Kurtz St.)	2/0 (Rosecrans St.)	14/0 (Kurtz St.)	0/1 (Rosecrans St.)	26
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	0/0 (Sports Arena Blvd.)	0/1 (Rosecrans St.)	7/3 (Sports Arena Blvd.)	0/6 (Rosecrans St.)	20
Rosecrans Street / Midway Drive	0/7 (Midway Dr.)	3/1 (Rosecrans St.)	6/3 (Midway Dr.)	2/3 (Rosecrans St.)	25
Rosecrans Street / N. Evergreen Street	0/6 (Evergreen St.)	1/2 (Rosecrans St.)	6/2 (Evergreen St.)	0/0 (Rosecrans St.)	17
Rosecrans Street / Lytton Street	0/5 (Lytton St.)	2/1 (Rosecrans St.)	1/0 (Lytton St.)	0/0 (Rosecrans St.)	9
Rosecrans Street / Roosevelt Road	1/6	0/1 (Rosecrans St.)	7/1 (Roosevelt Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Curtis Street	1/6 (Curtis St.)	3/0 (Rosecrans St.)	0/0	1/3 (Rosecrans St.)	14
Rosecrans Street / Womble Road		2/4 (Rosecrans St.)	9/1 (Womble Rd.)	0/0 (Rosecrans St.)	16
Rosecrans Street / Xenophon Street	0/2 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	2
Rosecrans Street / Farragut Road-Voltaire Street	0/5 (Voltaire St.)	0/0 (Rosecrans St.)	3/0 (Farragut Rd.)	0/0 (Rosecrans St.)	8
Rosecrans Street / Russell Street-Laning Road	0/4 (Russell St.)	5/0 (Rosecrans St.)	17/0 (Laning Rd.)	0/12 (Rosecrans St.)	38
Rosecrans Street / Oliphant Street	0/4 (Oliphant St.)	0/0 (Rosecrans St.)	8/0	0/0 (Rosecrans St.)	12
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	7/1 (DW)	0/0 (Rosecrans St.)	13
Rosecrans Street / Nimitz Boulevard	1/4 (Nimitz Blvd.)	12/0 (Rosecrans St.)	8/1 (Nimitz Blvd.)	0/6 (Rosecrans St.)	32
Rosecrans Street / Jarvis Street	0/13 (Jarvis St.)	0/0 (Rosecrans St.)	5/0 (Jarvis St.)	1/0 (Rosecrans St.)	19
Rosecrans Street / N. Harbor Drive-Hugo Street	0/3 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/1 (Rosecrans St.)	7
Rosecrans Street / Garrison Street	0/4 (Garrison St.)	0/0	8/0 (Garrison St.)	0/0 (Rosecrans St.)	12
Rosecrans Street / Carleton Street	1/3 (Carleton St.)	1/0 (Rosecrans St.)	3/0 (Carleton St.)	1/0 (Rosecrans St.)	9

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/4 *(Byron St.)*	2/1 *(Rosecrans St.)*	2/0 *(Shelter Island Dr.)*	0/0 *(Rosecrans St.)*	9
Rosecrans Street / Canon Street	0/5 *(Canon St.)*	10/0 *(Rosecrans St.)*	2/0 *(Canon St.)*	0/12 *(Rosecrans St.)*	29
Rosecrans Street / Talbot Street	0/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	2/0 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6
Camino del Rio W. / Moore Street	0/6 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	3/0 *(Camino del Rio)*	9
#23 Camino del Rio W. / Hancock Street	0/1 *(Hancock St.)*	2/0 *(Rosecrans St.)*	1/0 *(Hancock St.)*	0/0 *(Rosecrans St.)*	4
#19 Camino del Rio W. / Kurtz Street	0/1 *(Kurtz St.)*	2/0 *(Rosecrans St.)*	1/0 *(Kurtz St.)*	0/0 *(Rosecrans St.)*	4
TOTAL	183	63	170	57	476

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:

*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 1 bicyclist southwest bound along the northwest leg of the intersection (Camino del Rio) and 0 west bound and 2 east bound along the south leg (Rosecrans St.).

Table 5.2
Rosecrans Corridor 2-Hour PM Peak Period Bicycle Counts

Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Taylor Street / Congress Street	9/12	4/0 (Taylor St.)	18/2 (Congress St.)	1/1 (Taylor St.)	47
Rosecrans Street-Taylor Street / Pacific Coast Highway	9/12 (PCH)	21/2 (Taylor St.)	15/3 (PCH)	1/9 (Rosecrans St.)	72
Rosecrans Street / Jefferson Street	7/28 (Jefferson St.)	0/0 (Rosecrans St.)	4/1 (Jefferson St.)	0/0 (Rosecrans St.)	40
Rosecrans Street / Moore Street	4/20 (Moore St.)	0/0 (Rosecrans St.)	20/2 (Moore St.)	0/0 (Rosecrans St.)	46
Rosecrans Street / Hancock Street	1/1 (Hancock St.)	0/0 (Rosecrans St.)	20/5 (Hancock St.)	0/0 (Rosecrans St.)	27
Rosecrans Street / Kurtz Street	2/3 (Kurtz St.)	29/1 (Rosecrans St.)	3/0 (Kurtz St.)	3/15 (Rosecrans St.)	56
Rosecrans Street / Sports Arena Boulevard-Camino del Rio*	2/3 (Sports Arena Blvd.)	2/2 (Rosecrans St.)	6/4 (Sports Arena Blvd.)	6/13 (Rosecrans St.)	43
Rosecrans Street / Midway Drive	3/7 (Midway Dr.)	5/4 (Rosecrans St.)	8/3 (Midway Dr.)	0/7 (Rosecrans St.)	37
Rosecrans Street / N. Evergreen Street	2/5 (Evergreen St.)	0/2 (Rosecrans St.)	3/1 (Evergreen St.)	0/1 (Rosecrans St.)	14
Rosecrans Street / Lytton Street	0/3 (Lytton St.)	1/0 (Rosecrans St.)	2/0 (Lytton St.)	1/3 (Rosecrans St.)	10
Rosecrans Street / Roosevelt Road	2/1	0/2 (Rosecrans St.)	7/2 (Roosevelt Rd.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Curtis Street	0/1 (Curtis St.)	0/0 (Rosecrans St.)	0/0	0/0 (Rosecrans St.)	1
Rosecrans Street / Womble Road		2/2 (Rosecrans St.)	6/1 (Womble Rd.)	0/0 (Rosecrans St.)	11
Rosecrans Street / Xenophon Street	0/6 (Xenophon St.)	0/0 (Rosecrans St.)		0/0 (Rosecrans St.)	6
Rosecrans Street / Farragut Road-Voltaire Street	0/9 (Voltaire St.)	0/0 (Rosecrans St.)	10/0 (Farragut Rd.)	0/0 (Rosecrans St.)	19
Rosecrans Street / Russell Street-Laning Road	0/1 (Russell St.)	5/0 (Rosecrans St.)	11/0 (Laning Rd.)	0/20 (Rosecrans St.)	37
Rosecrans Street / Oliphant Street	0/3 (Oliphant St.)	0/0 (Rosecrans St.)	11/0	0/0 (Rosecrans St.)	14
Rosecrans Street / Macualay Street	1/4 (Macualay St.)	0/0 (Rosecrans St.)	6/2 (DW)	0/1 (Rosecrans St.)	14
Rosecrans Street / Nimitz Boulevard	0/2 (Nimitz Blvd.)	12/1 (Rosecrans St.)	6/2 (Nimitz Blvd.)	0/8 (Rosecrans St.)	31
Rosecrans Street / Jarvis Street	0/0 (Jarvis St.)	9/0 (Rosecrans St.)	0/0 (Jarvis St.)	0/1 (Rosecrans St.)	10
Rosecrans Street / N. Harbor Drive-Hugo Street	0/2 (Hugo St.)	0/0 (Rosecrans St.)	3/0 (Harbor Dr.)	0/4 (Rosecrans St.)	9
Rosecrans Street / Garrison Street	0/3 (Garrison St.)	0/0 (Rosecrans St.)	11/0 (Garrison St.)	0/0 (Rosecrans St.)	14
Rosecrans Street / Carleton Street	1/1 (Carleton St.)	1/0 (Rosecrans St.)	5/4 (Carleton St.)	1/0 (Rosecrans St.)	13

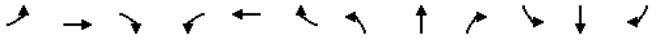
Intersection	West Leg (NB/SB)	North Leg (WB/EB)	East Leg (NB/SB)	South Leg (WB/EB)	Total
Rosecrans Street / Shelter Island Drive-Byron Street	0/2 *(Byron St.)*	5/0 *(Rosecrans St.)*	4/1 *(Shelter Island Dr.)*	1/0 *(Rosecrans St.)*	13
Rosecrans Street / Canon Street	1/5 *(Canon St.)*	12/0 *(Rosecrans St.)*	8/1 *(Canon St.)*	0/6 *(Rosecrans St.)*	33
Rosecrans Street / Talbot Street	1/4 *(Talbot St.)*	0/0 *(Rosecrans St.)*	6/1 *(Talbot St.)*	0/0 *(Rosecrans St.)*	12
Camino del Rio W. / Moore Street	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0/0 *(Moore St.)*	0/0 *(Camino del Rio)*	0
Camino del Rio W. / Hancock Street	0/12 *(Hancock St.)*	8/0 *(Rosecrans St.)*	0/0 *(Hancock St.)*	0/2 *(Rosecrans St.)*	22
Camino del Rio W. / Kurtz Street	0/12 *(Kurtz St.)*	8/0 *(Rosecrans St.)*	0/0 *(Kurtz St.)*	0/2 *(Rosecrans St.)*	22
TOTAL	207	140	228	107	687

Source: RBF Consulting; Alta Planning + Design (June 30, 2009)

Note:
*The Rosecrans Street / Sports Arena Boulevard-Camino del Rio intersection is a six-legged intersection. Counts for two of the six legs are reported here. They were 0 bicyclists northeast bound and 2 bicyclists southwest bound along the northwest leg of the intersection (Camino del Rio) and 2 bicyclists west bound and 1 bicyclist east bound along the south leg (Rosecrans St.).

Appendix E
Peak Hour Intersection Worksheets – Existing Conditions

Existing AM
1: Rosecrans St. & Lytton St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1499	3433	1863	1559	1770	1792	
Volume (vph)	3	1019	308	142	1311	161	349	285	15	546	254	77
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	1084	328	151	1395	171	371	303	16	581	270	82
RTOR Reduction (vph)	0	0	227	0	0	68	0	0	12	0	8	0
Lane Group Flow (vph)	3	1084	101	151	1395	103	371	303	4	581	344	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	0.8	38.9	38.9	7.6	45.6	45.6	17.6	28.6	28.6	37.4	46.6	
Effective Green, g (s)	1.2	40.2	40.2	8.0	47.0	47.0	18.0	29.4	29.4	36.4	47.8	
Actuated g/C Ratio	0.01	0.31	0.31	0.06	0.36	0.36	0.14	0.23	0.23	0.28	0.37	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	16	1572	483	211	1279	542	475	421	353	496	659	
v/s Ratio Prot	0.00	0.21		c0.04	c0.39		c0.11	c0.16		c0.33	0.19	
v/s Ratio Perm			0.06			0.07			0.00			
v/c Ratio	0.19	0.69	0.21	0.72	1.09	0.19	0.78	0.72	0.01	1.17	0.52	
Uniform Delay, d1	63.9	39.4	33.2	59.9	41.5	28.4	54.1	46.5	39.0	46.8	32.2	
Progression Factor	1.00	1.00	1.00	1.39	0.60	0.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	2.5	1.0	5.9	49.6	0.5	7.5	6.1	0.0	96.9	0.3	
Delay (s)	66.0	41.9	34.2	89.4	74.3	15.1	61.6	52.6	39.0	143.7	32.5	
Level of Service	E	D	C	F	E	B	E	D	D	F	C	
Approach Delay (s)		40.2			69.7			57.2			101.7	
Approach LOS		D			E			E			F	

Intersection Summary				
HCM Average Control Delay	65.4	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.03			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	99.4%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/5/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	452	1054	306	0	0	428
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	497	1158	333	0	0	465
RTOR Reduction (vph)	0	540	0	0	0	0
Lane Group Flow (vph)	497	618	333	0	0	465
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	10.7	10.7	13.9			13.9
Effective Green, g (s)	10.7	10.7	13.9			13.9
Actuated g/C Ratio	0.28	0.28	0.36			0.36
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	952	773	1274			671
v/s Ratio Prot	0.14		0.09			c0.25
v/s Ratio Perm		c0.22				
v/c Ratio	0.52	0.80	0.26			0.69
Uniform Delay, d1	11.8	13.0	8.7			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.2	5.4	0.0			2.5
Delay (s)	12.0	18.4	8.8			13.0
Level of Service	B	B	A			B
Approach Delay (s)	16.5		8.8			13.0
Approach LOS	B		A			B

Intersection Summary				
HCM Average Control Delay	14.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	38.6	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	57.0%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
3: Channel Way & W Mission Bay Dr 4/5/2012

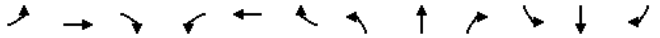


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	34	921	41	0	897
Peak Hour Factor	0.65	0.65	0.92	0.92	0.91	0.91
Hourly flow rate (vph)	0	52	1001	45	0	986
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked						
vC, conflicting volume	1352	359			1046	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1352	359			1046	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	92			100	
cM capacity (veh/h)	141	636			661	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	52	400	400	245	329	329	329
Volume Left	0	0	0	0	0	0	0
Volume Right	52	0	0	45	0	0	0
cSH	636	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.08	0.24	0.24	0.14	0.19	0.19	0.19
Queue Length 95th (ft)	7	0	0	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	11.2	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	29.7%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
4: Sports Arena & W Mission Bay Dr 4/5/2012

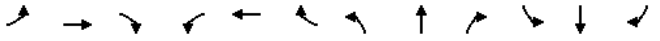


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1681	1751	1568	1770	3539	1563	1770	3539	1562	1610	3368	1561
Volume (vph)	412	277	244	16	125	223	149	327	19	298	428	171
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.79	0.79	0.79	0.94	0.94	0.94
Adj. Flow (vph)	438	295	260	19	147	262	189	414	24	317	455	182
RTOR Reduction (vph)	0	0	138	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	357	376	122	19	147	262	189	414	24	249	523	182
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Split		pm+ov	Split		Free	Split		Free	Split		Free
Protected Phases	2	2	3	1	1		3	3		4	4	
Permitted Phases			2			Free			Free			Free
Actuated Green, G (s)	32.2	32.2	54.0	19.4	19.4	119.4	21.8	21.8	119.4	26.3	26.3	119.4
Effective Green, g (s)	33.1	33.1	55.8	20.4	20.4	119.4	22.7	22.7	119.4	27.2	27.2	119.4
Actuated g/C Ratio	0.28	0.28	0.47	0.17	0.17	1.00	0.19	0.19	1.00	0.23	0.23	1.00
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0		3.1	3.1		5.5	5.5	
Lane Grp Cap (vph)	466	485	785	302	605	1563	337	673	1562	367	767	1561
v/s Ratio Prot	0.21	c0.21	0.03	0.01	c0.04		0.11	c0.12		0.15	c0.16	
v/s Ratio Perm			0.05			0.17			0.02			0.12
v/c Ratio	0.77	0.78	0.15	0.06	0.24	0.17	0.56	0.62	0.02	0.68	0.68	0.12
Uniform Delay, d1	39.6	39.7	18.3	41.5	42.8	0.0	43.8	44.3	0.0	42.1	42.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	6.9	0.1	0.4	0.9	0.2	2.2	1.7	0.0	7.0	3.5	0.2
Delay (s)	46.3	46.7	18.4	41.9	43.7	0.2	46.0	46.0	0.0	49.1	45.7	0.2
Level of Service	D	D	B	D	D	A	D	D	A	D	D	A
Approach Delay (s)		39.1			17.0			44.3			37.9	
Approach LOS		D			B			D			D	

Intersection Summary					
HCM Average Control Delay	36.6	HCM Level of Service		D	
HCM Volume to Capacity ratio	0.61				
Actuated Cycle Length (s)	119.4	Sum of lost time (s)		16.0	
Intersection Capacity Utilization	69.3%	ICU Level of Service		C	
Analysis Period (min)	15				

c Critical Lane Group

Existing AM
5: Kemper St & Midway Dr 4/5/2012

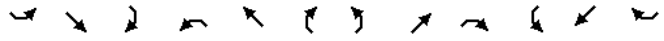


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1560	1770	1863	1555	3433	3479		1770	3539	1583
Volume (vph)	97	95	91	25	89	53	64	309	35	62	390	70
Peak-hour factor, PHF	0.80	0.80	0.80	0.91	0.91	0.91	0.88	0.88	0.88	0.93	0.93	0.93
Adj. Flow (vph)	121	119	114	27	98	58	73	351	40	67	419	75
RTOR Reduction (vph)	0	0	88	0	0	49	0	5	0	0	0	44
Lane Group Flow (vph)	121	119	26	27	98	9	73	386	0	67	419	31
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	12.9	12.9	17.6	11.9	11.9	11.9	4.7	33.1		4.7	33.1	33.1
Effective Green, g (s)	13.8	13.8	18.9	12.8	12.8	12.8	5.1	34.0		5.1	34.0	34.0
Actuated g/C Ratio	0.17	0.17	0.23	0.16	0.16	0.16	0.06	0.42		0.06	0.42	0.42
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	284	299	437	277	292	244	214	1448		110	1473	659
v/s Ratio Prot	c0.07	0.07	0.00	0.02	c0.05		0.02	0.11		c0.04	c0.12	
v/s Ratio Perm			0.01			0.01						0.02
v/c Ratio	0.43	0.40	0.06	0.10	0.34	0.04	0.34	0.27		0.61	0.28	0.05
Uniform Delay, d1	30.4	30.2	24.5	29.5	30.7	29.2	36.7	15.7		37.3	15.8	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.0	0.9	0.0	0.2	0.7	0.1	0.3	0.2		6.4	0.2	0.1
Delay (s)	31.4	31.1	24.5	29.7	31.3	29.3	37.0	15.8		43.7	16.0	14.3
Level of Service	C	C	C	C	C	C	D	B		D	B	B
Approach Delay (s)		29.1			30.4			19.2			19.1	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	22.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
6: Midway Dr & East Dr 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.98			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	3528		1770	3487			1750			1691	
Flt Permitted	0.33	1.00		0.42	1.00			0.76			0.83	
Satd. Flow (perm)	612	3528		791	3487			1382			1430	
Volume (vph)	16	537	10	25	629	68	19	3	5	16	2	15
Peak-hour factor, PHF	0.91	0.91	0.91	0.85	0.85	0.85	0.61	0.61	0.61	0.75	0.75	0.75
Adj. Flow (vph)	18	590	11	29	740	80	31	5	8	21	3	20
RTOR Reduction (vph)	0	1	0	0	7	0	0	7	0	0	18	0
Lane Group Flow (vph)	18	600	0	29	813	0	0	37	0	0	26	0
Confl. Peds. (#/hr)			3						1			10
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.4	41.6		42.4	41.6			4.1			4.1	
Effective Green, g (s)	43.7	42.5		43.7	42.5			5.0			5.0	
Actuated g/C Ratio	0.72	0.70		0.72	0.70			0.08			0.08	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	463	2470		589	2441			114			118	
v/s Ratio Prot	0.00	0.17		c0.00	c0.23							
v/s Ratio Perm	0.03			0.03				c0.03			0.02	
v/c Ratio	0.04	0.24		0.05	0.33			0.32			0.22	
Uniform Delay, d1	2.4	3.3		2.4	3.6			26.3			26.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.0		0.0	0.1			0.6			0.3	
Delay (s)	2.4	3.3		2.4	3.6			26.8			26.4	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		3.3			3.6			26.8			26.4	
Approach LOS		A			A			C			C	

Intersection Summary				
HCM Average Control Delay	4.8	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.33			
Actuated Cycle Length (s)	60.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	35.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
7: Rosecrans St. & Midway Dr 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5035		3433	4965		3433	3539	1537	1770	3539	1513
Volume (vph)	156	1299	67	204	1658	246	207	255	152	64	297	169
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	164	1367	71	215	1745	259	218	268	160	67	313	178
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	125	0	0	144
Lane Group Flow (vph)	164	1433	0	215	1990	0	218	268	35	67	313	34
Confl. Peds. (#/hr)	14		25	25		14	27		14	18		27
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	13.9	50.4		25.8	62.4		11.0	27.6	27.6	7.4	24.0	24.0
Effective Green, g (s)	14.3	51.5		26.2	63.4		11.4	28.5	28.5	7.8	24.9	24.9
Actuated g/C Ratio	0.11	0.40		0.20	0.49		0.09	0.22	0.22	0.06	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	195	1995		692	2421		301	776	337	106	678	290
v/s Ratio Prot	c0.09	0.28		0.06	c0.40		c0.06	0.08		c0.04	c0.09	
v/s Ratio Perm									0.02			0.02
v/c Ratio	0.84	0.72		0.31	0.82		0.72	0.35	0.10	0.63	0.46	0.12
Uniform Delay, d1	56.7	33.1		44.2	28.5		57.8	42.9	40.5	59.7	46.6	43.5
Progression Factor	0.81	0.69		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	1.1		0.1	2.5		7.1	0.1	0.0	8.7	0.2	0.1
Delay (s)	60.2	24.1		44.3	30.9		64.9	43.0	40.6	68.4	46.8	43.5
Level of Service	E	C		D	C		E	D	D	E	D	D
Approach Delay (s)		27.8			32.2			49.8			48.3	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM Average Control Delay	34.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.74			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	84.8%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

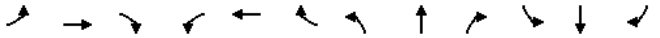
Existing AM
9: Enterprise St & Midway Dr 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	82	502	25	0	492
Peak Hour Factor	0.85	0.85	0.89	0.89	0.85	0.85
Hourly flow rate (vph)	0	96	564	28	0	579
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	870	301			594	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	870	301			594	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	86			100	
cM capacity (veh/h)	291	692			976	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	96	376	216	289	289
Volume Left	0	0	0	0	0
Volume Right	96	0	28	0	0
cSH	692	1700	1700	1700	1700
Volume to Capacity	0.14	0.22	0.13	0.17	0.17
Queue Length 95th (ft)	12	0	0	0	0
Control Delay (s)	11.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.0	0.0		0.0	
Approach LOS	B				

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	27.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
10: Barnett Ave & Midway Dr 4/5/2012

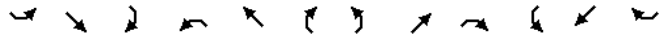


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	784	0	0	1211	527	0	0	0	397	0	95
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.92	0.81	0.92	0.81
Adj. Flow (vph)	0	852	0	0	1302	567	0	0	0	490	0	117
RTOR Reduction (vph)	0	0	0	0	0	267	0	0	0	0	0	90
Lane Group Flow (vph)	0	852	0	0	1302	300	0	0	0	490	0	27
Confl. Peds. (#/hr)						8				8		
Turn Type						custom				Prot		custom
Protected Phases		2			2	8				1		
Permitted Phases												1
Actuated Green, G (s)		26.8			26.8	22.3				12.9		12.9
Effective Green, g (s)		26.8			26.8	21.8				12.9		12.9
Actuated g/C Ratio		0.48			0.48	0.39				0.23		0.23
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	3.0				2.5		2.5
Lane Grp Cap (vph)		1688			1688	1081				788		363
v/s Ratio Prot		0.24			c0.37	0.11				c0.14		
v/s Ratio Perm												0.02
v/c Ratio		0.50			0.77	0.28				0.62		0.07
Uniform Delay, d1		10.1			12.2	11.8				19.5		17.0
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		0.2			2.2	0.1				1.3		0.1
Delay (s)		10.4			14.4	11.9				20.8		17.0
Level of Service		B			B	B				C		B
Approach Delay (s)		10.4			13.6			0.0			20.1	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	14.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.72			
Actuated Cycle Length (s)	56.2	Sum of lost time (s)	16.5	
Intersection Capacity Utilization	52.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
11: Sports Arena & Hancock 4/5/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9					4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91					1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes	1.00	1.00		0.78	1.00					1.00		1.00
Frt	1.00	1.00		1.00	0.98					1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)	1770	3532		1384	4970					1770		1583
Flt Permitted	0.95	1.00		0.95	1.00					0.95		1.00
Satd. Flow (perm)	1770	3532		1384	4970					1770		1583
Volume (vph)	104	484	6	1	331	52	0	0	0	18	0	33
Peak-hour factor, PHF	0.96	0.96	0.96	0.80	0.80	0.80	0.92	0.92	0.92	0.63	0.63	0.63
Adj. Flow (vph)	108	504	6	1	414	65	0	0	0	29	0	52
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	0	44
Lane Group Flow (vph)	108	510	0	1	462	0	0	0	0	29	0	8
Confl. Peds. (#/hr)	9		14	14		9			4	4		11
Turn Type	Prot			Prot					Free	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases									Free			
Actuated Green, G (s)	7.1	42.6		0.6	36.1					9.4		9.4
Effective Green, g (s)	7.1	42.6		0.6	36.1					9.4		10.3
Actuated g/C Ratio	0.11	0.64		0.01	0.54					0.14		0.15
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	188	2252		12	2686					249		244
v/s Ratio Prot	c0.06	c0.14		0.00	0.09					c0.02		0.01
v/s Ratio Perm												
v/c Ratio	0.57	0.23		0.08	0.17					0.12		0.03
Uniform Delay, d1	28.4	5.1		32.8	7.8					25.1		24.0
Progression Factor	1.00	1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2	2.6	0.1		1.1	0.1					0.1		0.0
Delay (s)	31.0	5.2		33.9	7.8					25.1		24.0
Level of Service	C	A		C	A					C		C
Approach Delay (s)		9.7			7.9			0.0			24.4	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	10.0	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.24			
Actuated Cycle Length (s)	66.8	Sum of lost time (s)	9.3	
Intersection Capacity Utilization	33.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
12: Kemper Street & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frt	1.00	0.90		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1863	1583	3433	3467		1770	4936	
Volume (vph)	62	40	90	46	23	100	68	481	76	117	327	80
Peak-hour factor, PHF	0.80	0.80	0.80	0.78	0.78	0.78	0.94	0.94	0.94	0.83	0.83	0.83
Adj. Flow (vph)	78	50	112	59	29	128	72	512	81	141	394	96
RTOR Reduction (vph)	0	94	0	0	0	117	0	13	0	0	38	0
Lane Group Flow (vph)	78	68	0	59	29	11	72	580	0	141	452	0
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	9.9	9.9		5.0	5.0	5.0	2.8	24.1		8.8	30.1	
Effective Green, g (s)	10.8	10.8		5.9	5.9	5.9	3.2	25.0		9.2	31.0	
Actuated g/C Ratio	0.16	0.16		0.09	0.09	0.09	0.05	0.37		0.14	0.46	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	286	270		156	164	140	164	1296		243	2287	
v/s Ratio Prot	c0.04	0.04		c0.03	0.02		0.02	c0.17		c0.08	0.09	
v/s Ratio Perm						0.01						
v/c Ratio	0.27	0.25		0.38	0.18	0.08	0.44	0.45		0.58	0.20	
Uniform Delay, d1	24.6	24.5		28.8	28.3	28.0	31.0	15.8		27.0	10.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.5	0.5		0.6	0.2	0.1	0.7	0.3		2.3	0.0	
Delay (s)	25.1	25.0		29.3	28.4	28.1	31.7	16.1		29.3	10.6	
Level of Service	C	C		C	C	C	C	B		C	B	
Approach Delay (s)		25.0			28.5			17.8			14.8	
Approach LOS		C			C			B			B	

Intersection Summary				
HCM Average Control Delay	19.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.43			
Actuated Cycle Length (s)	66.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	48.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
13: Sports Arena & 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99			0.97		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (prot)	3433	3464		1759	5042			1747		1770	1602	
Flt Permitted	0.95	1.00		0.95	1.00			0.97		0.95	1.00	
Satd. Flow (perm)	3433	3464		1759	5042			1747		1770	1602	
Volume (vph)	72	482	63	20	458	25	26	5	8	25	3	40
Peak-hour factor, PHF	0.94	0.94	0.94	0.85	0.85	0.85	0.75	0.75	0.75	0.71	0.71	0.71
Adj. Flow (vph)	77	513	67	24	539	29	35	7	11	35	4	56
RTOR Reduction (vph)	0	5	0	0	3	0	0	10	0	0	54	0
Lane Group Flow (vph)	77	575	0	24	565	0	0	43	0	35	6	0
Confl. Peds. (#/hr)	4		9	9		4			7	7		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Effective Green, g (s)	2.4	40.6		0.8	39.0			6.4		2.7	2.7	
Actuated g/C Ratio	0.03	0.58		0.01	0.56			0.09		0.04	0.04	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	118	2021		20	2825			161		69	62	
v/s Ratio Prot	c0.02	c0.17		0.01	0.11			c0.02		c0.02	0.00	
v/s Ratio Perm												
v/c Ratio	0.65	0.28		1.20	0.20			0.27		0.51	0.10	
Uniform Delay, d1	33.2	7.2		34.4	7.6			29.4		32.8	32.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	9.5	0.0		270.0	0.0			0.3		2.1	0.3	
Delay (s)	42.6	7.3		304.4	7.6			29.7		34.9	32.5	
Level of Service	D	A		F	A			C		C	C	
Approach Delay (s)		11.4			19.6			29.7			33.4	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	17.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.9%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
14: Sports Arena & East Dr 4/5/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (prot)	1770	5037		1770	5024			1770	1542			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.95	1.00			1.00
Satd. Flow (perm)	1770	5037		1770	5024			1770	1542			1611
Volume (vph)	30	524	26	41	544	36	13	0	34	0	0	2
Peak-hour factor, PHF	0.91	0.91	0.91	0.94	0.94	0.94	0.78	0.78	0.78	0.50	0.50	0.50
Adj. Flow (vph)	33	576	29	44	579	38	17	0	44	0	0	4
RTOR Reduction (vph)	0	4	0	0	5	0	0	0	39	0	0	0
Lane Group Flow (vph)	33	601	0	44	612	0	0	17	5	0	0	4
Confl. Peds. (#/hr)	21		15	15		21			21	21		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Effective Green, g (s)	1.0	42.3		1.0	42.3			7.3	7.3			64.8
Actuated g/C Ratio	0.02	0.65		0.02	0.65			0.11	0.11			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	27	3288		27	3280			199	174			1611
v/s Ratio Prot	0.02	0.12		c0.02	c0.12							
v/s Ratio Perm								0.01	0.00			0.00
v/c Ratio	1.22	0.18		1.63	0.19			0.09	0.03			0.00
Uniform Delay, d1	31.9	4.4		31.9	4.4			25.8	25.6			0.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	247.9	0.0		404.3	0.0			0.1	0.0			0.0
Delay (s)	279.8	4.5		436.2	4.5			25.8	25.6			0.0
Level of Service	F	A		F	A			C	C			A
Approach Delay (s)		18.7			33.2			25.7			0.0	
Approach LOS		B			C			C			A	

Intersection Summary				
HCM Average Control Delay	26.0	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.20			
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	44.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
15: Rosecrans St. & Sports Arena 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (prot)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.98	1.00
Satd. Flow (perm)	3433	4990			5085	1583	1610	3313		1610	3154	1441
Volume (vph)	171	1325	179	0	1887	296	155	154	10	242	215	101
Peak-hour factor, PHF	0.86	0.95	0.90	1.00	0.95	0.90	0.82	0.80	0.62	0.76	0.81	0.92
Adj. Flow (vph)	199	1395	199	0	1986	329	189	192	16	318	265	110
RTOR Reduction (vph)	0	13	0	0	0	0	0	4	0	0	0	87
Lane Group Flow (vph)	199	1581	0	0	1986	329	128	265	0	195	388	23
Confl. Peds. (#/hr)				45			18		9	9		45
Confl. Bikes (#/hr)									1			10
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	11.1	71.0			54.7	125.0	10.1	10.1		26.0	26.0	26.0
Effective Green, g (s)	12.5	73.1			56.6	125.0	10.1	10.1		26.0	26.0	26.0
Actuated g/C Ratio	0.10	0.58			0.45	1.00	0.08	0.08		0.21	0.21	0.21
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	343	2918			2302	1583	130	268		335	656	300
v/s Ratio Prot	0.06	c0.32			c0.39		0.08	c0.08		0.12	c0.12	0.02
v/s Ratio Perm						0.21						
v/c Ratio	0.58	0.54			0.86	0.21	0.98	0.99		0.58	0.59	0.08
Uniform Delay, d1	53.7	15.8			30.7	0.0	57.4	57.4		44.6	44.7	39.8
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.7			4.6	0.3	73.7	52.1		3.1	1.7	0.2
Delay (s)	55.4	16.5			35.3	0.3	131.1	109.5		47.7	46.4	40.0
Level of Service	E	B			D	A	F	F		D	D	D
Approach Delay (s)		20.8			30.3			116.4			45.8	
Approach LOS		C			C			F			D	

Intersection Summary				
HCM Average Control Delay	35.7	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	19.8	
Intersection Capacity Utilization	88.7%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	678	568	24
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	737	598	25
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	979	312	623			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	979	312	623			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	100			
cM capacity (veh/h)	247	684	954			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	368	368	399	225
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	25
cSH	684	1700	1700	1700	1700
Volume to Capacity	0.06	0.22	0.22	0.23	0.13
Queue Length 95th (ft)	5	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	26.5%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Existing AM
19: Kurtz & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1681	1752	1583		5085		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1681	1752	1583		5085		1770	6408	
Volume (vph)	0	0	0	112	78	45	0	1577	0	83	2142	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	122	85	47	0	1660	0	86	2208	0
RTOR Reduction (vph)	0	0	0	0	0	6	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	101	106	41	0	1660	0	86	2208	0
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				22.3	22.3	22.3		84.2		9.0	97.9	
Effective Green, g (s)				23.2	23.2	23.2		85.4		9.4	98.8	
Actuated g/C Ratio				0.18	0.18	0.18		0.66		0.07	0.76	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				300	313	283		3340		128	4870	
v/s Ratio Prot								c0.33		c0.05	0.34	
v/s Ratio Perm				0.06	0.06	0.03						
v/c Ratio				0.34	0.34	0.15		0.50		0.67	0.45	
Uniform Delay, d1				46.7	46.7	45.0		11.4		58.8	5.7	
Progression Factor				1.00	1.00	1.00		1.00		1.10	0.16	
Incremental Delay, d2				0.2	0.2	0.1		0.5		3.9	0.1	
Delay (s)				46.9	46.9	45.1		11.9		68.8	1.0	
Level of Service				D	D	D		B		E	A	
Approach Delay (s)		0.0			46.6			11.9			3.5	
Approach LOS		A			D			B			A	

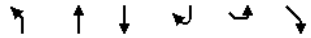
Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
20: Rosecrans St & Kurtz 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.98		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3364		1744	3539		1770		1548	1770	1863	
Flt Permitted		1.00		0.44	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3364		804	3539		1770		1548	1770	1863	
Volume (vph)	0	349	84	87	294	0	103	0	142	41	125	0
Peak-hour factor, PHF	1.00	0.95	0.95	0.97	0.97	0.92	0.92	0.92	0.92	0.94	0.94	0.94
Adj. Flow (vph)	0	367	88	90	303	0	112	0	154	44	133	0
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	65	0	0	0
Lane Group Flow (vph)	0	446	0	90	303	0	112	0	89	44	133	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		74.3		85.7	85.7		13.1		74.3	17.0	17.0	
Effective Green, g (s)		75.2		86.6	86.6		13.5		75.2	17.9	17.9	
Actuated g/C Ratio		0.58		0.67	0.67		0.10		0.58	0.14	0.14	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1946		589	2358		184		895	244	257	
v/s Ratio Prot		c0.13		c0.01	0.09		c0.06			0.02	c0.07	
v/s Ratio Perm				0.09					0.06			
v/c Ratio		0.23		0.15	0.13		0.61		0.10	0.18	0.52	
Uniform Delay, d1		13.3		7.9	7.9		55.7		12.3	49.6	52.0	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.82	0.81	
Incremental Delay, d2		0.3		0.0	0.1		5.6		0.2	0.3	1.6	
Delay (s)		13.6		8.0	8.0		61.3		12.5	41.1	44.0	
Level of Service		B		A	A		E		B	D	D	
Approach Delay (s)		13.6			8.0			33.0			43.2	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Existing AM
21: Pacific Highway & Kurtz St 4/5/2012

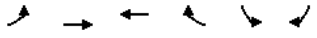


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	294	391	444	7	0	247
Peak Hour Factor	0.91	0.91	0.94	0.94	0.92	0.92
Hourly flow rate (vph)	323	430	472	7	0	268
Pedestrians		2				
Lane Width (ft)		12.0				
Walking Speed (ft/s)		4.0				
Percent Blockage		0				
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	480				1265	163
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	480				1265	163
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	65				100	68
cM capacity (veh/h)	918				104	851

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	323	143	143	143	189	189	102	268
Volume Left	323	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	7	268
cSH	918	1700	1700	1700	1700	1700	1700	851
Volume to Capacity	0.35	0.08	0.08	0.08	0.11	0.11	0.06	0.32
Queue Length 95th (ft)	40	0	0	0	0	0	0	34
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	0.0	0.0	11.2
Lane LOS	B							B
Approach Delay (s)	4.7				0.0			11.2
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	39.8%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
22: Hancock & Channel Way 4/5/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	31	125	67	26	4	14
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	38	154	84	32	5	19
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1157				
pX, platoon unblocked						
vC, conflicting volume	116				331	100
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	116				331	100
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	98
cM capacity (veh/h)	1472				647	956

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	38	154	116	24
Volume Left	38	0	0	5
Volume Right	0	0	32	19
cSH	1472	1700	1700	864
Volume to Capacity	0.03	0.09	0.07	0.03
Queue Length 95th (ft)	2	0	0	2
Control Delay (s)	7.5	0.0	0.0	9.3
Lane LOS	A			A
Approach Delay (s)	1.5		0.0	9.3
Approach LOS				A

Intersection Summary			
Average Delay	1.5		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
23: Hancock St & Camino Del Rio W 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frt		0.98					1.00	1.00			1.00	0.85
Flt Protected		1.00					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3475					1770	5078			5085	1583
Flt Permitted		1.00					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3475					1770	5078			5085	1583
Volume (vph)	10	184	23	0	0	0	75	1594	15	0	2215	286
Peak-hour factor, PHF	0.95	0.95	0.95	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	11	194	24	0	0	0	82	1752	16	0	2434	314
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	224	0	0	0	0	82	1768	0	0	2434	241
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		30.1					19.8	90.1			65.9	65.9
Effective Green, g (s)		31.0					20.2	91.0			66.8	66.8
Actuated g/C Ratio		0.24					0.16	0.70			0.51	0.51
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		829					275	3555			2613	813
v/s Ratio Prot		c0.06					0.05	c0.35			c0.48	
v/s Ratio Perm												0.15
v/c Ratio		0.27					0.30	0.50			0.93	0.30
Uniform Delay, d1		40.3					48.6	9.0			29.5	18.1
Progression Factor		0.90					0.89	0.52			1.00	1.00
Incremental Delay, d2		0.1					0.2	0.5			7.5	0.9
Delay (s)		36.4					43.3	5.1			37.0	19.1
Level of Service		D					D	A			D	B
Approach Delay (s)		36.4			0.0			6.8			34.9	
Approach LOS		D			A			A			C	

Intersection Summary				
HCM Average Control Delay	24.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.67			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
25: Old Town St & Hancock St 4/5/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	157	0	0	113	250	489
Peak Hour Factor	0.88	0.88	0.86	0.86	0.91	0.91
Hourly flow rate (vph)	178	0	0	131	275	537

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	178	131	275	537
Volume Left (vph)	178	0	275	0
Volume Right (vph)	0	131	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.0	4.8	5.7	5.2
Degree Utilization, x	0.30	0.18	0.44	0.78
Capacity (veh/h)	566	707	615	674
Control Delay (s)	11.5	8.9	12.0	23.3
Approach Delay (s)	11.5	8.9	19.4	
Approach LOS	B	A	C	

Intersection Summary			
Delay	16.9		
HCM Level of Service	C		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

Existing AM
26: Witherby St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	93	2	35	0	1	1	7	19	3	9	166	471
Peak Hour Factor	0.84	0.84	0.84	0.76	0.76	0.76	0.91	0.91	0.91	0.91	0.72	0.72
Hourly flow rate (vph)	111	2	42	0	1	1	8	21	3	10	231	654

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	155	3	32	240	654
Volume Left (vph)	111	0	8	10	0
Volume Right (vph)	42	1	3	0	654
Hadj (s)	0.02	-0.27	0.02	0.05	-0.67
Departure Headway (s)	5.6	5.6	5.3	5.1	4.3
Degree Utilization, x	0.24	0.00	0.05	0.34	0.79
Capacity (veh/h)	609	592	646	697	816
Control Delay (s)	10.4	8.6	8.5	9.4	20.2
Approach Delay (s)	10.4	8.6	8.5	17.3	
Approach LOS	B	A	A	C	

Intersection Summary				
Delay		16.0		
HCM Level of Service		C		
Intersection Capacity Utilization		45.8%	ICU Level of Service	A
Analysis Period (min)		15		

Existing AM
27: Washington St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3357	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3357	1583
Volume (vph)	0	256	95	448	396	0	0	0	0	158	188	233
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	278	103	487	430	0	0	0	0	172	204	253
RTOR Reduction (vph)	0	0	54	0	0	0	0	0	0	0	0	207
Lane Group Flow (vph)	0	278	49	487	430	0	0	0	0	121	255	46
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		41.8	41.8	18.4	64.6					15.6	15.6	15.6
Effective Green, g (s)		42.7	42.7	18.8	65.5					16.5	16.5	16.5
Actuated g/C Ratio		0.47	0.47	0.21	0.73					0.18	0.18	0.18
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1679	751	717	2576					295	615	290
v/s Ratio Prot		0.08		c0.14	c0.12							
v/s Ratio Perm			0.03							0.08	0.08	0.03
v/c Ratio		0.17	0.07	0.68	0.17					0.41	0.41	0.16
Uniform Delay, d1		13.5	12.8	32.8	3.8					32.5	32.5	30.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.2	2.0	0.1					0.3	0.2	0.1
Delay (s)		13.7	13.0	34.8	3.9					32.8	32.6	31.0
Level of Service		B	B	C	A					C	C	C
Approach Delay (s)		13.5			20.4			0.0			32.0	
Approach LOS		B			C			A			C	

Intersection Summary						
HCM Average Control Delay		22.8	HCM Level of Service		C	
HCM Volume to Capacity ratio		0.35				
Actuated Cycle Length (s)		90.0	Sum of lost time (s)		12.0	
Intersection Capacity Utilization		37.6%	ICU Level of Service		A	
Analysis Period (min)		15				
c Critical Lane Group						

Existing AM
28: Vine St & Hancock St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	10	28	0	0	0	0	0	0	1404	14
Peak Hour Factor	0.50	0.50	0.50	0.70	0.70	0.70	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	0	20	40	0	0	0	0	0	0	1478	15
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1485	1485	500	513	1493	0	1493			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1485	1485	500	513	1493	0	1493			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	96	91	100	100	100			100		
cM capacity (veh/h)	86	124	516	427	122	1084	446			1622		

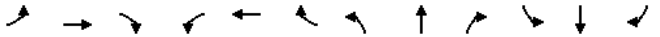
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	20	40	591	591	310
Volume Left	0	40	0	0	0
Volume Right	20	0	0	0	15
cSH	516	427	1700	1700	1700
Volume to Capacity	0.04	0.09	0.35	0.35	0.18
Queue Length 95th (ft)	3	8	0	0	0
Control Delay (s)	12.3	14.3	0.0	0.0	0.0
Lane LOS	B	B			
Approach Delay (s)	12.3	14.3	0.0		
Approach LOS	B	B			

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	45.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
29: Sassafras St & Kettner Bl 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3468					1770	4951	
Flt Permitted		1.00	1.00		0.81					0.95	1.00	
Satd. Flow (perm)		1863	1583		2850					1770	4951	
Volume (vph)	0	64	59	135	192	0	0	0	0	353	1036	221
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	70	64	147	209	0	0	0	0	384	1126	240
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	60	0
Lane Group Flow (vph)	0	70	40	0	356	0	0	0	0	384	1306	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		19.0	19.0		19.0					23.0	23.0	
Effective Green, g (s)		21.7	21.7		21.7					25.3	25.3	
Actuated g/C Ratio		0.39	0.39		0.39					0.46	0.46	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		735	625		1124					814	2277	
v/s Ratio Prot		0.04									c0.26	
v/s Ratio Perm			0.03		c0.12					0.22		
v/c Ratio		0.10	0.06		0.32					0.47	0.57	
Uniform Delay, d1		10.5	10.3		11.5					10.2	10.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.3	0.2		0.7					2.0	1.1	
Delay (s)		10.7	10.5		12.3					12.2	11.9	
Level of Service		B	B		B					B	B	
Approach Delay (s)		10.6			12.3			0.0			12.0	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM Average Control Delay	12.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	47.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3510		1770	3539						4657	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3510		1770	3539						4657	1362
Volume (vph)	0	637	37	29	178	0	0	0	0	510	287	250
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	692	40	32	193	0	0	0	0	554	312	272
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	728	0	32	193	0	0	0	0	0	866	90
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		37.3		3.0	43.0						25.0	25.0
Effective Green, g (s)		35.5		3.4	42.9						24.1	26.4
Actuated g/C Ratio		0.44		0.04	0.54						0.30	0.33
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1558		75	1898						1403	449
v/s Ratio Prot		c0.21		c0.02	0.05							
v/s Ratio Perm											0.19	0.07
v/c Ratio		0.47		0.43	0.10						1.09dl	0.20
Uniform Delay, d1		15.6		37.3	9.1						24.0	19.2
Progression Factor		1.00		1.33	0.85						1.00	1.00
Incremental Delay, d2		1.0		1.4	0.1						0.6	0.1
Delay (s)		16.6		50.9	7.9						24.6	19.3
Level of Service		B		D	A						C	B
Approach Delay (s)		16.6			14.0			0.0			23.3	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	20.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0	
Intersection Capacity Utilization	64.5%	ICU Level of Service	C	
Analysis Period (min)	15			

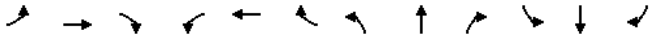
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Existing AM

32: Washington St & Pacific Highway NB Frontage Road

4/5/2012



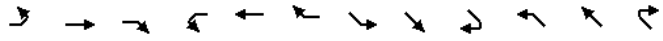
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.94			0.94	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97			0.97	
Satd. Flow (prot)	1770	3539			3539	1583	1610	3106			1702	
Flt Permitted	0.95	1.00			1.00	1.00	0.72	0.78			0.49	
Satd. Flow (perm)	1770	3539			3539	1583	1218	2502			856	
Volume (vph)	49	267	0	0	352	277	154	9	55	29	0	22
Peak-hour factor, PHF	0.95	0.92	0.95	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.83	0.83
Adj. Flow (vph)	52	290	0	0	383	301	164	10	60	32	0	27
RTOR Reduction (vph)	0	0	0	0	0	150	0	48	0	0	25	0
Lane Group Flow (vph)	52	290	0	0	383	151	82	104	0	0	34	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	2.3	48.7			41.5	41.5	14.0	14.0			6.3	
Effective Green, g (s)	2.8	48.7			41.9	41.9	16.4	16.4			6.3	
Actuated g/C Ratio	0.03	0.58			0.50	0.50	0.20	0.20			0.08	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	59	2067			1778	795	240	492			65	
v/s Ratio Prot	c0.03	0.08			c0.11							
v/s Ratio Perm						0.10	c0.07	0.04			c0.04	
v/c Ratio	0.88	0.14			0.22	0.19	0.34	0.21			0.52	
Uniform Delay, d1	40.1	7.9			11.6	11.4	28.9	28.1			37.1	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	76.9	0.0			0.3	0.5	0.3	0.1			3.5	
Delay (s)	117.0	7.9			11.9	11.9	29.2	28.2			40.6	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		24.5			11.9			28.5			40.6	
Approach LOS		C			B			C			D	

Intersection Summary				
HCM Average Control Delay	19.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	83.4	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

33: Washington St & Pacific Highway SB

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.97		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3411		1756	1863		1681	1701	1583			
Flt Permitted		1.00		0.60	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3411		1100	1863		1681	1701	1583			
Volume (vph)	0	186	47	131	397	0	130	15	224	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	202	51	142	432	0	141	16	243	0	0	0
RTOR Reduction (vph)	0	29	0	0	0	0	0	0	69	0	0	0
Lane Group Flow (vph)	0	224	0	142	432	0	76	81	174	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		9.2		22.6	22.6		16.5	16.5	25.7			
Effective Green, g (s)		9.2		22.9	22.9		18.7	18.7	27.9			
Actuated g/C Ratio		0.15		0.36	0.36		0.30	0.30	0.44			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		500		401	679		501	507	804			
v/s Ratio Prot		c0.07			c0.23				c0.06			
v/s Ratio Perm				0.13			0.05	0.05	0.05			
v/c Ratio		0.45		0.35	0.64		0.15	0.16	0.22			
Uniform Delay, d1		24.5		14.6	16.5		16.2	16.3	10.7			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.2		2.4	4.5		0.1	0.1	0.0			
Delay (s)		24.7		17.0	21.0		16.3	16.3	10.8			
Level of Service		C		B	C		B	B	B			
Approach Delay (s)		24.7			20.0			12.9			0.0	
Approach LOS		C			C			B			A	

Intersection Summary				
HCM Average Control Delay	18.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.45			
Actuated Cycle Length (s)	62.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	41.4%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
34: Sassafras St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.94		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1715		1766	1746		1770	4908		1770	5025	
Flt Permitted	0.65	1.00		0.74	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1207	1715		1368	1746		1770	4908		1770	5025	
Volume (vph)	2	16	15	276	93	66	27	231	70	26	258	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	17	16	300	101	72	29	251	76	28	280	21
RTOR Reduction (vph)	0	11	0	0	45	0	0	43	0	0	10	0
Lane Group Flow (vph)	2	22	0	300	128	0	29	284	0	28	291	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	17.2	17.2		16.5	16.5		1.6	22.0		1.3	21.5	
Effective Green, g (s)	17.2	17.2		16.9	16.9		1.6	23.4		1.8	23.6	
Actuated g/C Ratio	0.32	0.32		0.31	0.31		0.03	0.43		0.03	0.43	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	382	542		425	542		52	2111		59	2180	
v/s Ratio Prot		0.01			0.07		c0.02	0.06		0.02	c0.06	
v/s Ratio Perm	0.00			c0.22								
v/c Ratio	0.01	0.04		0.71	0.24		0.56	0.13		0.47	0.13	
Uniform Delay, d1	12.7	12.9		16.6	13.9		26.1	9.4		25.8	9.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		5.3	0.2		7.2	0.1		5.9	0.1	
Delay (s)	12.7	12.9		21.8	14.2		33.2	9.5		31.7	9.4	
Level of Service	B	B		C	B		C	A		C	A	
Approach Delay (s)		12.9			19.0			11.4			11.3	
Approach LOS		B			B			B			B	

Intersection Summary				
HCM Average Control Delay	14.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	54.4	Sum of lost time (s)	8.3	
Intersection Capacity Utilization	50.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
35: W Laurel St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3496		1770	3447		1770	4899		1770	5085	1544
Volume (vph)	208	401	36	49	319	60	73	222	64	209	148	40
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	226	436	39	53	347	65	79	241	70	227	161	43
RTOR Reduction (vph)	0	9	0	0	20	0	0	48	0	0	0	38
Lane Group Flow (vph)	226	466	0	53	392	0	79	263	0	227	161	5
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	8.7	20.9		6.6	18.2		6.2	23.7		8.7	26.1	8.7
Effective Green, g (s)	9.1	22.1		7.0	20.0		6.6	24.6		9.1	27.1	9.1
Actuated g/C Ratio	0.12	0.28		0.09	0.25		0.08	0.31		0.12	0.34	0.12
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	204	980		157	875		148	1529		204	1749	178
v/s Ratio Prot	c0.13	c0.13		0.03	0.11		0.04	c0.05		c0.13	0.03	
v/s Ratio Perm												0.00
v/c Ratio	1.11	0.48		0.34	0.45		0.53	0.17		1.11	0.09	0.03
Uniform Delay, d1	34.9	23.5		33.7	24.8		34.6	19.7		34.9	17.5	30.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	94.9	0.5		5.7	0.3		1.8	0.2		96.5	0.1	0.0
Delay (s)	129.7	24.0		39.5	25.1		36.5	19.9		131.4	17.6	30.9
Level of Service	F	C		D	C		D	B		F	B	C
Approach Delay (s)		58.1			26.7			23.3			78.9	
Approach LOS		E			C			C			E	

Intersection Summary				
HCM Average Control Delay	48.4	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	78.8	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	78.9%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
36: Rosecrans St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	3433	1863	1583	1770	3539	1583	1770	3539	1583
Volume (vph)	81	204	90	230	270	91	127	85	161	63	138	44
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	89	224	99	253	297	100	137	91	173	68	150	48
RTOR Reduction (vph)	0	0	47	0	0	54	0	0	132	0	0	38
Lane Group Flow (vph)	89	224	52	253	297	46	137	91	41	68	150	10
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	4.1	35.5	39.7	4.2	35.6	35.6	4.2	16.0	20.2	4.4	16.2	16.2
Effective Green, g (s)	4.5	36.4	41.0	4.6	36.5	36.5	4.6	15.4	18.5	4.8	15.7	15.7
Actuated g/C Ratio	0.06	0.46	0.52	0.06	0.46	0.46	0.06	0.20	0.24	0.06	0.20	0.20
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	101	1637	905	201	864	734	103	693	483	108	706	316
v/s Ratio Prot	0.05	0.06	0.00	c0.07	c0.16		c0.08	0.03	0.00	0.04	c0.04	
v/s Ratio Perm			0.03			0.03			0.02			0.01
v/c Ratio	0.88	0.14	0.06	1.26	0.34	0.06	1.33	0.13	0.08	0.63	0.21	0.03
Uniform Delay, d1	36.8	12.1	9.3	37.1	13.5	11.7	37.1	26.1	23.5	36.1	26.3	25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	52.4	0.2	0.0	150.2	1.1	0.2	200.7	0.1	0.0	8.0	0.3	0.1
Delay (s)	89.2	12.3	9.3	187.2	14.5	11.8	237.7	26.3	23.5	44.1	26.6	25.4
Level of Service	F	B	A	F	B	B	F	C	C	D	C	C
Approach Delay (s)		28.2			81.3			97.3			30.9	
Approach LOS		C			F			F			C	

Intersection Summary				
HCM Average Control Delay	64.6	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.39			
Actuated Cycle Length (s)	78.7	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	46.1%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
37: Old Town St & Moore St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.91			0.93			0.88	
Flt Protected		0.99			1.00			1.00			0.99	
Satd. Flow (prot)		1807			1699			1703			1638	
Flt Permitted		0.80			1.00			0.97			0.97	
Satd. Flow (perm)		1465			1698			1663			1594	
Volume (vph)	109	219	35	2	105	196	36	161	185	2	1	16
Peak-hour factor, PHF	0.88	0.88	0.88	0.84	0.84	0.84	0.87	0.87	0.87	0.68	0.68	0.68
Adj. Flow (vph)	124	249	40	2	125	233	41	185	213	3	1	24
RTOR Reduction (vph)	0	5	0	0	53	0	0	51	0	0	17	0
Lane Group Flow (vph)	0	408	0	0	307	0	0	388	0	0	11	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		38.3			38.3			17.9			17.9	
Effective Green, g (s)		39.2			39.2			18.8			18.8	
Actuated g/C Ratio		0.59			0.59			0.28			0.28	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		870			1009			474			454	
v/s Ratio Prot												
v/s Ratio Perm		c0.28			0.18			c0.23			0.01	
v/c Ratio		0.47			0.30			0.82			0.02	
Uniform Delay, d1		7.5			6.6			22.0			17.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.8			10.0			0.0	
Delay (s)		7.7			7.4			32.0			17.0	
Level of Service		A			A			C			B	
Approach Delay (s)		7.7			7.4			32.0			17.0	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	66.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	75.8%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
38: Taylor St & Congress St 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4974		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4974		1770	3539	1770	1583
Volume (vph)	376	52	124	517	74	84
Peak-hour factor, PHF	0.92	0.92	0.88	0.88	0.86	0.86
Adj. Flow (vph)	409	57	141	588	86	98
RTOR Reduction (vph)	21	0	0	0	0	77
Lane Group Flow (vph)	445	0	141	588	86	21
Confl. Peds. (#/hr)		7	7		30	15
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.8		5.9	40.1	12.5	12.5
Effective Green, g (s)	31.7		6.3	40.1	13.4	13.4
Actuated g/C Ratio	0.51		0.10	0.64	0.21	0.21
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2527		179	2274	380	340
v/s Ratio Prot	0.09		c0.08	c0.17	c0.05	0.01
v/s Ratio Perm						
v/c Ratio	0.18		0.79	0.26	0.23	0.06
Uniform Delay, d1	8.3		27.4	4.8	20.2	19.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2		18.7	0.3	0.1	0.0
Delay (s)	8.4		46.1	5.1	20.3	19.5
Level of Service	A		D	A	C	B
Approach Delay (s)	8.4			13.0	19.9	
Approach LOS	A			B	B	

Intersection Summary				
HCM Average Control Delay	12.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.30			
Actuated Cycle Length (s)	62.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	42.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

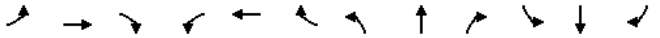
Existing AM
39: Twiggs St & Congress St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	4	0	1	22	0	25	5	122	7	20	91	1
Peak Hour Factor	0.63	0.63	0.63	0.73	0.73	0.73	0.88	0.88	0.88	0.72	0.72	0.72
Hourly flow rate (vph)	6	0	2	30	0	34	6	139	8	28	126	1

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	8	64	152	156
Volume Left (vph)	6	30	6	28
Volume Right (vph)	2	34	8	1
Hadj (s)	0.07	-0.19	0.01	0.06
Departure Headway (s)	4.7	4.4	4.2	4.3
Degree Utilization, x	0.01	0.08	0.18	0.19
Capacity (veh/h)	697	755	823	819
Control Delay (s)	7.8	7.8	8.2	8.3
Approach Delay (s)	7.8	7.8	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
HCM Level of Service	A			
Intersection Capacity Utilization	24.5%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
40: Harney St & Congress St 4/5/2012

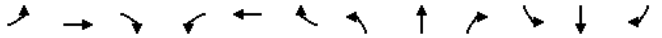


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	13	2	3	10	14	5	5	116	8	5	91	18
Peak Hour Factor	0.54	0.54	0.54	0.81	0.81	0.81	0.85	0.85	0.85	0.71	0.71	0.71
Hourly flow rate (vph)	24	4	6	12	17	6	6	136	9	7	128	25

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	33	36	152	161
Volume Left (vph)	24	12	6	7
Volume Right (vph)	6	6	9	25
Hadj (s)	0.08	0.00	0.00	-0.05
Departure Headway (s)	4.7	4.6	4.2	4.2
Degree Utilization, x	0.04	0.05	0.18	0.19
Capacity (veh/h)	704	717	824	842
Control Delay (s)	7.9	7.9	8.2	8.1
Approach Delay (s)	7.9	7.9	8.2	8.1
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.1		
HCM Level of Service		A		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
41: Ampudia St & Congress St 4/5/2012

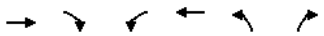


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	2	10	9	90	8	8	15	128	223	0	67	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	2	11	10	145	13	13	16	138	240	0	75	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								376				
pX, platoon unblocked												
vC, conflicting volume	273	497	78	271	258	152	80			386		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	273	497	78	271	258	152	80			386		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	98	99	78	98	99	99			100		
cM capacity (veh/h)	646	465	981	648	633	884	1516			1163		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	23	171	154	240	78
Volume Left	2	145	16	0	0
Volume Right	10	13	0	240	2
cSH	622	660	1516	1700	1163
Volume to Capacity	0.04	0.26	0.01	0.14	0.00
Queue Length 95th (ft)	3	26	1	0	0
Control Delay (s)	11.0	12.3	0.9	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.0	12.3	0.3		0.0
Approach LOS	B	B			

Intersection Summary				
Average Delay		3.8		
Intersection Capacity Utilization	33.6%	ICU Level of Service		A
Analysis Period (min)	15			

Existing AM
42: Twiggs St & San Diego Ave 4/5/2012

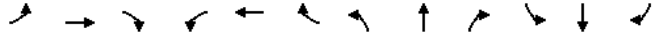


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	18	9	29	29	18	124
Peak Hour Factor	0.58	0.58	0.71	0.71	0.81	0.81
Hourly flow rate (vph)	31	16	41	41	22	153

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	47	82	175
Volume Left (vph)	0	41	22
Volume Right (vph)	16	0	153
Hadj (s)	-0.17	0.13	-0.46
Departure Headway (s)	4.2	4.4	3.7
Degree Utilization, x	0.05	0.10	0.18
Capacity (veh/h)	821	779	931
Control Delay (s)	7.4	7.9	7.5
Approach Delay (s)	7.4	7.9	7.5
Approach LOS	A	A	A

Intersection Summary			
Delay		7.6	
HCM Level of Service		A	
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
43: Harney St & San Diego Ave 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	5	7	3	37	18	12	3	125	83	3	27	8
Peak Hour Factor	0.69	0.69	0.69	0.80	0.80	0.80	0.89	0.89	0.89	0.73	0.73	0.73
Hourly flow rate (vph)	7	10	4	46	22	15	3	140	93	4	37	11

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	22	84	237	52
Volume Left (vph)	7	46	3	4
Volume Right (vph)	4	15	93	11
Hadj (s)	-0.02	0.04	-0.20	-0.08
Departure Headway (s)	4.6	4.6	4.0	4.3
Degree Utilization, x	0.03	0.11	0.26	0.06
Capacity (veh/h)	718	731	871	792
Control Delay (s)	7.7	8.1	8.4	7.6
Approach Delay (s)	7.7	8.1	8.4	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)		15	

Existing AM
44: San Diego Ave & Old Town St 4/5/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.91			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.97			1.00	
Satd. Flow (prot)	1764	1850		1763	1668			1763			1819	
Flt Permitted	0.68	1.00		0.63	1.00			0.79			1.00	
Satd. Flow (perm)	1265	1850		1164	1668			1438			1819	
Volume (vph)	218	159	6	9	40	63	254	87	65	0	22	4
Peak-hour factor, PHF	0.79	0.79	0.79	0.87	0.87	0.87	0.78	0.78	0.78	0.81	0.81	0.81
Adj. Flow (vph)	276	201	8	10	46	72	326	112	83	0	27	5
RTOR Reduction (vph)	0	2	0	0	41	0	0	14	0	0	3	0
Lane Group Flow (vph)	276	207	0	10	78	0	0	507	0	0	29	0
Confl. Peds. (#/hr)	3		4	4		3	5					5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Effective Green, g (s)	21.7	21.7		21.7	21.7			19.9			19.9	
Actuated g/C Ratio	0.44	0.44		0.44	0.44			0.40			0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	4.4	4.4		2.1	2.1			2.0			2.0	
Lane Grp Cap (vph)	553	809		509	730			577			730	
v/s Ratio Prot		0.11			0.05						0.02	
v/s Ratio Perm	c0.22			0.01				c0.35				
v/c Ratio	0.50	0.26		0.02	0.11			0.88			0.04	
Uniform Delay, d1	10.0	8.8		7.9	8.2			13.7			9.0	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	3.2	0.8		0.1	0.3			13.8			0.0	
Delay (s)	13.2	9.6		8.0	8.5			27.6			9.0	
Level of Service	B	A		A	A			C			A	
Approach Delay (s)		11.7			8.5			27.6			9.0	
Approach LOS		B			A			C			A	

Intersection Summary				
HCM Average Control Delay	18.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.68			
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	54.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

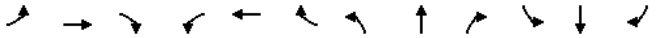
Existing AM
45: Taylor St & 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.90			0.88	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1769	3499		1770	3467			1623			1632	
Flt Permitted	0.39	1.00		0.38	1.00			0.92			0.94	
Satd. Flow (perm)	728	3499		716	3467			1511			1535	
Volume (vph)	33	395	32	98	563	75	62	4	229	2	0	16
Peak-hour factor, PHF	0.78	0.77	0.77	0.93	0.93	0.93	0.82	0.82	0.82	0.75	0.75	0.75
Adj. Flow (vph)	42	513	42	105	605	81	76	5	279	3	0	21
RTOR Reduction (vph)	0	6	0	0	11	0	0	222	0	0	17	0
Lane Group Flow (vph)	42	549	0	105	675	0	0	138	0	0	7	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	29.7	27.9		35.2	30.7			10.9			10.9	
Effective Green, g (s)	31.1	28.9		36.5	31.6			11.8			11.8	
Actuated g/C Ratio	0.54	0.50		0.63	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	433	1756		543	1902			310			314	
v/s Ratio Prot	0.00	0.16		c0.02	c0.19							
v/s Ratio Perm	0.05			0.11				c0.09			0.00	
v/c Ratio	0.10	0.31		0.19	0.35			0.45			0.02	
Uniform Delay, d1	6.2	8.5		4.3	7.3			20.0			18.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.5		0.1	0.5			0.4			0.0	
Delay (s)	6.3	8.9		4.4	7.8			20.4			18.3	
Level of Service	A	A		A	A			C			B	
Approach Delay (s)		8.8			7.3			20.4			18.3	
Approach LOS		A			A			C			B	

Intersection Summary				
HCM Average Control Delay	10.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	58.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
46: Twiggs St & Juan St 4/5/2012

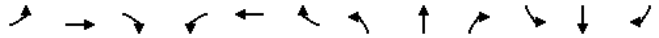


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	54	5	6	2	3	1	5	130	5	30	92	54
Peak Hour Factor	0.60	0.60	0.60	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77
Hourly flow rate (vph)	90	8	10	3	4	1	7	171	7	39	119	70

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	8	184	229
Volume Left (vph)	90	3	7	39
Volume Right (vph)	10	1	7	70
Hadj (s)	0.14	0.00	0.02	-0.12
Departure Headway (s)	5.0	5.0	4.5	4.3
Degree Utilization, x	0.15	0.01	0.23	0.27
Capacity (veh/h)	665	645	774	803
Control Delay (s)	8.9	8.0	8.8	8.9
Approach Delay (s)	8.9	8.0	8.8	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.8		
HCM Level of Service		A		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
47: Harney St & Juan St 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	26	9	26	0	0	5	41	109	0	13	54	33
Peak Hour Factor	0.93	0.93	0.93	0.42	0.42	0.42	0.71	0.71	0.71	0.77	0.77	0.77
Hourly flow rate (vph)	28	10	28	0	0	12	58	154	0	17	70	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	12	211	130
Volume Left (vph)	28	0	58	17
Volume Right (vph)	28	12	0	43
Hadj (s)	-0.14	-0.57	0.09	-0.14
Departure Headway (s)	4.5	4.2	4.3	4.2
Degree Utilization, x	0.08	0.01	0.25	0.15
Capacity (veh/h)	730	780	814	829
Control Delay (s)	7.9	7.2	8.8	7.9
Approach Delay (s)	7.9	7.2	8.8	7.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.3		
HCM Level of Service		A		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Existing AM
48: Taylor St & Morena Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95			0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00			1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Frt	1.00	1.00			0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3528			3397				1590	1681	1698	1583
Flt Permitted	0.95	1.00			1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3528			3397				1590	1681	1698	1583
Volume (vph)	368	253	5	0	522	192	0	0	4	59	5	214
Peak-hour factor, PHF	0.80	0.80	0.80	0.90	0.90	0.90	0.50	0.50	0.50	0.74	0.74	0.74
Adj. Flow (vph)	460	316	6	0	580	213	0	0	8	80	7	289
RTOR Reduction (vph)	0	1	0	0	42	0	0	0	0	0	0	190
Lane Group Flow (vph)	460	321	0	0	751	0	0	0	8	42	45	99
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	7.7	35.5			23.4				57.6	11.9	11.9	11.9
Effective Green, g (s)	8.1	36.4			24.3				57.6	13.2	13.2	13.2
Actuated g/C Ratio	0.14	0.63			0.42				1.00	0.23	0.23	0.23
Clearance Time (s)	4.4	4.9			4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3			3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	483	2230			1433				1590	385	389	363
v/s Ratio Prot	c0.13	0.09			c0.22					0.02	0.03	
v/s Ratio Perm									0.01			c0.06
v/c Ratio	0.95	0.14			0.52				0.01	0.11	0.12	0.27
Uniform Delay, d1	24.6	4.3			12.4				0.0	17.6	17.6	18.2
Progression Factor	1.00	1.00			1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	28.9	0.1			1.4				0.0	0.2	0.2	0.7
Delay (s)	53.4	4.4			13.7				0.0	17.8	17.8	18.9
Level of Service	D	A			B				A	B	B	B
Approach Delay (s)		33.3			13.7			0.0			18.7	
Approach LOS		C			B			A			B	

Intersection Summary				
HCM Average Control Delay	22.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
49: Rosecrans St. & Hugo St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.99		1.00	1.00		1.00	0.89			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.97	
Satd. Flow (prot)	1678	3382		1671	3434		1633	1515			1675	
Flt Permitted	0.95	1.00		0.95	1.00		0.68	1.00			0.80	
Satd. Flow (perm)	1678	3382		1671	3434		1175	1515			1381	
Volume (vph)	6	679	66	24	1355	12	217	20	58	56	32	8
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	6	730	71	26	1457	13	233	22	62	60	34	9
RTOR Reduction (vph)	0	6	0	0	0	0	0	47	0	0	3	0
Lane Group Flow (vph)	6	795	0	26	1470	0	233	37	0	0	100	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	1.2	69.8		4.3	72.9		27.7	27.7			27.7	
Effective Green, g (s)	1.6	70.7		4.7	73.8		28.6	28.6			28.6	
Actuated g/C Ratio	0.01	0.61		0.04	0.64		0.25	0.25			0.25	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	23	2061		68	2185		290	374			340	
v/s Ratio Prot	0.00	0.24		c0.02	c0.43			0.02				
v/s Ratio Perm							c0.20				0.07	
v/c Ratio	0.26	0.39		0.38	0.67		0.80	0.10			0.29	
Uniform Delay, d1	56.6	11.6		54.2	13.4		41.1	33.8			35.5	
Progression Factor	1.00	1.00		1.38	0.37		1.00	1.00			1.00	
Incremental Delay, d2	2.2	0.5		0.7	0.9		14.0	0.0			0.2	
Delay (s)	58.8	12.1		75.7	5.9		55.1	33.8			35.7	
Level of Service	E	B		E	A		E	C			D	
Approach Delay (s)		12.5			7.1			49.4			35.7	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	14.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.71			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
50: Rosecrans St. & Lowell St 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3514		1770	3522		1770	3539	1545	1770	3276	
Volume (vph)	140	612	23	110	1192	29	33	103	80	233	341	215
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	147	644	24	116	1255	31	35	108	84	245	359	226
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	56	0	87	0
Lane Group Flow (vph)	147	666	0	116	1285	0	35	108	28	245	498	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	11.2	44.5		11.6	44.4		3.7	21.4	33.0	19.8	37.6	
Effective Green, g (s)	11.6	45.4		12.0	45.8		4.1	22.4	34.4	20.2	38.5	
Actuated g/C Ratio	0.10	0.39		0.10	0.39		0.04	0.19	0.30	0.17	0.33	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	177	1375		183	1391		63	683	458	308	1087	
v/s Ratio Prot	c0.08	0.19		0.07	c0.36		c0.02	0.03	0.01	c0.14	c0.15	
v/s Ratio Perm									0.01			
v/c Ratio	0.83	0.48		0.63	0.92		0.56	0.16	0.06	0.80	0.46	
Uniform Delay, d1	51.2	26.5		49.9	33.4		55.1	39.0	29.2	45.9	30.5	
Progression Factor	0.87	1.52		1.23	0.82		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	24.8	1.2		4.5	10.4		5.9	0.1	0.0	12.4	0.2	
Delay (s)	69.6	41.3		66.1	37.7		61.0	39.1	29.2	58.3	30.8	
Level of Service	E	D		E	D		E	D	C	E	C	
Approach Delay (s)		46.4			40.0			38.8			38.9	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	41.2	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	79.1%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
51: Rosecrans St. & Laning Rd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		0.98	
Flt Protected		1.00		0.95	1.00			0.96	1.00		0.96	
Satd. Flow (prot)		5021		1770	3539			1778	1552		1747	
Flt Permitted		1.00		0.95	1.00			0.74	1.00		0.73	
Satd. Flow (perm)		5021		1770	3539			1377	1552		1329	
Volume (vph)	0	947	70	303	1318	1	54	4	132	55	1	8
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1029	76	329	1433	1	59	4	143	60	1	9
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	118	0	5	0
Lane Group Flow (vph)	0	1100	0	329	1434	0	0	63	25	0	65	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		57.5		24.8	86.7			19.1	19.1		19.1	
Effective Green, g (s)		58.8		25.2	88.0			20.0	20.0		20.0	
Actuated g/C Ratio		0.51		0.22	0.76			0.17	0.17		0.17	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		2545		385	2685			237	268		229	
v/s Ratio Prot		0.22		c0.19	c0.41							
v/s Ratio Perm								0.05	0.02		c0.05	
v/c Ratio		0.43		0.85	0.53			0.27	0.09		0.28	
Uniform Delay, d1		18.1		43.6	5.7			41.6	40.4		41.8	
Progression Factor		0.40		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		16.1	0.8			0.2	0.1		0.2	
Delay (s)		7.7		59.7	6.4			41.9	40.4		42.0	
Level of Service		A		E	A			D	D		D	
Approach Delay (s)		7.7			16.4			40.9			42.0	
Approach LOS		A			B			D			D	

Intersection Summary				
HCM Average Control Delay	15.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	60.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM
52: Hawthorne St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.97	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5058						4892	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5058						4892	
Volume (vph)	0	0	0	168	1696	0	0	0	0	0	218	62
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	179	1804	0	0	0	0	0	303	86
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	0	0	0	1974	0	0	0	0	0	380	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3546						1027	
v/s Ratio Prot											c0.08	
v/s Ratio Perm					0.39							
v/c Ratio					0.56						0.37	
Uniform Delay, d1					6.6						30.4	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.6						0.1	
Delay (s)					7.2						30.5	
Level of Service					A						C	
Approach Delay (s)		0.0			7.2			0.0			30.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	11.1	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	57.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

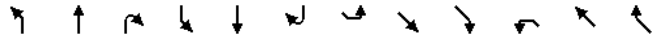
Existing AM
53: Grape St & Kettner Blvd 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5055									4985	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5055									4985	
Volume (vph)	0	833	30	0	0	0	0	0	0	110	276	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	896	32	0	0	0	0	0	0	124	310	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	926	0	0	0	0	0	0	0	0	364	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		62.0									19.0	
Effective Green, g (s)		62.0									20.0	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3482									1108	
v/s Ratio Prot		c0.18										
v/s Ratio Perm											0.07	
v/c Ratio		0.27									0.33	
Uniform Delay, d1		5.3									29.4	
Progression Factor		0.54									0.57	
Incremental Delay, d2		0.2									0.2	
Delay (s)		3.1									16.8	
Level of Service		A									B	
Approach Delay (s)		3.1			0.0			0.0			16.8	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	7.4	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.28			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
54: Seaworld Dr & E Mission Bay Dr 4/5/2012

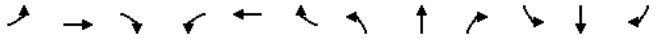


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1583	3433	1863	1562	1770	1863	1583
Volume (vph)	100	926	35	111	691	116	59	70	189	37	32	77
Peak-hour factor, PHF	0.93	0.93	0.93	0.85	0.85	0.85	0.92	0.92	0.92	0.85	0.85	0.85
Adj. Flow (vph)	108	996	38	131	813	136	64	76	205	44	38	91
RTOR Reduction (vph)	0	0	37	0	0	130	0	0	170	0	0	77
Lane Group Flow (vph)	108	996	1	131	813	6	64	76	35	44	38	14
Confl. Peds. (#/hr)	2								2			
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	4.0	29.9	2.3	6.9	32.9	3.2	3.2	10.6	10.6	2.3	8.8	8.8
Effective Green, g (s)	4.0	31.4	2.3	6.9	34.3	3.2	3.2	11.5	11.5	2.3	10.6	10.6
Actuated g/C Ratio	0.06	0.46	0.03	0.10	0.50	0.05	0.05	0.17	0.17	0.03	0.16	0.16
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	202	1632	53	179	1782	74	161	315	264	60	290	246
v/s Ratio Prot	0.03	c0.28		c0.07	c0.23		0.02	c0.04		c0.02	0.02	
v/s Ratio Perm			0.00			0.00			0.02			0.01
v/c Ratio	0.53	0.61	0.02	0.73	0.46	0.09	0.40	0.24	0.13	0.73	0.13	0.06
Uniform Delay, d1	31.1	13.8	31.8	29.7	10.9	31.1	31.5	24.5	24.1	32.6	24.8	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	1.7	0.1	12.4	0.8	0.2	0.6	0.4	0.2	32.5	0.1	0.0
Delay (s)	32.5	15.5	31.9	42.1	11.7	31.2	32.1	24.9	24.3	65.1	24.9	24.5
Level of Service	C	B	C	D	B	C	C	C	C	E	C	C
Approach Delay (s)		17.6			17.9			25.9			34.9	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	19.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	68.1	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
55: Hawthorne St & Pacific Highway 4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	5.0
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.98
Flpb, ped/bikes				0.94	1.00		1.00	1.00			1.00	1.00
Frt				1.00	0.99		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1665	3509		1770	5085			5085	1545
Flt Permitted				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)				1665	3509		1770	5085			5085	1545
Volume (vph)	0	0	0	362	1326	70	64	158	0	0	139	19
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.93	0.93	0.93	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	381	1396	74	69	170	0	0	162	22
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	0	0	381	1466	0	69	170	0	0	162	3
Confl. Peds. (#/hr)				68		10	8					8
Turn Type				Perm			Prot					Perm
Protected Phases					6		3	8			4	
Permitted Phases				6								4
Actuated Green, G (s)				35.1	35.1		29.3	45.1			11.4	11.4
Effective Green, g (s)				35.6	34.2		29.3	45.1			11.3	11.3
Actuated g/C Ratio				0.40	0.38		0.33	0.50			0.13	0.13
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	4.9
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	3.3
Lane Grp Cap (vph)				659	1333		576	2548			638	194
v/s Ratio Prot					c0.42		c0.04	0.03			c0.03	
v/s Ratio Perm				0.23								0.00
v/c Ratio				0.58	1.10		0.12	0.07			0.25	0.01
Uniform Delay, d1				21.3	27.9		21.3	11.6			35.5	34.5
Progression Factor				0.77	0.82		0.78	0.85			1.00	1.00
Incremental Delay, d2				3.1	55.1		0.4	0.0			0.2	0.0
Delay (s)				19.6	78.1		17.0	9.9			35.8	34.5
Level of Service				B	E		B	A			D	C
Approach Delay (s)		0.0			66.0			12.0			35.6	
Approach LOS		A			E			B			D	

Intersection Summary				
HCM Average Control Delay	57.9	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	15.2	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
56: Grape St & Pacific Highway 4/5/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.92		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5069	1549					4632		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5069	1549					4632		1770	5085	
Volume (vph)	39	609	25	0	0	0	0	209	213	41	460	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.25	0.25	0.25	0.93	0.93	0.93	0.75	0.75	0.75
Adj. Flow (vph)	44	684	28	0	0	0	0	225	229	55	613	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	160	0	0	0	0
Lane Group Flow (vph)	0	728	12	0	0	0	0	294	0	55	613	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		37.8	37.8					27.0		11.0	42.4	
Effective Green, g (s)		38.7	38.7					27.0		11.4	42.4	
Actuated g/C Ratio		0.43	0.43					0.30		0.13	0.47	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2180	666					1390		224	2396	
v/s Ratio Prot								0.06		0.03	c0.12	
v/s Ratio Perm		0.14	0.01									
v/c Ratio		0.33	0.02					0.21		0.25	0.26	
Uniform Delay, d1		17.1	14.7					23.5		35.4	14.3	
Progression Factor		1.00	1.00					1.00		0.89	0.81	
Incremental Delay, d2		0.4	0.0					0.3		2.5	0.2	
Delay (s)		17.5	14.8					23.9		34.2	11.9	
Level of Service		B	B					C		C	B	
Approach Delay (s)		17.4			0.0			23.9			13.7	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	17.7	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.29			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.9	
Intersection Capacity Utilization	66.3%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM
57: Seaworld Dr & Friars Rd 4/5/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.97	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3360	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3360	1421
Volume (vph)	963	244	138	779	197	98
Peak-hour factor, PHF	0.92	0.92	0.96	0.96	0.85	0.50
Adj. Flow (vph)	1047	265	144	811	232	196
RTOR Reduction (vph)	0	28	0	0	36	109
Lane Group Flow (vph)	1047	237	144	811	255	28
Confl. Peds. (#/hr)						2
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	32.5	43.9	5.1	42.8	11.4	11.4
Effective Green, g (s)	34.7	48.3	5.0	44.2	13.6	13.6
Actuated g/C Ratio	0.53	0.73	0.08	0.67	0.21	0.21
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1866	1258	261	2377	694	294
v/s Ratio Prot	c0.30	0.04	c0.04	0.23	c0.08	
v/s Ratio Perm		0.11				0.02
v/c Ratio	0.56	0.19	0.55	0.34	0.37	0.10
Uniform Delay, d1	10.4	2.7	29.3	4.6	22.4	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.0	1.4	0.4	0.1	0.1
Delay (s)	11.7	2.7	30.8	5.0	22.5	21.2
Level of Service	B	A	C	A	C	C
Approach Delay (s)	9.9			8.9	22.1	
Approach LOS	A			A	C	

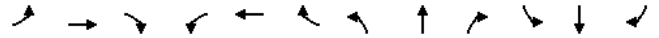
Intersection Summary				
HCM Average Control Delay	11.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	65.8	Sum of lost time (s)	12.5	
Intersection Capacity Utilization	48.7%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Existing AM

58: I-5 SB On/I-5 SB Off & Seaworld Dr

12/07/2017



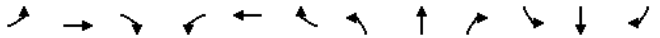
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Future Volume (vph)	0	1002	60	315	291	0	0	0	0	300	0	627
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.25	0.25	0.25	0.88	0.88	0.88
Adj. Flow (vph)	0	1139	68	358	331	0	0	0	0	341	0	712
RTOR Reduction (vph)	0	0	39	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1139	29	358	331	0	0	0	0	341	0	713
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		23.6	23.6	7.7	35.5					12.8		57.9
Effective Green, g (s)		24.6	24.6	7.9	36.5					13.4		57.9
Actuated g/C Ratio		0.42	0.42	0.14	0.63					0.23		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1503	663	468	2230					409		1583
v/s Ratio Prot		c0.32		c0.10	0.09					c0.19		
v/s Ratio Perm			0.02									0.45
v/c Ratio		0.76	0.04	0.76	0.15					0.83		0.45
Uniform Delay, d1		14.1	9.8	24.1	4.4					21.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.6	0.1	6.6	0.1					13.0		0.9
Delay (s)		17.7	9.9	30.7	4.5					34.2		0.9
Level of Service		B	A	C	A					C		A
Approach Delay (s)		17.3			18.1			0.0			11.7	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Existing AM

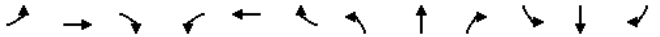
59: Seaworld Dr & I-5 NB On

4/5/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.92			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3266			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3266			1770	1583			
Volume (vph)	797	505	0	0	438	464	168	0	276	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.92	0.92	0.92	0.88	0.88	0.88
Adj. Flow (vph)	866	549	0	0	461	488	183	0	300	0	0	0
RTOR Reduction (vph)	0	0	0	0	162	0	0	0	268	0	0	0
Lane Group Flow (vph)	866	549	0	0	787	0	0	183	32	0	0	0
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	15.5	37.8			18.1			5.0	5.0			
Effective Green, g (s)	15.7	38.3			18.6			5.6	5.6			
Actuated g/C Ratio	0.30	0.72			0.35			0.11	0.11			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1019	2562			1148			187	168			
v/s Ratio Prot	c0.25	0.16			c0.24			c0.10				
v/s Ratio Perm									0.02			
v/c Ratio	0.85	0.21			0.69			0.98	0.19			
Uniform Delay, d1	17.5	2.4			14.7			23.6	21.6			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	6.5	0.2			3.3			58.7	0.2			
Delay (s)	24.0	2.6			18.0			82.3	21.8			
Level of Service	C	A			B			F	C			
Approach Delay (s)		15.7			18.0			44.7			0.0	
Approach LOS		B			B			D			A	

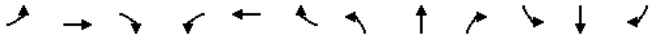
Intersection Summary				
HCM Average Control Delay	21.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.79			
Actuated Cycle Length (s)	52.9	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	69.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	3433	1863			3302			3510	1583			
Flt Permitted	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	3433	1863			3302			3510	1583			
Volume (vph)	359	788	0	0	186	150	21	106	20	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	390	857	0	0	202	163	23	115	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	73	0	0	0	20	0	0	0
Lane Group Flow (vph)	390	857	0	0	292	0	0	138	2	0	0	0
Turn Type	Prot						Perm		Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	15.7	64.1			44.0			6.1	6.1			
Effective Green, g (s)	15.7	64.1			44.0			6.1	6.1			
Actuated g/C Ratio	0.20	0.80			0.55			0.08	0.08			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	674	1493			1816			268	121			
v/s Ratio Prot	0.11	c0.46			0.09							
v/s Ratio Perm								0.04	0.00			
v/c Ratio	0.58	0.57			0.16			0.51	0.01			
Uniform Delay, d1	29.2	2.9			8.9			35.5	34.2			
Progression Factor	1.04	1.61			1.00			1.00	1.00			
Incremental Delay, d2	1.1	1.4			0.2			0.7	0.0			
Delay (s)	31.5	6.2			9.1			36.2	34.2			
Level of Service	C	A			A			D	C			
Approach Delay (s)		14.1			9.1			35.9			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	9.8
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Exisitng PM
1: Rosecrans St. & Lytton St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1504	3433	1863	1551	1770	1850	
Volume (vph)	15	1495	429	102	1142	346	414	329	144	279	238	11
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	16	1557	447	106	1190	360	431	343	150	291	248	11
RTOR Reduction (vph)	0	0	173	0	0	123	0	0	93	0	1	0
Lane Group Flow (vph)	16	1557	274	106	1190	237	431	343	57	291	258	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	3.4	71.6	71.6	8.2	76.3	76.3	23.7	33.3	33.3	29.4	37.2	
Effective Green, g (s)	3.8	72.9	72.9	8.6	77.7	77.7	24.1	34.1	34.1	28.4	38.4	
Actuated g/C Ratio	0.02	0.46	0.46	0.05	0.49	0.49	0.15	0.21	0.21	0.18	0.24	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	42	2317	711	185	1719	730	517	397	331	314	444	
v/s Ratio Prot	0.01	0.31		c0.03	c0.34		0.13	c0.18		c0.16	0.14	
v/s Ratio Perm			0.18			0.16			0.04			
v/c Ratio	0.38	0.67	0.39	0.57	0.69	0.32	0.83	0.86	0.17	0.93	0.58	
Uniform Delay, d1	76.9	34.2	28.8	73.9	31.9	25.1	66.0	60.7	51.4	64.8	53.7	
Progression Factor	1.00	1.00	1.00	0.94	0.77	1.09	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	1.6	1.6	1.7	1.5	0.7	10.6	17.9	0.3	31.7	1.3	
Delay (s)	79.0	35.7	30.3	70.9	26.1	28.1	76.6	78.6	51.7	96.4	55.0	
Level of Service	E	D	C	E	C	C	E	E	D	F	D	
Approach Delay (s)		34.9			29.4			73.3			76.9	
Approach LOS		C			C			E			E	

Intersection Summary				
HCM Average Control Delay	44.5	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	83.0%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
2: I-8 WB Off Ramp & W Mission Bay Dr 4/9/2012



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			1.00
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			1863
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			1863
Volume (vph)	689	1585	603	0	0	573
Peak-hour factor, PHF	0.91	0.91	0.92	0.92	0.92	0.92
Adj. Flow (vph)	757	1742	655	0	0	623
RTOR Reduction (vph)	0	68	0	0	0	0
Lane Group Flow (vph)	757	1674	655	0	0	623
Turn Type		Perm				
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	65.0	65.0	40.5			40.5
Effective Green, g (s)	65.0	65.0	40.5			40.5
Actuated g/C Ratio	0.54	0.54	0.34			0.34
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1867	1516	1199			631
v/s Ratio Prot	0.22		0.19			c0.33
v/s Ratio Perm		c0.60				
v/c Ratio	0.41	1.10	0.55			0.99
Uniform Delay, d1	15.9	27.2	32.0			39.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	57.1	0.3			32.2
Delay (s)	16.0	84.4	32.3			71.5
Level of Service	B	F	C			E
Approach Delay (s)	63.6		32.3			71.5
Approach LOS	E		C			E

Intersection Summary				
HCM Average Control Delay	59.5	HCM Level of Service	E	
HCM Volume to Capacity ratio	1.06			
Actuated Cycle Length (s)	119.5	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	83.8%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
3: Channel Way & W Mission Bay Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	136	1380	25	0	1200
Peak Hour Factor	0.65	0.87	0.98	0.98	0.90	0.90
Hourly flow rate (vph)	0	156	1408	26	0	1333
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.98	0.98			0.98	
vC, conflicting volume	1865	485			1434	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1847	444			1408	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	72			100	
cM capacity (veh/h)	65	551			473	

Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	156	563	563	307	444	444	444
Volume Left	0	0	0	0	0	0	0
Volume Right	156	0	0	26	0	0	0
cSH	551	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.28	0.33	0.33	0.18	0.26	0.26	0.26
Queue Length 95th (ft)	29	0	0	0	0	0	0
Control Delay (s)	14.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	14.1	0.0			0.0		
Approach LOS	B						

Intersection Summary				
Average Delay	0.8			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Exisitng PM
4: Midway Dr & W Point Loma Blvd 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	0.91	0.91	1.00	0.95	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1583	1610	3384	1562	1681	1745	1573	1770	3539	1562
Volume (vph)	359	445	30	312	594	294	350	206	287	39	503	610
Peak-hour factor, PHF	0.88	0.88	0.88	0.90	0.90	0.90	0.99	0.99	0.99	0.84	0.84	0.84
Adj. Flow (vph)	408	506	34	347	660	327	354	208	290	46	599	726
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	159	0	0	0
Lane Group Flow (vph)	408	506	34	324	683	327	274	288	131	46	599	726
Confl. Peds. (#/hr)	6					6	6		3	3		6
Turn Type	Split		Free	Split		Free	Split		pm+ov	Split		Free
Protected Phases	3	3		4	4		2	2	3	1	1	
Permitted Phases			Free			Free			2			Free
Actuated Green, G (s)	39.9	39.9	150.0	34.0	34.0	150.0	25.9	25.9	65.8	30.5	30.5	150.0
Effective Green, g (s)	40.8	40.8	150.0	34.9	34.9	150.0	26.8	26.8	67.6	31.5	31.5	150.0
Actuated g/C Ratio	0.27	0.27	1.00	0.23	0.23	1.00	0.18	0.18	0.45	0.21	0.21	1.00
Clearance Time (s)	4.9	4.9		4.9	4.9		4.9	4.9	4.9	5.0	5.0	
Vehicle Extension (s)	3.1	3.1		5.5	5.5		0.2	0.2	3.1	8.0	8.0	
Lane Grp Cap (vph)	481	963	1583	375	787	1562	300	312	751	372	743	1562
v/s Ratio Prot	c0.23	0.14		0.20	c0.20		0.16	c0.17	0.05	0.03	c0.17	
v/s Ratio Perm			0.02			0.21			0.04			0.46
v/c Ratio	0.85	0.53	0.02	0.86	0.87	0.21	0.91	0.92	0.17	0.12	0.81	0.46
Uniform Delay, d1	51.7	46.4	0.0	55.3	55.3	0.0	60.5	60.6	24.6	48.1	56.3	0.0
Progression Factor	0.90	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.6	1.9	0.0	20.0	11.0	0.3	30.0	31.2	0.0	0.6	8.3	1.0
Delay (s)	61.9	41.5	0.0	75.3	66.4	0.3	90.4	91.8	24.6	48.7	64.6	1.0
Level of Service	E	D	A	E	E	A	F	F	C	D	E	A
Approach Delay (s)		48.8			52.4			68.5			30.4	
Approach LOS		D			D			E			C	

Intersection Summary				
HCM Average Control Delay	48.0	HCM Level of Service		D
HCM Volume to Capacity ratio	0.86			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)		16.0
Intersection Capacity Utilization	84.6%	ICU Level of Service		E
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
5: Kemper St & Midway Dr 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1749	1559	1770	1863	1544	3433	3483		1770	3539	1526
Volume (vph)	186	122	157	53	141	74	225	621	59	122	500	140
Peak-hour factor, PHF	0.89	0.89	0.89	0.93	0.93	0.93	0.91	0.91	0.91	0.90	0.90	0.90
Adj. Flow (vph)	209	137	176	57	152	80	247	682	65	136	556	156
RTOR Reduction (vph)	0	0	126	0	0	70	0	3	0	0	0	81
Lane Group Flow (vph)	168	178	50	57	152	10	247	744	0	136	556	75
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split		pm+ov	Split		Perm	Prot			Prot		Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	41.7	18.4	18.4	18.4	17.8	65.8		22.8	70.8	70.8
Effective Green, g (s)	24.8	24.8	43.0	19.3	19.3	19.3	18.2	66.7		23.2	71.7	71.7
Actuated g/C Ratio	0.17	0.17	0.29	0.13	0.13	0.13	0.12	0.44		0.15	0.48	0.48
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	278	289	488	228	240	199	417	1549		274	1692	729
v/s Ratio Prot	0.10	c0.10	0.01	0.03	c0.08		c0.07	c0.21		c0.08	0.16	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.60	0.62	0.10	0.25	0.63	0.05	0.59	0.48		0.50	0.33	0.10
Uniform Delay, d1	58.1	58.2	39.3	58.8	62.0	57.3	62.4	29.4		58.1	24.2	21.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.81		1.13	0.56	0.79
Incremental Delay, d2	3.7	3.9	0.0	0.6	5.4	0.1	1.3	0.9		0.4	0.4	0.2
Delay (s)	61.7	62.0	39.4	59.4	67.4	57.4	59.4	24.6		65.8	13.9	17.2
Level of Service	E	E	D	E	E	E	E	C		E	B	B
Approach Delay (s)		54.3			63.0			33.2			22.8	
Approach LOS		D			E			C			C	

Intersection Summary				
HCM Average Control Delay	37.3	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.54			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	70.8%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
6: Midway Dr & East Dr 4/9/2012



Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	1.00		1.00	0.98			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1770	3530		1770	3452			1682			1676	
Flt Permitted	0.14	1.00		0.23	1.00			0.86			0.82	
Satd. Flow (perm)	269	3530		431	3452			1479			1406	
Volume (vph)	46	943	16	27	1008	164	24	6	34	69	4	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.92	0.92	0.92	0.79	0.79	0.79	0.74	0.74	0.74
Adj. Flow (vph)	51	1036	18	29	1096	178	30	8	43	93	5	70
RTOR Reduction (vph)	0	1	0	0	10	0	0	35	0	0	46	0
Lane Group Flow (vph)	51	1053	0	29	1264	0	0	46	0	0	122	0
Confl. Peds. (#/hr)	3					3	33					33
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.0	45.9		46.2	44.0			12.7			12.7	
Effective Green, g (s)	51.3	46.8		47.5	44.9			13.6			13.6	
Actuated g/C Ratio	0.68	0.62		0.63	0.60			0.18			0.18	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	2.9		2.0	2.9			2.0			2.0	
Lane Grp Cap (vph)	274	2203		319	2067			268			255	
v/s Ratio Prot	c0.01	0.30		0.00	c0.37							
v/s Ratio Perm	0.12			0.05				0.03			c0.09	
v/c Ratio	0.19	0.48		0.09	0.61			0.17			0.48	
Uniform Delay, d1	5.8	7.6		5.4	9.5			25.9			27.5	
Progression Factor	1.14	1.63		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.7		0.0	1.4			0.1			0.5	
Delay (s)	6.6	13.1		5.5	10.9			26.0			28.0	
Level of Service	A	B		A	B			C			C	
Approach Delay (s)		12.8			10.8			26.0			28.0	
Approach LOS		B			B			C			C	

Intersection Summary				
HCM Average Control Delay	13.2	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.59			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	60.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
7: Rosecrans St. & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.92	1.00	1.00	0.93
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	5034		3433	4824		3433	3539	1463	1770	3539	1471
Volume (vph)	290	1688	63	425	1298	332	312	490	244	130	577	328
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	293	1705	64	429	1311	335	315	495	246	131	583	331
RTOR Reduction (vph)	0	2	0	0	27	0	0	0	195	0	0	202
Lane Group Flow (vph)	293	1767	0	429	1619	0	315	495	51	131	583	129
Confl. Peds. (#/hr)	48		65	65		48	40		42	42		40
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases									4			8
Actuated Green, G (s)	29.1	68.0		26.5	65.5		17.0	32.3	32.3	14.4	29.7	29.7
Effective Green, g (s)	29.5	69.1		26.9	66.5		17.4	33.2	33.2	14.8	30.6	30.6
Actuated g/C Ratio	0.18	0.43		0.17	0.42		0.11	0.21	0.21	0.09	0.19	0.19
Clearance Time (s)	4.4	5.1		4.4	5.0		4.4	4.9	4.9	4.4	4.9	4.9
Vehicle Extension (s)	2.0	3.5		2.0	3.7		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	326	2174		577	2005		373	734	304	164	677	281
v/s Ratio Prot	c0.17	c0.35		0.12	c0.34		c0.09	0.14		0.07	c0.16	
v/s Ratio Perm									0.03			0.09
v/c Ratio	0.90	0.81		0.74	0.81		0.84	0.67	0.17	0.80	0.86	0.46
Uniform Delay, d1	63.8	39.8		63.3	41.1		70.0	58.4	52.1	71.1	62.6	57.4
Progression Factor	1.06	0.44		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	20.8	2.7		4.5	2.6		15.3	1.9	0.1	21.8	10.6	0.4
Delay (s)	88.3	20.2		67.8	43.7		85.3	60.4	52.2	92.9	73.2	57.8
Level of Service	F	C		E	D		F	E	D	F	E	E
Approach Delay (s)		29.8			48.7			65.9			70.8	
Approach LOS		C			D			E			E	

Intersection Summary				
HCM Average Control Delay	49.1	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.83			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.4%	ICU Level of Service	F	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
9: Enterprise St & Midway Dr 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	228	763	6	0	863
Peak Hour Factor	0.80	0.80	0.87	0.87	0.93	0.93
Hourly flow rate (vph)	0	285	877	7	0	928
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)			215			
pX, platoon unblocked						
vC, conflicting volume	1346	447			886	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1346	447			886	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	49			100	
cM capacity (veh/h)	142	557			759	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	285	585	299	464	464
Volume Left	0	0	0	0	0
Volume Right	285	0	7	0	0
cSH	557	1700	1700	1700	1700
Volume to Capacity	0.51	0.34	0.18	0.27	0.27
Queue Length 95th (ft)	72	0	0	0	0
Control Delay (s)	18.1	0.0	0.0	0.0	0.0
Lane LOS	C				
Approach Delay (s)	18.1	0.0		0.0	
Approach LOS	C				

Intersection Summary				
Average Delay	2.5			
Intersection Capacity Utilization	42.4%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
10: Barnett Ave & Midway Dr 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4			5.4	5.9				5.2		5.2
Lane Util. Factor		0.95			0.95	0.88				0.97		1.00
Frpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Flpb, ped/bikes		1.00			1.00	1.00				1.00		1.00
Frt		1.00			1.00	0.85				1.00		0.85
Flt Protected		1.00			1.00	1.00				0.95		1.00
Satd. Flow (prot)		3539			3539	2787				3433		1583
Flt Permitted		1.00			1.00	1.00				0.95		1.00
Satd. Flow (perm)		3539			3539	2787				3433		1583
Volume (vph)	0	1232	0	0	891	769	0	0	0	739	0	124
Peak-hour factor, PHF	0.86	0.86	0.86	0.95	0.95	0.95	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1433	0	0	938	809	0	0	0	803	0	135
RTOR Reduction (vph)	0	0	0	0	0	401	0	0	0	0	0	97
Lane Group Flow (vph)	0	1433	0	0	938	408	0	0	0	803	0	38
Confl. Peds. (#/hr)						6				3		
Turn Type						custom				Prot		custom
Protected Phases		2			2	2				1		
Permitted Phases						8						1
Actuated Green, G (s)		43.0			43.0	43.0				24.0		24.0
Effective Green, g (s)		43.0			43.0	42.5				24.0		24.0
Actuated g/C Ratio		0.51			0.51	0.50				0.29		0.29
Clearance Time (s)		5.4			5.4	5.4				5.2		5.2
Vehicle Extension (s)		2.9			2.9	2.9				2.5		2.5
Lane Grp Cap (vph)		1807			1807	1407				979		451
v/s Ratio Prot		c0.40			0.27	0.15				c0.23		
v/s Ratio Perm												0.02
v/c Ratio		0.79			0.52	0.29				0.82		0.09
Uniform Delay, d1		16.9			13.7	12.1				28.1		22.1
Progression Factor		1.00			1.00	1.00				1.00		1.00
Incremental Delay, d2		2.5			0.2	0.1				5.5		0.1
Delay (s)		19.4			14.0	12.2				33.6		22.1
Level of Service		B			B	B				C		C
Approach Delay (s)		19.4			13.1			0.0			31.9	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	19.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.80			
Actuated Cycle Length (s)	84.2	Sum of lost time (s)	17.2	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
11: Sport Arena Blvd & Hancock 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9				4.0	4.9		4.0
Lane Util. Factor	1.00	0.95		1.00	0.91				1.00	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99				0.86	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (prot)	1770	3529		1770	5041				1611	1770		1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95		1.00
Satd. Flow (perm)	1770	3529		1770	5041				1611	1770		1583
Volume (vph)	86	905	14	20	996	51	0	0	10	56	0	185
Peak-hour factor, PHF	0.96	0.96	0.96	0.85	0.85	0.85	0.92	0.92	0.92	0.90	0.90	0.90
Adj. Flow (vph)	90	943	15	24	1172	60	0	0	11	62	0	206
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	11	0	0	166
Lane Group Flow (vph)	90	957	0	24	1229	0	0	0	0	62	0	40
Confl. Peds. (#/hr)	18		10	10		18				11		16
Turn Type	Prot			Prot					NA	Prot		custom
Protected Phases	5	2		1	6					4		4
Permitted Phases												
Actuated Green, G (s)	8.5	67.0		4.1	62.6				0.0	19.7		19.7
Effective Green, g (s)	8.5	67.0		4.1	62.6				0.0	19.7		20.6
Actuated g/C Ratio	0.08	0.64		0.04	0.60				0.00	0.19		0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					4.9		4.9
Vehicle Extension (s)	2.0	3.2		2.0	5.0					2.0		2.0
Lane Grp Cap (vph)	143	2252		69	3005				0	332		311
v/s Ratio Prot	c0.05	c0.27		0.01	0.24					c0.04		0.03
v/s Ratio Perm												
v/c Ratio	0.63	0.43		0.35	0.41				0.00	0.19		0.13
Uniform Delay, d1	46.7	9.4		49.1	11.3				52.5	35.9		34.8
Progression Factor	1.00	1.00		1.50	0.58				1.00	1.00		1.00
Incremental Delay, d2	6.1	0.6		1.0	0.4				0.0	0.1		0.1
Delay (s)	52.8	10.0		74.5	6.9				52.5	36.0		34.9
Level of Service	D	B		E	A				D	D		C
Approach Delay (s)		13.7			8.2			52.5			35.1	
Approach LOS		B			A			D			D	

Intersection Summary				
HCM Average Control Delay	13.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.40			
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2	
Intersection Capacity Utilization	53.8%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
12: Kemper Street & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.95		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	1.00	0.98	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.89		1.00	1.00	0.85	1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1629		1770	1863	1553	3433	3524		1770	4990	
Volume (vph)	27	14	40	102	21	102	136	806	19	56	938	108
Peak-hour factor, PHF	0.92	0.92	0.92	0.78	0.78	0.78	0.95	0.95	0.95	0.91	0.91	0.91
Adj. Flow (vph)	29	15	43	131	27	131	143	848	20	62	1031	119
RTOR Reduction (vph)	0	37	0	0	0	115	0	1	0	0	9	0
Lane Group Flow (vph)	29	21	0	131	27	16	143	867	0	62	1141	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split			Split		Perm	Prot			Prot		
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases						8						
Actuated Green, G (s)	14.8	14.8		11.9	11.9	11.9	8.7	50.1		9.1	50.5	
Effective Green, g (s)	15.7	15.7		12.8	12.8	12.8	9.1	51.0		9.5	51.4	
Actuated g/C Ratio	0.15	0.15		0.12	0.12	0.12	0.09	0.49		0.09	0.49	
Clearance Time (s)	4.9	4.9		4.9	4.9	4.9	4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0	2.0	2.0	3.9		2.0	3.2	
Lane Grp Cap (vph)	265	244		216	227	189	298	1712		160	2443	
v/s Ratio Prot	c0.02	0.01		c0.07	0.01		0.04	c0.25		0.04	c0.23	
v/s Ratio Perm						0.01						
v/c Ratio	0.11	0.09		0.61	0.12	0.08	0.48	0.51		0.39	0.47	
Uniform Delay, d1	38.6	38.5		43.7	41.1	40.9	45.7	18.4		45.0	17.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.74	0.99		0.59	0.35	
Incremental Delay, d2	0.2	0.2		3.3	0.1	0.1	0.4	1.0		0.5	0.6	
Delay (s)	38.8	38.6		47.0	41.2	41.0	34.2	19.2		27.0	6.9	
Level of Service	D	D		D	D	D	C	B		C	A	
Approach Delay (s)		38.7			43.7			21.3			7.9	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
13: Sport Arena Blvd & 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Lane Util. Factor	0.97	0.95		1.00	0.91			1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99			0.94		1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (prot)	3433	3492		1770	5034			1694		1770	1610	
Flt Permitted	0.95	1.00		0.95	1.00			0.98		0.95	1.00	
Satd. Flow (perm)	3433	3492		1770	5034			1694		1770	1610	
Volume (vph)	101	786	61	34	931	53	50	11	54	129	13	121
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.79	0.79	0.79	0.93	0.93	0.93
Adj. Flow (vph)	107	836	65	36	990	56	63	14	68	139	14	130
RTOR Reduction (vph)	0	4	0	0	4	0	0	38	0	0	115	0
Lane Group Flow (vph)	107	897	0	36	1042	0	0	107	0	139	29	0
Confl. Peds. (#/hr)	18		7	7		18			6	6		
Turn Type	Prot			Prot			Split			Split		
Protected Phases	1	6		5	2		8	8		7	7	
Permitted Phases												
Actuated Green, G (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Effective Green, g (s)	9.6	50.7		8.8	49.9			14.3		12.1	12.1	
Actuated g/C Ratio	0.09	0.48		0.08	0.48			0.14		0.12	0.12	
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9		4.9	4.9	
Vehicle Extension (s)	2.0	2.0		2.0	3.6			2.0		2.0	2.0	
Lane Grp Cap (vph)	314	1686		148	2392			231		204	186	
v/s Ratio Prot	c0.03	c0.26		0.02	0.21			c0.06		c0.08	0.02	
v/s Ratio Perm												
v/c Ratio	0.34	0.53		0.24	0.44			0.46		0.68	0.16	
Uniform Delay, d1	44.7	18.9		45.0	18.2			41.8		44.6	41.8	
Progression Factor	1.10	1.07		1.23	0.77			1.00		1.00	1.00	
Incremental Delay, d2	0.2	1.1		0.3	0.6			0.5		7.3	0.1	
Delay (s)	49.6	21.4		55.6	14.6			42.3		51.9	42.0	
Level of Service	D	C		E	B			D		D	D	
Approach Delay (s)		24.4			15.9			42.3			46.8	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
14: Sport Arena Blvd & East Dr 4/9/2012

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9		4.4	4.9			4.9	4.9			4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00	0.99			1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00			1.00
Frt	1.00	0.98		1.00	1.00			1.00	0.85			0.86
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (prot)	1770	4954		1770	5074			1788	1563			1611
Flt Permitted	0.95	1.00		0.95	1.00			0.96	1.00			1.00
Satd. Flow (perm)	1770	4954		1770	5074			1788	1563			1611
Volume (vph)	22	837	110	123	989	11	24	5	56	0	0	5
Peak-hour factor, PHF	0.94	0.94	0.94	0.91	0.91	0.91	0.78	0.78	0.78	0.30	0.30	0.30
Adj. Flow (vph)	23	890	117	135	1087	12	31	6	72	0	0	17
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	66	0	0	0
Lane Group Flow (vph)	23	999	0	135	1098	0	0	37	6	0	0	17
Confl. Peds. (#/hr)	19		19	19		19			1	1		
Turn Type	Prot			Prot			Perm		Perm			Free
Protected Phases	5	2		1	6			8				
Permitted Phases							8		8			Free
Actuated Green, G (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Effective Green, g (s)	2.9	69.4		12.0	78.5			9.4	9.4			105.0
Actuated g/C Ratio	0.03	0.66		0.11	0.75			0.09	0.09			1.00
Clearance Time (s)	4.4	4.9		4.4	4.9			4.9	4.9			
Vehicle Extension (s)	2.0	3.9		2.0	2.9			2.0	2.0			
Lane Grp Cap (vph)	49	3274		202	3793			160	140			1611
v/s Ratio Prot	0.01	c0.20		c0.08	0.22							
v/s Ratio Perm								0.02	0.00			0.01
v/c Ratio	0.47	0.31		0.67	0.29			0.23	0.05			0.01
Uniform Delay, d1	50.3	7.6		44.6	4.3			44.4	43.7			0.0
Progression Factor	0.81	1.40		1.00	1.00			1.00	1.00			1.00
Incremental Delay, d2	2.3	0.2		6.3	0.2			0.3	0.0			0.0
Delay (s)	42.9	10.8		50.9	4.5			44.7	43.8			0.0
Level of Service	D	B		D	A			D	D			A
Approach Delay (s)		11.5			9.5			44.1			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM Average Control Delay	11.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Exisitng PM
15: Rosecrans St. & Sport Arena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	5.9	5.9	5.9		5.9	5.9	5.9
Lane Util. Factor	0.97	0.91			0.91	1.00	0.91	0.91		0.91	0.86	0.91
Frpb, ped/bikes	1.00	0.99			1.00	0.98	1.00	0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97			1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)	3433	4852			5085	1551	1610	3303		1610	3158	1441
Volume (vph)	274	1612	442	0	1621	587	251	262	26	372	338	183
Peak-hour factor, PHF	0.86	0.95	0.90	0.25	0.95	0.89	0.85	0.82	0.81	0.93	0.94	0.93
Adj. Flow (vph)	319	1697	491	0	1706	660	295	320	32	400	360	197
RTOR Reduction (vph)	0	33	0	0	0	0	0	3	0	0	0	159
Lane Group Flow (vph)	319	2155	0	0	1706	660	210	434	0	254	506	38
Confl. Peds. (#/hr)	29		31	31		29	63		31	10		63
Turn Type	Prot					Free	Split			Split		Prot
Protected Phases	5	2			6		3	3		4	4	4
Permitted Phases						Free						
Actuated Green, G (s)	15.6	79.9			59.1	150.0	23.0	23.0		29.2	29.2	29.2
Effective Green, g (s)	17.0	82.0			61.0	150.0	23.0	23.0		29.2	29.2	29.2
Actuated g/C Ratio	0.11	0.55			0.41	1.00	0.15	0.15		0.19	0.19	0.19
Clearance Time (s)	5.4	6.1			5.9		5.9	5.9		5.9	5.9	5.9
Vehicle Extension (s)	2.0	2.8			3.2		2.9	2.9		4.1	4.1	4.1
Lane Grp Cap (vph)	389	2652			2068	1551	247	506		313	615	281
v/s Ratio Prot	0.09	c0.44			0.34		0.13	c0.13		0.16	c0.16	0.03
v/s Ratio Perm						0.43						
v/c Ratio	0.82	0.81			0.82	0.43	0.85	0.86		0.81	0.82	0.14
Uniform Delay, d1	65.0	27.7			39.7	0.0	61.8	61.9		57.8	57.9	50.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.4	2.8			3.9	0.9	23.3	13.4		15.5	9.2	0.3
Delay (s)	77.4	30.6			43.6	0.9	85.1	75.3		73.3	67.1	50.3
Level of Service	E	C			D	A	F	E		E	E	D
Approach Delay (s)		36.5			31.7			78.5			65.3	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM Average Control Delay	43.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.8
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	37	0	852	844	19
Peak Hour Factor	0.91	0.91	0.92	0.92	0.95	0.95
Hourly flow rate (vph)	0	41	0	926	888	20
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1361	454	908			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1361	454	908			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	93	100			
cM capacity (veh/h)	139	553	745			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	41	463	463	592	316
Volume Left	0	0	0	0	0
Volume Right	41	0	0	0	20
cSH	553	1700	1700	1700	1700
Volume to Capacity	0.07	0.27	0.27	0.35	0.19
Queue Length 95th (ft)	6	0	0	0	0
Control Delay (s)	12.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	12.0	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM
19: Kurtz & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor				0.95	0.95	1.00		0.91		1.00	0.86	
Frpb, ped/bikes				1.00	1.00	0.98		1.00		1.00	1.00	
Flpb, ped/bikes				0.98	1.00	1.00		1.00		1.00	1.00	
Frt				1.00	1.00	0.85		1.00		1.00	1.00	
Flt Protected				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (prot)				1654	1738	1559		5080		1770	6408	
Flt Permitted				0.95	0.99	1.00		1.00		0.95	1.00	
Satd. Flow (perm)				1654	1738	1559		5080		1770	6408	
Volume (vph)	0	0	0	295	177	75	0	1996	14	85	2133	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	311	186	79	0	2101	15	88	2199	0
RTOR Reduction (vph)	0	0	0	0	0	10	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	240	257	69	0	2116	0	88	2199	0
Confl. Peds. (#/hr)				14		3				13		
Turn Type				Perm		Perm				Prot		
Protected Phases					4			2		1	6	
Permitted Phases				4		4						
Actuated Green, G (s)				30.4	30.4	30.4		104.1		11.0	119.8	
Effective Green, g (s)				31.3	31.3	31.3		105.3		11.4	120.7	
Actuated g/C Ratio				0.20	0.20	0.20		0.66		0.07	0.75	
Clearance Time (s)				4.9	4.9	4.9		5.2		4.4	4.9	
Vehicle Extension (s)				2.0	2.0	2.0		3.8		2.0	4.6	
Lane Grp Cap (vph)				324	340	305		3343		126	4834	
v/s Ratio Prot								c0.42		c0.05	0.34	
v/s Ratio Perm				0.15	0.15	0.04						
v/c Ratio				0.74	0.76	0.22		0.63		0.70	0.45	
Uniform Delay, d1				60.5	60.7	54.1		16.0		72.6	7.3	
Progression Factor				1.00	1.00	1.00		1.00		0.89	1.20	
Incremental Delay, d2				7.7	8.2	0.1		0.9		8.7	0.2	
Delay (s)				68.3	69.0	54.3		16.9		73.3	9.0	
Level of Service				E	E	D		B		E	A	
Approach Delay (s)		0.0			66.7			16.9			11.5	
Approach LOS		A			E			B			B	

Intersection Summary				
HCM Average Control Delay	20.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	68.5%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

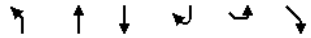
Exisitng PM
20: Rosecrans St & Kurtz 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.94		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3227		1770	3539		1770		1549	1770	1863	
Flt Permitted		1.00		0.23	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3227		435	3539		1770		1549	1770	1863	
Volume (vph)	0	672	199	80	464	0	167	0	124	67	209	0
Peak-hour factor, PHF	1.00	0.97	0.97	0.97	0.97	0.92	0.97	0.92	0.97	0.92	0.92	0.92
Adj. Flow (vph)	0	693	205	82	478	0	172	0	128	73	227	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	56	0	0	0
Lane Group Flow (vph)	0	888	0	82	478	0	172	0	72	73	227	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type				pm+pt			Prot		custom	Split		
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		89.4		101.3	101.3		19.8		89.4	24.7	24.7	
Effective Green, g (s)		90.3		102.2	102.2		20.2		90.3	25.6	25.6	
Actuated g/C Ratio		0.56		0.64	0.64		0.13		0.56	0.16	0.16	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1821		344	2261		223		874	283	298	
v/s Ratio Prot		c0.28		0.01	c0.14		c0.10			0.04	c0.12	
v/s Ratio Perm				0.14					0.05			
v/c Ratio		0.49		0.24	0.21		0.77		0.08	0.26	0.76	
Uniform Delay, d1		20.9		13.2	12.1		67.7		15.9	58.9	64.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	0.95	0.99	
Incremental Delay, d2		0.9		0.1	0.2		15.1		0.2	0.4	9.1	
Delay (s)		21.9		13.3	12.3		82.8		16.1	56.1	72.6	
Level of Service		C		B	B		F		B	E	E	
Approach Delay (s)		21.9			12.4			54.3			68.6	
Approach LOS		C			B			D			E	

Intersection Summary				
HCM Average Control Delay	30.9	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.56			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	66.6%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
21: Pacific Highway & Kurtz St 4/9/2012

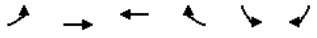


Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	214	656	444	7	0	423
Peak Hour Factor	0.92	0.92	0.87	0.87	0.99	0.99
Hourly flow rate (vph)	233	713	510	8	0	427
Pedestrians					2	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	520				1219	176
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	520				1219	176
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)	3.1					
tF (s)	2.2				3.5	3.3
p0 queue free %	74				100	49
cM capacity (veh/h)	905				128	835

Direction, Lane #	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SE 1
Volume Total	233	238	238	238	204	204	110	427
Volume Left	233	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	8	427
cSH	905	1700	1700	1700	1700	1700	1700	835
Volume to Capacity	0.26	0.14	0.14	0.14	0.12	0.12	0.06	0.51
Queue Length 95th (ft)	26	0	0	0	0	0	0	74
Control Delay (s)	10.4	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Lane LOS	B							B
Approach Delay (s)	2.5				0.0			13.7
Approach LOS								B

Intersection Summary			
Average Delay	4.4		
Intersection Capacity Utilization	42.6%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
22: Hancock & Channel Way 4/9/2012



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	51	72	159	59	10	70
Peak Hour Factor	0.81	0.81	0.80	0.80	0.75	0.75
Hourly flow rate (vph)	63	89	199	74	13	93
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
Upstream signal (ft)		1226				
pX, platoon unblocked						
vC, conflicting volume	272				450	236
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				450	236
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	95				98	88
cM capacity (veh/h)	1291				539	803

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	63	89	272	107
Volume Left	63	0	0	13
Volume Right	0	0	74	93
cSH	1291	1700	1700	757
Volume to Capacity	0.05	0.05	0.16	0.14
Queue Length 95th (ft)	4	0	0	12
Control Delay (s)	7.9	0.0	0.0	10.5
Lane LOS	A			B
Approach Delay (s)	3.3		0.0	10.5
Approach LOS				B

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	30.2%	ICU Level of Service	A
Analysis Period (min)	15		

Exisitng PM
23: Hancock St & Camino Del Rio W 4/9/2012

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0					4.0	4.0			4.0	4.0
Lane Util. Factor		0.95					1.00	0.91			0.91	1.00
Frpb, ped/bikes		0.98					1.00	1.00			1.00	0.96
Flpb, ped/bikes		1.00					1.00	1.00			1.00	1.00
Frt		0.92					1.00	1.00			1.00	0.85
Flt Protected		0.99					0.95	1.00			1.00	1.00
Satd. Flow (prot)		3165					1770	5073			5085	1516
Flt Permitted		0.99					0.95	1.00			1.00	1.00
Satd. Flow (perm)		3165					1770	5073			5085	1516
Volume (vph)	40	81	146	0	0	0	87	2175	29	0	2178	83
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	88	159	0	0	0	95	2364	32	0	2367	90
RTOR Reduction (vph)	0	6	0	0	0	0	0	1	0	0	0	21
Lane Group Flow (vph)	0	284	0	0	0	0	95	2395	0	0	2367	69
Confl. Peds. (#/hr)	1		20				15		2			15
Turn Type	Split						Prot					Perm
Protected Phases	4	4					5	2			6	
Permitted Phases												6
Actuated Green, G (s)		32.1					13.6	118.1			100.1	100.1
Effective Green, g (s)		33.0					14.0	119.0			101.0	101.0
Actuated g/C Ratio		0.21					0.09	0.74			0.63	0.63
Clearance Time (s)		4.9					4.4	4.9			4.9	4.9
Vehicle Extension (s)		2.0					2.0	3.8			4.6	4.6
Lane Grp Cap (vph)		653					155	3773			3210	957
v/s Ratio Prot		c0.09					0.05	c0.47			c0.47	
v/s Ratio Perm												0.05
v/c Ratio		0.43					0.61	0.63			0.74	0.07
Uniform Delay, d1		55.4					70.4	10.0			20.4	11.4
Progression Factor		0.81					1.08	1.20			1.00	1.00
Incremental Delay, d2		0.2					4.0	0.7			1.6	0.1
Delay (s)		44.9					79.8	12.6			21.9	11.5
Level of Service		D					E	B			C	B
Approach Delay (s)		44.9			0.0			15.2			21.5	
Approach LOS		D			A			B			C	

Intersection Summary				
HCM Average Control Delay	19.8	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	79.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

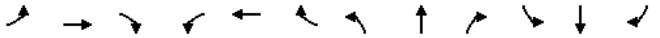
Exisitng PM
25: Old Town St & Hancock St 4/9/2012

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Volume (vph)	242	0	0	304	294	258
Peak Hour Factor	0.85	0.85	0.93	0.93	0.84	0.84
Hourly flow rate (vph)	285	0	0	327	350	307

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	285	327	350	307
Volume Left (vph)	285	0	350	0
Volume Right (vph)	0	327	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.3	5.3	6.5	5.9
Degree Utilization, x	0.50	0.48	0.63	0.51
Capacity (veh/h)	530	658	547	593
Control Delay (s)	15.5	13.0	18.5	13.7
Approach Delay (s)	15.5	13.0	16.3	
Approach LOS	C	B	C	

Intersection Summary				
Delay	15.2			
HCM Level of Service	C			
Intersection Capacity Utilization	41.8%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
26: Witherby St & Hancock St 4/9/2012

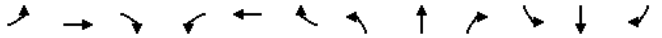


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	87	154	172	10	75	0	422	217	50	15	270	215
Peak Hour Factor	0.84	0.84	0.84	0.80	0.80	0.80	0.91	0.91	0.91	0.72	0.72	0.72
Hourly flow rate (vph)	104	183	205	12	94	0	464	238	55	21	375	299

Direction, Lane #	EB 1	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	492	106	757	396	299
Volume Left (vph)	104	13	464	21	0
Volume Right (vph)	205	0	55	0	299
Hadj (s)	-0.17	0.06	0.11	0.06	-0.67
Departure Headway (s)	7.4	9.5	7.8	8.2	7.5
Degree Utilization, x	1.02	0.28	1.64	0.90	0.62
Capacity (veh/h)	492	371	465	427	469
Control Delay (s)	72.3	16.1	319.6	50.2	20.9
Approach Delay (s)	72.3	16.1	319.6	37.6	
Approach LOS	F	C	F	E	

Intersection Summary				
Delay	149.0			
HCM Level of Service	F			
Intersection Capacity Utilization	93.1%	ICU Level of Service	F	
Analysis Period (min)	15			

Exisitng PM
27: Washington St & Hancock St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Volume (vph)	0	547	124	346	378	0	0	0	0	96	228	760
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	595	135	376	411	0	0	0	0	104	248	826
RTOR Reduction (vph)	0	0	99	0	0	0	0	0	0	0	0	253
Lane Group Flow (vph)	0	595	36	376	411	0	0	0	0	104	248	573
Turn Type			Perm	Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		20.5	20.5	12.7	37.6					32.6	32.6	32.6
Effective Green, g (s)		21.4	21.4	13.1	38.5					33.5	33.5	33.5
Actuated g/C Ratio		0.27	0.27	0.16	0.48					0.42	0.42	0.42
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		947	423	562	1703					674	1420	663
v/s Ratio Prot		c0.17		c0.11	0.12						0.07	
v/s Ratio Perm			0.02							0.06		c0.36
v/c Ratio		0.63	0.09	0.67	0.24					0.15	0.17	0.86
Uniform Delay, d1		25.8	22.0	31.4	12.2					14.4	14.6	21.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.2	0.4	2.3	0.3					0.0	0.0	11.0
Delay (s)		29.0	22.4	33.8	12.5					14.5	14.6	32.2
Level of Service		C	C	C	B					B	B	C
Approach Delay (s)		27.7			22.7			0.0			26.9	
Approach LOS		C			C			A			C	

Intersection Summary						
HCM Average Control Delay	25.9	HCM Level of Service		C		
HCM Volume to Capacity ratio	0.75					
Actuated Cycle Length (s)	80.0	Sum of lost time (s)		12.0		
Intersection Capacity Utilization	64.2%	ICU Level of Service		C		
Analysis Period (min)	15					
c Critical Lane Group						

Exisitng PM
28: Vine St & Hancock St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	0	0	18	51	0	0	0	0	0	0	2034	4
Peak Hour Factor	0.56	0.56	0.56	0.75	0.75	0.75	0.95	0.95	0.95	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	32	68	0	0	0	0	0	0	2211	4
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	2213	2213	739	769	2215	0	2215			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2213	2213	739	769	2215	0	2215			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	91	74	100	100	100			100		
cM capacity (veh/h)	24	43	360	265	43	1084	233			1622		

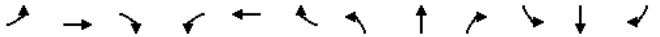
Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	32	68	884	884	447
Volume Left	0	68	0	0	0
Volume Right	32	0	0	0	4
cSH	360	265	1700	1700	1700
Volume to Capacity	0.09	0.26	0.52	0.52	0.26
Queue Length 95th (ft)	7	25	0	0	0
Control Delay (s)	16.0	23.2	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	16.0	23.2	0.0		
Approach LOS	C	C			

Intersection Summary				
Average Delay	0.9			
Intersection Capacity Utilization	57.9%	ICU Level of Service	B	
Analysis Period (min)	15			

Exisitng PM
29: Sassafras St & Kettner Bl 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.96	
Flt Protected		1.00	1.00		0.97					0.95	1.00	
Satd. Flow (prot)		1863	1583		3418					1770	4887	
Flt Permitted		1.00	1.00		0.72					0.95	1.00	
Satd. Flow (perm)		1863	1583		2557					1770	4887	
Volume (vph)	0	202	97	82	34	0	0	0	0	248	686	241
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	220	105	89	37	0	0	0	0	270	746	262
RTOR Reduction (vph)	0	0	52	0	0	0	0	0	0	0	115	0
Lane Group Flow (vph)	0	220	53	0	126	0	0	0	0	270	893	0
Turn Type			Perm	Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		22.0	22.0		22.0					20.0	20.0	
Effective Green, g (s)		24.7	24.7		24.7					22.3	22.3	
Actuated g/C Ratio		0.45	0.45		0.45					0.41	0.41	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		837	711		1148					718	1981	
v/s Ratio Prot		c0.12									c0.18	
v/s Ratio Perm			0.03		0.05					0.15		
v/c Ratio		0.26	0.07		0.11					0.38	0.45	
Uniform Delay, d1		9.5	8.6		8.8					11.5	11.9	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		0.8	0.2		0.2					1.5	0.7	
Delay (s)		10.2	8.8		9.0					13.0	12.6	
Level of Service		B	A		A					B	B	
Approach Delay (s)		9.8			9.0			0.0			12.7	
Approach LOS		A			A			A			B	

Intersection Summary				
HCM Average Control Delay	11.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.35			
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.8%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3481		1770	3539						4718	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3481		1770	3539						4718	1362
Volume (vph)	0	813	100	49	196	0	0	0	0	438	732	334
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	884	109	53	213	0	0	0	0	476	796	363
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	0	0	0	241
Lane Group Flow (vph)	0	985	0	53	213	0	0	0	0	0	1272	122
Turn Type				Prot						Perm		Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		49.6		6.2	58.5						33.5	33.5
Effective Green, g (s)		47.8		6.6	58.4						32.6	34.9
Actuated g/C Ratio		0.46		0.06	0.56						0.31	0.34
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1600		112	1987						1479	457
v/s Ratio Prot		c0.28		c0.03	0.06							
v/s Ratio Perm											0.27	0.09
v/c Ratio		0.62		0.47	0.11						0.90dl	0.27
Uniform Delay, d1		21.2		47.0	10.6						33.6	25.2
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		1.8		1.1	0.1						5.2	0.1
Delay (s)		23.0		48.2	10.7						38.7	25.3
Level of Service		C		D	B						D	C
Approach Delay (s)		23.0			18.2			0.0			35.8	
Approach LOS		C			B			A			D	

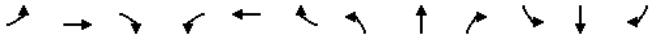
Intersection Summary			
HCM Average Control Delay	29.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Intersection Sign configuration not allowed in HCM analysis.

Exisitng PM

32: Washington St & Pacific Highway NB Frontage Road 4/9/2012

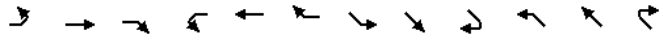


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00	0.91	0.91			1.00	
Frt	1.00	1.00			1.00	0.85	1.00	0.88			0.90	
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99			0.99	
Satd. Flow (prot)	1770	3539			3539	1583	1610	2969			1653	
Flt Permitted	0.95	1.00			1.00	1.00	0.70	0.90			0.31	
Satd. Flow (perm)	1770	3539			3539	1583	1184	2690			514	
Volume (vph)	139	511	0	0	766	372	93	11	140	20	0	63
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	151	555	0	0	833	404	101	12	152	22	0	68
RTOR Reduction (vph)	0	0	0	0	0	228	0	121	0	0	61	0
Lane Group Flow (vph)	151	555	0	0	833	176	71	73	0	0	29	0
Turn Type	Prot					Perm	Perm			Perm		
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		
Actuated Green, G (s)	4.0	42.9			34.0	34.0	13.5	13.5			8.1	
Effective Green, g (s)	4.5	42.9			34.4	34.4	15.9	15.9			8.1	
Actuated g/C Ratio	0.06	0.54			0.44	0.44	0.20	0.20			0.10	
Clearance Time (s)	4.5	4.0			4.4	4.4	6.4	6.4			4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5	2.0	2.0			2.0	
Lane Grp Cap (vph)	101	1924			1543	690	239	542			53	
v/s Ratio Prot	c0.09	0.16			c0.24							
v/s Ratio Perm						0.11	c0.06	0.03			c0.06	
v/c Ratio	1.50	0.29			0.54	0.26	0.30	0.13			0.55	
Uniform Delay, d1	37.2	9.7			16.4	14.1	26.8	25.9			33.7	
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	267.6	0.0			1.4	0.9	0.3	0.0			6.0	
Delay (s)	304.8	9.8			17.8	15.0	27.0	25.9			39.7	
Level of Service	F	A			B	B	C	C			D	
Approach Delay (s)		72.9			16.9			26.2			39.7	
Approach LOS		E			B			C			D	

Intersection Summary				
HCM Average Control Delay	36.0	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.55			
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	52.2%	ICU Level of Service	A	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM

33: Washington St & Pacific Highway SB 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.95		1.00	1.00		0.95	0.95	1.00			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		0.99	1.00		1.00	1.00	1.00			
Frt		0.98		1.00	1.00		1.00	1.00	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		3457		1757	1863		1681	1699	1583			
Flt Permitted		1.00		0.49	1.00		0.95	0.96	1.00			
Satd. Flow (perm)		3457		904	1863		1681	1699	1583			
Volume (vph)	0	367	53	270	652	0	283	27	358	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	399	58	293	709	0	308	29	389	0	0	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	0	444	0	293	709	0	164	173	348	0	0	0
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type				Perm			Perm		custom			
Protected Phases		7			8			6	6			
Permitted Phases				8			6		7			
Actuated Green, G (s)		12.7		32.2	32.2		18.3	18.3	31.0			
Effective Green, g (s)		12.7		32.5	32.5		20.5	20.5	33.2			
Actuated g/C Ratio		0.16		0.42	0.42		0.26	0.26	0.43			
Clearance Time (s)		4.0		4.3	4.3		6.2	6.2	6.2			
Vehicle Extension (s)		2.0		3.3	3.3		2.0	2.0	2.0			
Lane Grp Cap (vph)		565		378	779		444	448	758			
v/s Ratio Prot		c0.13			c0.38				c0.12			
v/s Ratio Perm				0.32			0.10	0.10	0.10			
v/c Ratio		0.79		0.78	0.91		0.37	0.39	0.46			
Uniform Delay, d1		31.2		19.5	21.2		23.3	23.4	15.9			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		6.6		14.4	16.6		0.2	0.2	0.2			
Delay (s)		37.8		33.8	37.8		23.5	23.6	16.0			
Level of Service		D		C	D		C	C	B			
Approach Delay (s)		37.8			36.7			19.5			0.0	
Approach LOS		D			D			B			A	

Intersection Summary				
HCM Average Control Delay	31.2	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.76			
Actuated Cycle Length (s)	77.7	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.1%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
34: Sassafras St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.89		1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1833		1763	1665		1767	4984		1770	5083	
Flt Permitted	0.69	1.00		0.64	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1278	1833		1182	1665		1767	4984		1770	5083	
Volume (vph)	23	139	15	174	29	72	19	549	84	76	404	1
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	151	16	189	32	78	21	597	91	83	439	1
RTOR Reduction (vph)	0	7	0	0	58	0	0	23	0	0	0	0
Lane Group Flow (vph)	25	160	0	189	52	0	21	665	0	83	440	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm			Perm			Prot			Prot		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	15.3	15.3		14.6	14.6		0.8	24.8		4.1	27.4	
Effective Green, g (s)	15.3	15.3		15.0	15.0		0.8	26.2		1.9	29.5	
Actuated g/C Ratio	0.27	0.27		0.26	0.26		0.01	0.45		0.03	0.51	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	339	487		308	434		25	2267		58	2603	
v/s Ratio Prot		0.09			0.03		0.01	c0.13		c0.05	c0.09	
v/s Ratio Perm	0.02			c0.16								
v/c Ratio	0.07	0.33		0.61	0.12		0.84	0.29		1.43	0.17	
Uniform Delay, d1	15.8	17.0		18.7	16.3		28.3	9.9		27.9	7.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.1		3.6	0.1		106.1	0.3		268.4	0.1	
Delay (s)	15.9	17.2		22.4	16.4		134.4	10.2		296.3	7.6	
Level of Service	B	B		C	B		F	B		F	A	
Approach Delay (s)		17.0			20.2			13.9			53.4	
Approach LOS		B			C			B			D	

Intersection Summary				
HCM Average Control Delay	27.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.50			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	18.5	
Intersection Capacity Utilization	54.6%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
35: W Laurel St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3481		1770	3421		1770	4996		1770	5085	1551
Volume (vph)	278	524	64	89	352	89	155	421	51	338	562	150
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	302	570	70	97	383	97	168	458	55	367	611	163
RTOR Reduction (vph)	0	9	0	0	22	0	0	13	0	0	0	134
Lane Group Flow (vph)	302	631	0	97	458	0	168	500	0	367	611	29
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot			Prot			Prot			Prot		custom
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												7
Actuated Green, G (s)	17.7	27.0		12.3	21.0		13.2	20.9		21.2	28.8	17.7
Effective Green, g (s)	18.1	28.2		12.7	22.8		13.6	21.8		21.6	29.8	18.1
Actuated g/C Ratio	0.18	0.28		0.13	0.23		0.14	0.22		0.22	0.30	0.18
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	319	979		224	778		240	1086		381	1511	280
v/s Ratio Prot	c0.17	c0.18		0.05	0.13		0.09	c0.10		c0.21	0.12	
v/s Ratio Perm												0.02
v/c Ratio	0.95	0.64		0.43	0.59		0.70	0.46		0.96	0.40	0.11
Uniform Delay, d1	40.6	31.6		40.5	34.6		41.4	34.1		39.0	28.2	34.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	35.8	1.6		6.0	1.0		7.0	1.4		36.1	0.8	0.1
Delay (s)	76.5	33.3		46.5	35.6		48.4	35.5		75.1	29.0	34.4
Level of Service	E	C		D	D		D	D		E	C	C
Approach Delay (s)		47.1			37.4			38.7			44.6	
Approach LOS		D			D			D			D	

Intersection Summary				
HCM Average Control Delay	42.9	HCM Level of Service	D	
HCM Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	100.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	90.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
36: Rosecrans St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.84	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	1544	3433	1863	1328	1770	3539	1552	1770	3539	1539
Volume (vph)	100	685	78	143	257	80	235	206	456	57	97	52
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	753	86	157	282	88	258	226	501	63	107	57
RTOR Reduction (vph)	0	0	39	0	0	54	0	0	88	0	0	47
Lane Group Flow (vph)	110	753	47	157	282	34	258	226	413	63	107	10
Confl. Peds. (#/hr)	170		27	27		170	23		15	15		23
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	7.2	34.4	46.4	5.8	33.0	33.0	12.0	21.9	27.7	5.8	15.7	15.7
Effective Green, g (s)	7.6	35.3	47.7	6.2	33.9	33.9	12.4	21.3	26.0	6.2	15.2	15.2
Actuated g/C Ratio	0.09	0.41	0.55	0.07	0.39	0.39	0.14	0.25	0.30	0.07	0.18	0.18
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	156	1444	923	246	730	520	254	871	565	127	622	270
v/s Ratio Prot	c0.06	c0.21	0.01	0.05	0.15		c0.15	0.06	c0.04	0.04	0.03	
v/s Ratio Perm			0.02			0.03			0.23			0.01
v/c Ratio	0.71	0.52	0.05	0.64	0.39	0.07	1.02	0.26	0.73	0.50	0.17	0.04
Uniform Delay, d1	38.4	19.2	9.0	39.1	18.8	16.4	37.0	26.2	27.1	38.6	30.3	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.2	1.3	0.0	4.0	1.5	0.2	60.6	0.3	4.2	1.1	0.2	0.1
Delay (s)	49.6	20.6	9.0	43.0	20.4	16.7	97.6	26.5	31.3	39.8	30.5	29.7
Level of Service	D	C	A	D	C	B	F	C	C	D	C	C
Approach Delay (s)		22.9			26.5			47.6			32.9	
Approach LOS		C			C			D			C	

Intersection Summary				
HCM Average Control Delay	33.5	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.66			
Actuated Cycle Length (s)	86.5	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	77.0%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
37: Old Town St & Moore St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		1.00			0.94			0.95			0.88	
Flt Protected		0.97			1.00			0.99			1.00	
Satd. Flow (prot)		1796			1726			1725			1605	
Flt Permitted		0.62			0.99			0.90			0.99	
Satd. Flow (perm)		1147			1714			1570			1596	
Volume (vph)	406	183	9	5	150	137	71	88	95	1	2	21
Peak-hour factor, PHF	0.98	0.98	0.98	0.86	0.86	0.86	0.89	0.89	0.89	0.67	0.67	0.67
Adj. Flow (vph)	414	187	9	6	174	159	80	99	107	1	3	31
RTOR Reduction (vph)	0	1	0	0	21	0	0	29	0	0	24	0
Lane Group Flow (vph)	0	609	0	0	318	0	0	257	0	0	11	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		49.4			49.4			15.4			15.4	
Effective Green, g (s)		50.3			50.3			16.3			16.3	
Actuated g/C Ratio		0.67			0.67			0.22			0.22	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		773			1156			343			349	
v/s Ratio Prot												
v/s Ratio Perm		c0.53			0.19			c0.16			0.01	
v/c Ratio		0.79			0.27			0.75			0.03	
Uniform Delay, d1		8.4			4.9			27.2			22.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		4.9			0.6			7.6			0.0	
Delay (s)		13.4			5.4			34.9			22.9	
Level of Service		B			A			C			C	
Approach Delay (s)		13.4			5.4			34.9			22.9	
Approach LOS		B			A			C			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.78			
Actuated Cycle Length (s)	74.6	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	80.4%	ICU Level of Service	D	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
38: Taylor St & Congress St 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4770		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4770		1770	3539	1770	1583
Volume (vph)	902	296	132	392	88	157
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.90	0.90
Adj. Flow (vph)	1013	333	148	440	98	174
RTOR Reduction (vph)	67	0	0	0	0	136
Lane Group Flow (vph)	1279	0	148	440	98	38
Confl. Peds. (#/hr)		53	53		46	81
Turn Type			Prot			Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	33.8		6.3	44.5	14.0	14.0
Effective Green, g (s)	35.7		6.7	44.5	14.9	14.9
Actuated g/C Ratio	0.52		0.10	0.65	0.22	0.22
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2493		174	2306	386	345
v/s Ratio Prot	c0.27		c0.08	0.12	c0.06	0.02
v/s Ratio Perm						
v/c Ratio	0.51		0.85	0.19	0.25	0.11
Uniform Delay, d1	10.6		30.3	4.7	22.1	21.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8		29.8	0.2	0.1	0.1
Delay (s)	11.4		60.1	4.9	22.2	21.4
Level of Service	B		E	A	C	C
Approach Delay (s)	11.4			18.8	21.7	
Approach LOS	B			B	C	

Intersection Summary				
HCM Average Control Delay	14.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.49			
Actuated Cycle Length (s)	68.3	Sum of lost time (s)	11.0	
Intersection Capacity Utilization	55.1%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

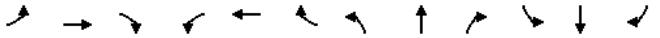
Exisitng PM
39: Twiggs St & Congress St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	8	2	3	17	5	47	12	106	13	43	136	9
Peak Hour Factor	0.80	0.80	0.80	0.66	0.66	0.66	0.82	0.82	0.82	0.90	0.90	0.90
Hourly flow rate (vph)	10	2	4	26	8	71	15	129	16	48	151	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	16	105	160	209
Volume Left (vph)	10	26	15	48
Volume Right (vph)	4	71	16	10
Hadj (s)	0.02	-0.33	-0.01	0.05
Departure Headway (s)	4.9	4.4	4.4	4.4
Degree Utilization, x	0.02	0.13	0.20	0.26
Capacity (veh/h)	666	744	783	782
Control Delay (s)	8.0	8.1	8.5	8.9
Approach Delay (s)	8.0	8.1	8.5	8.9
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.6			
HCM Level of Service	A			
Intersection Capacity Utilization	34.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Exisitng PM
40: Harney St & Congress St 4/9/2012

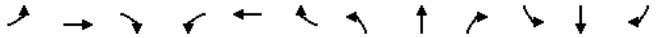


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	21	10	5	19	29	8	5	102	15	20	96	40
Peak Hour Factor	0.75	0.75	0.75	0.73	0.73	0.73	0.87	0.87	0.87	0.92	0.92	0.92
Hourly flow rate (vph)	28	13	7	26	40	11	6	117	17	22	104	43

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	48	77	140	170
Volume Left (vph)	28	26	6	22
Volume Right (vph)	7	11	17	43
Hadj (s)	0.07	0.02	-0.03	-0.09
Departure Headway (s)	4.8	4.7	4.4	4.3
Degree Utilization, x	0.06	0.10	0.17	0.20
Capacity (veh/h)	695	712	791	805
Control Delay (s)	8.1	8.2	8.2	8.3
Approach Delay (s)	8.1	8.2	8.2	8.3
Approach LOS	A	A	A	A

Intersection Summary				
Delay			8.3	
HCM Level of Service			A	
Intersection Capacity Utilization			30.3%	ICU Level of Service
Analysis Period (min)			15	A

Exisitng PM
41: Ampudia St & Congress St 4/9/2012

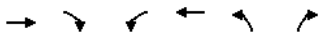


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	6	5	6	51	18	11	9	99	290	0	107	2
Peak Hour Factor	0.91	0.91	0.91	0.62	0.62	0.62	0.93	0.93	0.93	0.89	0.89	0.89
Hourly flow rate (vph)	7	5	7	82	29	18	10	106	312	0	120	2
Pedestrians		2			9						5	
Lane Width (ft)		12.0			12.0						12.0	
Walking Speed (ft/s)		4.0			4.0						4.0	
Percent Blockage		0			1						0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)								320				
pX, platoon unblocked												
vC, conflicting volume	286	570	123	265	259	120	124			427		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	286	570	123	265	259	120	124			427		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	99	99	99	88	95	98	99			100		
cM capacity (veh/h)	619	425	926	662	635	920	1460			1124		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total	19	129	116	312	122
Volume Left	7	82	10	0	0
Volume Right	7	18	0	312	2
cSH	608	682	1460	1700	1124
Volume to Capacity	0.03	0.19	0.01	0.18	0.00
Queue Length 95th (ft)	2	17	1	0	0
Control Delay (s)	11.1	11.5	0.7	0.0	0.0
Lane LOS	B	B	A		
Approach Delay (s)	11.1	11.5	0.2		0.0
Approach LOS	B	B			

Intersection Summary					
Average Delay			2.5		
Intersection Capacity Utilization			38.5%	ICU Level of Service	
Analysis Period (min)			15		A

Exisitng PM
42: Twiggs St & San Diego Ave 4/9/2012

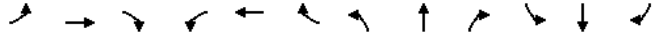


Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (vph)	30	28	41	35	34	85
Peak Hour Factor	0.89	0.89	0.78	0.78	0.83	0.83
Hourly flow rate (vph)	34	31	53	45	41	102

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	65	97	143
Volume Left (vph)	0	53	41
Volume Right (vph)	31	0	102
Hadj (s)	-0.26	0.14	-0.34
Departure Headway (s)	4.0	4.4	3.9
Degree Utilization, x	0.07	0.12	0.16
Capacity (veh/h)	851	787	877
Control Delay (s)	7.4	8.0	7.6
Approach Delay (s)	7.4	8.0	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay		7.7	
HCM Level of Service		A	
Intersection Capacity Utilization	32.7%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
43: Harney St & San Diego Ave 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	14	18	13	40	18	6	30	99	46	3	58	8
Peak Hour Factor	0.82	0.82	0.82	0.86	0.86	0.86	0.91	0.91	0.91	0.81	0.81	0.81
Hourly flow rate (vph)	17	22	16	47	21	7	33	109	51	4	72	10

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	74	192	85
Volume Left (vph)	17	47	33	4
Volume Right (vph)	16	7	51	10
Hadj (s)	-0.08	0.10	-0.09	-0.03
Departure Headway (s)	4.5	4.7	4.2	4.4
Degree Utilization, x	0.07	0.10	0.23	0.10
Capacity (veh/h)	732	713	822	777
Control Delay (s)	7.9	8.2	8.4	7.9
Approach Delay (s)	7.9	8.2	8.4	7.9
Approach LOS	A	A	A	A

Intersection Summary			
Delay		8.2	
HCM Level of Service		A	
Intersection Capacity Utilization	38.0%	ICU Level of Service	A
Analysis Period (min)		15	

Exisitng PM
44: Old Town St & San Diego Ave 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.97		1.00	1.00		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1728			1785		1765	1852		1763	1623	
Flt Permitted		0.77			0.95		0.62	1.00		0.66	1.00	
Satd. Flow (perm)		1377			1713		1149	1852		1219	1623	
Volume (vph)	160	28	91	7	45	17	100	121	4	8	48	147
Peak-hour factor, PHF	0.78	0.78	0.78	0.81	0.81	0.81	0.79	0.79	0.79	0.87	0.87	0.87
Adj. Flow (vph)	205	36	117	9	56	21	127	153	5	9	55	169
RTOR Reduction (vph)	0	41	0	0	14	0	0	2	0	0	83	0
Lane Group Flow (vph)	0	317	0	0	72	0	127	156	0	9	141	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Effective Green, g (s)		13.9			13.9		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.31			0.31		0.51	0.51		0.51	0.51	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		431			536		582	939		618	822	
v/s Ratio Prot								0.08			0.09	
v/s Ratio Perm		c0.23			0.04		c0.11			0.01		
v/c Ratio		0.73			0.13		0.22	0.17		0.01	0.17	
Uniform Delay, d1		13.6			10.9		6.1	5.9		5.4	5.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.5			0.0		0.9	0.4		0.0	0.5	
Delay (s)		19.1			11.0		6.9	6.3		5.5	6.4	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		19.1			11.0			6.6			6.3	
Approach LOS		B			B			A			A	

Intersection Summary				
HCM Average Control Delay	11.6	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	44.4	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	55.6%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

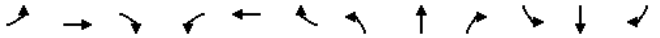
Exisitng PM
45: Taylor St & 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.90			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	
Satd. Flow (prot)	1764	3473		1769	3530			1640			1742	
Flt Permitted	0.46	1.00		0.14	1.00			0.90			0.73	
Satd. Flow (perm)	856	3473		264	3530			1500			1315	
Volume (vph)	52	909	98	188	454	6	65	2	179	15	2	5
Peak-hour factor, PHF	0.93	0.93	0.93	0.89	0.89	0.89	0.95	0.95	0.95	0.79	0.79	0.79
Adj. Flow (vph)	56	977	105	211	510	7	68	2	188	19	3	6
RTOR Reduction (vph)	0	10	0	0	1	0	0	148	0	0	5	0
Lane Group Flow (vph)	56	1072	0	211	516	0	0	110	0	0	23	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.1	25.8		37.3	30.6			10.5			10.5	
Effective Green, g (s)	29.5	26.8		38.2	31.5			11.4			11.4	
Actuated g/C Ratio	0.51	0.47		0.66	0.55			0.20			0.20	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	481	1616		368	1930			297			260	
v/s Ratio Prot	0.01	c0.31		c0.07	0.15							
v/s Ratio Perm	0.05			0.31				c0.07			0.02	
v/c Ratio	0.12	0.66		0.57	0.27			0.37			0.09	
Uniform Delay, d1	7.1	11.9		6.8	6.9			20.0			18.9	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	2.2		1.3	0.3			0.3			0.1	
Delay (s)	7.1	14.1		8.1	7.3			20.3			18.9	
Level of Service	A	B		A	A			C			B	
Approach Delay (s)		13.7			7.5			20.3			18.9	
Approach LOS		B			A			C			B	

Intersection Summary				
HCM Average Control Delay	12.5	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	57.6	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
46: Twiggs St & Juan St 4/9/2012

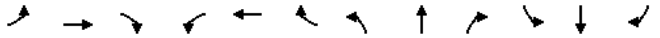


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	98	4	13	0	1	5	4	91	3	6	127	71
Peak Hour Factor	0.93	0.93	0.93	0.50	0.50	0.50	0.87	0.87	0.87	0.96	0.96	0.96
Hourly flow rate (vph)	105	4	14	0	2	10	5	105	3	6	132	74

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	124	12	113	213
Volume Left (vph)	105	0	5	6
Volume Right (vph)	14	10	3	74
Hadj (s)	0.14	-0.47	0.02	-0.17
Departure Headway (s)	4.8	4.3	4.5	4.2
Degree Utilization, x	0.16	0.01	0.14	0.25
Capacity (veh/h)	701	753	765	819
Control Delay (s)	8.7	7.4	8.2	8.6
Approach Delay (s)	8.7	7.4	8.2	8.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay		8.5		
HCM Level of Service		A		
Intersection Capacity Utilization		33.9%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
47: Harney St & Juan St 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	22	3	42	0	3	9	21	67	4	4	96	40
Peak Hour Factor	0.90	0.90	0.90	0.50	0.50	0.50	0.92	0.92	0.92	0.88	0.88	0.80
Hourly flow rate (vph)	24	3	47	0	6	18	23	73	4	5	109	50

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	74	24	100	164
Volume Left (vph)	24	0	23	5
Volume Right (vph)	47	18	4	50
Hadj (s)	-0.28	-0.42	0.05	-0.14
Departure Headway (s)	4.2	4.1	4.3	4.1
Degree Utilization, x	0.09	0.03	0.12	0.19
Capacity (veh/h)	790	799	798	858
Control Delay (s)	7.6	7.3	7.9	8.0
Approach Delay (s)	7.6	7.3	7.9	8.0
Approach LOS	A	A	A	A

Intersection Summary				
Delay		7.9		
HCM Level of Service		A		
Intersection Capacity Utilization		33.2%	ICU Level of Service	A
Analysis Period (min)		15		

Exisitng PM
48: Taylor St & Morena Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (prot)	3433	3510		1770	3426				1611	1681	1699	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.96	1.00
Satd. Flow (perm)	3433	3510		1770	3426				1611	1681	1699	1561
Volume (vph)	468	606	29	3	448	107	0	0	14	78	7	200
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.86	0.86	0.86	0.89	0.89	0.89
Adj. Flow (vph)	498	645	31	3	477	114	0	0	16	88	8	225
RTOR Reduction (vph)	0	3	0	0	21	0	0	0	0	0	0	181
Lane Group Flow (vph)	498	673	0	3	570	0	0	0	16	47	49	44
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot			Prot					Free	Split		Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	12.0	38.5		0.6	27.1				65.3	11.6	11.6	11.6
Effective Green, g (s)	12.4	39.4		1.0	28.0				65.3	12.9	12.9	12.9
Actuated g/C Ratio	0.19	0.60		0.02	0.43				1.00	0.20	0.20	0.20
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	652	2118		27	1469				1611	332	336	308
v/s Ratio Prot	c0.15	0.19		0.00	c0.17					0.03	c0.03	
v/s Ratio Perm									0.01			0.03
v/c Ratio	0.76	0.32		0.11	0.39				0.01	0.14	0.15	0.14
Uniform Delay, d1	25.1	6.4		31.7	12.8				0.0	21.6	21.6	21.6
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	4.8	0.4		0.7	0.8				0.0	0.3	0.3	0.4
Delay (s)	29.8	6.8		32.4	13.6				0.0	22.0	22.0	22.0
Level of Service	C	A		C	B				A	C	C	C
Approach Delay (s)		16.5			13.6			0.0			22.0	
Approach LOS		B			B			A			C	

Intersection Summary				
HCM Average Control Delay	16.4	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.42			
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	49.3%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
49: Rosecrans St. & Hugo St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.92			1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3420		1671	3423		1644	1575			1736	
Flt Permitted	0.95	1.00		0.95	1.00		0.55	1.00			0.51	
Satd. Flow (perm)	1678	3420		1671	3423		949	1575			900	
Volume (vph)	16	1386	63	32	969	26	105	99	124	24	76	3
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	1540	70	36	1077	29	117	110	138	27	84	3
RTOR Reduction (vph)	0	1	0	0	1	0	0	34	0	0	1	0
Lane Group Flow (vph)	18	1609	0	36	1105	0	117	214	0	0	113	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot			Prot			Perm			Perm		
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	105.3		6.8	109.0		23.7	23.7			23.7	
Effective Green, g (s)	3.5	106.2		7.2	109.9		24.6	24.6			24.6	
Actuated g/C Ratio	0.02	0.71		0.05	0.73		0.16	0.16			0.16	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	39	2421		80	2508		156	258			148	
v/s Ratio Prot	0.01	c0.47		c0.02	c0.32			c0.14				
v/s Ratio Perm							0.12				0.13	
v/c Ratio	0.46	0.66		0.45	0.44		0.75	0.83			0.76	
Uniform Delay, d1	72.3	12.1		69.5	7.9		59.8	60.7			59.9	
Progression Factor	1.00	1.00		0.91	0.44		1.00	1.00			1.00	
Incremental Delay, d2	3.1	1.5		1.0	0.4		16.3	18.4			18.8	
Delay (s)	75.4	13.5		64.3	3.8		76.1	79.0			78.7	
Level of Service	E	B		E	A		E	E			E	
Approach Delay (s)		14.2			5.8			78.1			78.7	
Approach LOS		B			A			E			E	

Intersection Summary				
HCM Average Control Delay	20.7	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0	
Intersection Capacity Utilization	72.2%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
50: Rosecrans St. & Lowell St 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3526		1770	3394		1770	3539	1527	1770	3183	
Volume (vph)	352	1316	24	165	799	184	18	370	181	287	190	135
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	371	1385	25	174	841	194	19	389	191	302	200	142
RTOR Reduction (vph)	0	1	0	0	13	0	0	0	31	0	85	0
Lane Group Flow (vph)	371	1409	0	174	1022	0	19	389	160	302	257	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	33.0	60.9		16.7	44.1		3.6	24.8	41.5	28.9	50.2	
Effective Green, g (s)	33.4	61.8		17.1	45.5		4.0	25.8	42.9	29.3	51.1	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.03	0.17	0.29	0.20	0.34	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	394	1453		202	1030		47	609	437	346	1084	
v/s Ratio Prot	c0.21	c0.40		0.10	0.30		0.01	c0.11	0.04	c0.17	0.08	
v/s Ratio Perm									0.06			
v/c Ratio	0.94	0.97		0.86	0.99		0.40	0.64	0.37	0.87	0.24	
Uniform Delay, d1	57.3	43.2		65.3	52.1		71.8	57.8	42.7	58.5	35.5	
Progression Factor	1.19	0.83		1.16	0.91		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	26.0	15.0		26.6	25.0		2.1	2.5	0.2	20.2	0.1	
Delay (s)	94.0	50.7		102.4	72.3		73.9	60.2	42.9	78.8	35.6	
Level of Service	F	D		F	E		E	E	D	E	D	
Approach Delay (s)		59.7			76.7			55.1			55.8	
Approach LOS		E			E			E			E	

Intersection Summary				
HCM Average Control Delay	63.3	HCM Level of Service	E	
HCM Volume to Capacity ratio	0.87			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	95.3%	ICU Level of Service	F	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
51: Rosecrans St. & Laning Rd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00			1.00	0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00			1.00	1.00		1.00	
Frt		0.99		1.00	1.00			1.00	0.85		1.00	
Flt Protected		1.00		0.95	1.00			0.95	1.00		0.96	
Satd. Flow (prot)		5045		1770	3539			1775	1552		1787	
Flt Permitted		1.00		0.95	1.00			0.71	1.00		0.70	
Satd. Flow (perm)		5045		1770	3539			1329	1552		1302	
Volume (vph)	0	1855	83	142	1217	1	87	1	203	40	10	1
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1953	87	149	1281	1	92	1	214	42	11	1
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	184	0	1	0
Lane Group Flow (vph)	0	2038	0	149	1282	0	0	93	30	0	53	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)		98.8		16.5	119.7			20.1	20.1		20.1	
Effective Green, g (s)		100.1		16.9	121.0			21.0	21.0		21.0	
Actuated g/C Ratio		0.67		0.11	0.81			0.14	0.14		0.14	
Clearance Time (s)		5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)		4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)		3367		199	2855			186	217		182	
v/s Ratio Prot		c0.40		c0.08	0.36							
v/s Ratio Perm								c0.07	0.02		0.04	
v/c Ratio		0.61		0.75	0.45			0.50	0.14		0.29	
Uniform Delay, d1		13.9		64.5	4.4			59.6	56.6		57.8	
Progression Factor		0.35		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2		0.5		12.6	0.5			0.8	0.1		0.3	
Delay (s)		5.4		77.1	4.9			60.4	56.7		58.2	
Level of Service		A		E	A			E	E		E	
Approach Delay (s)		5.4			12.4			57.8			58.2	
Approach LOS		A			B			E			E	

Intersection Summary				
HCM Average Control Delay	12.9	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.61			
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.1%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Exisitng PM
52: Hawthorne St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						1.00	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.98	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5031						4958	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5031						4958	
Volume (vph)	0	0	0	197	900	0	0	0	0	0	393	67
Peak-hour factor, PHF	0.92	0.92	0.92	0.94	0.94	0.94	0.92	0.92	0.92	0.72	0.72	0.72
Adj. Flow (vph)	0	0	0	210	957	0	0	0	0	0	546	93
RTOR Reduction (vph)	0	0	0	0	26	0	0	0	0	0	32	0
Lane Group Flow (vph)	0	0	0	0	1141	0	0	0	0	0	607	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm								
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3527						1041	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.23							
v/c Ratio					0.32						0.58	
Uniform Delay, d1					5.2						32.0	
Progression Factor					1.00						1.00	
Incremental Delay, d2					0.2						0.5	
Delay (s)					5.4						32.5	
Level of Service					A						C	
Approach Delay (s)		0.0			5.4			0.0			32.5	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	15.0	HCM Level of Service	B	
HCM Volume to Capacity ratio	0.38			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

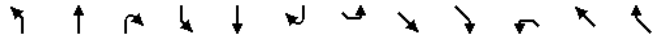
Exisitng PM
53: Grape St & Kettner Blvd 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		1.00									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5063									4943	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5063									4943	
Volume (vph)	0	1526	39	0	0	0	0	0	0	240	350	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.25	0.25	0.25	0.25	0.25	0.25	0.89	0.89	0.89
Adj. Flow (vph)	0	1641	42	0	0	0	0	0	0	270	393	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	0	0	8	0
Lane Group Flow (vph)	0	1681	0	0	0	0	0	0	0	0	655	0
Confl. Peds. (#/hr)			9							14		
Turn Type										Perm		
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		61.8									19.2	
Effective Green, g (s)		61.8									20.2	
Actuated g/C Ratio		0.69									0.22	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3477									1109	
v/s Ratio Prot		c0.33										
v/s Ratio Perm											0.13	
v/c Ratio		0.48									0.59	
Uniform Delay, d1		6.6									31.2	
Progression Factor		0.40									0.72	
Incremental Delay, d2		0.4									0.8	
Delay (s)		3.0									23.3	
Level of Service		A									C	
Approach Delay (s)		3.0			0.0			0.0			23.3	
Approach LOS		A			A			A			C	

Intersection Summary				
HCM Average Control Delay	8.7	HCM Level of Service	A	
HCM Volume to Capacity ratio	0.51			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0	
Intersection Capacity Utilization	52.9%	ICU Level of Service	A	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
54: Seaworld Dr & E Mission Bay Dr 4/9/2012

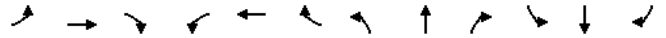


Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	1770	3539	1555	3433	1863	1563	1770	1863	1583
Volume (vph)	78	1077	116	142	1276	13	59	70	189	102	41	116
Peak-hour factor, PHF	0.97	0.97	0.97	0.96	0.96	0.96	0.82	0.82	0.82	0.74	0.74	0.74
Adj. Flow (vph)	80	1110	120	148	1329	14	72	85	230	138	55	157
RTOR Reduction (vph)	0	0	89	0	0	9	0	0	115	0	0	116
Lane Group Flow (vph)	80	1110	31	148	1329	5	72	85	115	138	55	41
Confl. Peds. (#/hr)	1					1			1	1		
Turn Type	Prot		custom	Prot		custom	Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases			3			7			4			8
Actuated Green, G (s)	3.1	31.6	8.0	8.1	36.7	3.9	3.9	11.8	11.8	8.0	15.0	15.0
Effective Green, g (s)	3.1	33.1	8.0	8.1	38.1	3.9	3.9	12.7	12.7	8.0	16.8	16.8
Actuated g/C Ratio	0.04	0.42	0.10	0.10	0.49	0.05	0.05	0.16	0.16	0.10	0.22	0.22
Clearance Time (s)	4.0	5.5	4.0	4.0	5.4	4.0	4.0	4.9	4.9	4.0	5.8	5.8
Vehicle Extension (s)	2.0	3.7	2.0	2.0	4.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	137	1504	163	184	1731	78	172	304	255	182	402	341
v/s Ratio Prot	0.02	0.31		c0.08	c0.38		0.02	0.05		c0.08	0.03	
v/s Ratio Perm			0.02			0.00			c0.07			0.03
v/c Ratio	0.58	0.74	0.19	0.80	0.77	0.07	0.42	0.28	0.45	0.76	0.14	0.12
Uniform Delay, d1	36.8	18.8	32.0	34.1	16.3	35.3	35.9	28.6	29.5	34.0	24.7	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	3.3	0.2	20.8	3.3	0.1	0.6	0.5	1.3	14.8	0.1	0.1
Delay (s)	40.8	22.0	32.2	54.9	19.6	35.4	36.5	29.1	30.7	48.8	24.7	24.7
Level of Service	D	C	C	D	B	D	D	C	C	D	C	C
Approach Delay (s)		24.1			23.3			31.4			34.2	
Approach LOS		C			C			C			C	

Intersection Summary				
HCM Average Control Delay	25.6	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.69			
Actuated Cycle Length (s)	77.9	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	63.0%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
55: Hawthorne St & Pacific Highway 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.4	5.8		4.4	4.9			5.0	
Lane Util. Factor				1.00	0.95		1.00	0.91			0.91	
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	
Flpb, ped/bikes				0.97	1.00		1.00	1.00			1.00	
Frt				1.00	0.99		1.00	1.00			0.99	
Flt Protected				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)				1716	3482		1770	5085			5029	
Flt Permitted				0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)				1716	3482		1770	5085			5029	
Volume (vph)	0	0	0	110	775	82	52	375	0	0	258	18
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.88	0.88	0.88	0.84	0.84	0.84
Adj. Flow (vph)	0	0	0	124	871	92	59	426	0	0	307	21
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	124	954	0	59	426	0	0	318	0
Confl. Peds. (#/hr)				35		10	7					7
Turn Type				Perm			Prot					
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)				40.5	40.5		23.3	39.7			12.0	
Effective Green, g (s)				41.0	39.6		23.3	39.7			11.9	
Actuated g/C Ratio				0.46	0.44		0.26	0.44			0.13	
Clearance Time (s)				4.9	4.9		4.4	4.9			4.9	
Vehicle Extension (s)				3.0	3.0		3.0	3.3			3.3	
Lane Grp Cap (vph)				782	1532		458	2243			665	
v/s Ratio Prot					c0.27		0.03	c0.08			c0.06	
v/s Ratio Perm				0.07								
v/c Ratio				0.16	0.62		0.13	0.19			0.48	
Uniform Delay, d1				14.4	19.4		25.6	15.3			36.2	
Progression Factor				1.07	1.09		0.47	0.53			1.00	
Incremental Delay, d2				0.4	1.8		0.5	0.2			0.6	
Delay (s)				15.8	23.1		12.4	8.2			36.8	
Level of Service				B	C		B	A			D	
Approach Delay (s)		0.0			22.3			8.7			36.8	
Approach LOS		A			C			A			D	

Intersection Summary				
HCM Average Control Delay	21.3	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.44			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	10.8	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
56: Grape St & Pacific Highway 4/9/2012

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5075	1532					4668		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5075	1532					4668		1770	5085	
Volume (vph)	43	1141	24	0	0	0	0	384	332	92	276	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.25	0.25	0.25	0.93	0.92	0.92	0.92	0.95	0.95
Adj. Flow (vph)	47	1240	26	0	0	0	0	417	361	100	291	0
RTOR Reduction (vph)	0	0	16	0	0	0	0	119	0	0	0	0
Lane Group Flow (vph)	0	1287	10	0	0	0	0	659	0	100	291	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm		Perm							Prot		
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		34.6	34.6					26.0		15.2	45.6	
Effective Green, g (s)		35.5	35.5					26.0		15.6	45.6	
Actuated g/C Ratio		0.39	0.39					0.29		0.17	0.51	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2002	604					1349		307	2576	
v/s Ratio Prot								c0.14		c0.06	0.06	
v/s Ratio Perm		0.25	0.01									
v/c Ratio		0.64	0.02					0.49		0.33	0.11	
Uniform Delay, d1		22.1	16.6					26.5		32.6	11.6	
Progression Factor		1.00	1.00					1.00		1.77	0.56	
Incremental Delay, d2		1.6	0.1					1.3		2.8	0.1	
Delay (s)		23.7	16.7					27.8		60.3	6.6	
Level of Service		C	B					C		E	A	
Approach Delay (s)		23.6			0.0			27.8			20.4	
Approach LOS		C			A			C			C	

Intersection Summary				
HCM Average Control Delay	24.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9	
Intersection Capacity Utilization	58.3%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group

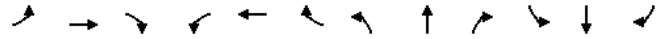
Exisitng PM
57: Seaworld Dr & Friars Rd 4/9/2012

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1568	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1568	3433	3539	3433	1418
Volume (vph)	1153	391	270	1297	301	118
Peak-hour factor, PHF	0.96	0.96	0.99	0.99	0.93	0.93
Adj. Flow (vph)	1201	407	273	1310	324	127
RTOR Reduction (vph)	0	7	0	0	0	98
Lane Group Flow (vph)	1201	400	273	1310	324	29
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type		pm+ov	Prot			Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.8	41.6	7.8	41.8	12.8	12.8
Effective Green, g (s)	31.0	46.0	7.7	43.2	15.0	15.0
Actuated g/C Ratio	0.47	0.69	0.12	0.65	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1657	1184	399	2309	778	321
v/s Ratio Prot	c0.34	0.08	0.08	c0.37	c0.09	
v/s Ratio Perm		0.18				0.02
v/c Ratio	0.72	0.34	0.68	0.57	0.42	0.09
Uniform Delay, d1	14.2	4.0	28.1	6.3	21.9	20.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	0.1	3.8	1.0	0.1	0.0
Delay (s)	17.0	4.1	31.9	7.4	22.0	20.3
Level of Service	B	A	C	A	C	C
Approach Delay (s)	13.7			11.6	21.5	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Existing PM
58: I-5 SB On/I-5 SB Off & Seaworld Dr 12/07/2017

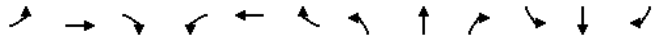


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Future Volume (vph)	0	1016	236	292	306	0	0	0	0	333	0	1125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.86	0.86	0.86	0.25	0.25	0.25	0.96	0.96	0.96
Adj. Flow (vph)	0	1116	259	340	356	0	0	0	0	347	0	1172
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1116	131	340	356	0	0	0	0	347	0	1172
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		36.8	36.8	9.4	50.4					15.0		75.0
Effective Green, g (s)		37.8	37.8	9.6	51.4					15.6		75.0
Actuated g/C Ratio		0.50	0.50	0.13	0.69					0.21		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1783	786	439	2425					368		1583
v/s Ratio Prot		0.32		0.10	0.10					c0.20		
v/s Ratio Perm			0.08									c0.74
v/c Ratio		0.63	0.17	0.77	0.15					0.94		0.74
Uniform Delay, d1		13.5	10.1	31.7	4.1					29.3		0.0
Progression Factor		1.00	1.00	0.91	1.16					1.00		1.00
Incremental Delay, d2		1.7	0.5	6.7	0.1					32.1		3.2
Delay (s)		15.1	10.5	35.5	4.9					61.3		3.2
Level of Service		B	B	D	A					E		A
Approach Delay (s)		14.3			19.9			0.0			16.4	
Approach LOS		B			B			A			B	

Intersection Summary				
HCM 2000 Control Delay	16.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.88			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			

c Critical Lane Group

Exisitng PM
59: Seaworld Dr & I-5 NB On 4/9/2012



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3265			1775	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3265			1775	1583			
Volume (vph)	783	566	0	0	432	384	166	3	418	0	0	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.99	0.99	0.99	0.90	0.90	0.90	0.25	0.25	0.25
Adj. Flow (vph)	833	602	0	0	436	388	184	3	464	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	328	0	0	0
Lane Group Flow (vph)	833	602	0	0	622	0	0	187	136	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot						Split		Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	19.5	55.7			32.0			9.2	9.2			
Effective Green, g (s)	19.7	56.2			32.5			9.8	9.8			
Actuated g/C Ratio	0.26	0.75			0.43			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	902	2652			1415			232	207			
v/s Ratio Prot	c0.24	0.17			c0.19			c0.11				
v/s Ratio Perm									0.09			
v/c Ratio	0.92	0.23			0.44			0.81	0.66			
Uniform Delay, d1	26.9	2.8			14.9			31.7	31.0			
Progression Factor	1.47	0.76			1.00			1.00	1.00			
Incremental Delay, d2	11.1	0.1			1.0			17.2	5.7			
Delay (s)	50.6	2.3			15.9			48.9	36.7			
Level of Service	D	A			B			D	D			
Approach Delay (s)		30.3			15.9			40.2			0.0	
Approach LOS		C			B			D			A	

Intersection Summary				
HCM Average Control Delay	28.4	HCM Level of Service	C	
HCM Volume to Capacity ratio	0.65			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0	
Intersection Capacity Utilization	87.2%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group

Appendix F
Caltrans Freeway Count Worksheets

Dist	Rte		Description	CO		Poast Mile	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak hour	Ahead Peak Month	Ahead AADT	Peak Hour
	11	8	NIMITZ BLVD	SD	T	0.466	740	11,000	10,500	4,050	48,500	46,500	8.7%
	11	8	MIDWAY DRIVE	SD	L	1.213	4,050	48,500	46,500	8,800	113,000	102,000	8.6%
	11	8	JCT RTE 5 LT LANES	SD	L	2.379	8,800	113,000	102,000	11,100	144,000	132,000	8.4%
	11	8	SAN DIEGO, MORENA BLVD	SD	R	0.364	11,100	144,000	132,000	15,700	194,000	191,000	8.2%
	11	5	CLAIREMONT DRIVE	SD	R	22.262	Ahead Peak hour 18,300	Ahead Peak Month 230,000	Ahead AADT 220,000	Back Peak Hour 16,800	Back Peak Month 208,000	Back AADT 203,000	8.3%
	11	5	MISSION BAY/SEA WORLD	SD	R	20.818	16,700	212,000	199,000	18,300	230,000	220,000	8.4%
	11	5	JCT. RTE. 8/CAMINO DEL RIO	SD	R	20.056	16,300	212,000	199,000	16,700	212,000	199,000	8.2%
	11	5	SAN DIEGO, OLD TOWN AVE	SD	R	19.033	15,400	205,000	192,000	16,300	212,000	199,000	8.0%
	11	5	SAN DIEGO, WASHINGTON ST	SD	R	18.283	11,500	152,000	142,000	15,400	205,000	192,000	8.1%
	11	5	SAN DIEGO, SASSAFRAS ST	SD	R	17.77	12,400	157,000	147,000	11,500	152,000	142,000	8.4%
	11	5	PACIFIC HIGHWAY VIADUCT	SD	R	17.53	14,400	200,000	183,000	12,400	157,000	147,000	7.9%

Location (I.D.)	Route	Dir	Period	Cars per green	Fast. rate (cyc./min.)	Slow. rate (cyc./min.)	Rate Delta	Sec./ Cycle	(per lane) Veh./hr	Total # lanes	HOV	Flow/lane			Total Flow
												High	Low	Average	Average
W. Mission Bay Dr (251)	8	EB	1500 - 1900	2	8.3	5.8	0.18	7.2 - 10.4	996 - 694	2	No	996	694	845	1690
Sports Arena Blvd (252)	8	EB	1500 - 1900	2	6.6	4.1	0.18	9.1 - 14.7	396 - 245	3	Lt	396	245	320.5	641
Sea World Dr (97)	5	SB	0530 - 0930	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	Lt	570	318	444	444
Sea World Dr (223)	5	NB	0530 - 0930	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555
			1500 - 1900	2	8.3	5.5	0.20	7.2 - 10.9	996 - 660	2	No	996	660	828	1656
Old Town Ave (187)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	1	No	570	352	461	461
Old Town Ave (188)	5	NB	0530 - 0930	1	9.5	5.6	0.28	6.3 - 10.8	570 - 335	2	No	570	335	452.5	905
			1500 - 1900	1	9.5	5.3	0.30	6.3 - 11.3	570 - 318	2	No	570	318	444	888
Washington St (184)	5	SB	1500 - 1900	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Washington St (186)	5	NB	0530 - 0930	1	9.5	5.9	0.26	6.3 - 10.2	570 - 352	2	No	570	352	461	922
Hawthorne St (181)	5	NB	0530 - 0930	2	8.3	4.8	0.25	7.2 - 12.5	996 - 576	2	No	996	576	786	1572
			1500 - 1900	2	8.3	4.7	0.26	7.2 - 12.9	996 - 559	2	No	996	559	777.5	1555

There are 15 separate rates or steps that depend on the mainlane volumes. The Cycles/min. have a definite rate delta whereas the seconds/cycle from one rate to another can vary from 0.1 - 0.4 sec.

RTE	DIST	CNTY	POST MILE	LEG	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
008	11	SD	T.407	A	SAN DIEGO, SUNSET CLIFFS BOULEVARD	10500	105	1	86	8	3	8	82.3	7.4	2.9	7.4	7	78E
008	11	SD	L2.379	B	JCT RTE 5 LT LANES	102000	1224	1.2	1038	87	9	91	84.8	7.1	.7	7.4	77	78V
008	11	SD	L2.379	A	JCT RTE 5 LT LANES	129000	3612	2.8	2416	520	155	520	66.9	14.4	4.3	14.4	335	83V
008	11	SD	2.41	B	SAN DIEGO, JCT. RTE. 163	201000	5427	2.7	4200	586	136	505	77.4	10.8	2.5	9.3	395	83E
008	11	SD	2.41	A	SAN DIEGO, JCT. RTE. 163	205000	5740	2.8	4483	574	138	545	78.1	10	2.4	9.5	418	83E
008	11	SD	4.378	B	SAN DIEGO, JCT. RTE. 805	194000	6208	3.2	4662	615	211	720	75.1	9.9	3.4	11.6	499	83E
008	11	SD	5.638	B	JCT. RTE. 15	241000	7230	3	4230	918	304	1779	58.5	12.7	4.2	24.6	891	83V
008	11	SD	5.638	A	JCT. RTE. 15	214000	7490	3.5	4794	861	337	1498	64	11.5	4.5	20	813	84E
008	11	SD	10.57	B	FLETCHER PARKWAY	190000	7030	3.7	4204	893	246	1687	59.8	12.7	3.5	24	847	84V
008	11	SD	10.57	A	FLETCHER PARKWAY	174000	7656	4.4	4326	1179	390	1761	56.5	15.4	5.1	23	925	78V
008	11	SD	15.8	B	EL CAJON, JCT. RTE. 67 NORTH	166000	7802	4.7	4205	1022	359	2216	53.9	13.1	4.6	28.4	1058	78V
008	11	SD	15.8	A	EL CAJON, JCT. RTE. 67 NORTH	134000	3886	2.9	2153	439	136	1158	55.4	11.3	3.5	29.8	535	78V
008	11	SD	R18.727	A	GREENFIELD DRIVE	80000	5520	6.9	2909	431	132	2048	52.7	7.8	2.4	37.1	867	86V
008	11	SD	R37.831	B	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	24900	2988	12	1174	176	90	1548	39.3	5.9	3	51.8	605	86E
008	11	SD	R37.831	A	JCT. RTE. 79 NORTH, JAPATUL VALLEY ROAD	19300	2625	13.6	853	205	76	1491	32.5	7.8	2.9	56.8	574	00E
008	11	SD	R51.98	B	CAMERON ROAD	15700	2013	12.82	843	94	40	1036	41.89	4.67	1.99	51.46	401	09V

RTE	DIST	CNTY	POST MILE	L E G	DESCRIPTION	VEHICLE AADT TOTAL	TRUCK AADT TOTAL	TRUCK % TOT VEH	TRUCK AADT TOTAL By Axle 2	3	4	5+	% TRUCK AADT By Axle 2	3	4	5+	EAL 2-WAY (1000)	YEAR VER/ EST
005	11	SD	R.09	A	SAN DIEGO, MEXICAN BORDER, TIE OFF	74000	1628	2.2	1014	62	46	506	62.3	3.8	2.8	31.1	223	83E
005	11	SD	R.878	A	SOUTH JCT. RTE. 805	40000	1520	3.8	800	195	15	511	52.6	12.8	1	33.6	224	83V
005	11	SD	4.632	B	JCT. RTE. 75 WEST	117000	4914	4.2	3155	595	147	1017	64.2	12.1	3	20.7	538	78V
005	11	SD	4.632	A	JCT. RTE. 75 WEST	143000	5291	3.7	2974	857	254	1206	56.2	16.2	4.8	22.8	636	83V
005	11	SD	R11.129	B	8TH STREET	168000	8400	5	4259	1344	445	2352	50.7	16	5.3	28	1150	85V
005	11	SD	R12.647	B	JCT. RTE. 15 NORTH	187000	9350	5	4740	1496	496	2618	50.7	16	5.3	28	1280	85E
005	11	SD	R12.647	A	JCT. RTE. 15 NORTH	152000	6232	4.1	3509	897	287	1539	56.3	14.4	4.6	24.7	778	85V
005	11	SD	R14.077	B	SAN DIEGO, JCT. RTE. 75 SOUTH	159000	6519	4.1	3670	939	300	1610	56.3	14.4	4.6	24.7	814	85E
005	11	SD	R14.077	A	SAN DIEGO, JCT. RTE. 75 SOUTH	163000	6520	4	3984	782	254	1500	61.1	12	3.9	23	766	78E
005	11	SD	R15.036	B	SAN DIEGO, JCT. RTE. 94	163000	6194	3.8	3785	743	242	1425	61.1	12	3.9	23	728	78V
005	11	SD	R15.036	A	SAN DIEGO, JCT. RTE. 94	209000	8360	4	5827	920	242	1371	69.7	11	2.9	16.4	797	87V
005	11	SD	R16.069	B	SAN DIEGO, JCT. RTE. 163	209000	7733	3.7	5119	773	286	1554	66.2	10	3.7	20.1	828	78E
005	11	SD	R16.069	A	SAN DIEGO, JCT. RTE. 163	200000	8200	4.1	5150	730	230	2091	62.8	8.9	2.8	25.5	1003	85V
005	11	SD	R20.056	B	JCT. RTE. 8/CAMINO DEL RIO	197000	8077	4.1	5072	719	226	2060	62.8	8.9	2.8	25.5	988	85V
005	11	SD	R20.056	A	JCT. RTE. 8/CAMINO DEL RIO	198000	6732	3.4	4443	673	289	1326	66	10	4.3	19.7	717	84V
005	11	SD	R23.476	B	SAN DIEGO, BALBOA	162000	7290	4.5	4811	729	313	1436	66	10	4.3	19.7	777	84E

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Mainline VDS 1111514 - SUNSET CLIFFS BLVD

Current Location



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I8-E @ CA PM T.68 (Abs PM 0.3)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	60.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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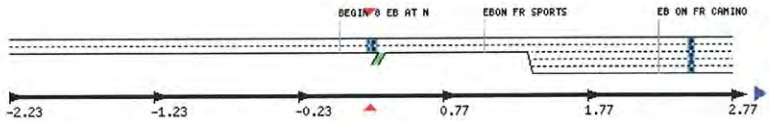
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,292	23,244		23,357	23,356	23,244	23,255	23,357	67	2,3
10/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,251	23,190		23,335	23,329	23,190	23,200	23,335	68	2,3
11/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,242	23,238		23,349	23,342	23,238	23,247	23,349	71	2,2
12/01/2010	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,170	23,207		23,295	23,302	23,207	23,212	23,295	75	2,2
01/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,265	23,289		23,346	23,346	23,289	23,295	23,346	74	2,2
02/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,202	23,274		23,343	23,346	23,274	23,281	23,343	75	2,2
03/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,212	23,290		23,333	23,343	23,290	23,297	23,333	76	2,2
04/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,182	23,261		23,312	23,322	23,261	23,268	23,312	76	2,2
05/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,144	23,262		23,301	23,315	23,262	23,269	23,301	76	2,2
06/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,211	23,285		23,343	23,384	23,285	23,292	23,343	79	2,2
07/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,188	23,266		23,343	23,380	23,266	23,273	23,343	78	2,2
08/01/2011	I8-E	T.68	0.27	1111514	SUNSET CLIFFS BLVD	Mainline	23,073	23,218		23,312	23,349	23,218	22,994	23,312	73	2,2



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Used for D Factor

$$\frac{23,300}{23,300 + 21,700} = .52$$

(EB) (WB)

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Mainline VDS 1111515 - SUNSET CLIFFS BLVD

Current Location



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I8-W @ CA PM T.54 (Abs PM 0.1)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 219
LDS	1111453
Owner	Caltrans
Assoc. Traffic Census Station	119510
Speeds	Estimated
Max Cap.	40.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,684	21,626		21,708	21,722	21,626	21,630	21,708	65	2,(
10/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,627	21,547		21,675	21,686	21,547	21,550	21,675	67	2,(
11/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,616	21,598		21,686	21,694	21,598	21,601	21,686	70	2,(
12/01/2010	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,535	21,566		21,637	21,654	21,566	21,566	21,637	74	2,(
01/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,637	21,649		21,685	21,701	21,649	21,651	21,685	73	2,(
02/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,576	21,631		21,682	21,697	21,631	21,633	21,682	74	2,(
03/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,594	21,658		21,685	21,703	21,658	21,660	21,685	76	2,(
04/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,557	21,624		21,658	21,678	21,624	21,626	21,658	75	2,(
05/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,505	21,606		21,633	21,653	21,606	21,607	21,633	75	2,(
06/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,551	21,610		21,649	21,691	21,610	21,611	21,649	78	2,(
07/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,516	21,589		21,646	21,682	21,589	21,589	21,646	77	2,(
08/01/2011	I8-W	T.54	0.13	1111515	SUNSET CLIFFS BLVD	Mainline	21,391	21,548		21,621	21,647	21,548	21,358	21,621	72	2,(



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Mainline VDS 1115528 - E/O MORENA BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I8-W @ CA PM R.589 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10308
LDS	1115522
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	134.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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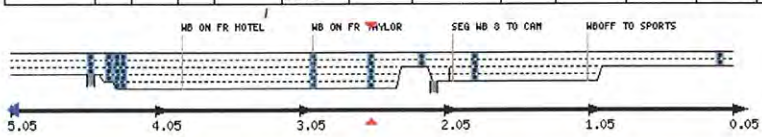
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,314	84,891		85,180	85,215	84,891	84,899	85,180	68
10/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	85,083	84,566		85,019	85,059	84,566	84,567	85,019	69
11/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,957	84,644		84,970	84,986	84,644	84,643	84,970	72
12/01/2010	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,605	84,457		84,760	84,820	84,457	84,439	84,760	76
01/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,819	84,729		84,830	84,875	84,729	84,712	84,830	77
02/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,468	84,564		84,723	84,761	84,564	84,547	84,723	78
03/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,364	84,581		84,710	84,748	84,581	84,564	84,710	80
04/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,178	84,392		84,544	84,629	84,392	84,372	84,544	79
05/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,035	84,357		84,470	84,526	84,357	84,336	84,470	79
06/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,277	84,502		84,584	84,727	84,502	84,481	84,584	80
07/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	84,234	84,471		84,647	84,795	84,471	84,448	84,647	79
08/01/2011	I8-W	R.589	2.55	1115528	E/O MORENA BLVD	Mainline	83,631	84,381		84,609	84,681	84,381	83,667	84,609	74



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{85{,}000}{85000 + 92{,}000} = .48$$

(WB) (EB)

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Mainline VDS 1115356 - EB 8 E/O Morena

Current Location



Maps: Real-Time | Performance | Inventory

I8-E @ CA PM R.535 (Abs PM 2.5)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10307
LDS	1115357
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	150.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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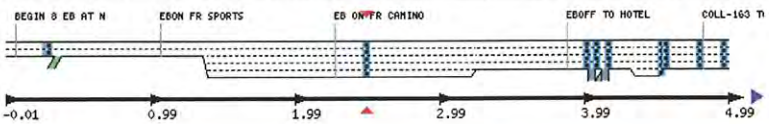
ABOUT THIS REPORT

From Sep 2010
*Max Range:*10 years

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DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,802				92,959				45	8,2
10/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
11/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	92,534				92,425				41	8,2
12/01/2010	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	93,070				92,984				39	8,2
01/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	94,431				94,074				33	8,2
02/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,379				95,149				28	8,1
03/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	96,142				95,919				22	8,1
04/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,987				95,888				15	8,0
05/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	95,805				95,761				8	7,9
06/01/2011	I8-E	R.535	2.49	1115356	EB 8 E/O Morena	Mainline	98,871				97,707				2	7,1



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Mainline VDS 1108457 - SEA WORLD DR

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R20.719 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 97
LDS	1108113
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	148.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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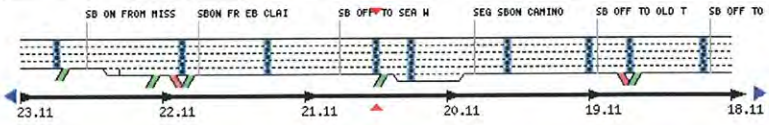
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From Sep 2010 To Sep 2011
*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Dat Use
09/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,407	90,808		89,922	89,853	90,808		89,922	3
10/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,017	90,111		89,788	89,630	90,111		89,788	3
11/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,990	89,582		88,612	89,628	89,582		88,612	3
12/01/2010	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	88,517	88,234			89,867	88,234		86,475	2
01/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,253	89,079			90,438	89,079		86,658	2
02/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,388				91,039	89,267		81,735	1
03/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,567				91,403				1
04/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	90,971				91,538				1
05/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,395				91,660				
06/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	92,053				92,054				
07/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	91,811				91,310				
08/01/2011	I5-S	R20.701	20.59	1108457	SEA WORLD DR	Mainline	87,847				90,103				



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Mainline VDS 1118496 - 5 NB S/O Sea World

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R20.7 (Abs PM 20.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 16202
LDS	1118490
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	159.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	ISS RTMS	Mainline
2	2	ISS RTMS	Mainline
3	3	ISS RTMS	Mainline
4	4	ISS RTMS	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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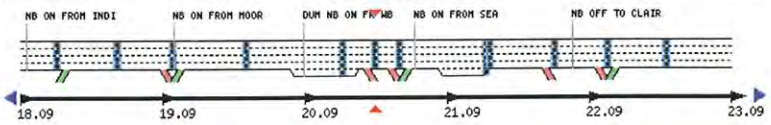
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used	
09/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,464	97,291		97,753	97,684	97,291	97,355	97,753	67	8,
10/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,301	97,106		97,606	97,542	97,106	97,167	97,606	68	8,
11/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,304	97,277		97,735	97,653	97,277	97,338	97,735	71	8,
12/01/2010	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,174	97,282		97,589	97,553	97,282	97,330	97,589	75	8,
01/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,496	97,618		97,746	97,678	97,618	97,669	97,746	76	8,
02/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,533		97,692	97,637	97,533	97,585	97,692	77	8,
03/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,134	97,553		97,694	97,657	97,553	97,603	97,694	79	8,
04/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,079	97,521		97,661	97,638	97,521	97,573	97,661	78	8,
05/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,086	97,619		97,729	97,696	97,619	97,673	97,729	78	8,
06/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,218	97,621		97,812	97,873	97,621	97,674	97,812	79	8,
07/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	97,115	97,517		97,782	97,821	97,517	97,569	97,782	78	8,
08/01/2011	I5-N	R20.7	20.59	1118496	5 NB S/O Sea World	Mainline	96,570	97,463		97,751	97,682	97,463	96,393	97,751	73	8,



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Mainline VDS 1115355 - SB 5 S/O 8

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Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10304
LDS	1115349
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	157.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

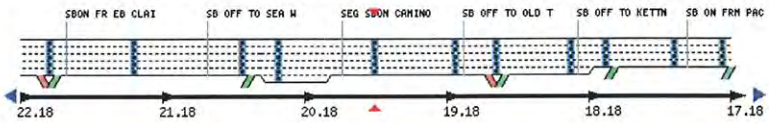
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,377	98,871		99,305	99,501	98,871	98,912	99,305	63
10/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,035	98,563		99,132	99,345	98,563	98,601	99,132	64
11/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	99,002	98,719		99,174	99,354	98,719	98,756	99,174	67
12/01/2010	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,709	98,645		98,988	99,215	98,645	98,666	98,988	70
01/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,723	98,892		99,035	99,155	98,892	98,916	99,035	73
02/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,093	98,626		98,807	98,817	98,626	98,648	98,807	75
03/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,842	98,594		98,805	98,822	98,594	98,614	98,805	77
04/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,975	98,466		98,733	98,819	98,466	98,487	98,733	76
05/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,980	98,523		98,700	98,748	98,523	98,545	98,700	76
06/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,259	98,667		98,831	99,000	98,667	98,689	98,831	77
07/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	98,137	98,572		98,858	99,033	98,572	98,591	98,858	76
08/01/2011	I5-S	R19.784	19.68	1115355	SB 5 S/O 8	Mainline	97,278	98,480		98,805	98,893	98,480	97,276	98,805	71



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$$\frac{99{,}000}{99{,}000 + 64{,}700} = .61$$

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Mainline VDS 1115269 - NB 5 @ I-8

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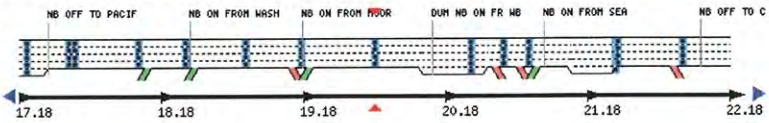
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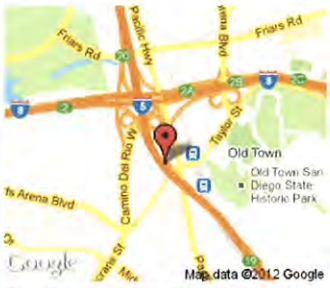
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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,282				64,658				50
10/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,182				64,373				46
11/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,245				64,467				42
12/01/2010	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,053				64,370				43
01/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,160				64,347				45
02/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,760				64,156				48
03/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,710				64,228				50
04/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,727				64,238				49
05/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	63,742				64,273				48
06/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,135				64,575				50
07/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,355				64,892				51
08/01/2011	I5-N	R19.784	19.68	1115269	NB 5 @ I-8	Mainline	64,704				65,656				54



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R19.784 (Abs PM 19.7)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10303
LDS	1115262
Owner	Caltrans
Assoc. Traffic Census Station	118000
Speeds	Estimated
Max Cap.	111.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1108615 - OLD TOWN AVE

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R18.931 (Abs PM 18.8)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10411
LDS	1108200
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	145.6 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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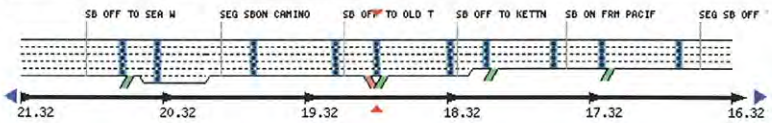
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From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,546	87,579		88,554	88,360	87,579	86,924	88,554	60
10/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,512				88,153	87,233		88,401	57
11/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,518				88,236	87,295		88,315	54
12/01/2010	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,164				88,067	87,241		88,120	58
01/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	88,556				88,195	87,507		88,247	57
02/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,881				88,010	87,329		88,093	59
03/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,902				88,074	87,161		87,935	57
04/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,820				88,010				50
05/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,494				87,789				43
06/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	87,638				87,966				42
07/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	86,430				86,950				36
08/01/2011	I5-S	R18.937	18.83	1108615	OLD TOWN AVE	Mainline	84,971				86,227				32



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{88{,}500}{88{,}500 + 91{,}500} = .49$$

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Mainline VDS 1114050 - OLD TOWN AVE

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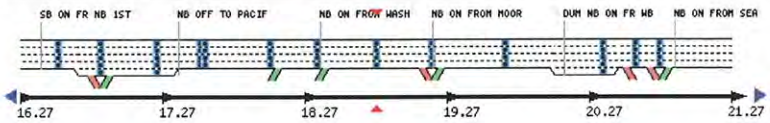
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From Sep 2010 Max Range:10 years

To Sep 2011

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,821	90,949			91,722	90,949	90,139	91,630	63
10/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,665	90,808			91,614	90,808	89,973	91,529	64
11/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,719	91,038			91,725	91,038	90,243	91,653	67
12/01/2010	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,472	91,079			91,657	91,079	90,480	91,544	71
01/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,792	91,334			91,789	91,334	90,777	91,687	70
02/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,388	91,213			91,664	91,213	90,607	91,594	71
03/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,447	91,104			91,758	91,104	90,512	91,485	69
04/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,396				91,703	91,018			62
05/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,107				91,505				55
06/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	91,203				91,623				54
07/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	90,387				90,837				48
08/01/2011	I5-N	R18.874	18.77	1114050	OLD TOWN AVE	Mainline	89,232				90,428				44



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R18.874 (Abs PM 18.8)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10412
LDS	1114045
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	138.8 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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Mainline VDS 1117724 - SB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.681 (Abs PM 17.6)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10406
LDS	1117700
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	181.2 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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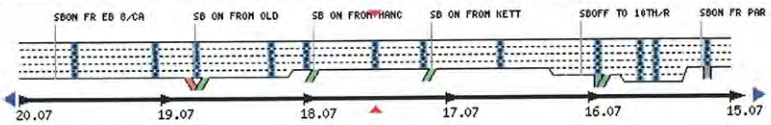
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From Sep 2010 To Sep 2011
*Max Range:*10 years

DRAW PLOT | VIEW TABLE | EXPORT TEXT | EXPORT to XLS

Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	D. Us
09/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	147,017	146,263		146,781	146,818	146,263	146,432	146,781	
10/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	146,711	145,795		146,583	146,622	145,795	145,259	146,583	
11/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	144,957	144,852		144,969	144,760	144,852	143,905	144,969	
12/01/2010	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	136,029	137,637		137,478	136,968	137,637	136,817	137,478	
01/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	127,132	130,565		130,273	129,050	130,565	129,832	130,273	
02/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	119,356	122,914		122,738	121,367	122,914	122,160	122,738	
03/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	111,112	115,457		115,296	113,899	115,457	114,729	115,296	
04/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	101,795	107,589		107,418	105,619	107,589	106,848	107,418	
05/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	94,870	99,619		99,395	98,300	99,619	98,839	99,395	
06/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	86,902	91,837		91,628	90,213	91,837	91,049	91,628	
07/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	80,939	83,787		83,655	82,609	83,787	82,961	83,655	
08/01/2011	I5-S	R17.681	17.57	1117724	SB 5 N/O Pacific HWY	Mainline	71,906	75,617		75,543	73,989	75,617	75,108	75,543	



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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$$\frac{115000}{115{,}000 + 75{,}000} = .62$$

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Mainline VDS 1117717 - NB 5 N/O Pacific HWY

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.68 (Abs PM 17.6)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10405
LDS	1117710
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	126.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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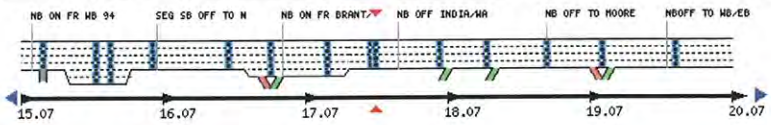
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From Sep 2010 To Sep 2011
*Max Range:*10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,877	75,545		75,830	75,835	75,545	75,539	75,830	68
10/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,720	75,304		75,693	75,713	75,304	75,298	75,693	69
11/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,721	75,474		75,789	75,792	75,474	75,468	75,789	72
12/01/2010	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,471	75,450		75,664	75,710	75,450	75,434	75,664	76
01/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,717	75,729		75,810	75,840	75,729	75,715	75,810	76
02/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,408	75,604		75,713	75,744	75,604	75,592	75,713	77
03/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,291	75,597		75,693	75,731	75,597	75,584	75,693	79
04/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,190	75,513		75,618	75,678	75,513	75,499	75,618	78
05/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,100	75,523		75,566	75,603	75,523	75,512	75,566	78
06/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,334	75,667		75,686	75,795	75,667	75,657	75,686	80
07/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	75,248	75,574		75,707	75,808	75,574	75,562	75,707	79
08/01/2011	I5-N	R17.68	17.57	1117717	NB 5 N/O Pacific HWY	Mainline	74,658	75,568		75,701	75,736	75,568	74,731	75,701	74



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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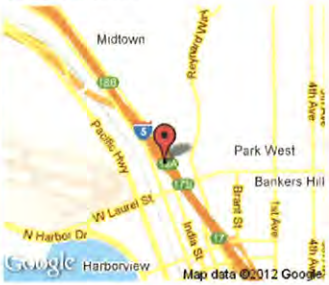
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Mainline VDS 1108605 - KETTNER BLVD

Current Location



Maps: Real-Time | Performance | Inventory

I5-S @ CA PM R17.339 (Abs PM 17.2)
District 11, San Diego County , City of San Diego

Station Details

Aliases	MS ID 10403
LDS	1108195
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	156.0 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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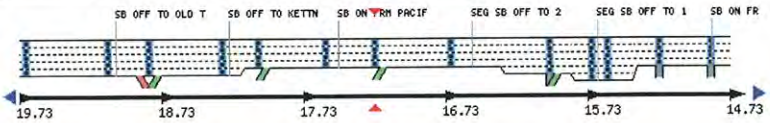
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From Sep 2010 *Max Range:10 years*

To Sep 2011

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	Da Us
09/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,935	88,657		88,989	88,883	88,657	88,698	88,989	
10/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,770	88,297		88,601	88,560	88,297	88,337	88,601	
11/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,698	88,451		88,643	88,572	88,451	88,491	88,643	
12/01/2010	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	88,907	88,734		88,795	88,811	88,734	88,781	88,795	
01/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,772				89,521	89,594	88,303	89,515	
02/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,291				90,119				
03/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,581				90,490				
04/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,757				90,590				
05/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,722				90,572				
06/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,972				90,943				
07/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	90,255				90,332				
08/01/2011	I5-S	R17.282	17.17	1108605	KETTNER BLVD	Mainline	89,112				90,024				



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

90,000

90,000 + 86,000
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Mainline VDS 1117835 - NB S/O Pacific

Current Location



Maps: Real-Time | Performance | Inventory

I5-N @ CA PM R17.34 (Abs PM 17.2)
District 11, San Diego County, City of San Diego

Station Details

Aliases	MS ID 10404
LDS	1117827
Owner	Caltrans
Assoc. Traffic Census Station	*None*
Speeds	Estimated
Max Cap.	160.4 Veh/Min (12/01/2010)
Vehicle Classification	*N/A*

Lane Detection

Lane	Slot	Sensor Tech	Type
1	1	Dual Loop	Mainline
2	2	Dual Loop	Mainline
3	3	Dual Loop	Mainline
4	4	Dual Loop	Mainline
5	5	Dual Loop	Mainline

Diagnostics

Threshold Set	Urban_D11
Flow = 0, Occ > 0 (Intermittent)	2%
High Flow Threshold	20
High Occ Threshold	.7
High Occupancy (High Val)	20%
Occ = 0; Flow > 0 (Intermittent)	50%
Repeat Occupancy (Constant)	50
Occupancy = 0 (Card Off)	59%

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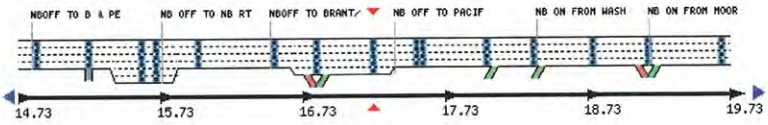
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From Sep 2010 To Sep 2011
Max Range: 10 years

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Starting Month	Fwy	CA PM	Abs PM	VDS	Name	Type	Arithmetic Mean	ASTM Std 1442	Conv. AASHTO	Prov. AASHTO	Sum of 24 Annual Avg Hours	Mod. ASTM Std	Mod. Conv. AASHTO	Mod. Prov. AASHTO	% Data Used
09/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,750	94,616		94,964	94,829	94,616	94,624	94,964	67
10/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,691				94,636	94,308	92,994	94,810	64
11/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	94,479				94,520	93,820		94,105	61
12/01/2010	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	92,229				92,636	92,158		92,315	65
01/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	90,594				90,959	90,917		90,874	66
02/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	88,426				89,009	89,103		89,084	67
03/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	86,468				87,218	87,380		87,341	69
04/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	84,180				85,145	85,461		85,439	68
05/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	82,279				83,228	83,703		83,640	68
06/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	80,653				81,496	82,041		81,976	69
07/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	78,905				79,563	80,181		80,200	68
08/01/2011	I5-N	R17.34	17.23	1117835	NB S/O Pacific	Mainline	76,079				77,390	78,272		78,313	64

Average = 86,000



Related Planning Analysis Reports: AADT • MADT • Demand Spreading • Congestion Spreading • Lane Utilization

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Appendix G
VMT Analysis Worksheet – Preferred Plan

2035M - Alt 7 land uses (with Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	4,348,073	14,339	-	14,339	4,333,734
CHULA VISTA TOTAL	5,606,357	32,294	-	32,294	5,574,063
CORONADO TOTAL	467,446	6,306	-	6,306	461,140
DEL MAR TOTAL	101,816	241	-	241	101,575
EL CAJON TOTAL	2,447,912	15,262	-	15,262	2,432,650
ENCINITAS TOTAL	2,563,726	16,788	-	16,788	2,546,938
ESCONDIDO TOTAL	3,489,019	8,395	-	8,395	3,480,624
External TOTAL	526,657	2,184	-	2,184	524,473
IMPERIAL BEACH TOTAL	131,619	279	-	279	131,340
LA MESA TOTAL	2,097,754	23,879	-	23,879	2,073,875
LEMON GROVE TOTAL	962,525	8,224	-	8,224	954,301
NATIONAL CITY TOTAL	1,962,677	27,356	-	27,356	1,935,321
OCEANSIDE TOTAL	4,091,901	5,120	-	5,120	4,086,781
POWAY TOTAL	1,305,440	2,578	-	2,578	1,302,862
MIDWAY TOTAL	47,326,299	1,225,918	205,836	1,020,082	46,100,381
SAN MARCOS TOTAL	2,648,904	1,277	-	1,277	2,647,627
SANTEE TOTAL	1,350,120	3,456	-	3,456	1,346,664
SOLANA BEACH TOTAL	717,531	6,039	-	6,039	711,492
Unincorporated TOTAL	24,646,210	60,124	-	60,124	24,586,086
VISTA TOTAL	2,208,148	736	-	736	2,207,412
REGIONWIDE TOTAL	109,000,134	1,460,795 833,315	205,836	1,254,959	107,539,339

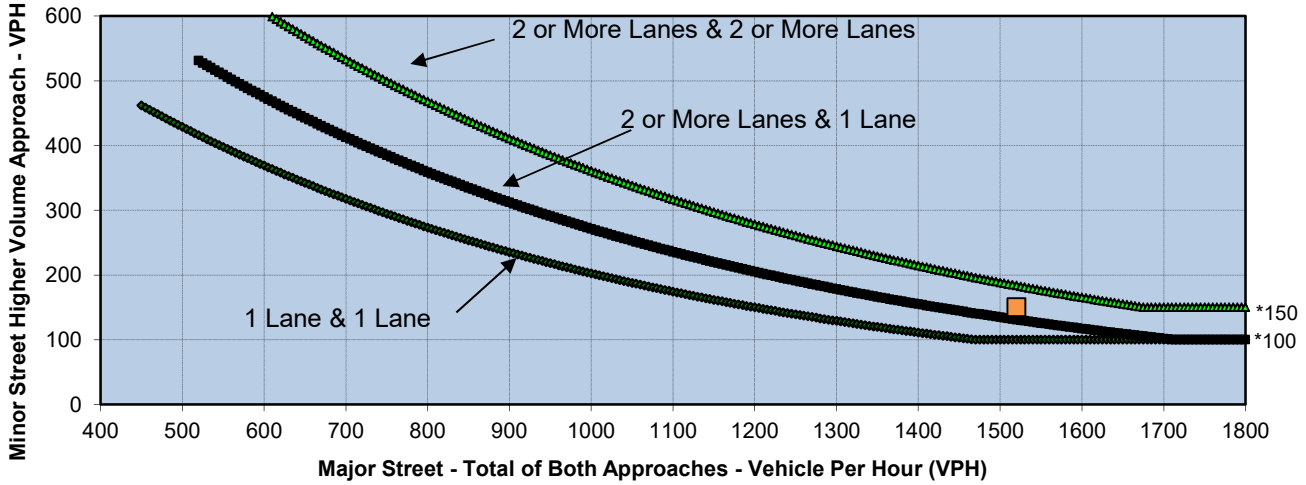
2035M - Alt 7 land uses (with Sports Arena)

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
			I-I	I-E and E-I	
CARLSBAD TOTAL	4,348,073	3,091	-	3,091	4,344,982
CHULA VISTA TOTAL	5,606,357	7,430	-	7,430	5,598,927
CORONADO TOTAL	467,446	1,359	-	1,359	466,087
DEL MAR TOTAL	101,816	60	-	60	101,756
EL CAJON TOTAL	2,447,912	3,800	-	3,800	2,444,112
ENCINITAS TOTAL	2,563,726	3,780	-	3,780	2,559,946
ESCONDIDO TOTAL	3,489,019	1,946	-	1,946	3,487,073
External TOTAL	526,657	410	-	410	526,247
IMPERIAL BEACH TOTAL	131,619	24	-	24	131,595
LA MESA TOTAL	2,097,754	6,094	-	6,094	2,091,660
LEMON GROVE TOTAL	962,525	1,666	-	1,666	960,859
NATIONAL CITY TOTAL	1,962,677	6,264	-	6,264	1,956,413
OCEANSIDE TOTAL	4,091,901	997	-	997	4,090,904
POWAY TOTAL	1,305,440	606	-	606	1,304,834
OLD TOWN TOTAL	47,326,299	278,278	19,561	258,717	47,048,021
SAN MARCOS TOTAL	2,648,904	295	-	295	2,648,609
SANTEE TOTAL	1,350,120	792	-	792	1,349,328
SOLANA BEACH TOTAL	717,531	1,382	-	1,382	716,149
Unincorporated TOTAL	24,646,210	12,633	-	12,633	24,633,577
VISTA TOTAL	2,208,148	110	-	110	2,208,038
REGIONWIDE TOTAL	109,000,134	331,017 175,289	19,561	311,456	108,669,117

Appendix H
Signal Warrant Worksheets

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	150	0	120
Through	590	690	0	0
Right	90	0	0	30
Total	680	840	0	150

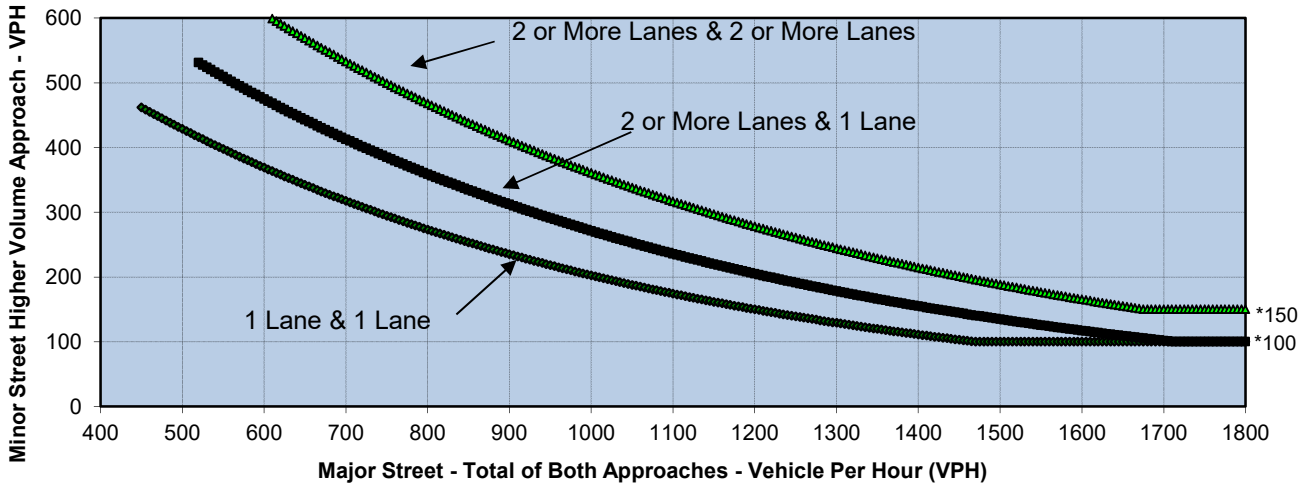
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,520**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#8

Major Street	Midway Drive
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	400	0	120
Through	770	870	0	0
Right	120	0	0	300
Total	890	1,270	0	420

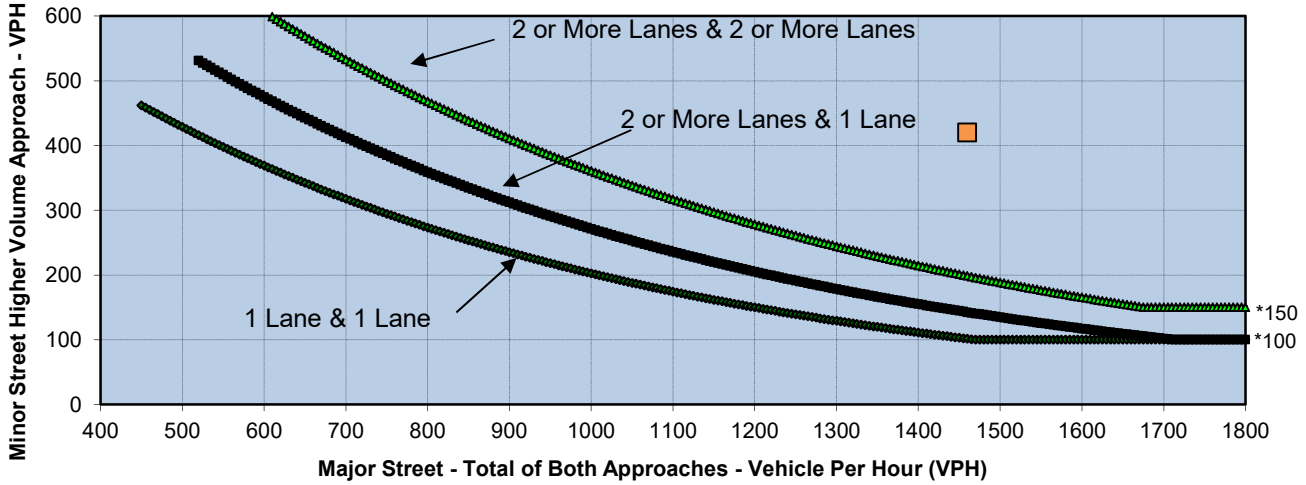
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,160	420	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	200	120	80	160
Through	410	520	50	140
Right	100	110	110	120
Total	710	750	240	420

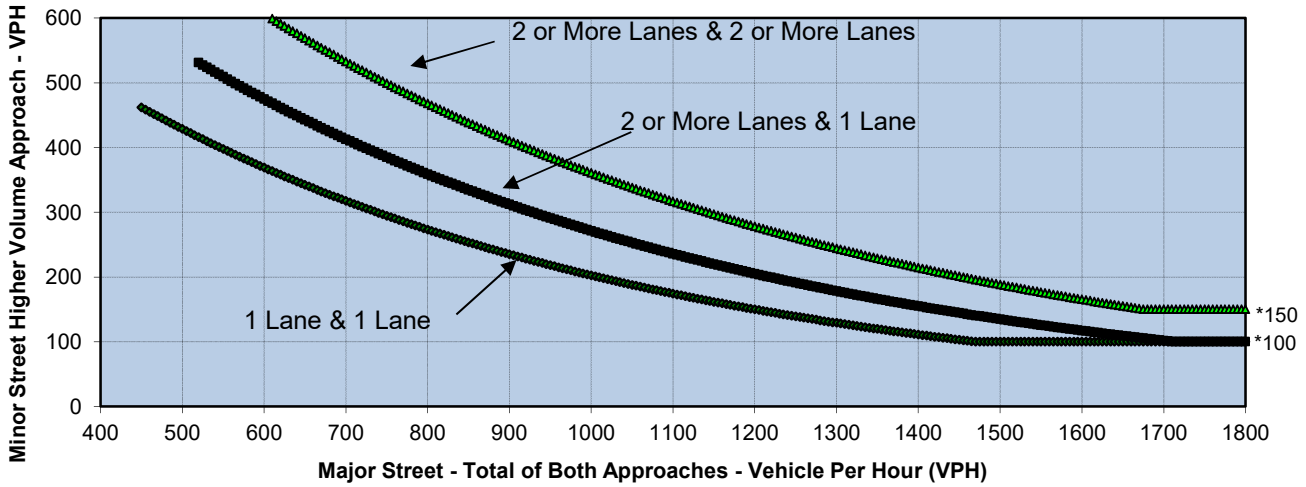
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,460**	**420**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#12

Major Street	Sports Arean Boulevard
Minor Street	Kemper Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	240	200	70	120
Through	1,120	890	130	40
Right	120	80	150	130
Total	1,480	1,170	350	290

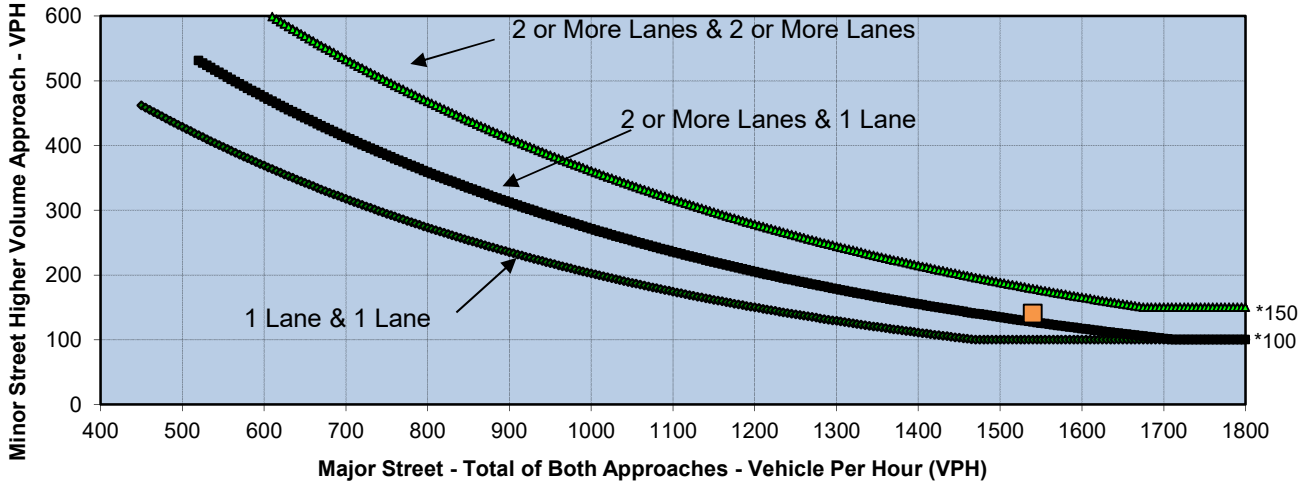
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Kemper Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,650	350	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

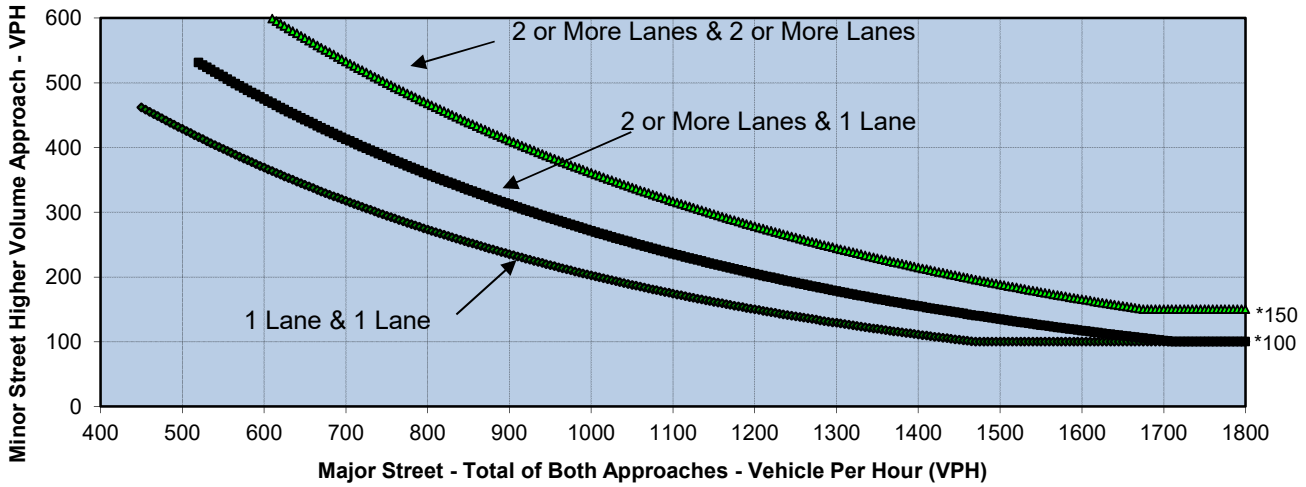
	NB	SB	EB	WB
Left	30	90	40	70
Through	620	680	20	20
Right	40	80	20	50
Total	690	850	80	140

Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,540**	**140**	

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#13

Major Street	Sports Arean Boulevard
Minor Street	Frontier Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	50	120	60	150
Through	1,250	1,080	30	30
Right	70	80	70	140
Total	1,370	1,280	160	320

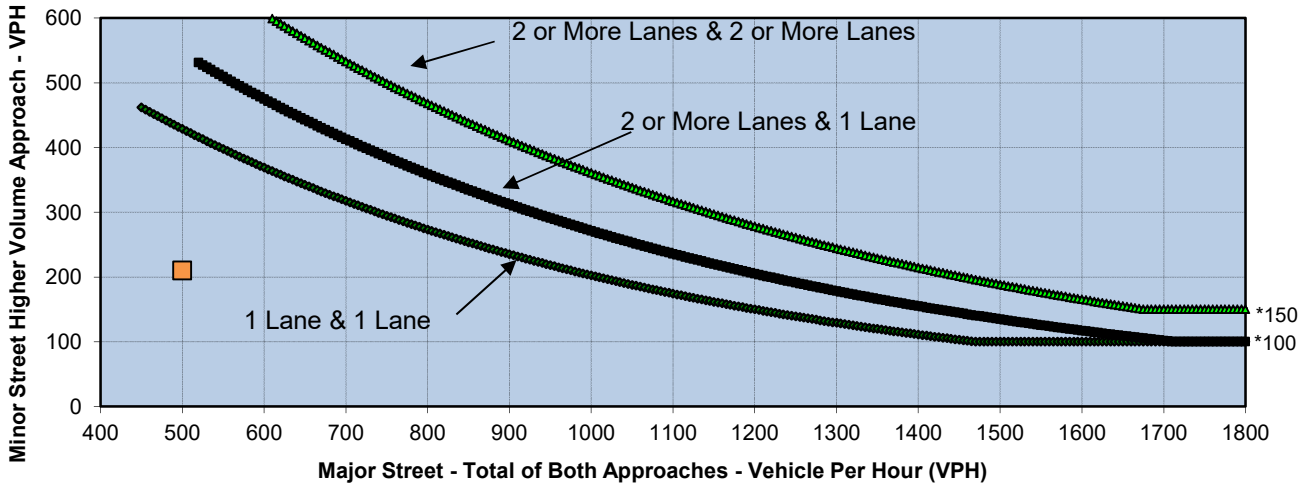
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Frontier Street	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,650	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	20	50	90
Through	50	30	100	80
Right	90	30	100	80
Total	210	80	250	250

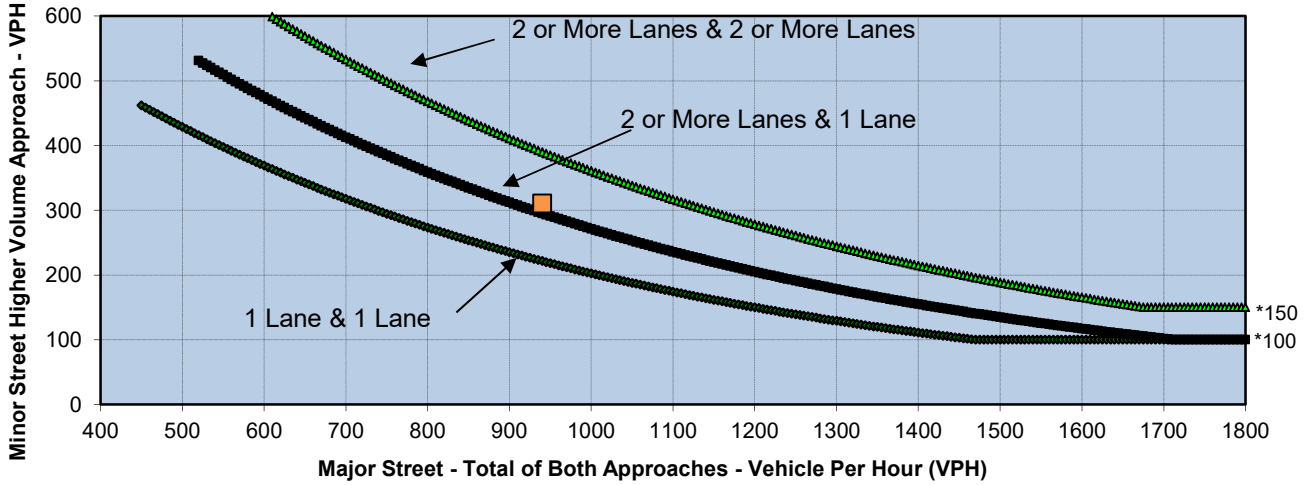
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**500**	**210**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#16

Major Street	Sports Arean Boulevard
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	70	90	100	120
Through	90	120	120	230
Right	120	100	300	70
Total	280	310	520	420

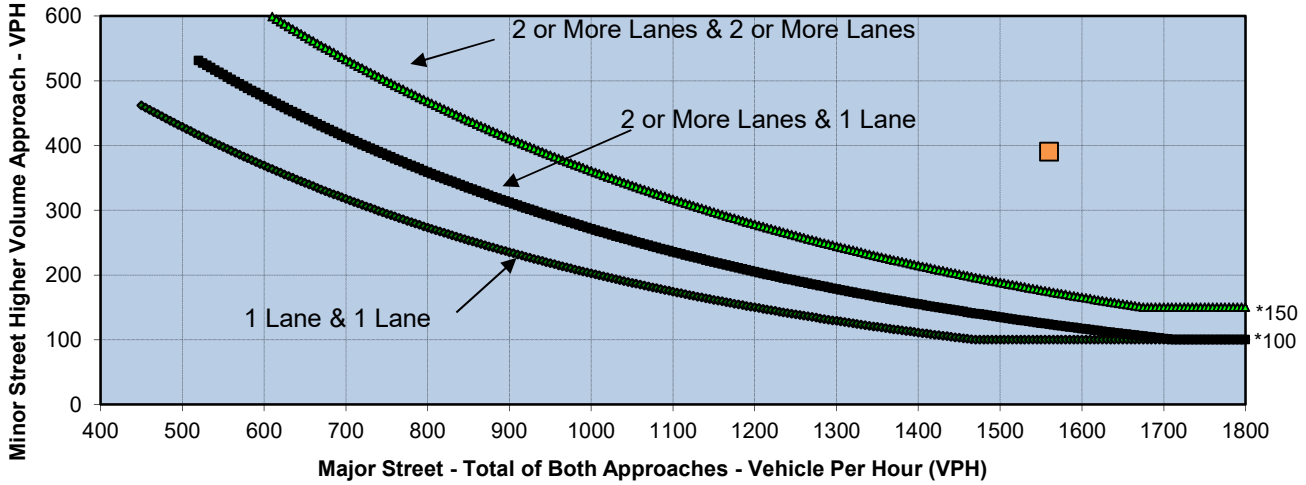
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arean Boulevard	Charles Lindbergh Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	940	310	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	280	0	200	0
Through	610	600	0	0
Right	0	70	190	0
Total	890	670	390	0

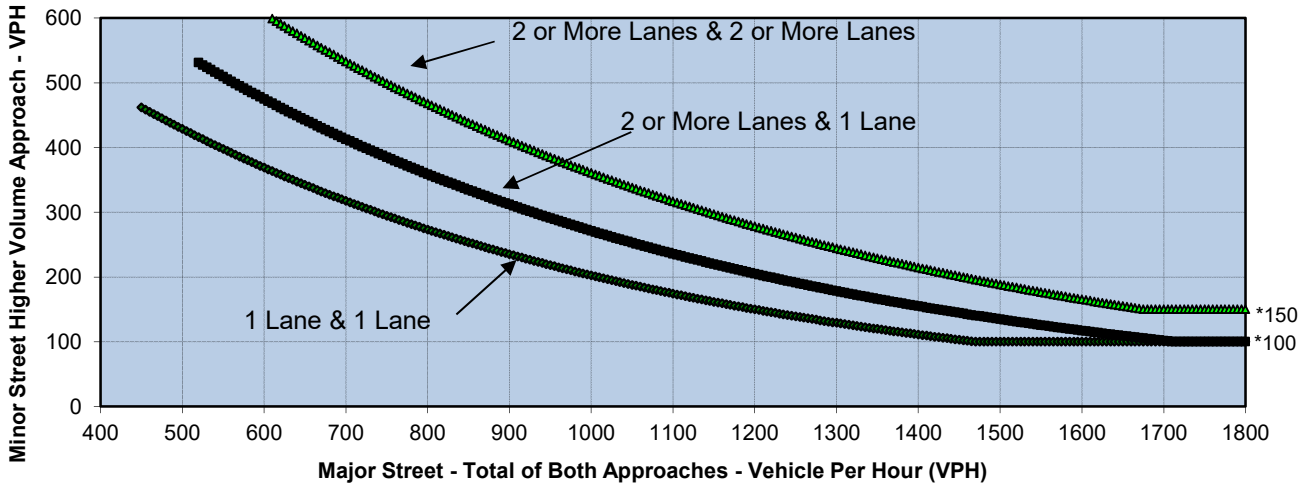
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,560**	**390**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#17

Major Street	Pacific Highway
Minor Street	Sports Arena Blvd

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	290	0	50	0
Through	1,310	850	0	0
Right	0	50	460	0
Total	1,600	900	510	0

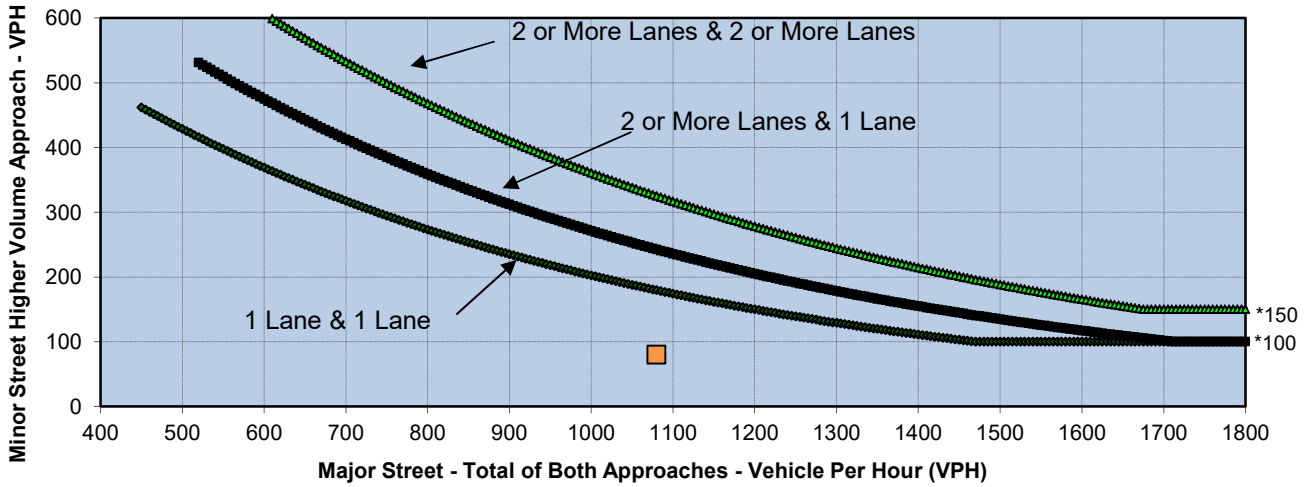
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Sports Arena Blvd	
Number of Approach Lanes	3	1	YES
Traffic Volume (VPH) *	2,500	510	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18

Major Street	Kurtz Street
Minor Street	Hancock Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	30	460
Through	0	70	0	390
Right	0	10	100	100
Total	0	80	130	950

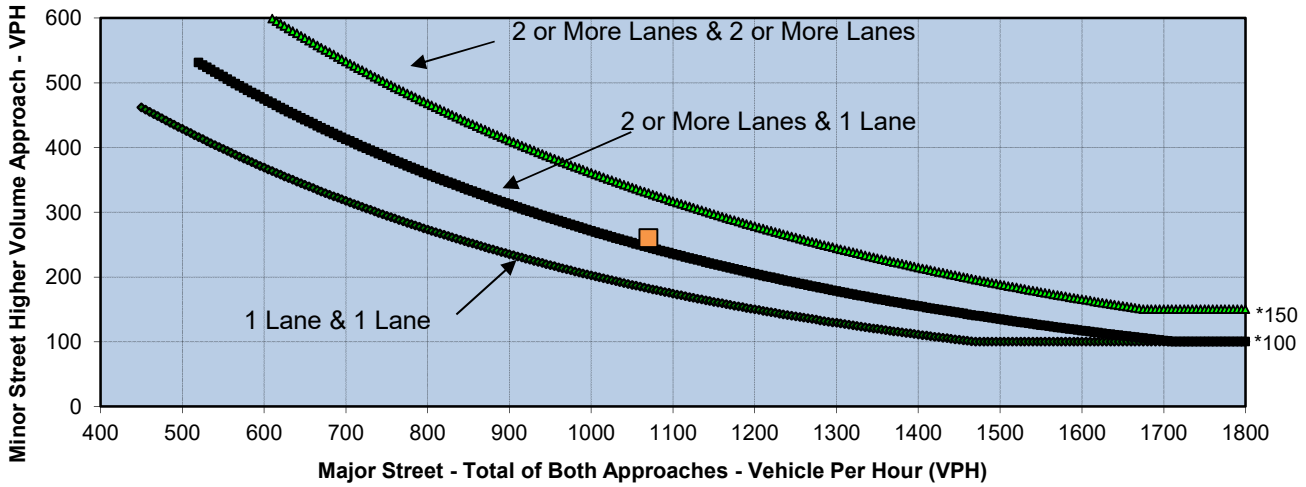
Major Street Direction

	North/South
X	East/West

	Major Street Kurtz Street	Minor Street Hancock Street	Warrant Met
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**1,080**	**80**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#18

Major Street	Kurtz Street
Minor Street	Hancock Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	100	370
Through	0	170	0	310
Right	0	90	140	150
Total	0	260	240	830

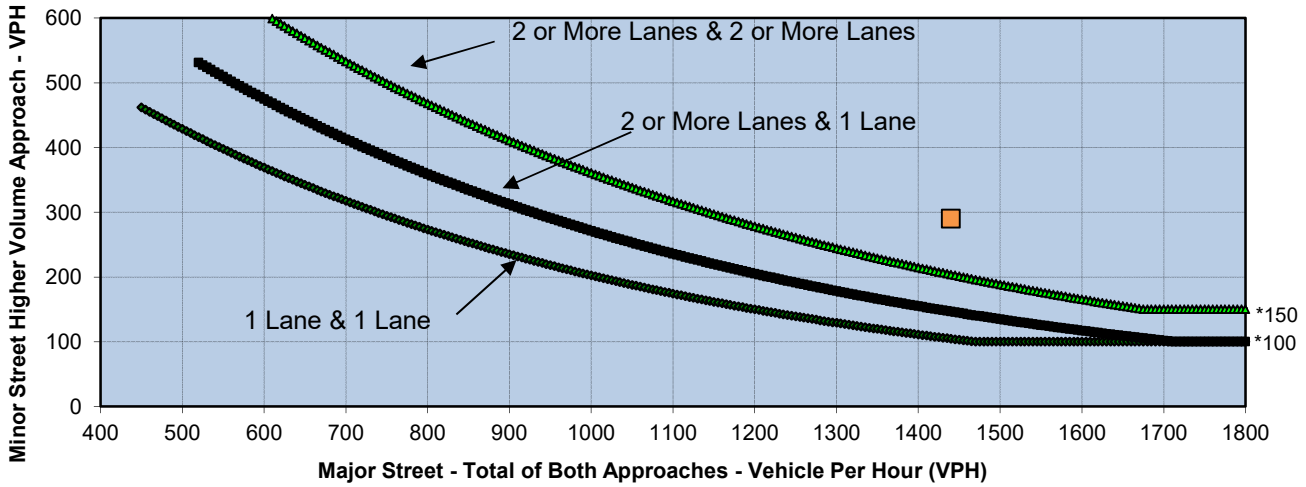
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Hancock Street	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	1,070	260	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	350	0	100	0
Through	460	480	0	0
Right	0	150	190	0
Total	810	630	290	0

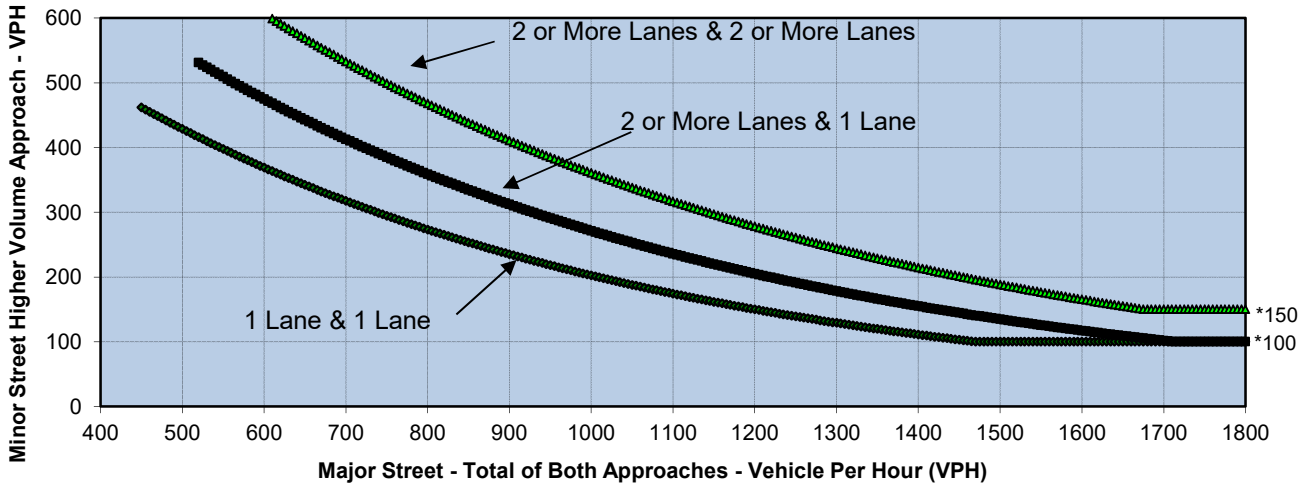
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,440**	**290**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#21

Major Street	Pacific Highway
Minor Street	Kurtz Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	480	0	250	0
Through	880	450	0	0
Right	0	100	450	0
Total	1,360	550	700	0

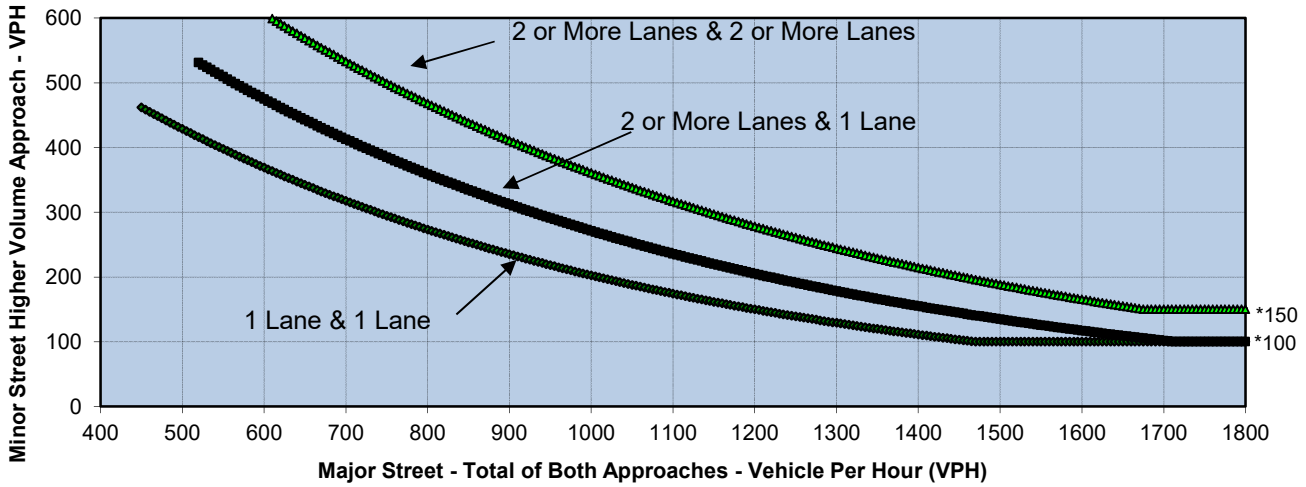
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Pacific Highway	Kurtz Street	
Number of Approach Lanes	**3**	**1**	**YES**
Traffic Volume (VPH) *	**1,910**	**700**	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street	Project	Midway & Old Town CPU
Minor Street	Greenwood Street	Scenario	3A
		Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	40	0	60
Through	0	220	20	90
Right	0	10	100	0
Total	0	270	120	150

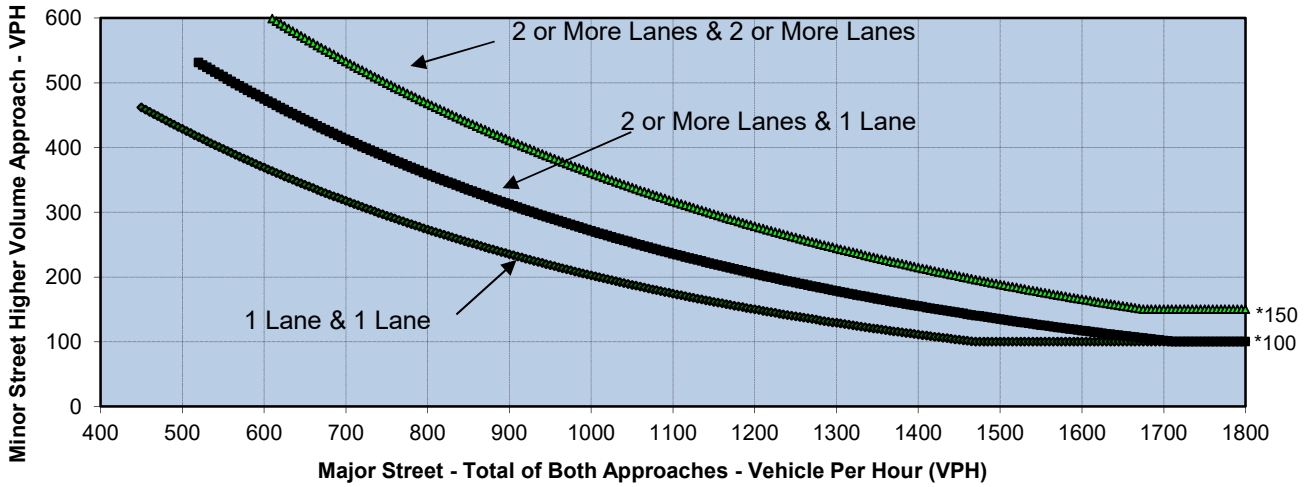
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**270**	**150**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#62

Major Street	Kurtz Street
Minor Street	Greenwood Street

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	50	0	320
Through	0	720	30	290
Right	0	70	260	0
Total	0	840	290	610

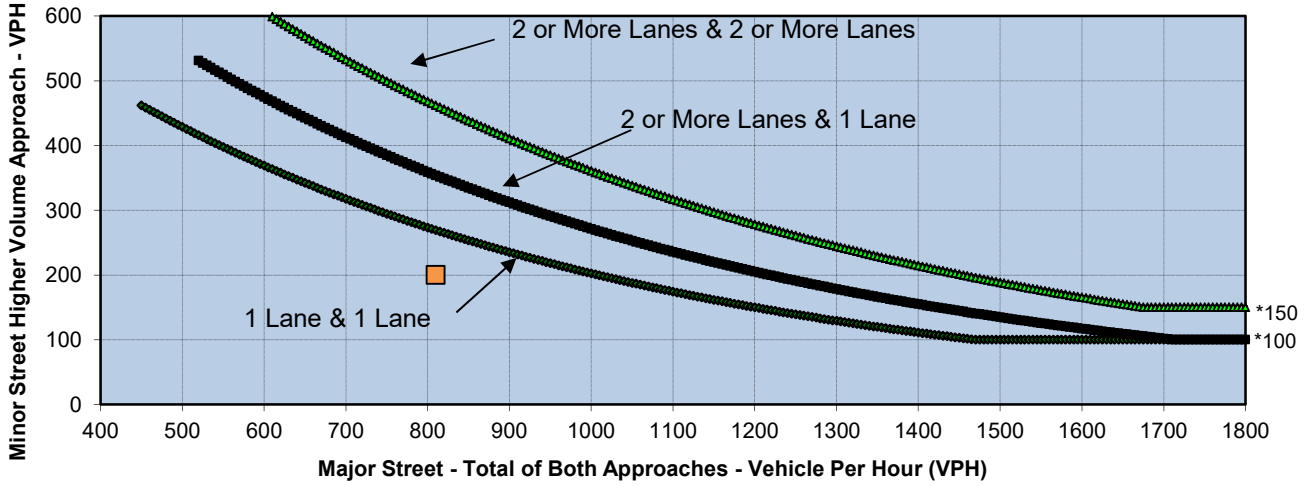
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Greenwood Street	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	840	610	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63		Project	Midway & Old Town CPU
Major Street	Kurtz Street	Scenario	3A
Minor Street	Charles Lindbergh Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	140	0	50	0
Through	330	310	0	0
Right	0	30	150	0
Total	470	340	200	0

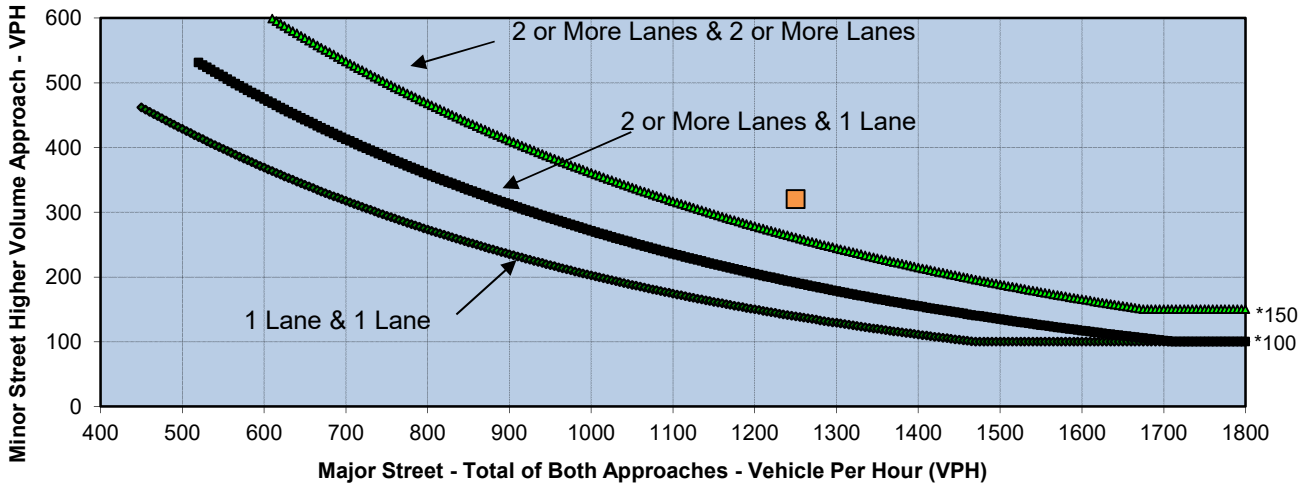
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	**2**	**1**	**NO**
Traffic Volume (VPH) *	**810**	**200**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#63

Major Street	Kurtz Street
Minor Street	Charles Lindbergh Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	180	0	120	0
Through	370	480	0	0
Right	0	220	200	0
Total	550	700	320	0

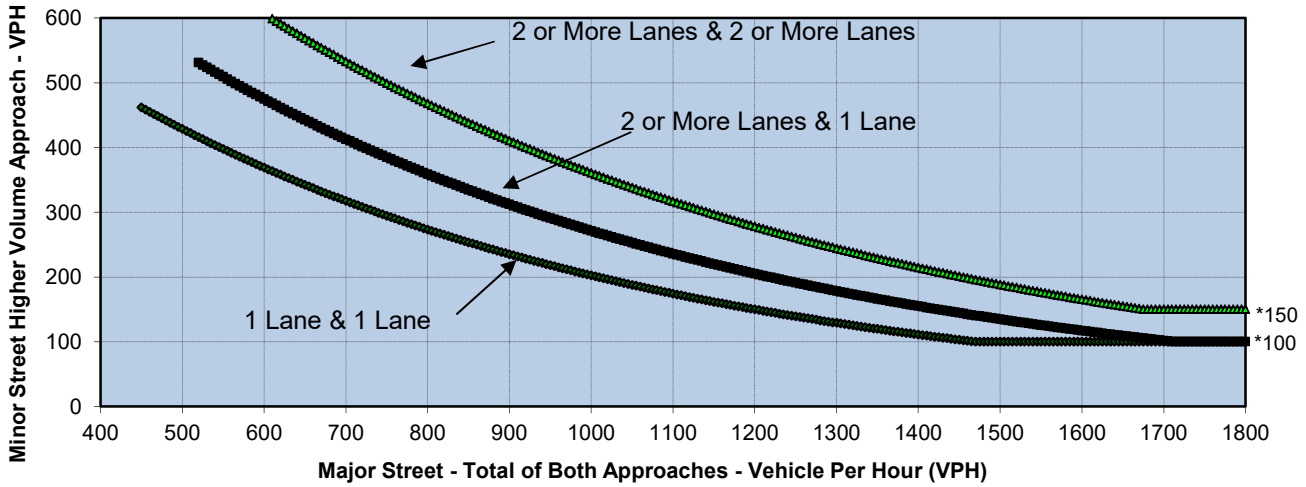
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Kurtz Street	Charles Lindbergh Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	1,250	320	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	3A
Minor Street	Dutch Flats Parkway	Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	50	0
Through	0	150	670	1,420
Right	0	250	0	40
Total	0	400	720	1,460

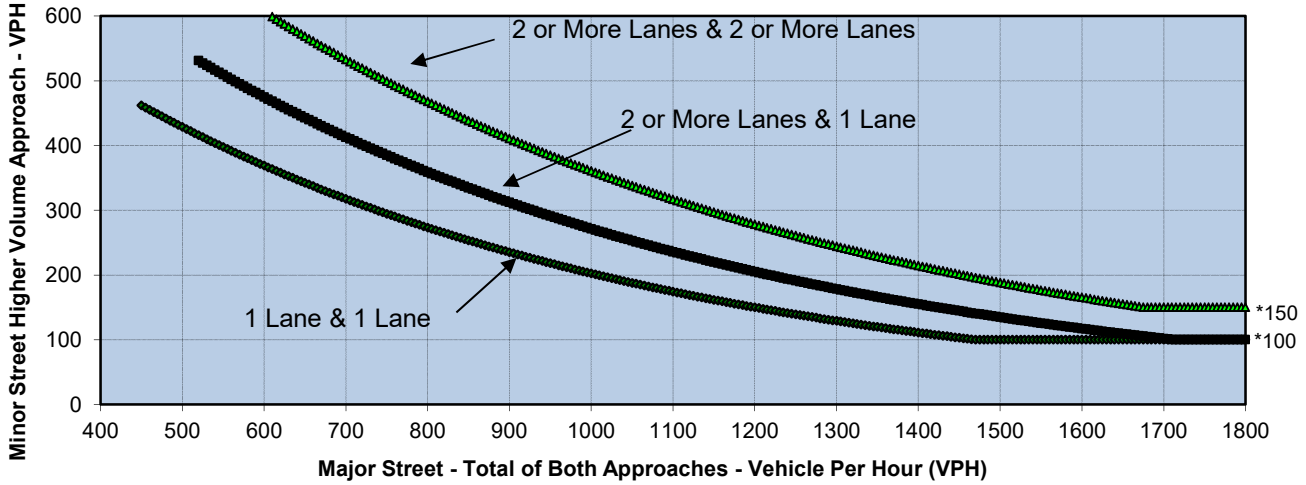
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**2,180**	**400**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#64		Project	Midway & Old Town CPU
Major Street	Barnett Avenue	Scenario	3A
Minor Street	Dutch Flats Parkway	Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	0	60	0
Through	0	160	1,090	1,200
Right	0	240	0	60
Total	0	400	1,150	1,260

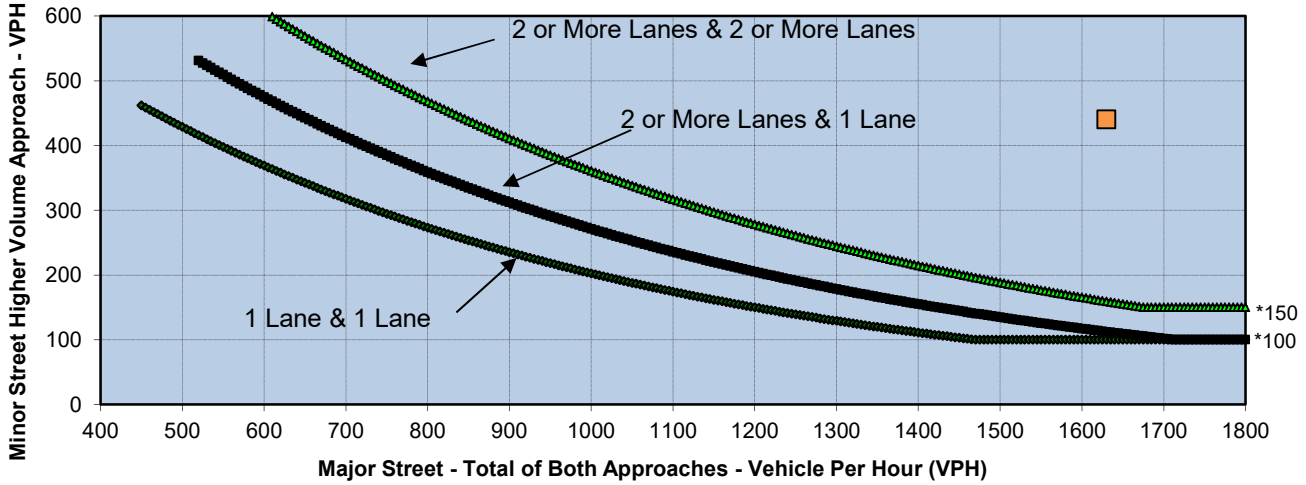
Major Street Direction

	North/South
X	East/West

	Major Street	Minor Street	Warrant Met
	Barnett Avenue	Dutch Flats Parkway	
Number of Approach Lanes	2	1	YES
Traffic Volume (VPH) *	2,410	400	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	220	250	60	40
Through	390	450	10	160
Right	130	190	100	240
Total	740	890	170	440

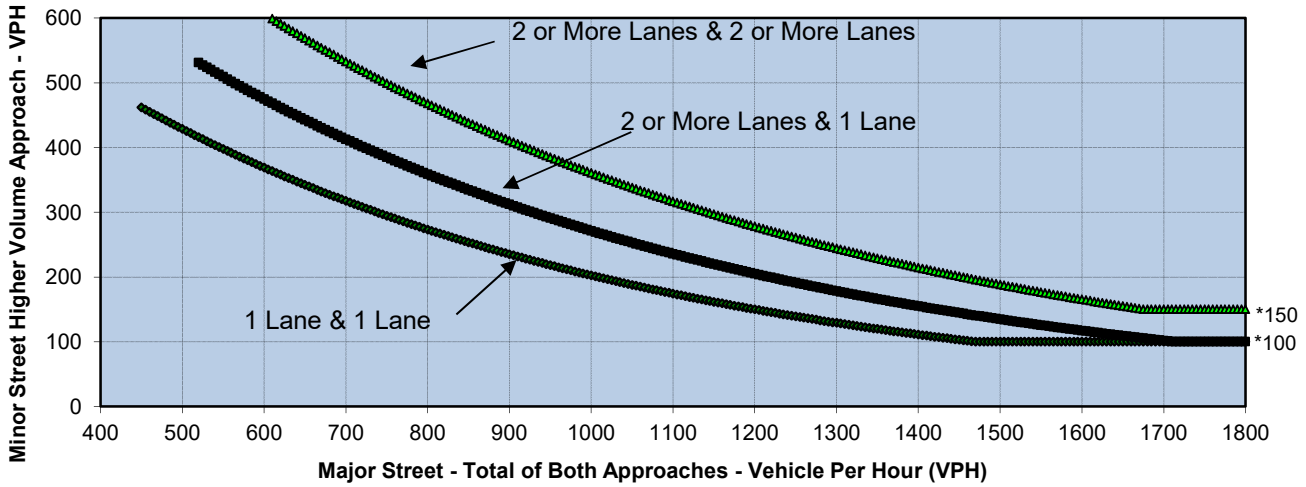
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,630**	**440**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#65

Major Street	Midway Drive
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	160	210	130	60
Through	480	500	20	110
Right	370	160	90	280
Total	1,010	870	240	450

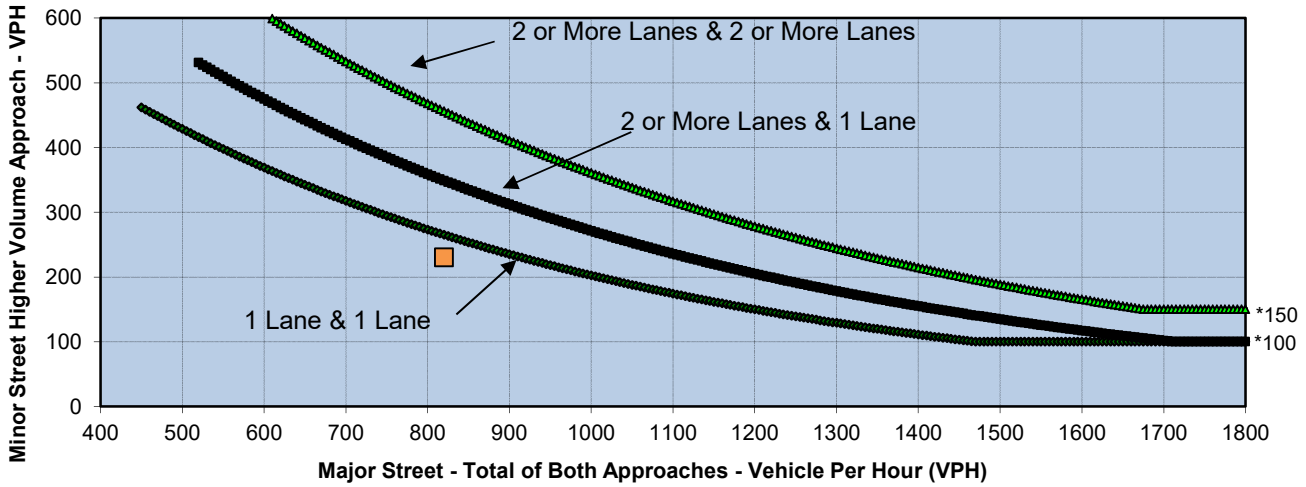
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Midway Drive	Dutch Flats Parkway	
Number of Approach Lanes	**2**	**1**	**YES**
Traffic Volume (VPH) *	**1,880**	**450**	

Sheet No 1 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	340	0	30	0
Through	190	190	0	0
Right	0	100	200	0
Total	530	290	230	0

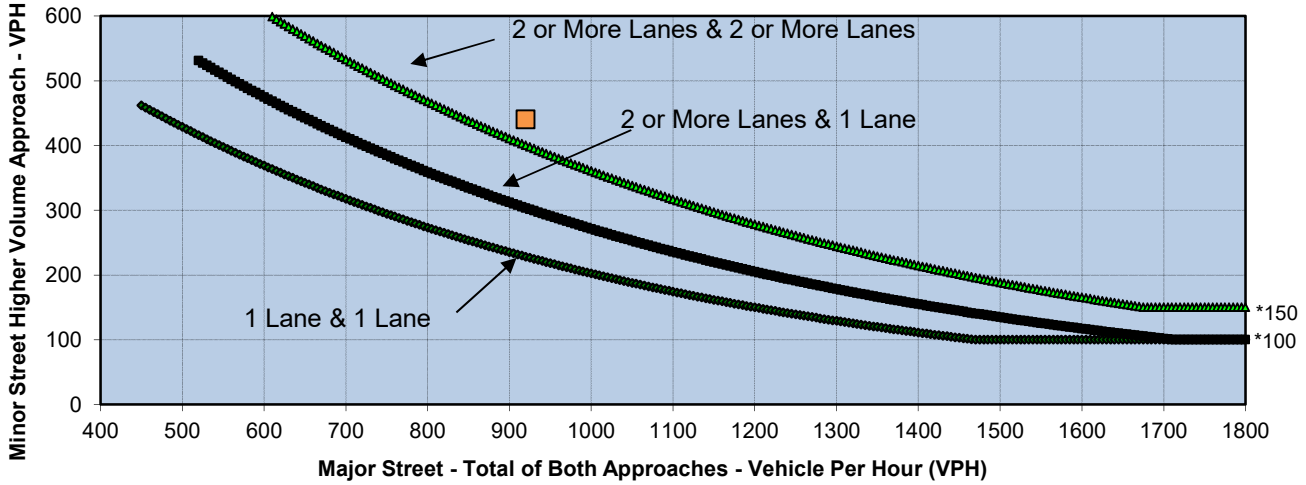
Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	**1**	**1**	**NO**
Traffic Volume (VPH) *	**820**	**230**	

Sheet No 2 of 2

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

#66

Major Street	Sports Arena Boulevard
Minor Street	Dutch Flats Parkway

Project	Midway & Old Town CPU
Scenario	3A
Peak Hour	PM

Turn Movement Volumes

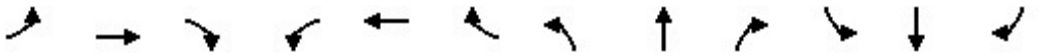
	NB	SB	EB	WB
Left	190	0	180	0
Through	140	270	0	0
Right	0	320	260	0
Total	330	590	440	0

Major Street Direction

X	North/South
	East/West

	Major Street	Minor Street	Warrant Met
	Sports Arena Boulevard	Dutch Flats Parkway	
Number of Approach Lanes	1	1	YES
Traffic Volume (VPH) *	920	440	

Appendix I
Peak Hour Intersection Worksheets – Preferred Plan Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1563	3433	3539	1497	3433	1863	1559	1770	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	286	0	0	85	0	0	99	0	12	0
Lane Group Flow (vph)	65	1239	149	174	1446	111	522	435	64	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	4.0	37.7	37.7	10.8	44.4	44.4	31.4	33.2	33.2	35.8	35.8	
Effective Green, g (s)	4.4	39.0	39.0	11.2	45.8	45.8	31.8	34.0	34.0	34.8	37.0	
Actuated g/C Ratio	0.03	0.29	0.29	0.08	0.34	0.34	0.24	0.25	0.25	0.26	0.27	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	57	1469	451	284	1200	507	808	469	392	456	485	
v/s Ratio Prot	c0.04	0.24		0.05	c0.41		0.15	c0.23		c0.36	0.24	
v/s Ratio Perm			0.10			0.07			0.04			
v/c Ratio	1.14	0.84	0.33	0.61	1.21	0.22	0.65	0.93	0.16	1.38	0.87	
Uniform Delay, d1	65.3	45.1	37.7	59.8	44.6	31.8	46.5	49.3	39.4	50.1	46.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	162.7	6.1	2.0	2.7	100.4	1.0	1.3	24.8	0.3	185.0	14.8	
Delay (s)	228.0	51.2	39.7	62.5	145.0	32.8	47.9	74.1	39.7	235.1	61.5	
Level of Service	F	D	D	E	F	C	D	E	D	F	E	
Approach Delay (s)		54.9			125.0			56.9			164.3	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	97.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	550	1190	370	0	0	650
Future Volume (vph)	550	1190	370	0	0	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	1293	402	0	0	707
RTOR Reduction (vph)	0	301	0	0	0	0
Lane Group Flow (vph)	598	992	402	0	0	707
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	19.7	19.7	13.0			13.0
Effective Green, g (s)	19.7	19.7	13.0			13.0
Actuated g/C Ratio	0.42	0.42	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1448	1175	985			985
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.36				
v/c Ratio	0.41	0.84	0.41			0.72
Uniform Delay, d1	9.5	12.1	13.7			15.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	5.5	0.1			2.1
Delay (s)	9.5	17.6	13.8			17.3
Level of Service	A	B	B			B
Approach Delay (s)	15.1		13.8			17.3
Approach LOS	B		B			B

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	46.7	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

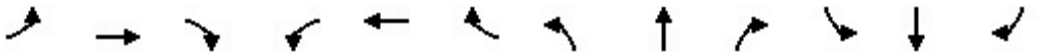
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	130	980	210	0	1200
Future Volume (Veh/h)	0	130	980	210	0	1200
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	141	1065	228	0	1304
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			780
pX, platoon unblocked	0.97	0.97			0.97	
vC, conflicting volume	1614	472			1293	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1499	327			1177	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	78			100	
cM capacity (veh/h)	109	644			568	

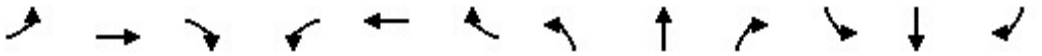
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	141	426	426	441	435	435	435
Volume Left	0	0	0	0	0	0	0
Volume Right	141	0	0	228	0	0	0
cSH	644	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.22	0.25	0.25	0.26	0.26	0.26	0.26
Queue Length 95th (ft)	21	0	0	0	0	0	0
Control Delay (s)	12.1	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B						
Approach Delay (s)	12.1	0.0			0.0		
Approach LOS	B						

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		



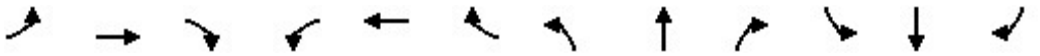
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	300	270	30	140	290	190	460	50	440	520	240
Future Volume (vph)	440	300	270	30	140	290	190	460	50	440	520	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1565	1770	3539	1574	1770	3482		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1565	1770	3539	1574	1770	3482		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	326	293	33	152	315	207	500	54	478	565	261
RTOR Reduction (vph)	0	0	58	0	0	44	0	6	0	0	0	119
Lane Group Flow (vph)	478	326	235	33	152	271	207	548	0	478	565	142
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	30.3	46.1	64.7	3.4	19.1	49.4	18.6	24.4		30.3	36.1	66.4
Effective Green, g (s)	31.2	47.0	66.5	4.4	20.1	49.4	19.5	25.3		31.2	37.0	66.4
Actuated g/C Ratio	0.26	0.39	0.55	0.04	0.16	0.40	0.16	0.21		0.26	0.30	0.54
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	452	717	853	63	583	637	282	722		452	1073	852
v/s Ratio Prot	c0.27	c0.18	0.04	0.02	0.04	0.11	0.12	c0.16		c0.27	0.16	0.04
v/s Ratio Perm			0.11			0.07						0.05
v/c Ratio	1.06	0.45	0.28	0.52	0.26	0.43	0.73	0.76		1.06	0.53	0.17
Uniform Delay, d1	45.4	27.9	14.9	57.8	44.5	26.1	48.8	45.5		45.4	35.2	13.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	58.4	0.2	0.2	7.6	1.0	0.5	9.5	4.6		58.4	1.0	0.1
Delay (s)	103.8	28.1	15.0	65.4	45.5	26.6	58.3	50.1		103.8	36.3	14.0
Level of Service	F	C	B	E	D	C	E	D		F	D	B
Approach Delay (s)		57.6			34.9			52.3			56.6	
Approach LOS		E			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	53.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	122.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	110	110	90	100	170	80	320	50	90	410	90
Future Volume (vph)	110	110	110	90	100	170	80	320	50	90	410	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1770	1556	1770	1863	1551	3433	3459		1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	120	120	98	109	185	87	348	54	98	446	98
RTOR Reduction (vph)	0	0	96	0	0	159	0	7	0	0	0	47
Lane Group Flow (vph)	120	120	25	98	109	26	87	395	0	98	446	51
Confl. Peds. (#/hr)			12			8			5			
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	17.0	17.0	23.7	16.0	16.0	16.0	6.7	55.6		12.3	61.2	61.2
Effective Green, g (s)	17.9	17.9	24.5	16.9	16.9	16.9	7.1	56.5		12.7	62.1	62.1
Actuated g/C Ratio	0.15	0.15	0.20	0.14	0.14	0.14	0.06	0.47		0.11	0.52	0.52
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	250	264	317	249	262	218	203	1628		187	1831	819
v/s Ratio Prot	c0.07	0.07	0.00	0.06	c0.06		0.03	0.11		c0.06	c0.13	
v/s Ratio Perm			0.01			0.02						0.03
v/c Ratio	0.48	0.45	0.08	0.39	0.42	0.12	0.43	0.24		0.52	0.24	0.06
Uniform Delay, d1	46.8	46.6	38.6	46.9	47.0	45.0	54.5	19.0		50.8	16.0	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.27	0.71	0.71
Incremental Delay, d2	1.5	1.2	0.0	1.0	1.1	0.2	0.5	0.4		1.0	0.3	0.1
Delay (s)	48.2	47.8	38.6	47.9	48.1	45.3	55.0	19.3		65.8	11.6	10.4
Level of Service	D	D	D	D	D	D	E	B		E	B	B
Approach Delay (s)		44.9			46.7			25.7			19.7	
Approach LOS		D			D			C			B	

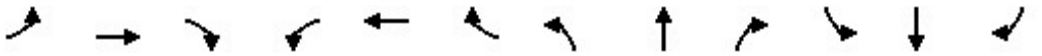
Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	20
Future Volume (vph)	30	20	20	30	20	30	60	660	90	30	550	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.98		1.00	0.99	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1746			1724		1770	3475		1770	3517	
Flt Permitted		0.84			0.84		0.39	1.00		0.33	1.00	
Satd. Flow (perm)		1506			1482		730	3475		609	3517	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	22	22	33	22	33	65	717	98	33	598	22
RTOR Reduction (vph)	0	19	0	0	28	0	0	13	0	0	3	0
Lane Group Flow (vph)	0	58	0	0	60	0	65	802	0	33	617	0
Confl. Peds. (#/hr)			1			10						3
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		5.2			5.2		22.6	21.2		20.8	20.3	
Effective Green, g (s)		6.1			6.1		23.4	22.1		21.6	21.2	
Actuated g/C Ratio		0.15			0.15		0.57	0.54		0.53	0.52	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		223			219		461	1868		345	1814	
v/s Ratio Prot							c0.01	c0.23		0.00	0.18	
v/s Ratio Perm		0.04			c0.04		0.07			0.05		
v/c Ratio		0.26			0.27		0.14	0.43		0.10	0.34	
Uniform Delay, d1		15.5			15.5		4.0	5.7		4.7	5.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			0.2		0.1	0.2		0.0	0.1	
Delay (s)		15.7			15.8		4.0	5.9		4.8	5.9	
Level of Service		B			B		A	A		A	A	
Approach Delay (s)		15.7			15.8			5.7			5.9	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Future Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4984		3433	5085	1544	1770	3539	1542	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	370	1957	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	12	0	0	0	76	0	0	77	0	0	79
Lane Group Flow (vph)	239	1760	0	370	1957	250	130	359	151	250	304	117
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.8	42.6		10.4	44.3	53.5	8.5	24.0	34.4	9.2	24.7	33.5
Effective Green, g (s)	9.2	43.7		10.8	45.3	53.5	8.9	24.9	36.2	9.6	25.6	35.3
Actuated g/C Ratio	0.09	0.42		0.10	0.43	0.51	0.08	0.24	0.34	0.09	0.24	0.34
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	2074		353	2193	786	150	839	583	313	862	522
v/s Ratio Prot	0.07	c0.35		0.11	c0.38	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.80	0.85		1.05	0.89	0.32	0.87	0.43	0.26	0.80	0.35	0.22
Uniform Delay, d1	47.0	27.7		47.1	27.6	15.1	47.5	34.0	24.7	46.8	32.8	25.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	4.6		61.1	6.1	0.1	36.3	0.1	0.1	12.4	0.1	0.1
Delay (s)	59.8	32.2		108.2	33.6	15.2	83.8	34.1	24.8	59.2	32.9	25.1
Level of Service	E	C		F	C	B	F	C	C	E	C	C
Approach Delay (s)		35.5			41.8			40.2			39.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	30	590	90	150	690
Future Volume (vph)	120	30	590	90	150	690
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.97		0.98		1.00	1.00
Flt Protected	0.96		1.00		0.95	1.00
Satd. Flow (prot)	1742		3469		1770	3539
Flt Permitted	0.96		1.00		0.95	1.00
Satd. Flow (perm)	1742		3469		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	33	641	98	163	750
RTOR Reduction (vph)	16	0	14	0	0	0
Lane Group Flow (vph)	147	0	725	0	163	750
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	8.9		30.2		8.8	43.5
Effective Green, g (s)	8.9		30.2		8.8	43.5
Actuated g/C Ratio	0.14		0.49		0.14	0.71
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	252		1706		253	2507
v/s Ratio Prot	c0.08		c0.21		c0.09	0.21
v/s Ratio Perm						
v/c Ratio	0.58		0.42		0.64	0.30
Uniform Delay, d1	24.5		10.0		24.8	3.3
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	3.4		0.8		5.5	0.3
Delay (s)	27.9		10.8		30.4	3.6
Level of Service	C		B		C	A
Approach Delay (s)	27.9		10.8			8.4
Approach LOS	C		B			A

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	61.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		

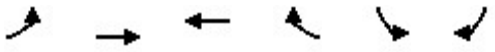
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	170	560	100	0	600
Future Volume (Veh/h)	0	170	560	100	0	600
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	185	609	109	0	652
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			491
pX, platoon unblocked	0.86					
vC, conflicting volume	992	364			720	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	667	364			720	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	71			100	
cM capacity (veh/h)	337	630			876	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	185	406	312	326	326
Volume Left	0	0	0	0	0
Volume Right	185	0	109	0	0
cSH	630	1700	1700	1700	1700
Volume to Capacity	0.29	0.24	0.18	0.19	0.19
Queue Length 95th (ft)	30	0	0	0	0
Control Delay (s)	13.1	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	13.1	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	1.6		
Intersection Capacity Utilization	36.5%	ICU Level of Service	A
Analysis Period (min)	15		



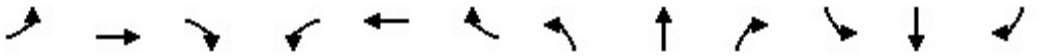
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	820	1290	660	420	170
Future Volume (vph)	0	820	1290	660	420	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	891	1402	717	457	185
RTOR Reduction (vph)	0	0	0	289	0	148
Lane Group Flow (vph)	0	891	1402	428	457	37
Confl. Peds. (#/hr)				8	8	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	8	1	
Permitted Phases						1
Actuated Green, G (s)		31.9	31.9	27.3	12.1	12.1
Effective Green, g (s)		31.9	31.9	26.8	12.1	12.1
Actuated g/C Ratio		0.52	0.52	0.44	0.20	0.20
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	3.0	2.5	2.5
Lane Grp Cap (vph)		1856	1856	1228	683	315
v/s Ratio Prot		0.25	c0.40	0.15	c0.13	
v/s Ratio Perm						0.02
v/c Ratio		0.48	0.76	0.35	0.67	0.12
Uniform Delay, d1		9.2	11.4	11.2	22.5	20.0
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.2	1.8	0.2	2.2	0.1
Delay (s)		9.4	13.2	11.4	24.7	20.1
Level of Service		A	B	B	C	C
Approach Delay (s)		9.4	12.6		23.4	
Approach LOS		A	B		C	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.8	Sum of lost time (s)	17.1
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



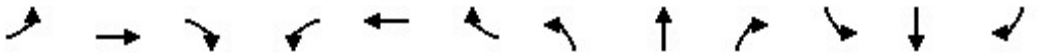
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	30	50	410	70	130	660
Future Volume (vph)	30	50	410	70	130	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.9	4.0	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.98	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1550	4959		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1550	4959		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	54	446	76	141	717
RTOR Reduction (vph)	0	48	11	0	0	0
Lane Group Flow (vph)	33	6	511	0	141	717
Confl. Peds. (#/hr)	4	11		9	9	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	11.9	11.9	70.8		13.1	88.3
Effective Green, g (s)	11.9	12.8	70.8		13.1	88.3
Actuated g/C Ratio	0.11	0.12	0.64		0.12	0.80
Clearance Time (s)	4.9	4.9	4.9		4.4	4.9
Vehicle Extension (s)	2.0	2.0	5.0		2.0	3.2
Lane Grp Cap (vph)	191	180	3191		210	4081
v/s Ratio Prot	c0.02		0.10		c0.08	c0.14
v/s Ratio Perm		0.00				
v/c Ratio	0.17	0.03	0.16		0.67	0.18
Uniform Delay, d1	44.6	43.1	7.8		46.4	2.5
Progression Factor	1.00	1.00	2.10		1.00	1.00
Incremental Delay, d2	0.2	0.0	0.1		6.5	0.1
Delay (s)	44.7	43.1	16.4		52.9	2.6
Level of Service	D	D	B		D	A
Approach Delay (s)	43.8		16.4			10.8
Approach LOS	D		B			B

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



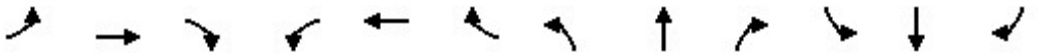
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	50	110	160	140	120	200	410	100	120	520	110
Future Volume (vph)	80	50	110	160	140	120	200	410	100	120	520	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.5	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.96		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.93		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1670		1770	1734		1770	4760		3433	3446	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1670		1770	1734		1770	4760		3433	3446	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	54	120	174	152	130	217	446	109	130	565	120
RTOR Reduction (vph)	0	87	0	0	26	0	0	34	0	0	14	0
Lane Group Flow (vph)	87	87	0	174	256	0	217	521	0	130	671	0
Confl. Peds. (#/hr)									120			
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	14.0	14.0		19.5	19.5		16.8	33.3		23.6	40.6	
Effective Green, g (s)	14.9	14.9		20.4	20.4		17.2	34.2		24.0	41.5	
Actuated g/C Ratio	0.14	0.14		0.19	0.19		0.16	0.31		0.22	0.38	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		3.9	3.9	
Lane Grp Cap (vph)	239	226		328	321		276	1479		749	1300	
v/s Ratio Prot	0.05	c0.05		0.10	c0.15		c0.12	0.11		0.04	c0.19	
v/s Ratio Perm												
v/c Ratio	0.36	0.38		0.53	0.80		0.79	0.35		0.17	0.52	
Uniform Delay, d1	43.2	43.4		40.5	42.8		44.6	29.3		34.9	26.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.95	0.95	
Incremental Delay, d2	0.9	1.1		0.8	12.1		12.7	0.7		0.1	1.5	
Delay (s)	44.2	44.4		41.3	54.9		57.3	30.0		33.3	26.7	
Level of Service	D	D		D	D		E	C		C	C	
Approach Delay (s)		44.4			49.7			37.7			27.8	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	62.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	20	70	20	50	30	620	40	90	680	80
Future Volume (vph)	40	20	20	70	20	50	30	620	40	90	680	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.97		1.00	0.89		1.00	0.99		1.00	0.98	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1749		1770	1664		1770	5032		3433	3471	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1749		1770	1664		1770	5032		3433	3471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	22	76	22	54	33	674	43	98	739	87
RTOR Reduction (vph)	0	10	0	0	49	0	0	4	0	0	5	0
Lane Group Flow (vph)	0	77	0	76	27	0	33	713	0	98	821	0
Confl. Peds. (#/hr)			7	7			9		4	4		9
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		9.0		6.5	6.5		2.1	20.4		13.5	32.3	
Effective Green, g (s)		9.0		6.5	6.5		2.1	20.4		13.5	32.3	
Actuated g/C Ratio		0.13		0.09	0.09		0.03	0.30		0.20	0.47	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.9	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		228		166	156		53	1487		671	1624	
v/s Ratio Prot		c0.04		c0.04	0.02		c0.02	0.14		0.03	c0.24	
v/s Ratio Perm												
v/c Ratio		0.34		0.46	0.17		0.62	0.48		0.15	0.51	
Uniform Delay, d1		27.3		29.6	28.8		33.1	19.9		23.0	12.8	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.7	0.2		15.2	0.1		0.0	0.1	
Delay (s)		27.6		30.3	29.0		48.3	20.0		23.0	12.9	
Level of Service		C		C	C		D	C		C	B	
Approach Delay (s)		27.6			29.6			21.3			14.0	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay	18.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	69.0	Sum of lost time (s)	19.6
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	50	30	10	40	60	610	50	40	730	40
Future Volume (vph)	30	10	50	30	10	40	60	610	50	40	730	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.9	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected		0.96	1.00		0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1795	1583		1795	1583	1770	5028		1770	5046	
Flt Permitted		0.76	1.00		0.75	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1414	1583		1399	1583	1770	5028		1770	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	54	33	11	43	65	663	54	43	793	43
RTOR Reduction (vph)	0	0	47	0	0	37	0	11	0	0	7	0
Lane Group Flow (vph)	0	44	7	0	44	6	65	706	0	43	829	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		8						
Actuated Green, G (s)		7.4	7.4		7.4	7.4	4.4	33.1		2.5	31.2	
Effective Green, g (s)		7.4	7.4		6.5	7.4	4.4	33.1		2.5	31.2	
Actuated g/C Ratio		0.13	0.13		0.12	0.13	0.08	0.60		0.05	0.57	
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		190	212		165	212	141	3025		80	2862	
v/s Ratio Prot							c0.04	0.14		c0.02	c0.16	
v/s Ratio Perm		0.03	0.00		c0.03	0.00						
v/c Ratio		0.23	0.03		0.27	0.03	0.46	0.23		0.54	0.29	
Uniform Delay, d1		21.3	20.7		22.1	20.7	24.2	5.1		25.7	6.2	
Progression Factor		1.00	1.00		1.00	1.00	0.83	0.64		1.00	1.00	
Incremental Delay, d2		0.6	0.1		0.9	0.1	2.0	0.2		6.8	0.3	
Delay (s)		21.9	20.8		23.0	20.7	22.1	3.4		32.5	6.4	
Level of Service		C	C		C	C	C	A		C	A	
Approach Delay (s)		21.3			21.9			4.9			7.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	37.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	200	1350	150	200	2150	410	100	270	180	140	100	190
Future Volume (vph)	200	1350	150	200	2150	410	100	270	180	140	100	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	7.8	5.9	5.9	5.9	5.9	5.9	5.9
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (prot)	3433	4725		1362	5085	1583	1611	1681	1610	1666	1401	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.98	1.00	0.95
Satd. Flow (perm)	3433	4725		1362	5085	1583	1611	1681	1610	1666	1401	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	1467	163	217	2337	446	109	293	196	152	109	207
RTOR Reduction (vph)	0	1	0	84	0	36	74	0	0	0	93	0
Lane Group Flow (vph)	217	1651	0	111	2337	410	35	179	228	234	16	207
Confl. Peds. (#/hr)								9			45	18
Confl. Bikes (#/hr)											10	
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	8.0	62.8		62.8	51.0	67.1	35.2	16.1	16.1	16.1	16.1	13.2
Effective Green, g (s)	9.4	64.9		62.8	52.9	63.3	35.2	16.1	16.1	16.1	16.1	13.2
Actuated g/C Ratio	0.09	0.59		0.57	0.48	0.58	0.32	0.15	0.15	0.15	0.15	0.12
Clearance Time (s)	4.0	6.1		6.1	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
Vehicle Extension (s)	3.0	2.8		2.8	3.2	2.9	4.1	2.9	2.9	2.9	2.9	2.9
Lane Grp Cap (vph)	293	2787		777	2445	910	515	246	235	243	205	212
v/s Ratio Prot	c0.06	0.35			c0.46	0.06		0.11	c0.14	0.14		c0.12
v/s Ratio Perm				0.08		0.20	0.02				0.01	
v/c Ratio	0.74	0.59		0.14	0.96	0.45	0.07	0.73	0.97	0.96	0.08	0.98
Uniform Delay, d1	49.1	14.2		11.0	27.4	13.4	26.0	44.9	46.7	46.7	40.5	48.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.86	0.88	0.87	1.74	1.00
Incremental Delay, d2	9.7	0.9		0.4	10.4	0.3	0.1	10.0	49.6	46.6	0.2	54.5
Delay (s)	58.8	15.1		11.4	37.9	13.7	26.1	48.6	90.5	87.4	70.6	102.8
Level of Service	E	B		B	D	B	C	D	F	F	E	F
Approach Delay (s)		19.4			34.0					76.6		73.0
Approach LOS		B			C					E		E

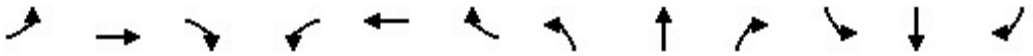
Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	20.3
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	170	30
Future Volume (vph)	170	30
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.9	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	185	33
RTOR Reduction (vph)	114	0
Lane Group Flow (vph)	104	0
Confl. Peds. (#/hr)		9
Confl. Bikes (#/hr)		1
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	13.2	
Effective Green, g (s)	13.2	
Actuated g/C Ratio	0.12	
Clearance Time (s)	5.9	
Vehicle Extension (s)	2.9	
Lane Grp Cap (vph)	334	
v/s Ratio Prot	0.04	
v/s Ratio Perm		
v/c Ratio	0.31	
Uniform Delay, d1	44.3	
Progression Factor	1.00	
Incremental Delay, d2	0.5	
Delay (s)	44.8	
Level of Service	D	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	100	100	90	80	80	70	50	90	20	30	30
Future Volume (vph)	50	100	100	90	80	80	70	50	90	20	30	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.95			0.96			0.94			0.95	
Flt Protected		0.99			0.98			0.98			0.99	
Satd. Flow (prot)		1745			1751			1726			1747	
Flt Permitted		0.90			0.75			0.89			0.92	
Satd. Flow (perm)		1577			1335			1563			1635	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	109	109	98	87	87	76	54	98	22	33	33
RTOR Reduction (vph)	0	50	0	0	35	0	0	32	0	0	15	0
Lane Group Flow (vph)	0	222	0	0	237	0	0	196	0	0	73	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		12.9			12.9			26.7			27.2	
Effective Green, g (s)		12.9			12.9			26.7			27.2	
Actuated g/C Ratio		0.27			0.27			0.55			0.56	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		418			354			858			915	
v/s Ratio Prot												
v/s Ratio Perm		0.14			c0.18			c0.13			0.04	
v/c Ratio		0.53			0.67			0.23			0.08	
Uniform Delay, d1		15.3			15.9			5.6			4.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.3			4.7			0.6			0.0	
Delay (s)		16.6			20.7			6.3			5.0	
Level of Service		B			C			A			A	
Approach Delay (s)		16.6			20.7			6.3			5.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	48.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	50.0%	ICU Level of Service	A
Analysis Period (min)	15		

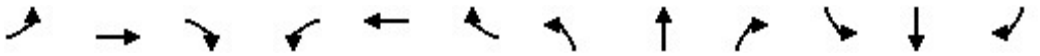
c Critical Lane Group



Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	280	610	600	70	200	190
Future Volume (vph)	280	610	600	70	200	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5006		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5006		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	304	663	652	76	217	207
RTOR Reduction (vph)	0	0	8	0	0	172
Lane Group Flow (vph)	304	663	720	0	217	35
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.1	91.7	61.6		20.3	20.3
Effective Green, g (s)	26.1	91.7	61.6		20.3	20.3
Actuated g/C Ratio	0.22	0.76	0.51		0.17	0.17
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	384	3885	2569		299	267
v/s Ratio Prot	c0.17	0.13	c0.14		c0.12	
v/s Ratio Perm						0.02
v/c Ratio	0.79	0.17	0.28		0.73	0.13
Uniform Delay, d1	44.4	3.8	16.6		47.2	42.4
Progression Factor	1.17	0.17	1.10		1.00	1.00
Incremental Delay, d2	10.5	0.1	0.3		8.5	0.2
Delay (s)	62.5	0.7	18.5		55.7	42.6
Level of Service	E	A	B		E	D
Approach Delay (s)		20.2	18.5		49.3	
Approach LOS		C	B		D	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

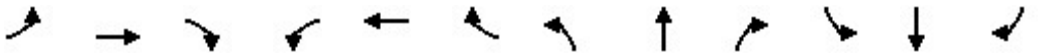
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Future Volume (vph)	30	0	100	460	390	100	0	0	0	0	70	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.97						0.98	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1806						1831	
Flt Permitted	0.53		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	993		1583	1770	1806						1831	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	0	109	500	424	109	0	0	0	0	76	11
RTOR Reduction (vph)	0	0	92	292	12	0	0	0	0	0	9	0
Lane Group Flow (vph)	33	0	17	208	521	0	0	0	0	0	78	0
Turn Type	Perm		Perm	Split	NA						NA	
Protected Phases				8	8						6	
Permitted Phases	4		4									
Actuated Green, G (s)	7.5		7.5	19.5	19.5						7.9	
Effective Green, g (s)	7.5		7.5	19.5	19.5						7.9	
Actuated g/C Ratio	0.16		0.16	0.42	0.42						0.17	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	158		253	735	750						308	
v/s Ratio Prot				0.12	c0.29						c0.04	
v/s Ratio Perm	c0.03		0.01									
v/c Ratio	0.21		0.07	0.28	0.69						0.25	
Uniform Delay, d1	17.1		16.7	9.1	11.3						16.9	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.7		0.1	0.2	2.8						0.4	
Delay (s)	17.8		16.8	9.3	14.1						17.4	
Level of Service	B		B	A	B						B	
Approach Delay (s)		17.1			11.7			0.0			17.4	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

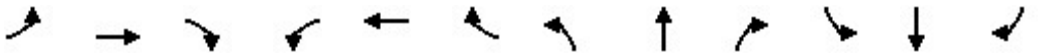
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1640	10	460	2410	0	0	0	0	390	240	150
Future Volume (vph)	0	1640	10	460	2410	0	0	0	0	390	240	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frt		1.00		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		5081		1770	6408					1681	1751	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		5081		1770	6408					1681	1751	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1783	11	500	2620	0	0	0	0	424	261	163
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	0	0	0	39
Lane Group Flow (vph)	0	1793	0	500	2620	0	0	0	0	352	333	124
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		52.1		34.5	91.3					33.9	33.9	33.9
Effective Green, g (s)		53.3		34.9	92.2					34.8	34.8	34.8
Actuated g/C Ratio		0.39		0.26	0.68					0.26	0.26	0.26
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2006		457	4376					433	451	408
v/s Ratio Prot		c0.35		c0.28	0.41							
v/s Ratio Perm										c0.21	0.19	0.08
v/c Ratio		0.89		1.09	0.60					0.81	0.74	0.30
Uniform Delay, d1		38.2		50.1	11.5					47.0	45.9	40.3
Progression Factor		1.00		1.09	0.07					1.00	1.00	1.00
Incremental Delay, d2		6.6		46.1	0.1					10.6	5.4	0.2
Delay (s)		44.9		100.6	0.9					57.6	51.3	40.5
Level of Service		D		F	A					E	D	D
Approach Delay (s)		44.9			16.9			0.0			51.8	
Approach LOS		D			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	100	160	240	0	140	0	160	230	230	10
Future Volume (vph)	0	330	100	160	240	0	140	0	160	230	230	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		0.99	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	0.99	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3329		1750	3539		1770		1548	1770	1850	
Flt Permitted		1.00		0.40	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3329		739	3539		1770		1548	1770	1850	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	359	109	174	261	0	152	0	174	250	250	11
RTOR Reduction (vph)	0	16	0	0	0	0	0	0	92	0	2	0
Lane Group Flow (vph)	0	452	0	174	261	0	152	0	82	250	259	0
Confl. Peds. (#/hr)			21	21		47	2		4			2
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		60.1		75.3	75.3		16.4		60.1	24.1	24.1	
Effective Green, g (s)		61.0		75.7	76.2		16.8		61.0	25.0	25.0	
Actuated g/C Ratio		0.47		0.58	0.59		0.13		0.47	0.19	0.19	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1562		517	2074		228		726	340	355	
v/s Ratio Prot		0.14		c0.03	0.07		c0.09			c0.14	0.14	
v/s Ratio Perm				c0.17					0.05			
v/c Ratio		0.29		0.34	0.13		0.67		0.11	0.74	0.73	
Uniform Delay, d1		21.2		13.2	12.0		53.9		19.3	49.4	49.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		0.5		0.1	0.1		7.2		0.3	8.0	7.5	
Delay (s)		21.7		13.3	12.1		61.1		19.6	57.4	56.9	
Level of Service		C		B	B		E		B	E	E	
Approach Delay (s)		21.7			12.6			39.0			57.1	
Approach LOS		C			B			D			E	

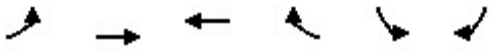
Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	190	350	460	480	150
Future Volume (vph)	100	190	350	460	480	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	0.99		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.96	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1651		1770	5085	4904	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1651		1770	5085	4904	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	207	380	500	522	163
RTOR Reduction (vph)	64	0	0	0	32	0
Lane Group Flow (vph)	252	0	380	500	653	0
Confl. Peds. (#/hr)		2				
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	23.3		32.2	88.7	52.5	
Effective Green, g (s)	23.3		31.8	88.7	51.6	
Actuated g/C Ratio	0.19		0.27	0.74	0.43	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	320		469	3758	2108	
v/s Ratio Prot	c0.15		c0.21	0.10	c0.13	
v/s Ratio Perm						
v/c Ratio	0.79		0.81	0.13	0.31	
Uniform Delay, d1	46.0		41.3	4.5	22.5	
Progression Factor	1.00		0.99	1.42	1.00	
Incremental Delay, d2	12.1		10.1	0.1	0.4	
Delay (s)	58.1		50.7	6.5	22.9	
Level of Service	E		D	A	C	
Approach Delay (s)	58.1			25.6	22.9	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

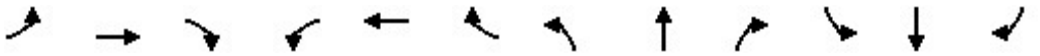
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	140	80	40	20	30
Future Volume (Veh/h)	50	140	80	40	20	30
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	54	152	87	43	22	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1157	644			
pX, platoon unblocked						
vC, conflicting volume	130				368	108
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	130				368	108
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				96	97
cM capacity (veh/h)	1455				608	945

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	54	152	130	55
Volume Left	54	0	0	22
Volume Right	0	0	43	33
cSH	1455	1700	1700	774
Volume to Capacity	0.04	0.09	0.08	0.07
Queue Length 95th (ft)	3	0	0	6
Control Delay (s)	7.6	0.0	0.0	10.0
Lane LOS	A			B
Approach Delay (s)	2.0		0.0	10.0
Approach LOS				B

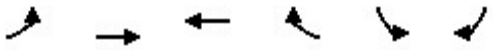
Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	19.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	1980	0	0	2790	640	80	370	150	0	0	0
Future Volume (vph)	50	1980	0	0	2790	640	80	370	150	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frt	1.00	1.00			1.00	0.85		0.96				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1583		3384				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1583		3384				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	2152	0	0	3033	696	87	402	163	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	137	0	6	0	0	0	0
Lane Group Flow (vph)	54	2152	0	0	3033	559	0	646	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	10.9	88.3			73.0	73.0		36.9				
Effective Green, g (s)	11.3	89.2			73.9	73.9		37.8				
Actuated g/C Ratio	0.08	0.66			0.55	0.55		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	148	3359			2783	866		947				
v/s Ratio Prot	0.03	c0.42			c0.60			c0.19				
v/s Ratio Perm						0.35						
v/c Ratio	0.36	0.64			1.09	0.65		0.68				
Uniform Delay, d1	58.5	13.5			30.5	21.4		43.3				
Progression Factor	0.80	0.89			1.00	1.00		1.00				
Incremental Delay, d2	0.3	0.5			47.2	3.7		1.6				
Delay (s)	47.2	12.4			77.7	25.1		44.9				
Level of Service	D	B			E	C		D				
Approach Delay (s)		13.3			67.9			44.9			0.0	
Approach LOS		B			E			D			A	

Intersection Summary			
HCM 2000 Control Delay	47.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	10	710	400	330	0	0
Future Volume (Veh/h)	10	710	400	330	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	11	772	435	359	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		480	811			
pX, platoon unblocked	0.93				0.96	0.93
vC, conflicting volume	794				1022	397
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	635				676	210
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				100	100
cM capacity (veh/h)	881				367	743

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	11	386	386	290	504
Volume Left	11	0	0	0	0
Volume Right	0	0	0	0	359
cSH	881	1700	1700	1700	1700
Volume to Capacity	0.01	0.23	0.23	0.17	0.30
Queue Length 95th (ft)	1	0	0	0	0
Control Delay (s)	9.1	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.1			0.0	
Approach LOS					

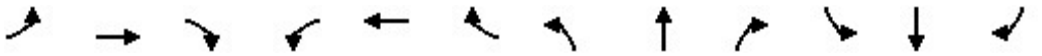
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	25.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	170	0	0	130	300	570
Future Volume (vph)	170	0	0	130	300	570
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	185	0	0	141	326	620

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	185	141	326	620
Volume Left (vph)	185	0	326	0
Volume Right (vph)	0	141	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.2	5.0	5.8	5.3
Degree Utilization, x	0.32	0.19	0.53	0.91
Capacity (veh/h)	567	702	611	675
Control Delay (s)	12.0	9.1	13.8	38.0
Approach Delay (s)	12.0	9.1	29.7	
Approach LOS	B	A	D	

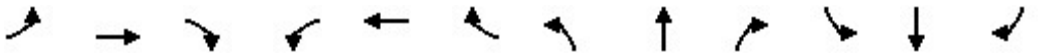
Intersection Summary			
Delay	24.8		
Level of Service	C		
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Future Volume (vph)	100	20	50	40	20	10	20	30	20	20	230	490
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	109	22	54	43	22	11	22	33	22	22	250	533

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	120	65	76	77	272	533
Volume Left (vph)	109	0	43	22	22	0
Volume Right (vph)	0	54	11	22	0	533
Hadj (s)	0.49	-0.55	0.06	-0.08	0.07	-0.67
Departure Headway (s)	7.1	6.1	6.7	6.1	5.5	4.8
Degree Utilization, x	0.24	0.11	0.14	0.13	0.42	0.71
Capacity (veh/h)	473	547	493	553	632	729
Control Delay (s)	11.1	8.6	10.9	10.1	11.3	17.5
Approach Delay (s)	10.2		10.9	10.1	15.4	
Approach LOS	B		B	B	C	

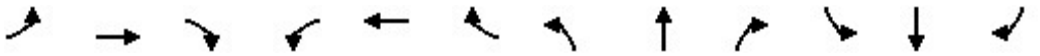
Intersection Summary				
Delay	13.9			
Level of Service	B			
Intersection Capacity Utilization	48.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	350	190	540	520	0	0	0	0	280	360	410
Future Volume (vph)	0	350	190	540	520	0	0	0	0	280	360	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3358	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3358	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	380	207	587	565	0	0	0	0	304	391	446
RTOR Reduction (vph)	0	0	90	0	0	0	0	0	0	0	0	227
Lane Group Flow (vph)	0	380	117	587	565	0	0	0	0	213	482	219
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		30.2	30.2	16.1	50.7					19.5	19.5	19.5
Effective Green, g (s)		31.1	31.1	16.5	51.6					20.4	20.4	20.4
Actuated g/C Ratio		0.39	0.39	0.21	0.65					0.25	0.25	0.25
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1375	615	708	2282					410	856	403
v/s Ratio Prot		c0.11		c0.17	0.16							
v/s Ratio Perm			0.07							0.13	0.14	0.14
v/c Ratio		0.28	0.19	0.83	0.25					0.52	0.56	0.54
Uniform Delay, d1		16.7	16.1	30.4	6.0					25.6	25.9	25.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	7.6	0.3					0.5	0.5	0.8
Delay (s)		17.2	16.8	38.0	6.3					26.1	26.4	26.6
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.1			22.4			0.0			26.4	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

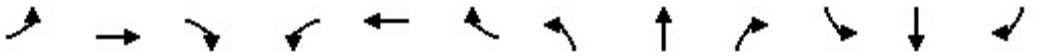
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	40	40	0	0	0	0	0	0	1490	160
Future Volume (Veh/h)	0	0	40	40	0	0	0	0	0	0	1490	160
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	43	43	0	0	0	0	0	0	1620	174
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1707	1707	627	583	1794	0	1794			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1707	1707	627	583	1794	0	1794			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	90	88	100	100	100			100		
cM capacity (veh/h)	59	90	426	356	80	1084	341			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	43	43	648	648	498
Volume Left	0	43	0	0	0
Volume Right	43	0	0	0	174
cSH	426	356	1700	1700	1700
Volume to Capacity	0.10	0.12	0.38	0.38	0.29
Queue Length 95th (ft)	8	10	0	0	0
Control Delay (s)	14.4	16.5	0.0	0.0	0.0
Lane LOS	B	C			
Approach Delay (s)	14.4	16.5	0.0		
Approach LOS	B	C			

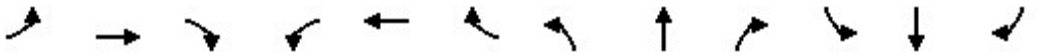
Intersection Summary				
Average Delay	0.7			
Intersection Capacity Utilization	50.9%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	190	160	190	370	0	0	0	0	470	1270	360
Future Volume (vph)	0	190	160	190	370	0	0	0	0	470	1270	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.97	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3480					1770	4917	
Flt Permitted		1.00	1.00		0.76					0.95	1.00	
Satd. Flow (perm)		1863	1583		2673					1770	4917	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	207	174	207	402	0	0	0	0	511	1380	391
RTOR Reduction (vph)	0	0	35	0	0	0	0	0	0	0	78	0
Lane Group Flow (vph)	0	207	139	0	609	0	0	0	0	511	1693	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		21.3	21.3		21.3					30.7	30.7	
Effective Green, g (s)		24.0	24.0		24.0					33.0	33.0	
Actuated g/C Ratio		0.37	0.37		0.37					0.51	0.51	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		687	584		986					898	2496	
v/s Ratio Prot		0.11									c0.34	
v/s Ratio Perm			0.09		c0.23					0.29		
v/c Ratio		0.30	0.24		0.62					0.57	0.68	
Uniform Delay, d1		14.5	14.2		16.8					11.1	12.0	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		1.1	1.0		2.9					2.6	1.5	
Delay (s)		15.7	15.1		19.7					13.7	13.5	
Level of Service		B	B		B					B	B	
Approach Delay (s)		15.4			19.7			0.0			13.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	660	80	40	540	0	0	0	0	540	340	510
Future Volume (vph)	0	660	80	40	540	0	0	0	0	540	340	510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		3482		1770	3539						4663	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		3482		1770	3539						4663	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	717	87	43	587	0	0	0	0	587	370	554
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	0	107
Lane Group Flow (vph)	0	790	0	43	587	0	0	0	0	0	957	447
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.4		2.8	27.9						25.1	25.1
Effective Green, g (s)		20.6		3.2	27.8						24.2	26.5
Actuated g/C Ratio		0.32		0.05	0.43						0.37	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1103		87	1513						1736	555
v/s Ratio Prot		c0.23		0.02	c0.17							
v/s Ratio Perm											0.21	c0.33
v/c Ratio		0.72		0.49	0.39						0.94dl	0.81
Uniform Delay, d1		19.6		30.1	12.8						16.1	17.0
Progression Factor		1.00		1.32	0.84						1.00	1.00
Incremental Delay, d2		4.0		1.5	0.7						0.2	7.9
Delay (s)		23.6		41.2	11.4						16.3	24.8
Level of Service		C		D	B						B	C
Approach Delay (s)		23.6			13.5			0.0			19.4	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



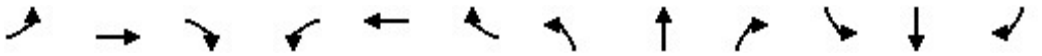
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	130	1110	1820	760	660	130
Future Volume (vph)	130	1110	1820	760	660	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2765	3433	5085	5085	1583
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2765	3433	5085	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	1207	1978	826	717	141
RTOR Reduction (vph)	0	18	0	0	0	1
Lane Group Flow (vph)	141	1189	1978	826	717	140
Confl. Peds. (#/hr)	129	61	34			
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	14.8	76.0	61.2	97.2	32.0	46.8
Effective Green, g (s)	14.8	76.0	61.2	97.2	32.0	46.8
Actuated g/C Ratio	0.12	0.63	0.51	0.81	0.27	0.39
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	218	1843	1750	4118	1356	670
v/s Ratio Prot	0.08	c0.33	c0.58	0.16	c0.14	0.03
v/s Ratio Perm		0.10				0.06
v/c Ratio	0.65	0.64	1.13	0.20	0.53	0.21
Uniform Delay, d1	50.1	13.6	29.4	2.6	37.6	24.3
Progression Factor	1.00	1.00	0.42	0.60	0.82	0.98
Incremental Delay, d2	6.5	0.8	61.7	0.0	1.4	0.2
Delay (s)	56.6	14.4	74.1	1.6	32.1	24.0
Level of Service	E	B	E	A	C	C
Approach Delay (s)	18.8			52.8	30.8	
Approach LOS	B			D	C	

Intersection Summary			
HCM 2000 Control Delay	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	100	310	0	0	680	320	60	0	60	250	20	180
Future Volume (vph)	100	310	0	0	680	320	60	0	60	250	20	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.95	0.95	1.00
Frt	1.00	1.00			1.00	0.85		0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539			3539	1583		1695		1681	1697	1583
Flt Permitted	0.95	1.00			1.00	1.00		0.76		0.50	0.54	1.00
Satd. Flow (perm)	1770	3539			3539	1583		1326		893	964	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	337	0	0	739	348	65	0	65	272	22	196
RTOR Reduction (vph)	0	0	0	0	0	232	0	118	0	0	0	151
Lane Group Flow (vph)	109	337	0	0	739	116	0	12	0	147	147	45
Turn Type	Prot	NA			NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	5	2			6			8			7	
Permitted Phases						6	8			7		7
Actuated Green, G (s)	4.6	28.4			19.8	19.8		5.3		13.7	13.7	13.7
Effective Green, g (s)	4.6	28.4			19.8	19.8		5.3		13.7	13.7	13.7
Actuated g/C Ratio	0.08	0.48			0.33	0.33		0.09		0.23	0.23	0.23
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	137	1692			1179	527		118		205	222	365
v/s Ratio Prot	c0.06	0.10			c0.21							
v/s Ratio Perm						0.07		c0.01		c0.16	0.15	0.03
v/c Ratio	0.80	0.20			0.63	0.22		0.10		0.72	0.66	0.12
Uniform Delay, d1	26.9	8.9			16.7	14.2		24.9		21.1	20.7	18.1
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	26.5	0.3			2.5	1.0		0.4		11.3	7.2	0.2
Delay (s)	53.4	9.2			19.2	15.2		25.2		32.4	28.0	18.3
Level of Service	D	A			B	B		C		C	C	B
Approach Delay (s)		20.0			17.9			25.2			25.4	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	59.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



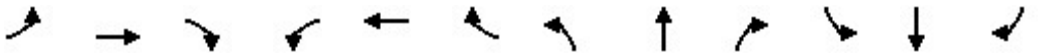
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	60	360	610	0	0	0	0	170	30	240
Future Volume (vph)	0	210	60	360	610	0	0	0	0	170	30	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.97		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3408		1763	1863					1681	1708	1583
Flt Permitted		1.00		0.57	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3408		1062	1863					1681	1708	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	228	65	391	663	0	0	0	0	185	33	261
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	78
Lane Group Flow (vph)	0	259	0	391	663	0	0	0	0	100	118	183
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Perm	NA					Perm	NA	custom
Protected Phases		7			8						6	7
Permitted Phases				8						6		6
Actuated Green, G (s)		11.2		27.8	27.8					10.1	10.1	21.3
Effective Green, g (s)		11.2		28.1	28.1					12.3	12.3	25.7
Actuated g/C Ratio		0.18		0.44	0.44					0.19	0.19	0.41
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		602		471	827					326	331	687
v/s Ratio Prot		c0.08			0.36							0.06
v/s Ratio Perm				c0.37						0.06	0.07	0.06
v/c Ratio		0.43		0.83	0.80					0.31	0.36	0.27
Uniform Delay, d1		23.2		15.5	15.2					21.8	22.1	12.5
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5		11.3	5.3					0.5	0.7	0.2
Delay (s)		23.7		26.8	20.5					22.4	22.7	12.7
Level of Service		C		C	C					C	C	B
Approach Delay (s)		23.7			22.8			0.0			17.2	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	63.3	Sum of lost time (s)	11.7
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Future Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1697		1770	4981		1770	4955	
Flt Permitted	0.46	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	864	1710		1326	1697		1770	4981		1770	4955	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1446	228	152	804	141
RTOR Reduction (vph)	0	21	0	0	59	0	0	23	0	0	26	0
Lane Group Flow (vph)	22	45	0	478	235	0	43	1651	0	152	919	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	33.9	33.9		33.2	33.2		3.6	33.3		9.3	38.8	
Effective Green, g (s)	33.9	33.9		33.6	33.6		3.6	34.7		9.8	40.9	
Actuated g/C Ratio	0.37	0.37		0.37	0.37		0.04	0.38		0.11	0.45	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	324	641		492	630		70	1911		191	2241	
v/s Ratio Prot		0.03			0.14		0.02	c0.33		c0.09	0.19	
v/s Ratio Perm	0.03			c0.36								
v/c Ratio	0.07	0.07		0.97	0.37		0.61	0.86		0.80	0.41	
Uniform Delay, d1	18.1	18.1		27.9	20.7		42.7	25.7		39.3	16.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		33.1	0.4		10.7	5.5		20.1	0.6	
Delay (s)	18.1	18.2		61.1	21.1		53.4	31.2		59.4	17.2	
Level of Service	B	B		E	C		D	C		E	B	
Approach Delay (s)		18.2			45.8			31.7			23.0	
Approach LOS		B			D			C			C	

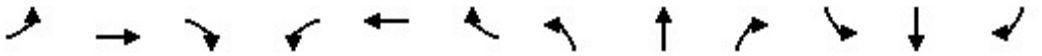
Intersection Summary			
HCM 2000 Control Delay	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	12.3
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Future Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3433		1770	3428		1770	4980		1770	5085	1571
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3433		1770	3428		1770	4980		1770	5085	1571
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	707	609	152	163	793	185	326	750	109	120	772	272
RTOR Reduction (vph)	0	16	0	0	16	0	0	15	0	0	0	51
Lane Group Flow (vph)	707	745	0	163	962	0	326	844	0	120	772	221
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	40.6	56.7		15.5	31.0		18.6	29.7		9.2	20.2	60.8
Effective Green, g (s)	41.0	57.9		15.9	32.8		19.0	30.6		9.6	21.2	61.6
Actuated g/C Ratio	0.32	0.45		0.12	0.25		0.15	0.24		0.07	0.16	0.47
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	558	1529		216	864		258	1172		130	829	744
v/s Ratio Prot	c0.40	0.22		0.09	c0.28		c0.18	0.17		0.07	c0.15	0.09
v/s Ratio Perm												0.05
v/c Ratio	1.27	0.49		0.75	1.11		1.26	0.72		0.92	0.93	0.30
Uniform Delay, d1	44.5	25.5		55.2	48.6		55.5	45.8		59.8	53.7	20.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	133.9	0.3		12.4	66.8		145.8	3.8		55.0	18.4	0.1
Delay (s)	178.4	25.9		67.6	115.4		201.3	49.6		114.8	72.1	21.0
Level of Service	F	C		E	F		F	D		F	E	C
Approach Delay (s)		99.3			108.6			91.3			64.6	
Approach LOS		F			F			F			E	

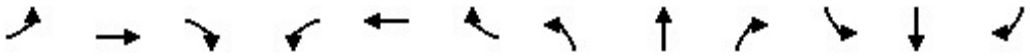
Intersection Summary			
HCM 2000 Control Delay	91.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	430	150	330	400	110	230	120	210	80	150	100
Future Volume (vph)	130	430	150	330	400	110	230	120	210	80	150	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2787	3433	3539	1583	3433	1863	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	467	163	359	435	120	250	130	228	87	163	109
RTOR Reduction (vph)	0	0	89	0	0	74	0	0	135	0	0	85
Lane Group Flow (vph)	141	467	74	359	435	46	250	130	93	87	163	24
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	9.9	32.8	40.4	10.9	33.8	33.8	7.6	20.8	31.7	7.3	20.5	20.5
Effective Green, g (s)	10.3	33.7	41.2	11.3	34.7	34.7	8.0	20.2	29.5	7.7	20.0	20.0
Actuated g/C Ratio	0.11	0.37	0.46	0.12	0.38	0.38	0.09	0.22	0.33	0.09	0.22	0.22
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	201	1319	1270	429	1358	607	303	416	516	150	1125	350
v/s Ratio Prot	0.08	c0.13	0.01	c0.10	0.12		c0.07	c0.07	0.02	0.05	0.03	
v/s Ratio Perm			0.02			0.03			0.04			0.02
v/c Ratio	0.70	0.35	0.06	0.84	0.32	0.08	0.83	0.31	0.18	0.58	0.14	0.07
Uniform Delay, d1	38.6	20.5	13.8	38.6	19.6	17.7	40.5	29.3	21.8	39.8	28.3	27.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	0.7	0.0	12.7	0.6	0.2	15.8	0.7	0.1	3.4	0.1	0.1
Delay (s)	47.3	21.2	13.8	51.4	20.2	17.9	56.3	30.0	21.9	43.1	28.4	28.0
Level of Service	D	C	B	D	C	B	E	C	C	D	C	C
Approach Delay (s)		24.4			32.1			37.8			31.9	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	19.0
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Future Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			1.00			0.98			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.98			0.92			0.93			0.94	
Flt Protected		0.98			1.00			0.99			0.99	
Satd. Flow (prot)		1787			1715			1691			1728	
Flt Permitted		0.78			0.97			0.96			0.80	
Satd. Flow (perm)		1410			1664			1634			1398	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	228	54	196	272	22	22	33
RTOR Reduction (vph)	0	10	0	0	40	0	0	57	0	0	23	0
Lane Group Flow (vph)	0	468	0	0	362	0	0	465	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		39.1			39.1			20.3			20.3	
Effective Green, g (s)		40.0			40.0			21.2			21.2	
Actuated g/C Ratio		0.58			0.58			0.31			0.31	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		815			961			500			428	
v/s Ratio Prot												
v/s Ratio Perm		c0.33			0.22			c0.28			0.04	
v/c Ratio		0.57			0.38			0.93			0.13	
Uniform Delay, d1		9.2			7.9			23.3			17.3	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			1.1			23.8			0.0	
Delay (s)		9.8			9.0			47.1			17.4	
Level of Service		A			A			D			B	
Approach Delay (s)		9.8			9.0			47.1			17.4	
Approach LOS		A			A			D			B	

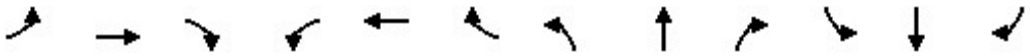
Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	570	120	240	680	150	150
Future Volume (vph)	570	120	240	680	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4928		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4928		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	620	130	261	739	163	163
RTOR Reduction (vph)	42	0	0	0	0	124
Lane Group Flow (vph)	708	0	261	739	163	39
Confl. Peds. (#/hr)		7	7		30	15
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	21.5		10.8	36.7	13.4	13.4
Effective Green, g (s)	23.4		11.2	36.7	14.3	14.3
Actuated g/C Ratio	0.39		0.19	0.61	0.24	0.24
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	1925		330	2168	422	377
v/s Ratio Prot	c0.14		c0.15	0.21	c0.09	0.02
v/s Ratio Perm						
v/c Ratio	0.37		0.79	0.34	0.39	0.10
Uniform Delay, d1	13.0		23.2	5.7	19.1	17.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5		11.4	0.4	0.2	0.0
Delay (s)	13.5		34.6	6.1	19.3	17.8
Level of Service	B		C	A	B	B
Approach Delay (s)	13.5			13.6	18.6	
Approach LOS	B			B	B	

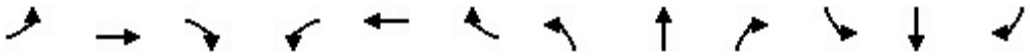
Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	59.9	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	10	20	40	10	40	30	150	30	50	170	50
Future Volume (vph)	20	10	20	40	10	40	30	150	30	50	170	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	11	22	43	11	43	33	163	33	54	185	54

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	55	97	229	293
Volume Left (vph)	22	43	33	54
Volume Right (vph)	22	43	33	54
Hadj (s)	-0.13	-0.14	-0.02	-0.04
Departure Headway (s)	5.1	5.1	4.6	4.5
Degree Utilization, x	0.08	0.14	0.29	0.37
Capacity (veh/h)	619	637	744	760
Control Delay (s)	8.6	8.8	9.5	10.2
Approach Delay (s)	8.6	8.8	9.5	10.2
Approach LOS	A	A	A	B

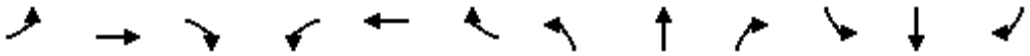
Intersection Summary				
Delay	9.6			
Level of Service	A			
Intersection Capacity Utilization	36.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Future Volume (vph)	30	20	20	20	30	20	30	140	30	40	120	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	22	22	33	22	33	152	33	43	130	65

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	77	77	218	238
Volume Left (vph)	33	22	33	43
Volume Right (vph)	22	22	33	65
Hadj (s)	-0.05	-0.08	-0.03	-0.09
Departure Headway (s)	5.0	5.0	4.5	4.5
Degree Utilization, x	0.11	0.11	0.28	0.30
Capacity (veh/h)	646	649	757	768
Control Delay (s)	8.6	8.6	9.3	9.3
Approach Delay (s)	8.6	8.6	9.3	9.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.1		
Level of Service	A		
Intersection Capacity Utilization	31.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	100	20	20	30	260	300	10	100	20
Future Volume (vph)	20	20	20	100	20	20	30	260	300	10	100	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	109	22	22	33	283	326	11	109	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	153	316	326	142
Volume Left (vph)	22	109	33	0	11
Volume Right (vph)	22	22	0	326	22
Hadj (s)	-0.10	0.09	0.09	-0.67	-0.04
Departure Headway (s)	5.8	5.7	5.4	4.7	5.3
Degree Utilization, x	0.11	0.24	0.48	0.42	0.21
Capacity (veh/h)	562	577	651	754	639
Control Delay (s)	9.4	10.6	12.0	9.8	9.7
Approach Delay (s)	9.4	10.6	10.9		9.7
Approach LOS	A	B	B		A

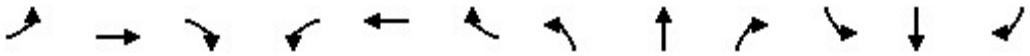
Intersection Summary				
Delay	10.6			
Level of Service	B			
Intersection Capacity Utilization	43.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	30	20	40	40	40	150
Future Volume (vph)	30	20	40	40	40	150
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	22	43	43	43	163

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	55	86	206
Volume Left (vph)	0	43	43
Volume Right (vph)	22	0	163
Hadj (s)	-0.21	0.13	-0.40
Departure Headway (s)	4.2	4.5	3.8
Degree Utilization, x	0.06	0.11	0.22
Capacity (veh/h)	807	750	907
Control Delay (s)	7.5	8.1	7.9
Approach Delay (s)	7.5	8.1	7.9
Approach LOS	A	A	A

Intersection Summary			
Delay	7.9		
Level of Service	A		
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Future Volume (vph)	20	20	20	50	30	30	20	140	100	20	40	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	54	33	33	22	152	109	22	43	22

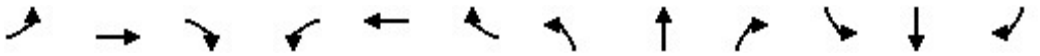
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	283	87
Volume Left (vph)	22	54	22	22
Volume Right (vph)	22	33	109	22
Hadj (s)	-0.10	-0.04	-0.18	-0.07
Departure Headway (s)	4.8	4.8	4.3	4.6
Degree Utilization, x	0.09	0.16	0.34	0.11
Capacity (veh/h)	679	691	806	728
Control Delay (s)	8.3	8.7	9.5	8.2
Approach Delay (s)	8.3	8.7	9.5	8.2
Approach LOS	A	A	A	A

Intersection Summary				
Delay		9.0		
Level of Service		A		
Intersection Capacity Utilization		38.2%	ICU Level of Service	A
Analysis Period (min)		15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	100	80	10	40	20	260	270	40	20	50	80
Future Volume (vph)	290	100	80	10	40	20	260	270	40	20	50	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.98			0.96		1.00	0.98		1.00	0.91	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1761			1769		1763	1821		1764	1665	
Flt Permitted		0.77			0.93		0.67	1.00		0.49	1.00	
Satd. Flow (perm)		1394			1662		1238	1821		902	1665	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	109	87	11	43	22	283	293	43	22	54	87
RTOR Reduction (vph)	0	13	0	0	13	0	0	7	0	0	49	0
Lane Group Flow (vph)	0	498	0	0	63	0	283	329	0	22	92	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		
Actuated Green, G (s)		23.3			23.3		24.4	24.4		24.4	24.4	
Effective Green, g (s)		23.3			23.3		24.4	24.4		24.4	24.4	
Actuated g/C Ratio		0.42			0.42		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		4.4	4.4		2.1	2.1	
Lane Grp Cap (vph)		583			695		542	797		395	729	
v/s Ratio Prot								0.18			0.06	
v/s Ratio Perm		c0.36			0.04		c0.23			0.02		
v/c Ratio		0.85			0.09		0.52	0.41		0.06	0.13	
Uniform Delay, d1		14.7			9.8		11.4	10.7		9.0	9.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		11.2			0.0		3.6	1.6		0.3	0.4	
Delay (s)		25.9			9.8		15.0	12.3		9.3	9.7	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		25.9			9.8			13.5			9.6	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	55.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

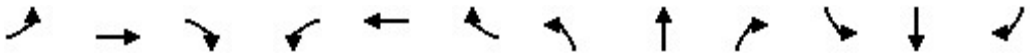
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	430	290	230	720	90	110	20	270	20	10	30
Future Volume (vph)	50	430	290	230	720	90	110	20	270	20	10	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.94		1.00	0.98			0.91			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1769	4778		1770	3471			1646			1706	
Flt Permitted	0.32	1.00		0.25	1.00			0.89			0.82	
Satd. Flow (perm)	587	4778		458	3471			1478			1424	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	467	315	250	783	98	120	22	293	22	11	33
RTOR Reduction (vph)	0	149	0	0	12	0	0	127	0	0	24	0
Lane Group Flow (vph)	54	633	0	250	869	0	0	308	0	0	42	0
Confl. Peds. (#/hr)	2					2			13	13		
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	22.5	20.3		33.3	26.7			15.5			15.5	
Effective Green, g (s)	23.3	21.3		33.7	27.6			16.4			16.4	
Actuated g/C Ratio	0.40	0.36		0.58	0.47			0.28			0.28	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	285	1736		462	1634			413			398	
v/s Ratio Prot	0.01	0.13		c0.08	c0.25							
v/s Ratio Perm	0.07			0.23				c0.21			0.03	
v/c Ratio	0.19	0.36		0.54	0.53			0.74			0.11	
Uniform Delay, d1	11.0	13.7		6.9	10.9			19.2			15.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	0.6		0.7	1.2			6.3			0.0	
Delay (s)	11.1	14.3		7.6	12.2			25.5			15.7	
Level of Service	B	B		A	B			C			B	
Approach Delay (s)		14.1			11.2			25.5			15.7	
Approach LOS		B			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	58.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

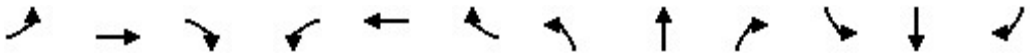
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Future Volume (vph)	70	20	20	20	20	20	20	160	40	60	120	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	22	22	22	22	22	22	174	43	65	130	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	120	66	239	271
Volume Left (vph)	76	22	22	65
Volume Right (vph)	22	22	43	76
Hadj (s)	0.05	-0.10	-0.06	-0.09
Departure Headway (s)	5.3	5.2	4.7	4.6
Degree Utilization, x	0.18	0.10	0.31	0.35
Capacity (veh/h)	618	611	732	741
Control Delay (s)	9.4	8.7	9.8	10.1
Approach Delay (s)	9.4	8.7	9.8	10.1
Approach LOS	A	A	A	B

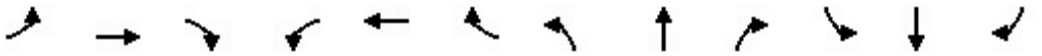
Intersection Summary				
Delay	9.7			
Level of Service	A			
Intersection Capacity Utilization	45.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Future Volume (vph)	40	20	40	10	10	20	60	150	10	30	90	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	43	11	11	22	65	163	11	33	98	54

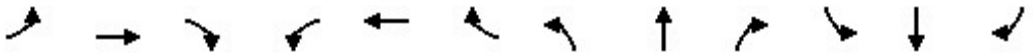
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	108	44	239	185
Volume Left (vph)	43	11	65	33
Volume Right (vph)	43	22	11	54
Hadj (s)	-0.13	-0.22	0.06	-0.11
Departure Headway (s)	4.8	4.8	4.6	4.5
Degree Utilization, x	0.14	0.06	0.30	0.23
Capacity (veh/h)	680	667	759	766
Control Delay (s)	8.6	8.1	9.5	8.8
Approach Delay (s)	8.6	8.1	9.5	8.8
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.0			
Level of Service	A			
Intersection Capacity Utilization	35.2%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Future Volume (vph)	400	270	30	10	650	260	0	0	20	200	150	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.96				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3478		1770	3387				1590	1681	1736	1583
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3478		1770	3387				1590	1681	1736	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	293	33	11	707	283	0	0	22	217	163	348
RTOR Reduction (vph)	0	8	0	0	46	0	0	0	0	0	0	214
Lane Group Flow (vph)	435	318	0	11	944	0	0	0	22	113	267	134
Confl. Peds. (#/hr)			1	1					4	4		
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	11.2	38.3		0.7	27.8				71.2	17.6	17.6	17.6
Effective Green, g (s)	11.6	39.2		1.1	28.7				71.2	18.9	18.9	18.9
Actuated g/C Ratio	0.16	0.55		0.02	0.40				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	559	1914		27	1365				1590	446	460	420
v/s Ratio Prot	c0.13	0.09		0.01	c0.28					0.07	c0.15	
v/s Ratio Perm									0.01			0.08
v/c Ratio	0.78	0.17		0.41	0.69				0.01	0.25	0.58	0.32
Uniform Delay, d1	28.6	7.9		34.7	17.6				0.0	20.6	22.7	21.0
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.2		3.6	2.9				0.0	0.5	2.5	0.7
Delay (s)	34.7	8.1		38.3	20.5				0.0	21.1	25.2	21.7
Level of Service	C	A		D	C				A	C	C	C
Approach Delay (s)		23.3			20.7			0.0			22.9	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	71.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	710	90	70	1410	60	230	30	70	70	50	20
Future Volume (vph)	30	710	90	70	1410	60	230	30	70	70	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			0.99	
Frt	1.00	0.98		1.00	0.99		1.00	0.90			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.98	
Satd. Flow (prot)	1678	3364		1671	3411		1635	1527			1669	
Flt Permitted	0.95	1.00		0.95	1.00		0.63	1.00			0.80	
Satd. Flow (perm)	1678	3364		1671	3411		1078	1527			1374	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	772	98	76	1533	65	250	33	76	76	54	22
RTOR Reduction (vph)	0	7	0	0	2	0	0	56	0	0	5	0
Lane Group Flow (vph)	33	863	0	76	1596	0	250	53	0	0	147	0
Confl. Peds. (#/hr)	14		16	16		14	13		13	13		13
Confl. Bikes (#/hr)			3			3			1			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	3.1	67.0		8.0	71.9		30.8	30.8			30.8	
Effective Green, g (s)	3.5	67.9		8.4	72.8		31.7	31.7			31.7	
Actuated g/C Ratio	0.03	0.57		0.07	0.61		0.26	0.26			0.26	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	48	1903		116	2069		284	403			362	
v/s Ratio Prot	0.02	0.26		c0.05	c0.47			0.03				
v/s Ratio Perm							c0.23				0.11	
v/c Ratio	0.69	0.45		0.66	0.77		0.88	0.13			0.41	
Uniform Delay, d1	57.7	15.2		54.4	17.4		42.3	33.7			36.4	
Progression Factor	1.00	1.00		0.85	1.50		1.00	1.00			1.00	
Incremental Delay, d2	27.8	0.8		2.8	0.8		25.0	0.1			0.3	
Delay (s)	85.5	16.0		48.9	26.9		67.3	33.7			36.7	
Level of Service	F	B		D	C		E	C			D	
Approach Delay (s)		18.5			27.9			57.1			36.7	
Approach LOS		B			C			E			D	

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	660	90	170	1240	70	70	130	110	260	380	250
Future Volume (vph)	190	660	90	170	1240	70	70	130	110	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3454		1770	3501		1770	3539	1550	1770	3267	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3454		1770	3501		1770	3539	1550	1770	3267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	717	98	185	1348	76	76	141	120	283	413	272
RTOR Reduction (vph)	0	8	0	0	3	0	0	0	45	0	92	0
Lane Group Flow (vph)	207	807	0	185	1421	0	76	141	75	283	593	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	13.9	40.9		16.3	42.8		7.3	21.4	37.7	22.7	36.9	
Effective Green, g (s)	14.3	41.8		16.7	44.2		7.7	22.4	38.5	23.1	37.8	
Actuated g/C Ratio	0.12	0.35		0.14	0.37		0.06	0.19	0.32	0.19	0.31	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	210	1203		246	1289		113	660	497	340	1029	
v/s Ratio Prot	c0.12	0.23		0.10	c0.41		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.03			
v/c Ratio	0.99	0.67		0.75	1.10		0.67	0.21	0.15	0.83	0.58	
Uniform Delay, d1	52.7	33.2		49.7	37.9		54.9	41.3	29.1	46.6	34.4	
Progression Factor	1.19	0.79		1.06	0.84		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	55.6	2.8		9.0	56.0		11.7	0.2	0.1	15.2	0.7	
Delay (s)	118.3	28.9		61.4	88.0		66.6	41.6	29.1	61.8	35.1	
Level of Service	F	C		E	F		E	D	C	E	D	
Approach Delay (s)		47.0			84.9			42.8			42.9	
Approach LOS		D			F			D			D	

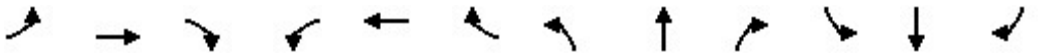
Intersection Summary			
HCM 2000 Control Delay	61.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	990	80	320	1390	80	70	20	150	70	20	20
Future Volume (vph)	10	990	80	320	1390	80	70	20	150	70	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5015		1770	3506			1792	1552		1750	
Flt Permitted	0.95	1.00		0.95	1.00			0.70	1.00		0.70	
Satd. Flow (perm)	1770	5015		1770	3506			1309	1552		1267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1076	87	348	1511	87	76	22	163	76	22	22
RTOR Reduction (vph)	0	6	0	0	3	0	0	0	135	0	7	0
Lane Group Flow (vph)	11	1157	0	348	1595	0	0	98	28	0	113	0
Confl. Peds. (#/hr)	1		1	1		1	1		1	1		1
Confl. Bikes (#/hr)			17			4			5			12
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	0.8	57.1		28.3	84.6			20.0	20.0		20.0	
Effective Green, g (s)	1.2	58.4		28.7	85.9			20.9	20.9		20.9	
Actuated g/C Ratio	0.01	0.49		0.24	0.72			0.17	0.17		0.17	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	17	2440		423	2509			227	270		220	
v/s Ratio Prot	0.01	0.23		c0.20	c0.46							
v/s Ratio Perm								0.07	0.02		c0.09	
v/c Ratio	0.65	0.47		0.82	0.64			0.43	0.11		0.51	
Uniform Delay, d1	59.2	20.6		43.2	8.9			44.2	41.7		44.9	
Progression Factor	0.81	1.50		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	39.9	0.5		11.6	1.2			0.5	0.1		0.8	
Delay (s)	87.9	31.3		54.9	10.1			44.7	41.7		45.8	
Level of Service	F	C		D	B			D	D		D	
Approach Delay (s)		31.8			18.1			42.9			45.8	
Approach LOS		C			B			D			D	

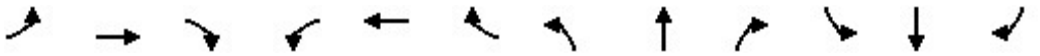
Intersection Summary			
HCM 2000 Control Delay	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



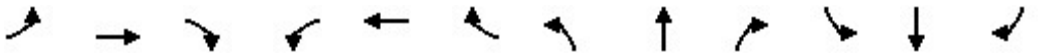
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	280	3130	0	0	0	0	0	150	150
Future Volume (vph)	0	0	0	280	3130	0	0	0	0	0	150	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.93	
Flt Protected					1.00						1.00	
Satd. Flow (prot)					5061						4651	
Flt Permitted					1.00						1.00	
Satd. Flow (perm)					5061						4651	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	304	3402	0	0	0	0	0	163	163
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	3697	0	0	0	0	0	326	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3548						976	
v/s Ratio Prot											c0.07	
v/s Ratio Perm					0.73							
v/c Ratio					1.04						0.33	
Uniform Delay, d1					13.4						30.2	
Progression Factor					1.00						1.00	
Incremental Delay, d2					27.5						0.1	
Delay (s)					41.0						30.3	
Level of Service					D						C	
Approach Delay (s)		0.0			41.0			0.0			30.3	
Approach LOS		A			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



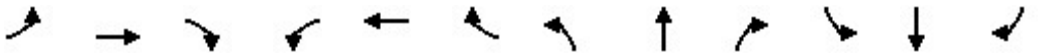
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	900	100	0	0	0	0	0	0	160	330	0
Future Volume (vph)	0	900	100	0	0	0	0	0	0	160	330	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.98									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		4997									4977	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		4997									4977	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	978	109	0	0	0	0	0	0	174	359	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	70	0
Lane Group Flow (vph)	0	1072	0	0	0	0	0	0	0	0	463	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		47.0									19.0	
Effective Green, g (s)		47.0									20.0	
Actuated g/C Ratio		0.63									0.27	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3131									1327	
v/s Ratio Prot		c0.21										
v/s Ratio Perm											0.09	
v/c Ratio		0.34									0.35	
Uniform Delay, d1		6.7									22.2	
Progression Factor		0.58									1.00	
Incremental Delay, d2		0.3									0.2	
Delay (s)		4.1									22.4	
Level of Service		A									C	
Approach Delay (s)		4.1			0.0			0.0			22.4	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1090	40	120	780	190	50	40	90	80	80	210
Future Volume (vph)	240	1090	40	120	780	190	50	40	90	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		1770	3539	1583	1770	1863	1583	3433	1863	1562
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		1770	3539	1583	1770	1863	1583	3433	1863	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1185	43	130	848	207	54	43	98	87	87	228
RTOR Reduction (vph)	0	3	0	0	0	192	0	0	84	0	0	187
Lane Group Flow (vph)	261	1225	0	130	848	15	54	43	14	87	87	41
Confl. Peds. (#/hr)	2											2
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	8.7	34.3		7.1	32.8	5.5	2.8	8.9	8.9	5.5	12.5	12.5
Effective Green, g (s)	8.7	35.8		7.1	34.2	5.5	2.8	10.7	10.7	5.5	13.4	13.4
Actuated g/C Ratio	0.12	0.48		0.09	0.46	0.07	0.04	0.14	0.14	0.07	0.18	0.18
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	397	1678		167	1611	115	65	265	225	251	332	278
v/s Ratio Prot	c0.08	c0.35		0.07	0.24		c0.03	0.02		0.03	c0.05	
v/s Ratio Perm						0.01			0.01			0.03
v/c Ratio	0.66	0.73		0.78	0.53	0.13	0.83	0.16	0.06	0.35	0.26	0.15
Uniform Delay, d1	31.8	15.8		33.2	14.6	32.6	35.9	28.3	27.9	33.1	26.6	26.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	2.8		18.5	1.2	0.2	54.8	0.1	0.0	0.3	0.4	0.2
Delay (s)	34.8	18.6		51.8	15.9	32.8	90.8	28.4	27.9	33.4	27.0	26.3
Level of Service	C	B		D	B	C	F	C	C	C	C	C
Approach Delay (s)		21.4			22.8			45.4			28.0	
Approach LOS		C			C			D			C	

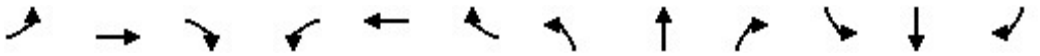
Intersection Summary			
HCM 2000 Control Delay	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	75.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	550	2560	180	300	290	0	0	210	90
Future Volume (vph)	0	0	0	550	2560	180	300	290	0	0	210	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			0.99	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.95	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6269		1770	3539			3362	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6269		1770	3539			3362	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	579	2695	189	316	305	0	0	221	95
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	0	0	27	0
Lane Group Flow (vph)	0	0	0	0	3456	0	316	305	0	0	289	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					62.6		20.6	37.6			12.1	
Effective Green, g (s)					62.6		20.6	37.6			12.1	
Actuated g/C Ratio					0.57		0.19	0.34			0.11	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					3567		331	1209			369	
v/s Ratio Prot							c0.18	0.09			c0.09	
v/s Ratio Perm					0.55							
v/c Ratio					0.97		0.95	0.25			0.78	
Uniform Delay, d1					22.8		44.2	26.1			47.7	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					9.4		37.3	0.1			10.0	
Delay (s)					32.2		81.5	26.2			57.7	
Level of Service					C		F	C			E	
Approach Delay (s)		0.0			32.2			54.3			57.7	
Approach LOS		A			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	700	70	0	0	0	0	510	230	70	690	0
Future Volume (vph)	90	700	70	0	0	0	0	510	230	70	690	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.98					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5055	1551					4809		1770	5085	
Flt Permitted		0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5055	1551					4809		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	761	76	0	0	0	0	554	250	76	750	0
RTOR Reduction (vph)	0	0	42	0	0	0	0	106	0	0	0	0
Lane Group Flow (vph)	0	859	34	0	0	0	0	698	0	76	750	0
Confl. Peds. (#/hr)	4		12				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		32.2	32.2					22.0		6.6	33.0	
Effective Green, g (s)		33.1	33.1					22.0		7.0	33.0	
Actuated g/C Ratio		0.44	0.44					0.29		0.09	0.44	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2230	684					1410		165	2237	
v/s Ratio Prot								c0.15		c0.04	0.15	
v/s Ratio Perm		0.17	0.02									
v/c Ratio		0.39	0.05					0.50		0.46	0.34	
Uniform Delay, d1		14.1	12.0					21.9		32.2	13.8	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		0.5	0.1					1.2		9.0	0.4	
Delay (s)		14.6	12.1					23.2		41.2	14.2	
Level of Service		B	B					C		D	B	
Approach Delay (s)		14.4			0.0			23.2			16.7	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		

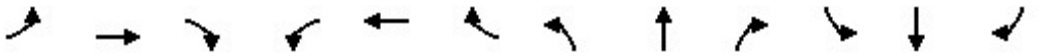
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1180	530	280	900	310	200
Future Volume (vph)	1180	530	280	900	310	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.98	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3539	1583	3433	3539	3377	1421
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3539	1583	3433	3539	3377	1421
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1283	576	304	978	337	217
RTOR Reduction (vph)	0	5	0	0	24	116
Lane Group Flow (vph)	1283	571	304	978	378	36
Confl. Peds. (#/hr)						2
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	28.6	42.3	8.0	41.8	13.7	13.7
Effective Green, g (s)	30.8	46.7	7.9	43.2	15.9	15.9
Actuated g/C Ratio	0.46	0.70	0.12	0.64	0.24	0.24
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1624	1196	404	2278	800	336
v/s Ratio Prot	c0.36	c0.11	c0.09	0.28	0.11	
v/s Ratio Perm		0.25				0.03
v/c Ratio	0.79	0.48	0.75	0.43	0.47	0.11
Uniform Delay, d1	15.4	4.6	28.7	5.9	22.0	20.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.1	6.9	0.6	0.2	0.1
Delay (s)	19.4	4.8	35.5	6.5	22.2	20.1
Level of Service	B	A	D	A	C	C
Approach Delay (s)	14.9			13.4	21.6	
Approach LOS	B			B	C	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	67.1	Sum of lost time (s)	12.5
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

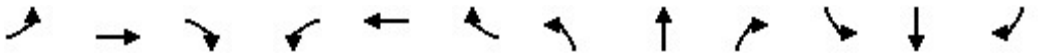
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1060	140	380	330	0	0	0	0	340	0	670
Future Volume (vph)	0	1060	140	380	330	0	0	0	0	340	0	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1561	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1561	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1152	152	413	359	0	0	0	0	370	0	728
RTOR Reduction (vph)	0	0	87	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1152	65	413	359	0	0	0	0	370	0	728
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		25.9	25.9	9.0	39.1					14.5		63.2
Effective Green, g (s)		26.9	26.9	9.2	40.1					15.1		63.2
Actuated g/C Ratio		0.43	0.43	0.15	0.63					0.24		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1506	664	499	2245					422		1583
v/s Ratio Prot		c0.33		c0.12	0.10					c0.21		
v/s Ratio Perm			0.04									0.46
v/c Ratio		0.76	0.10	0.83	0.16					0.88		0.46
Uniform Delay, d1		15.5	10.9	26.2	4.7					23.2		0.0
Progression Factor		1.00	1.00	1.00	1.00					1.00		1.00
Incremental Delay, d2		3.8	0.3	10.3	0.2					17.6		1.0
Delay (s)		19.2	11.2	36.6	4.9					40.8		1.0
Level of Service		B	B	D	A					D		A
Approach Delay (s)		18.3			21.8			0.0			14.4	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	63.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	890	650	0	0	620	590	190	0	300	0	0	0
Future Volume (vph)	890	650	0	0	620	590	190	0	300	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (prot)	3433	3539			3280			1770	1583			
Flt Permitted	0.95	1.00			1.00			0.95	1.00			
Satd. Flow (perm)	3433	3539			3280			1770	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	967	707	0	0	674	641	207	0	326	0	0	0
RTOR Reduction (vph)	0	0	0	0	202	0	0	0	277	0	0	0
Lane Group Flow (vph)	967	707	0	0	1113	0	0	207	49	0	0	0
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	23.6	59.3			31.5			10.0	10.0			
Effective Green, g (s)	23.8	59.8			32.0			10.6	10.6			
Actuated g/C Ratio	0.30	0.75			0.40			0.13	0.13			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	1029	2665			1321			236	211			
v/s Ratio Prot	c0.28	0.20			c0.34			c0.12				
v/s Ratio Perm									0.03			
v/c Ratio	0.94	0.27			0.84			0.88	0.23			
Uniform Delay, d1	27.1	3.0			21.4			33.8	30.8			
Progression Factor	1.00	1.00			1.00			1.00	1.00			
Incremental Delay, d2	15.3	0.2			6.7			27.8	0.2			
Delay (s)	42.4	3.3			28.1			61.5	31.0			
Level of Service	D	A			C			E	C			
Approach Delay (s)		25.8			28.1			42.8			0.0	
Approach LOS		C			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	13.0
Intersection Capacity Utilization	82.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	210	210	110	500	700	110
Future Volume (vph)	210	210	110	500	700	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.93		1.00	1.00	0.98	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1695		1770	3539	3467	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1695		1770	3539	3467	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	228	120	543	761	120
RTOR Reduction (vph)	35	0	0	0	9	0
Lane Group Flow (vph)	421	0	120	543	872	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	35.5		13.1	76.5	59.4	
Effective Green, g (s)	35.5		13.1	76.5	59.4	
Actuated g/C Ratio	0.30		0.11	0.64	0.49	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	501		193	2256	1716	
v/s Ratio Prot	c0.25		c0.07	0.15	c0.25	
v/s Ratio Perm						
v/c Ratio	0.84		0.62	0.24	0.51	
Uniform Delay, d1	39.6		51.1	9.3	20.4	
Progression Factor	1.00		1.01	0.91	1.00	
Incremental Delay, d2	11.8		6.0	0.2	1.1	
Delay (s)	51.4		57.4	8.8	21.5	
Level of Service	D		E	A	C	
Approach Delay (s)	51.4			17.6	21.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	27.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

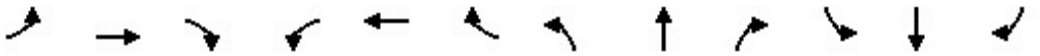
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	180	0	0	160	30
Future Volume (Veh/h)	0	180	0	0	160	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	196	0	0	174	33
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				973	1298	
pX, platoon unblocked						
vC, conflicting volume	190	104	207			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	190	104	207			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	79	100			
cM capacity (veh/h)	781	931	1361			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	196	116	91
Volume Left	0	0	0
Volume Right	196	0	33
cSH	931	1700	1700
Volume to Capacity	0.21	0.07	0.05
Queue Length 95th (ft)	20	0	0
Control Delay (s)	9.9	0.0	0.0
Lane LOS	A		
Approach Delay (s)	9.9	0.0	
Approach LOS	A		

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	23.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	100	60	90	0	0	0	0	40	220	10
Future Volume (vph)	0	20	100	60	90	0	0	0	0	40	220	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5						4.5	
Lane Util. Factor		1.00			1.00						0.95	
Frt		0.89			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		1654			1826						3494	
Flt Permitted		1.00			0.86						0.99	
Satd. Flow (perm)		1654			1598						3494	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	22	109	65	98	0	0	0	0	43	239	11
RTOR Reduction (vph)	0	56	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	75	0	0	163	0	0	0	0	0	289	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		2			6						4	
Permitted Phases				6						4		
Actuated Green, G (s)		31.5			31.5						24.5	
Effective Green, g (s)		31.5			31.5						24.5	
Actuated g/C Ratio		0.48			0.48						0.38	
Clearance Time (s)		4.5			4.5						4.5	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		801			774						1316	
v/s Ratio Prot		0.05										
v/s Ratio Perm					c0.10						0.08	
v/c Ratio		0.09			0.21						0.22	
Uniform Delay, d1		9.0			9.6						13.8	
Progression Factor		1.00			1.00						1.00	
Incremental Delay, d2		0.1			0.6						0.4	
Delay (s)		9.1			10.2						14.1	
Level of Service		A			B						B	
Approach Delay (s)		9.1			10.2			0.0			14.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	29.8%	ICU Level of Service	A
Analysis Period (min)	15		

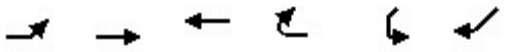
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	50	150	140	330	310	30
Future Volume (vph)	50	150	140	330	310	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.90			1.00	0.99	
Flt Protected	0.99			0.99	1.00	
Satd. Flow (prot)	1653			1835	1840	
Flt Permitted	0.99			0.80	1.00	
Satd. Flow (perm)	1653			1481	1840	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	163	152	359	337	33
RTOR Reduction (vph)	141	0	0	0	4	0
Lane Group Flow (vph)	76	0	0	511	366	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.3			45.5	45.5	
Effective Green, g (s)	8.3			45.5	45.5	
Actuated g/C Ratio	0.13			0.74	0.74	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	222			1090	1354	
v/s Ratio Prot	c0.05				0.20	
v/s Ratio Perm				c0.35		
v/c Ratio	0.34			0.47	0.27	
Uniform Delay, d1	24.3			3.3	2.7	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.9			1.4	0.5	
Delay (s)	25.2			4.7	3.2	
Level of Service	C			A	A	
Approach Delay (s)	25.2			4.7	3.2	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

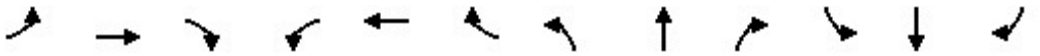
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	50	670	1420	40	150	250
Future Volume (vph)	50	670	1420	40	150	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5		4.5	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	1.00		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3525		1674	
Flt Permitted	0.95	1.00	1.00		0.98	
Satd. Flow (perm)	1770	3539	3525		1674	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	728	1543	43	163	272
RTOR Reduction (vph)	0	0	3	0	74	0
Lane Group Flow (vph)	54	728	1583	0	361	0
Turn Type	Prot	NA	NA		Prot	
Protected Phases	7	4	8		6	
Permitted Phases						
Actuated Green, G (s)	3.5	46.0	38.0		23.6	
Effective Green, g (s)	3.5	46.0	38.0		23.6	
Actuated g/C Ratio	0.04	0.59	0.48		0.30	
Clearance Time (s)	4.5	4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	78	2071	1704		502	
v/s Ratio Prot	c0.03	0.21	c0.45		c0.22	
v/s Ratio Perm						
v/c Ratio	0.69	0.35	0.93		0.72	
Uniform Delay, d1	37.0	8.5	19.0		24.5	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	23.3	0.1	9.4		8.6	
Delay (s)	60.3	8.6	28.4		33.1	
Level of Service	E	A	C		C	
Approach Delay (s)		12.2	28.4		33.1	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	10	100	40	160	240	220	390	130	250	450	190
Future Volume (vph)	60	10	100	40	160	240	220	390	130	250	450	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.92			0.93		1.00	0.96		1.00	0.96	
Flt Protected		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1685			1718		1770	3407		1770	3381	
Flt Permitted		0.98			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1685			1718		1770	3407		1770	3381	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	11	109	43	174	261	239	424	141	272	489	207
RTOR Reduction (vph)	0	62	0	0	46	0	0	35	0	0	51	0
Lane Group Flow (vph)	0	123	0	0	432	0	239	530	0	272	645	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	2	2		6	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)		11.0			21.6		11.7	15.8		15.1	19.2	
Effective Green, g (s)		11.0			21.6		11.7	15.8		15.1	19.2	
Actuated g/C Ratio		0.13			0.27		0.14	0.19		0.19	0.24	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		227			455		254	660		327	796	
v/s Ratio Prot		c0.07			c0.25		0.14	0.16		c0.15	c0.19	
v/s Ratio Perm												
v/c Ratio		0.54			0.95		0.94	0.80		0.83	0.81	
Uniform Delay, d1		32.9			29.4		34.6	31.4		32.0	29.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.6			29.2		40.5	7.0		16.3	6.3	
Delay (s)		35.5			58.6		75.0	38.3		48.3	35.7	
Level of Service		D			E		E	D		D	D	
Approach Delay (s)		35.5			58.6			49.2			39.2	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	81.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

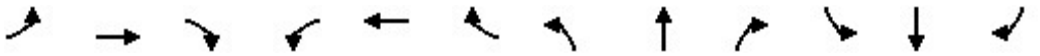
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	30	200	340	190	190	100
Future Volume (vph)	30	200	340	190	190	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5			4.5	4.5	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.88			1.00	0.95	
Flt Protected	0.99			0.97	1.00	
Satd. Flow (prot)	1634			1805	1776	
Flt Permitted	0.99			0.63	1.00	
Satd. Flow (perm)	1634			1175	1776	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	217	370	207	207	109
RTOR Reduction (vph)	188	0	0	0	21	0
Lane Group Flow (vph)	62	0	0	577	295	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	8.1			43.5	43.5	
Effective Green, g (s)	8.1			43.5	43.5	
Actuated g/C Ratio	0.13			0.72	0.72	
Clearance Time (s)	4.5			4.5	4.5	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	218			843	1274	
v/s Ratio Prot	c0.04				0.17	
v/s Ratio Perm				c0.49		
v/c Ratio	0.28			0.68	0.23	
Uniform Delay, d1	23.6			4.7	2.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	0.7			4.5	0.4	
Delay (s)	24.4			9.2	3.3	
Level of Service	C			A	A	
Approach Delay (s)	24.4			9.2	3.3	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	60.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	20	50	200	180	150	70	2380	70	80	1640	50
Future Volume (vph)	50	20	50	200	180	150	70	2380	70	80	1640	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.89		1.00	0.93		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3162		1770	3298		1770	5064		1770	5063	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3162		1770	3298		1770	5064		1770	5063	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	22	54	217	196	163	76	2587	76	87	1783	54
RTOR Reduction (vph)	0	46	0	0	122	0	0	3	0	0	2	0
Lane Group Flow (vph)	54	30	0	217	237	0	76	2660	0	87	1835	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Effective Green, g (s)	6.9	16.8		15.0	24.9		8.3	64.3		7.9	63.9	
Actuated g/C Ratio	0.06	0.14		0.12	0.21		0.07	0.54		0.07	0.53	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	101	442		221	684		122	2713		116	2696	
v/s Ratio Prot	0.03	0.01		c0.12	c0.07		0.04	c0.53		c0.05	0.36	
v/s Ratio Perm												
v/c Ratio	0.53	0.07		0.98	0.35		0.62	0.98		0.75	0.68	
Uniform Delay, d1	55.0	44.8		52.4	40.6		54.3	27.2		55.1	20.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.81	0.95	
Incremental Delay, d2	5.4	0.3		55.1	1.4		9.5	13.3		18.9	1.1	
Delay (s)	60.3	45.1		107.5	42.0		63.8	40.5		63.7	20.5	
Level of Service	E	D		F	D		E	D		E	C	
Approach Delay (s)		51.4			66.7			41.2			22.5	
Approach LOS		D			E			D			C	

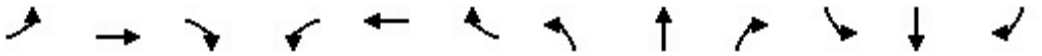
Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	110	0	200	700	0	0
Future Volume (vph)	110	0	200	700	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	0	217	761	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	120	0	217	761	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.07			c0.22		
v/s Ratio Perm			0.12			
v/c Ratio	0.17		0.31	0.54		
Uniform Delay, d1	7.7		8.2	9.2		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		1.1	1.5		
Delay (s)	8.2		9.3	10.6		
Level of Service	A		A	B		
Approach Delay (s)	8.2			10.4	0.0	
Approach LOS	A			B	A	

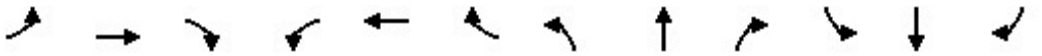
Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	410	790	0	0	390	200	150	200	20	0	0	0
Future Volume (vph)	410	790	0	0	390	200	150	200	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.4	4.9			4.9			4.9	4.9			
Lane Util. Factor	0.97	1.00			0.95			0.95	1.00			
Frt	1.00	1.00			0.95			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (prot)	3433	1863			3359			3465	1583			
Flt Permitted	0.95	1.00			1.00			0.98	1.00			
Satd. Flow (perm)	3433	1863			3359			3465	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	859	0	0	424	217	163	217	22	0	0	0
RTOR Reduction (vph)	0	0	0	0	92	0	0	0	18	0	0	0
Lane Group Flow (vph)	446	859	0	0	549	0	0	380	4	0	0	0
Turn Type	Prot	NA			NA		Perm	NA	Perm			
Protected Phases	5	2			6			8				
Permitted Phases							8		8			
Actuated Green, G (s)	14.4	43.5			24.7			11.7	11.7			
Effective Green, g (s)	14.4	43.5			24.7			11.7	11.7			
Actuated g/C Ratio	0.22	0.67			0.38			0.18	0.18			
Clearance Time (s)	4.4	4.9			4.9			4.9	4.9			
Vehicle Extension (s)	3.0	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	760	1246			1276			623	284			
v/s Ratio Prot	0.13	c0.46			0.16							
v/s Ratio Perm								0.11	0.00			
v/c Ratio	0.59	0.69			0.43			0.61	0.01			
Uniform Delay, d1	22.6	6.6			14.9			24.5	21.9			
Progression Factor	0.98	1.16			1.00			1.00	1.00			
Incremental Delay, d2	0.9	2.5			1.1			1.2	0.0			
Delay (s)	23.2	10.2			16.0			25.7	21.9			
Level of Service	C	B			B			C	C			
Approach Delay (s)		14.6			16.0			25.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	14.2
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1561	3433	3539	1506	3433	1863	1552	1770	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1815	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	240	0	0	159	0	0	95	0	4	0
Lane Group Flow (vph)	98	1815	369	130	1261	232	500	380	101	326	322	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.6	59.7	59.7	10.0	61.0	61.0	23.0	32.9	32.9	29.9	38.0	
Effective Green, g (s)	9.0	61.0	61.0	10.4	62.4	62.4	23.4	33.7	33.7	28.9	39.2	
Actuated g/C Ratio	0.06	0.41	0.41	0.07	0.42	0.42	0.16	0.22	0.22	0.19	0.26	
Clearance Time (s)	4.4	5.3	5.3	4.4	5.4	5.4	4.4	4.8	4.8	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	4.4	2.0	4.4	4.4	2.0	3.8	3.8	2.0	2.0	
Lane Grp Cap (vph)	106	2067	634	238	1472	626	535	418	348	341	476	
v/s Ratio Prot	c0.06	c0.36		0.04	0.36		0.15	c0.20		c0.18	0.18	
v/s Ratio Perm			0.24			0.15			0.06			
v/c Ratio	0.92	0.88	0.58	0.55	0.86	0.37	0.93	0.91	0.29	0.96	0.68	
Uniform Delay, d1	70.2	41.1	34.6	67.5	39.7	30.2	62.5	56.7	48.2	59.9	49.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	62.6	5.7	3.9	1.4	6.6	1.7	23.4	23.5	0.6	36.6	3.0	
Delay (s)	132.8	46.8	38.5	68.9	46.4	31.9	85.9	80.2	48.8	96.5	52.7	
Level of Service	F	D	D	E	D	C	F	F	D	F	D	
Approach Delay (s)		48.1			44.8			77.1			74.6	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	55.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1790	930	0	0	870
Future Volume (vph)	830	1790	930	0	0	870
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.88	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	2787	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	2787	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1946	1011	0	0	946
RTOR Reduction (vph)	0	5	0	0	0	0
Lane Group Flow (vph)	902	1941	1011	0	0	946
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	94.0	94.0	42.0			42.0
Effective Green, g (s)	94.0	94.0	42.0			42.0
Actuated g/C Ratio	0.63	0.63	0.28			0.28
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	2151	1746	990			990
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.70				
v/c Ratio	0.42	1.11	1.02			0.96
Uniform Delay, d1	14.2	28.0	54.0			53.1
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.0	59.0	34.1			18.5
Delay (s)	14.2	87.0	88.1			71.6
Level of Service	B	F	F			E
Approach Delay (s)	64.0		88.1			71.6
Approach LOS	E		F			E

Intersection Summary			
HCM 2000 Control Delay	70.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	100.0%	ICU Level of Service	F
Analysis Period (min)	15		

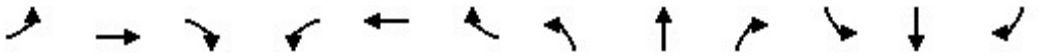
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	290	1440	150	0	1510
Future Volume (Veh/h)	0	290	1440	150	0	1510
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	315	1565	163	0	1641
Pedestrians						3
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			810			779
pX, platoon unblocked	0.83					
vC, conflicting volume	2194	606			1728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1710	606			1728	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	28			100	
cM capacity (veh/h)	68	439			361	

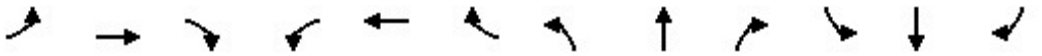
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	315	626	626	476	547	547	547
Volume Left	0	0	0	0	0	0	0
Volume Right	315	0	0	163	0	0	0
cSH	439	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.72	0.37	0.37	0.28	0.32	0.32	0.32
Queue Length 95th (ft)	140	0	0	0	0	0	0
Control Delay (s)	31.4	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D						
Approach Delay (s)	31.4	0.0			0.0		
Approach LOS	D						

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	420	310	80	540	700	460	510	130	420	700	390
Future Volume (vph)	380	420	310	80	540	700	460	510	130	420	700	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1568	1770	3539	1568	1770	3432		1770	3539	1566
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	1863	1568	1770	3539	1568	1770	3432		1770	3539	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	457	337	87	587	761	500	554	141	457	761	424
RTOR Reduction (vph)	0	0	32	0	0	32	0	15	0	0	0	50
Lane Group Flow (vph)	413	457	305	87	587	729	500	680	0	457	761	374
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	29.1	50.2	84.3	11.0	32.1	68.2	34.1	33.0		36.1	35.0	64.1
Effective Green, g (s)	30.0	51.1	86.1	12.0	33.1	68.2	35.0	33.9		37.0	35.9	64.1
Actuated g/C Ratio	0.20	0.34	0.57	0.08	0.22	0.45	0.23	0.23		0.25	0.24	0.43
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	354	634	941	141	780	764	413	775		436	847	669
v/s Ratio Prot	c0.23	0.25	0.08	0.05	0.17	c0.23	c0.28	0.20		c0.26	0.22	0.11
v/s Ratio Perm			0.12			0.24						0.13
v/c Ratio	1.17	0.72	0.32	0.62	0.75	0.95	1.21	0.88		1.05	0.90	0.56
Uniform Delay, d1	60.0	43.2	16.7	66.8	54.6	39.4	57.5	56.0		56.5	55.3	32.3
Progression Factor	1.00	1.00	1.00	1.15	0.66	1.12	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	101.3	6.9	0.2	16.5	6.3	21.8	115.4	11.0		56.3	13.2	0.6
Delay (s)	161.3	50.2	16.9	93.2	42.5	66.0	172.9	67.0		112.8	68.5	32.9
Level of Service	F	D	B	F	D	E	F	E		F	E	C
Approach Delay (s)		78.9			58.0			111.3			71.6	
Approach LOS		E			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	78.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	106.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

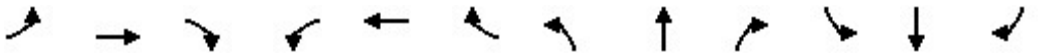


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	140	170	70	160	90	240	640	70	150	730	170
Future Volume (vph)	200	140	170	70	160	90	240	640	70	150	730	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	0.97	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Flt Permitted	0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1681	1750	1557	1770	1863	1547	3433	3476		1770	3539	1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	152	185	76	174	98	261	696	76	163	793	185
RTOR Reduction (vph)	0	0	132	0	0	80	0	5	0	0	0	106
Lane Group Flow (vph)	174	195	53	76	174	18	261	767	0	163	793	79
Confl. Peds. (#/hr)	10		12	12		10	15		12	12		15
Turn Type	Split	NA	pm+ov	Split	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases	8	8	1	7	7		1	6		5	2	
Permitted Phases			8			7						2
Actuated Green, G (s)	23.9	23.9	36.2	22.4	22.4	22.4	12.3	50.2		14.4	52.3	52.3
Effective Green, g (s)	24.8	24.8	37.0	23.3	23.3	23.3	12.7	51.1		14.8	53.2	53.2
Actuated g/C Ratio	0.19	0.19	0.28	0.18	0.18	0.18	0.10	0.39		0.11	0.41	0.41
Clearance Time (s)	4.9	4.9	4.4	4.9	4.9	4.9	4.4	4.9		4.4	4.9	4.9
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0	3.0	2.0	4.5		2.0	4.6	4.6
Lane Grp Cap (vph)	320	333	443	317	333	277	335	1366		201	1448	626
v/s Ratio Prot	0.10	c0.11	0.01	0.04	c0.09		0.08	0.22		c0.09	c0.22	
v/s Ratio Perm			0.02			0.01						0.05
v/c Ratio	0.54	0.59	0.12	0.24	0.52	0.06	0.78	0.56		0.81	0.55	0.13
Uniform Delay, d1	47.5	47.9	34.4	45.8	48.3	44.3	57.3	30.7		56.2	29.2	23.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.41	0.66	0.41
Incremental Delay, d2	1.9	2.6	0.0	0.4	1.5	0.1	10.0	1.7		14.8	1.0	0.3
Delay (s)	49.4	50.5	34.5	46.1	49.8	44.4	67.3	32.4		93.9	20.3	10.1
Level of Service	D	D	C	D	D	D	E	C		F	C	B
Approach Delay (s)		44.8			47.5			41.2			29.1	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Future Volume (vph)	40	20	50	80	20	70	90	1050	200	60	960	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00			0.97		1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.94		1.00	0.98		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1696			1659		1770	3435		1770	3523	
Flt Permitted		0.78			0.71		0.22	1.00		0.16	1.00	
Satd. Flow (perm)		1351			1208		414	3435		296	3523	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	54	87	22	76	98	1141	217	65	1043	33
RTOR Reduction (vph)	0	22	0	0	18	0	0	7	0	0	1	0
Lane Group Flow (vph)	0	97	0	0	167	0	98	1351	0	65	1075	0
Confl. Peds. (#/hr)	33					33			3	3		
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		23.6			23.6		113.9	107.3		110.5	105.6	
Effective Green, g (s)		24.5			24.5		114.7	108.2		111.3	106.5	
Actuated g/C Ratio		0.16			0.16		0.76	0.72		0.74	0.71	
Clearance Time (s)		4.9			4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0			2.0		2.0	2.9		2.0	2.9	
Lane Grp Cap (vph)		220			197		379	2477		271	2501	
v/s Ratio Prot							c0.01	c0.39		0.01	0.31	
v/s Ratio Perm		0.07			c0.14		0.19			0.17		
v/c Ratio		0.44			0.85		0.26	0.55		0.24	0.43	
Uniform Delay, d1		56.6			60.9		5.7	9.6		7.1	9.1	
Progression Factor		1.00			1.26		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.5			24.3		0.1	0.9		0.2	0.5	
Delay (s)		57.1			101.0		5.8	10.5		7.3	9.6	
Level of Service		E			F		A	B		A	A	
Approach Delay (s)		57.1			101.0			10.2			9.5	
Approach LOS		E			F			B			A	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.92	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4954		3433	5085	1464	1770	3539	1521	3433	3539	1516
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4954		3433	5085	1464	1770	3539	1521	3433	3539	1516
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	2033	217	554	1685	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	9	0	0	0	39	0	0	55	0	0	55
Lane Group Flow (vph)	413	2241	0	554	1685	385	250	696	391	380	576	260
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	19.7	58.7		19.9	59.0	75.9	16.2	30.7	50.6	16.9	31.4	51.1
Effective Green, g (s)	20.1	59.8		20.3	60.0	75.9	16.6	31.6	52.4	17.3	32.3	52.9
Actuated g/C Ratio	0.14	0.41		0.14	0.41	0.52	0.11	0.22	0.36	0.12	0.22	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	475	2043		480	2104	766	202	771	586	409	788	553
v/s Ratio Prot	0.12	c0.45		c0.16	0.33	0.06	c0.14	c0.20	0.10	c0.11	0.16	0.07
v/s Ratio Perm						0.20			0.16			0.10
v/c Ratio	0.87	1.10		1.15	0.80	0.50	1.24	0.90	0.67	0.93	0.73	0.47
Uniform Delay, d1	61.2	42.6		62.4	37.3	22.4	64.2	55.2	39.0	63.2	52.3	35.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.0	52.0		90.8	2.4	0.2	141.9	13.6	2.2	26.8	3.0	0.2
Delay (s)	76.2	94.6		153.2	39.6	22.5	206.1	68.8	41.2	90.1	55.3	35.5
Level of Service	E	F		F	D	C	F	E	D	F	E	D
Approach Delay (s)		91.8			60.5			84.6			60.8	
Approach LOS		F			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	75.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	120	300	770	120	400	870
Future Volume (vph)	120	300	770	120	400	870
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5		4.5	4.5
Lane Util. Factor	1.00		0.95		1.00	0.95
Frt	0.90		0.98		1.00	1.00
Flt Protected	0.99		1.00		0.95	1.00
Satd. Flow (prot)	1659		3468		1770	3539
Flt Permitted	0.99		1.00		0.95	1.00
Satd. Flow (perm)	1659		3468		1770	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	326	837	130	435	946
RTOR Reduction (vph)	130	0	17	0	0	0
Lane Group Flow (vph)	326	0	950	0	435	946
Turn Type	Prot		NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases						
Actuated Green, G (s)	15.2		21.7		18.8	45.0
Effective Green, g (s)	15.2		21.7		18.8	45.0
Actuated g/C Ratio	0.22		0.31		0.27	0.65
Clearance Time (s)	4.5		4.5		4.5	4.5
Vehicle Extension (s)	3.0		3.0		3.0	3.0
Lane Grp Cap (vph)	364		1087		480	2301
v/s Ratio Prot	c0.20		c0.27		c0.25	0.27
v/s Ratio Perm						
v/c Ratio	0.89		0.87		0.91	0.41
Uniform Delay, d1	26.2		22.5		24.3	5.8
Progression Factor	1.00		1.00		1.00	1.00
Incremental Delay, d2	23.2		9.8		20.5	0.5
Delay (s)	49.5		32.2		44.8	6.3
Level of Service	D		C		D	A
Approach Delay (s)	49.5		32.2			18.5
Approach LOS	D		C			B

Intersection Summary			
HCM 2000 Control Delay	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	69.2	Sum of lost time (s)	13.5
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

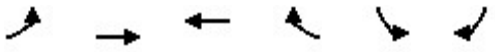
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	340	670	200	0	660
Future Volume (Veh/h)	0	340	670	200	0	660
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	370	728	217	0	717
Pedestrians	2					3
Lane Width (ft)	12.0					12.0
Walking Speed (ft/s)	4.0					4.0
Percent Blockage	0					0
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			215			407
pX, platoon unblocked	0.83					
vC, conflicting volume	1197	478			947	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	840	478			947	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	30			100	
cM capacity (veh/h)	253	532			719	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	370	485	460	358	358
Volume Left	0	0	0	0	0
Volume Right	370	0	217	0	0
cSH	532	1700	1700	1700	1700
Volume to Capacity	0.70	0.29	0.27	0.21	0.21
Queue Length 95th (ft)	135	0	0	0	0
Control Delay (s)	25.8	0.0	0.0	0.0	0.0
Lane LOS	D				
Approach Delay (s)	25.8	0.0		0.0	
Approach LOS	D				

Intersection Summary			
Average Delay	4.7		
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1250	970	860	360	300
Future Volume (vph)	0	1250	970	860	360	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.4	5.4	5.9	5.2	5.2
Lane Util. Factor		0.95	0.95	0.88	0.97	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00
Frt		1.00	1.00	0.85	1.00	0.85
Flt Protected		1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3539	3539	2787	3433	1583
Flt Permitted		1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)		3539	3539	2787	3433	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1359	1054	935	391	326
RTOR Reduction (vph)	0	0	0	429	0	267
Lane Group Flow (vph)	0	1359	1054	506	391	59
Confl. Peds. (#/hr)				6	3	
Turn Type		NA	NA	custom	Prot	Perm
Protected Phases		2	2	2	1	
Permitted Phases				8		1
Actuated Green, G (s)		34.2	34.2	34.2	11.2	11.2
Effective Green, g (s)		34.2	34.2	33.7	11.2	11.2
Actuated g/C Ratio		0.55	0.55	0.54	0.18	0.18
Clearance Time (s)		5.4	5.4	5.4	5.2	5.2
Vehicle Extension (s)		2.9	2.9	2.9	2.5	2.5
Lane Grp Cap (vph)		1942	1942	1507	617	284
v/s Ratio Prot		c0.38	0.30	0.18	c0.11	
v/s Ratio Perm						0.04
v/c Ratio		0.70	0.54	0.34	0.63	0.21
Uniform Delay, d1		10.3	9.0	8.0	23.7	21.8
Progression Factor		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		1.1	0.3	0.1	1.9	0.3
Delay (s)		11.4	9.3	8.1	25.5	22.0
Level of Service		B	A	A	C	C
Approach Delay (s)		11.4	8.8		23.9	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	62.3	Sum of lost time (s)	16.6
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	260	1060	100	130	970
Future Volume (vph)	70	260	1060	100	130	970
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	3.1	4.9		4.4	4.9
Lane Util. Factor	1.00	1.00	0.91		1.00	0.91
Frpb, ped/bikes	1.00	0.94	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1495	5003		1770	5085
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	1495	5003		1770	5085
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	283	1152	109	141	1054
RTOR Reduction (vph)	0	258	4	0	0	0
Lane Group Flow (vph)	76	25	1257	0	141	1054
Confl. Peds. (#/hr)	11	16		18	18	
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	4		6		5	2
Permitted Phases		4				
Actuated Green, G (s)	12.2	12.2	108.2		16.3	128.9
Effective Green, g (s)	12.2	13.1	108.2		16.3	128.9
Actuated g/C Ratio	0.08	0.09	0.72		0.11	0.86
Clearance Time (s)	4.0	4.0	4.9		4.4	4.9
Vehicle Extension (s)	3.0	3.0	5.0		2.0	3.2
Lane Grp Cap (vph)	143	130	3608		192	4369
v/s Ratio Prot	c0.04		c0.25		c0.08	0.21
v/s Ratio Perm		0.02				
v/c Ratio	0.53	0.19	0.35		0.73	0.24
Uniform Delay, d1	66.2	63.5	7.8		64.8	1.9
Progression Factor	1.00	1.00	1.64		1.14	1.26
Incremental Delay, d2	3.8	0.7	0.2		7.4	0.1
Delay (s)	69.9	64.2	12.9		81.3	2.4
Level of Service	E	E	B		F	A
Approach Delay (s)	65.4		12.9			11.7
Approach LOS	E		B			B

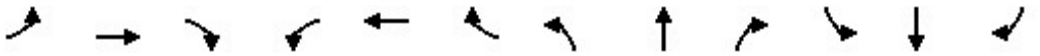
Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	130	150	120	40	130	240	1120	120	200	890	80
Future Volume (vph)	70	130	150	120	40	130	240	1120	120	200	890	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.92		1.00	0.89		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1690		1770	1622		1770	4993		3433	3484	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	1690		1770	1622		1770	4993		3433	3484	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	141	163	130	43	141	261	1217	130	217	967	87
RTOR Reduction (vph)	0	29	0	0	80	0	0	9	0	0	4	0
Lane Group Flow (vph)	76	275	0	130	104	0	261	1338	0	217	1050	0
Confl. Peds. (#/hr)	3		9	9		3	14		14	14		14
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	7	7		8	8		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)	28.2	28.2		14.3	14.3		24.9	68.5		19.9	63.5	
Effective Green, g (s)	29.1	29.1		15.2	15.2		25.3	69.4		20.3	64.4	
Actuated g/C Ratio	0.19	0.19		0.10	0.10		0.17	0.46		0.14	0.43	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)	3.0	3.0		2.0	2.0		2.0	3.9		2.0	3.9	
Lane Grp Cap (vph)	343	327		179	164		298	2310		464	1495	
v/s Ratio Prot	0.04	c0.16		c0.07	0.06		c0.15	0.27		0.06	c0.30	
v/s Ratio Perm												
v/c Ratio	0.22	0.84		0.73	0.63		0.88	0.58		0.47	0.70	
Uniform Delay, d1	50.9	58.2		65.4	64.7		60.8	29.6		59.9	35.0	
Progression Factor	1.00	1.00		1.00	1.00		1.06	0.54		0.90	1.24	
Incremental Delay, d2	0.3	17.4		11.7	5.8		20.8	0.9		0.3	2.8	
Delay (s)	51.2	75.6		77.1	70.5		85.5	17.0		54.0	46.0	
Level of Service	D	E		E	E		F	B		D	D	
Approach Delay (s)		70.8			73.2			28.1			47.4	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM 2000 Control Delay	43.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	30	70	150	30	140	50	1250	70	120	1080	80
Future Volume (vph)	60	30	70	150	30	140	50	1250	70	120	1080	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.91		0.97	0.95	
Frpb, ped/bikes		0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.94		1.00	0.88		1.00	0.99		1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1706		1770	1633		1770	5024		3433	3492	
Flt Permitted		0.98		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1706		1770	1633		1770	5024		3433	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	33	76	163	33	152	54	1359	76	130	1174	87
RTOR Reduction (vph)	0	22	0	0	115	0	0	3	0	0	3	0
Lane Group Flow (vph)	0	152	0	163	70	0	54	1432	0	130	1258	0
Confl. Peds. (#/hr)			6	6			7		18	18		7
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases												
Actuated Green, G (s)		19.9		17.6	17.6		7.1	79.4		14.0	86.3	
Effective Green, g (s)		19.9		17.6	17.6		7.1	79.4		14.0	86.3	
Actuated g/C Ratio		0.13		0.12	0.12		0.05	0.53		0.09	0.58	
Clearance Time (s)		4.9		4.9	4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		226		207	191		83	2659		320	2009	
v/s Ratio Prot		c0.09		c0.09	0.04		0.03	c0.28		0.04	c0.36	
v/s Ratio Perm												
v/c Ratio		0.67		0.79	0.37		0.65	0.54		0.41	0.63	
Uniform Delay, d1		62.0		64.4	61.1		70.2	23.2		64.1	21.1	
Progression Factor		1.00		1.00	1.00		1.09	0.95		0.64	0.39	
Incremental Delay, d2		6.1		16.5	0.4		12.7	0.8		0.2	1.2	
Delay (s)		68.1		80.9	61.5		89.0	22.8		41.4	9.5	
Level of Service		E		F	E		F	C		D	A	
Approach Delay (s)		68.1			70.6			25.2			12.5	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	19.1
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	20	70	30	110	200	140	1110	30	40	1140	120
Future Volume (vph)	40	20	70	30	110	200	140	1110	30	40	1140	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.9	4.9		5.8	4.0	4.4	4.9		4.4	4.9	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.99		1.00	1.00	1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected		0.97	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1803	1562		1842	1583	1770	5055		1770	4966	
Flt Permitted		0.48	1.00		0.91	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		903	1562		1696	1583	1770	5055		1770	4966	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	22	76	33	120	217	152	1207	33	43	1239	130
RTOR Reduction (vph)	0	0	67	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	0	65	9	0	153	217	152	1239	0	43	1362	0
Confl. Peds. (#/hr)			1	1			19		19	19		19
Turn Type	Perm	NA	Perm	Perm	NA	Free	Prot	NA		Prot	NA	
Protected Phases		8			8		1	6		5	2	
Permitted Phases	8		8	8		Free						
Actuated Green, G (s)		18.5	18.5		18.5	150.0	31.5	110.2		7.1	85.8	
Effective Green, g (s)		18.5	18.5		17.6	150.0	31.5	110.2		7.1	85.8	
Actuated g/C Ratio		0.12	0.12		0.12	1.00	0.21	0.73		0.05	0.57	
Clearance Time (s)		4.9	4.9		4.9		4.4	4.9		4.4	4.9	
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.9		2.0	3.9	
Lane Grp Cap (vph)		111	192		198	1583	371	3713		83	2840	
v/s Ratio Prot							c0.09	0.25		0.02	c0.27	
v/s Ratio Perm		0.07	0.01		c0.09	0.14						
v/c Ratio		0.59	0.05		0.77	0.14	0.41	0.33		0.52	0.48	
Uniform Delay, d1		62.1	58.0		64.3	0.0	51.2	7.0		69.8	18.9	
Progression Factor		1.25	2.62		1.00	1.00	0.90	0.84		0.95	1.41	
Incremental Delay, d2		4.5	0.0		15.6	0.2	0.1	0.1		1.8	0.5	
Delay (s)		82.5	152.0		79.8	0.2	46.0	6.0		67.9	27.1	
Level of Service		F	F		E	A	D	A		E	C	
Approach Delay (s)		119.9			33.1			10.4			28.4	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	15.1
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



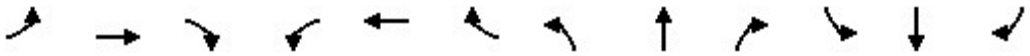
Movement	EBL	EBT	EBR	EBR2	WBT	WBR	NBR2	SBL2	SBL	SBT	SBR	NWL
Lane Configurations												
Traffic Volume (vph)	300	1610	460	260	2040	700	160	350	400	110	210	200
Future Volume (vph)	300	1610	460	260	2040	700	160	350	400	110	210	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	2.6	4.0		6.1	4.0	5.9	5.9	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.86	0.91	1.00	1.00	0.95	0.91	0.91	1.00	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.94	1.00	1.00	1.00	1.00	0.81	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		0.85	1.00	0.85	0.86	1.00	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (prot)	3433	4578		1362	5085	1486	1611	1681	1610	1641	1289	1770
Flt Permitted	0.95	1.00		1.00	1.00	1.00	1.00	0.95	0.95	0.97	1.00	0.95
Satd. Flow (perm)	3433	4578		1362	5085	1486	1611	1681	1610	1641	1289	1770
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	326	1750	500	283	2217	761	174	380	435	120	228	217
RTOR Reduction (vph)	0	1	0	79	0	14	111	0	0	0	155	0
Lane Group Flow (vph)	326	2277	0	176	2217	747	63	243	341	351	73	217
Confl. Peds. (#/hr)	29		31			29		10			63	63
Turn Type	Prot	NA		Perm	NA	pm+ov	Perm	Split	Split	NA	Perm	Prot
Protected Phases	5	2			6	4		4	4	4		3
Permitted Phases				2		6	8				4	
Actuated Green, G (s)	15.8	83.9		83.9	64.3	97.3	54.1	33.0	33.0	33.0	33.0	19.0
Effective Green, g (s)	17.2	86.0		83.9	66.2	93.5	54.1	33.0	33.0	33.0	33.0	19.0
Actuated g/C Ratio	0.11	0.57		0.56	0.44	0.62	0.36	0.22	0.22	0.22	0.22	0.13
Clearance Time (s)	4.0	6.1		6.1	5.9	4.0	5.9	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	2.8		2.8	3.2	3.0	4.1	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	393	2624		761	2244	926	581	369	354	361	283	224
v/s Ratio Prot	0.09	c0.50			c0.44	0.17		0.14	0.21	c0.21		c0.12
v/s Ratio Perm				0.13		0.34	0.04				0.06	
v/c Ratio	0.83	0.87		0.23	0.99	0.81	0.11	0.66	0.96	0.97	0.26	0.97
Uniform Delay, d1	65.0	27.2		16.7	41.5	21.4	31.9	53.4	57.9	58.0	48.4	65.2
Progression Factor	1.00	1.00		1.00	1.04	1.45	1.00	0.82	0.83	0.83	0.98	1.00
Incremental Delay, d2	13.5	4.2		0.7	13.6	3.8	0.1	3.8	35.7	37.6	0.4	50.7
Delay (s)	78.5	31.4		17.4	56.7	35.0	32.0	47.8	83.6	85.6	47.9	115.9
Level of Service	E	C		B	E	C	C	D	F	F	D	F
Approach Delay (s)		35.5			51.1					69.7		103.0
Approach LOS		D			D					E		F

Intersection Summary			
HCM 2000 Control Delay	51.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.5
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWR	NWR2
Lane Configurations		
Traffic Volume (vph)	330	50
Future Volume (vph)	330	50
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	4.0	
Lane Util. Factor	0.88	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.85	
Flt Protected	1.00	
Satd. Flow (prot)	2787	
Flt Permitted	1.00	
Satd. Flow (perm)	2787	
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	359	54
RTOR Reduction (vph)	83	0
Lane Group Flow (vph)	330	0
Confl. Peds. (#/hr)		31
Turn Type	Prot	
Protected Phases	3	
Permitted Phases		
Actuated Green, G (s)	19.0	
Effective Green, g (s)	19.0	
Actuated g/C Ratio	0.13	
Clearance Time (s)	4.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	353	
v/s Ratio Prot	0.12	
v/s Ratio Perm		
v/c Ratio	0.93	
Uniform Delay, d1	64.9	
Progression Factor	1.00	
Incremental Delay, d2	31.4	
Delay (s)	96.3	
Level of Service	F	
Approach Delay (s)		
Approach LOS		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	120	300	120	230	70	70	90	120	90	120	100
Future Volume (vph)	100	120	300	120	230	70	70	90	120	90	120	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5			4.5			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		0.92			0.98			0.94			0.96	
Flt Protected		0.99			0.99			0.99			0.99	
Satd. Flow (prot)		1701			1795			1734			1756	
Flt Permitted		0.84			0.70			0.86			0.84	
Satd. Flow (perm)		1440			1279			1509			1497	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	130	326	130	250	76	76	98	130	98	130	109
RTOR Reduction (vph)	0	94	0	0	14	0	0	36	0	0	23	0
Lane Group Flow (vph)	0	471	0	0	442	0	0	268	0	0	314	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		22.0			22.0			22.0			22.5	
Effective Green, g (s)		22.0			22.0			22.0			22.5	
Actuated g/C Ratio		0.42			0.42			0.42			0.42	
Clearance Time (s)		4.5			4.5			4.5			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		597			530			626			635	
v/s Ratio Prot												
v/s Ratio Perm		0.33			c0.35			0.18			c0.21	
v/c Ratio		0.79			0.83			0.43			0.49	
Uniform Delay, d1		13.5			13.9			11.0			11.1	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		6.8			10.8			2.1			0.6	
Delay (s)		20.3			24.7			13.2			11.7	
Level of Service		C			C			B			B	
Approach Delay (s)		20.3			24.7			13.2			11.7	
Approach LOS		C			C			B			B	

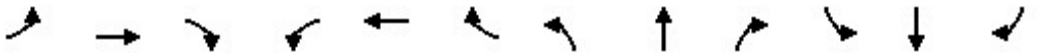
Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	53.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations						
Traffic Volume (vph)	290	1310	850	50	50	460
Future Volume (vph)	290	1310	850	50	50	460
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	0.91		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	5085	5043		1770	1583
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	1770	5085	5043		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	315	1424	924	54	54	500
RTOR Reduction (vph)	0	0	3	0	0	450
Lane Group Flow (vph)	315	1424	975	0	54	50
Turn Type	Prot	NA	NA		Prot	Perm
Protected Phases	7	4	8		5	
Permitted Phases						5
Actuated Green, G (s)	26.6	100.1	69.5		11.9	11.9
Effective Green, g (s)	26.6	100.1	69.5		11.9	11.9
Actuated g/C Ratio	0.22	0.83	0.58		0.10	0.10
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	392	4241	2920		175	156
v/s Ratio Prot	c0.18	c0.28	0.19		0.03	
v/s Ratio Perm						c0.03
v/c Ratio	0.80	0.34	0.33		0.31	0.32
Uniform Delay, d1	44.2	2.3	13.2		50.2	50.3
Progression Factor	1.00	1.00	0.59		1.00	1.00
Incremental Delay, d2	11.3	0.2	0.2		1.0	1.2
Delay (s)	55.5	2.5	7.9		51.2	51.5
Level of Service	E	A	A		D	D
Approach Delay (s)		12.1	7.9		51.4	
Approach LOS		B	A		D	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	0	140	370	310	150	0	0	0	0	70	90
Future Volume (vph)	100	0	140	370	310	150	0	0	0	0	70	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0						4.0	
Lane Util. Factor	1.00		1.00	1.00	1.00						1.00	
Frt	1.00		0.85	1.00	0.95						0.92	
Flt Protected	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (prot)	1770		1583	1770	1772						1721	
Flt Permitted	0.95		1.00	0.95	1.00						1.00	
Satd. Flow (perm)	1770		1583	1770	1772						1721	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	152	402	337	163	0	0	0	0	76	98
RTOR Reduction (vph)	0	0	134	235	23	0	0	0	0	0	78	0
Lane Group Flow (vph)	109	0	18	167	477	0	0	0	0	0	96	0
Turn Type	Prot		Perm	Split	NA						NA	
Protected Phases	2!			8	8						6!	
Permitted Phases			4									
Actuated Green, G (s)	8.4		5.0	18.0	18.0						8.4	
Effective Green, g (s)	8.4		5.0	18.0	18.0						8.4	
Actuated g/C Ratio	0.19		0.12	0.41	0.41						0.19	
Clearance Time (s)	4.0		4.0	4.0	4.0						4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0						3.0	
Lane Grp Cap (vph)	342		182	734	734						333	
v/s Ratio Prot	c0.06			0.09	c0.27						0.06	
v/s Ratio Perm			c0.01									
v/c Ratio	0.32		0.10	0.23	0.65						0.29	
Uniform Delay, d1	15.0		17.2	8.2	10.2						14.9	
Progression Factor	1.00		1.00	1.00	1.00						1.00	
Incremental Delay, d2	0.5		0.2	0.2	2.1						0.5	
Delay (s)	15.6		17.4	8.4	12.2						15.4	
Level of Service	B		B	A	B						B	
Approach Delay (s)		16.6			10.5			0.0			15.4	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	43.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1860	150	290	2420	0	0	0	0	790	440	320
Future Volume (vph)	0	1860	150	290	2420	0	0	0	0	790	440	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.86					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.98	1.00	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		5028		1770	6408					1656	1736	1559
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		5028		1770	6408					1656	1736	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	2022	163	315	2630	0	0	0	0	859	478	348
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	0	0	0	31
Lane Group Flow (vph)	0	2179	0	315	2630	0	0	0	0	661	676	317
Confl. Peds. (#/hr)				13						14		3
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		63.8		19.6	88.1					52.1	52.1	52.1
Effective Green, g (s)		65.0		20.0	89.0					53.0	53.0	53.0
Actuated g/C Ratio		0.43		0.13	0.59					0.35	0.35	0.35
Clearance Time (s)		5.2		4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8		2.0	4.6					2.0	2.0	2.0
Lane Grp Cap (vph)		2178		236	3802					585	613	550
v/s Ratio Prot		c0.43		c0.18	0.41							
v/s Ratio Perm										c0.40	0.39	0.20
v/c Ratio		1.00		1.33	0.69					1.13	1.10	0.58
Uniform Delay, d1		42.5		65.0	21.0					48.5	48.5	39.4
Progression Factor		0.89		1.23	0.10					1.00	1.00	1.00
Incremental Delay, d2		13.6		153.3	0.1					78.4	67.8	0.9
Delay (s)		51.3		233.0	2.1					126.9	116.3	40.3
Level of Service		D		F	A					F	F	D
Approach Delay (s)		51.3			26.8			0.0			104.7	
Approach LOS		D			C			A			F	

Intersection Summary			
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

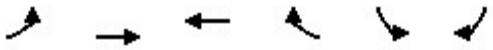
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	800	220	180	390	0	180	0	300	390	370	10
Future Volume (vph)	0	800	220	180	390	0	180	0	300	390	370	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0	4.0	4.0	
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00	1.00	1.00	
Frpb, ped/bikes		0.97		1.00	1.00		1.00		0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Frt		0.97		1.00	1.00		1.00		0.85	1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (prot)		3317		1770	3539		1770		1556	1770	1854	
Flt Permitted		1.00		0.11	1.00		0.95		1.00	0.95	1.00	
Satd. Flow (perm)		3317		204	3539		1770		1556	1770	1854	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	870	239	196	424	0	196	0	326	424	402	11
RTOR Reduction (vph)	0	28	0	0	0	0	0	0	206	0	1	0
Lane Group Flow (vph)	0	1081	0	196	424	0	196	0	120	424	412	0
Confl. Peds. (#/hr)			43	43		51	17		3	3		17
Turn Type		NA		pm+pt	NA		Prot		Perm	Split	NA	
Protected Phases		2		1	6		3			4	4	
Permitted Phases				6					2			
Actuated Green, G (s)		32.2		42.9	42.9		11.9		32.2	21.0	21.0	
Effective Green, g (s)		33.1		43.3	43.8		12.3		33.1	21.9	21.9	
Actuated g/C Ratio		0.37		0.48	0.49		0.14		0.37	0.24	0.24	
Clearance Time (s)		4.9		4.4	4.9		4.4		4.9	4.9	4.9	
Vehicle Extension (s)		6.7		2.0	6.7		3.0		6.7	3.0	3.0	
Lane Grp Cap (vph)		1219		214	1722		241		572	430	451	
v/s Ratio Prot		0.33		c0.07	0.12		c0.11			c0.24	0.22	
v/s Ratio Perm				c0.37					0.08			
v/c Ratio		0.89		0.92	0.25		0.81		0.21	0.99	0.91	
Uniform Delay, d1		26.7		19.1	13.5		37.7		19.5	33.9	33.1	
Progression Factor		1.00		1.00	1.00		1.00		1.00	1.00	1.00	
Incremental Delay, d2		9.7		38.2	0.3		18.5		0.8	39.4	22.8	
Delay (s)		36.4		57.3	13.8		56.3		20.3	73.3	56.0	
Level of Service		D		E	B		E		C	E	E	
Approach Delay (s)		36.4			27.6			33.8			64.7	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	250	450	480	880	450	100
Future Volume (vph)	250	450	480	880	450	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.4	4.0	4.9	
Lane Util. Factor	1.00		1.00	0.91	0.91	
Frpb, ped/bikes	1.00		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.91		1.00	1.00	0.97	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1671		1770	5085	4922	
Flt Permitted	0.98		0.95	1.00	1.00	
Satd. Flow (perm)	1671		1770	5085	4922	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	272	489	522	957	489	109
RTOR Reduction (vph)	54	0	0	0	30	0
Lane Group Flow (vph)	707	0	522	957	568	0
Confl. Peds. (#/hr)			2			2
Turn Type	Prot		Prot	NA	NA	
Protected Phases	2		3	8	4	
Permitted Phases						
Actuated Green, G (s)	49.0		36.7	63.0	22.3	
Effective Green, g (s)	49.0		36.3	63.0	21.4	
Actuated g/C Ratio	0.41		0.30	0.52	0.18	
Clearance Time (s)	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	682		535	2669	877	
v/s Ratio Prot	c0.42		c0.29	0.19	c0.12	
v/s Ratio Perm						
v/c Ratio	1.04		0.98	0.36	0.65	
Uniform Delay, d1	35.5		41.4	16.7	45.8	
Progression Factor	1.00		1.05	1.20	1.00	
Incremental Delay, d2	44.4		31.7	0.4	3.7	
Delay (s)	79.9		75.0	20.4	49.5	
Level of Service	E		E	C	D	
Approach Delay (s)	79.9			39.7	49.5	
Approach LOS	E			D	D	

Intersection Summary			
HCM 2000 Control Delay	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	13.3
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



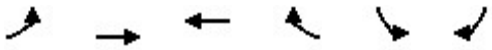
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	90	170	80	70	130
Future Volume (Veh/h)	70	90	170	80	70	130
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	76	98	185	87	76	141
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		1226	738			
pX, platoon unblocked						
vC, conflicting volume	272				478	228
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	272				478	228
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				85	83
cM capacity (veh/h)	1291				514	811

Direction, Lane #	EB 1	EB 2	WB 1	SB 1
Volume Total	76	98	272	217
Volume Left	76	0	0	76
Volume Right	0	0	87	141
cSH	1291	1700	1700	674
Volume to Capacity	0.06	0.06	0.16	0.32
Queue Length 95th (ft)	5	0	0	35
Control Delay (s)	8.0	0.0	0.0	12.9
Lane LOS	A			B
Approach Delay (s)	3.5		0.0	12.9
Approach LOS				B

Intersection Summary			
Average Delay	5.1		
Intersection Capacity Utilization	39.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	2520	0	0	2580	700	130	360	250	0	0	0
Future Volume (vph)	130	2520	0	0	2580	700	130	360	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	1.00	0.91			0.91	1.00		0.95				
Frpb, ped/bikes	1.00	1.00			1.00	0.96		0.99				
Flpb, ped/bikes	1.00	1.00			1.00	1.00		1.00				
Frt	1.00	1.00			1.00	0.85		0.95				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	1770	5085			5085	1519		3294				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1770	5085			5085	1519		3294				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	2739	0	0	2804	761	141	391	272	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	98	0	2	0	0	0	0
Lane Group Flow (vph)	141	2739	0	0	2804	663	0	802	0	0	0	0
Confl. Peds. (#/hr)	15		2			15	1		20			
Turn Type	Prot	NA			NA	Perm	Split	NA				
Protected Phases	5	2			6		4	4				
Permitted Phases						6						
Actuated Green, G (s)	19.8	99.3			75.1	75.1		40.9				
Effective Green, g (s)	20.2	100.2			76.0	76.0		41.8				
Actuated g/C Ratio	0.13	0.67			0.51	0.51		0.28				
Clearance Time (s)	4.4	4.9			4.9	4.9		4.9				
Vehicle Extension (s)	2.0	3.8			4.6	4.6		2.0				
Lane Grp Cap (vph)	238	3396			2576	769		917				
v/s Ratio Prot	0.08	c0.54			c0.55			c0.24				
v/s Ratio Perm						0.44						
v/c Ratio	0.59	0.81			1.09	0.86		0.87				
Uniform Delay, d1	61.0	17.9			37.0	32.4		51.6				
Progression Factor	0.80	0.67			1.00	1.00		1.00				
Incremental Delay, d2	0.2	0.2			47.1	12.2		9.0				
Delay (s)	49.1	12.2			84.1	44.6		60.6				
Level of Service	D	B			F	D		E				
Approach Delay (s)		14.0			75.7			60.6			0.0	
Approach LOS		B			E			E			A	

Intersection Summary			
HCM 2000 Control Delay	49.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	1360	570	140	0	0
Future Volume (Veh/h)	130	1360	570	140	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	1478	620	152	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		345	945			
pX, platoon unblocked	0.94				0.75	0.94
vC, conflicting volume	772				1717	386
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	641				953	232
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	84				100	100
cM capacity (veh/h)	887				162	727

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2
Volume Total	141	739	739	413	359
Volume Left	141	0	0	0	0
Volume Right	0	0	0	0	152
cSH	887	1700	1700	1700	1700
Volume to Capacity	0.16	0.43	0.43	0.24	0.21
Queue Length 95th (ft)	14	0	0	0	0
Control Delay (s)	9.8	0.0	0.0	0.0	0.0
Lane LOS	A				
Approach Delay (s)	0.9			0.0	
Approach LOS					

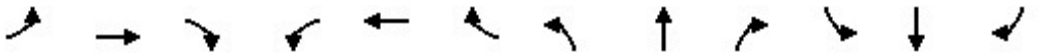
Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Stop			Stop
Traffic Volume (vph)	130	0	0	590	360	280
Future Volume (vph)	130	0	0	590	360	280
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	141	0	0	641	391	304

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	141	641	391	304
Volume Left (vph)	141	0	391	0
Volume Right (vph)	0	641	0	0
Hadj (s)	0.23	-0.57	0.53	0.03
Departure Headway (s)	6.9	4.7	6.2	5.7
Degree Utilization, x	0.27	0.84	0.67	0.48
Capacity (veh/h)	499	751	565	624
Control Delay (s)	12.4	27.4	19.7	12.6
Approach Delay (s)	12.4	27.4	16.6	
Approach LOS	B	D	C	

Intersection Summary			
Delay	20.9		
Level of Service	C		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	440	50	150	20	20	30	50	120	10	20	200	190
Future Volume (vph)	440	50	150	20	20	30	50	120	10	20	200	190
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	478	54	163	22	22	33	54	130	11	22	217	207

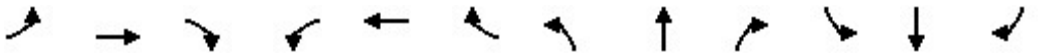
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1	SB 2
Volume Total (vph)	505	190	77	195	239	207
Volume Left (vph)	478	0	22	54	22	0
Volume Right (vph)	0	163	33	11	0	207
Hadj (s)	0.51	-0.57	-0.17	0.06	0.08	-0.67
Departure Headway (s)	7.2	6.1	7.7	7.5	7.3	6.6
Degree Utilization, x	1.01	0.32	0.16	0.41	0.49	0.38
Capacity (veh/h)	491	575	440	467	482	536
Control Delay (s)	69.6	10.9	12.1	15.6	15.9	12.4
Approach Delay (s)	53.5		12.1	15.6	14.2	
Approach LOS	F		B	C	B	

Intersection Summary				
Delay	33.6			
Level of Service	D			
Intersection Capacity Utilization	62.8%	ICU Level of Service	B	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	720	290	430	480	0	0	0	0	400	550	1020
Future Volume (vph)	0	720	290	430	480	0	0	0	0	400	550	1020
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	783	315	467	522	0	0	0	0	435	598	1109
RTOR Reduction (vph)	0	0	164	0	0	0	0	0	0	0	0	87
Lane Group Flow (vph)	0	783	151	467	522	0	0	0	0	435	598	1022
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		26.7	26.7	15.0	46.1					64.1	64.1	64.1
Effective Green, g (s)		27.6	27.6	15.4	47.0					65.0	65.0	65.0
Actuated g/C Ratio		0.23	0.23	0.13	0.39					0.54	0.54	0.54
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		813	364	440	1386					872	1836	857
v/s Ratio Prot		c0.22		c0.14	0.15							
v/s Ratio Perm			0.10							0.27	0.18	c0.65
v/c Ratio		0.96	0.41	1.06	0.38					0.50	0.33	1.19
Uniform Delay, d1		45.7	39.3	52.3	26.0					17.3	15.3	27.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		23.8	3.5	60.1	0.8					0.2	0.0	98.1
Delay (s)		69.5	42.8	112.4	26.8					17.4	15.3	125.6
Level of Service		E	D	F	C					B	B	F
Approach Delay (s)		61.8			67.2			0.0			72.8	
Approach LOS		E			E			A			E	

Intersection Summary			
HCM 2000 Control Delay	68.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

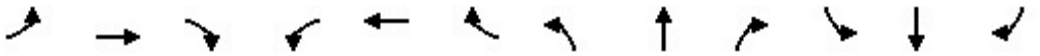
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	60	50	0	0	0	0	0	0	1620	160
Future Volume (Veh/h)	0	0	60	50	0	0	0	0	0	0	1620	160
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	65	54	0	0	0	0	0	0	1761	174
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1066				
pX, platoon unblocked												
vC, conflicting volume	1848	1848	674	652	1935	0	1935			0		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1848	1848	674	652	1935	0	1935			0		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	84	82	100	100	100			100		
cM capacity (veh/h)	46	74	397	295	65	1084	300			1622		

Direction, Lane #	EB 1	WB 1	SB 1	SB 2	SB 3
Volume Total	65	54	704	704	526
Volume Left	0	54	0	0	0
Volume Right	65	0	0	0	174
cSH	397	295	1700	1700	1700
Volume to Capacity	0.16	0.18	0.41	0.41	0.31
Queue Length 95th (ft)	14	16	0	0	0
Control Delay (s)	15.8	19.9	0.0	0.0	0.0
Lane LOS	C	C			
Approach Delay (s)	15.8	19.9	0.0		
Approach LOS	C	C			

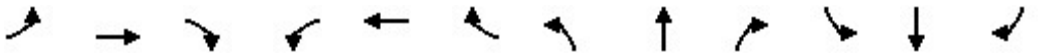
Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	53.7%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	440	260	110	170	0	0	0	0	400	860	490
Future Volume (vph)	0	440	260	110	170	0	0	0	0	400	860	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		1.00	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.95	
Flt Protected		1.00	1.00		0.98					0.95	1.00	
Satd. Flow (prot)		1863	1583		3471					1770	4808	
Flt Permitted		1.00	1.00		0.62					0.95	1.00	
Satd. Flow (perm)		1863	1583		2177					1770	4808	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	478	283	120	185	0	0	0	0	435	935	533
RTOR Reduction (vph)	0	0	38	0	0	0	0	0	0	0	158	0
Lane Group Flow (vph)	0	478	245	0	305	0	0	0	0	435	1310	0
Turn Type		NA	Perm	Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4	8						6		
Actuated Green, G (s)		25.3	25.3		25.3					26.7	26.7	
Effective Green, g (s)		28.0	28.0		28.0					29.0	29.0	
Actuated g/C Ratio		0.43	0.43		0.43					0.45	0.45	
Clearance Time (s)		6.7	6.7		6.7					6.3	6.3	
Vehicle Extension (s)		2.0	2.0		2.5					4.6	4.6	
Lane Grp Cap (vph)		802	681		937					789	2145	
v/s Ratio Prot		c0.26									c0.27	
v/s Ratio Perm			0.16		0.14					0.25		
v/c Ratio		0.60	0.36		0.33					0.55	0.61	
Uniform Delay, d1		14.2	12.5		12.2					13.2	13.7	
Progression Factor		1.00	1.00		1.00					1.00	1.00	
Incremental Delay, d2		3.3	1.5		0.9					2.8	1.3	
Delay (s)		17.4	13.9		13.2					16.0	15.0	
Level of Service		B	B		B					B	B	
Approach Delay (s)		16.1			13.2			0.0			15.2	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1090	340	50	700	0	0	0	0	730	1100	660
Future Volume (vph)	0	1090	340	50	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.95		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		3413		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		3413		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1185	370	54	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	0	52
Lane Group Flow (vph)	0	1522	0	54	761	0	0	0	0	0	1989	665
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		31.5		3.4	37.6						40.4	40.4
Effective Green, g (s)		29.7		3.8	37.5						39.5	41.8
Actuated g/C Ratio		0.33		0.04	0.42						0.44	0.46
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1126		74	1474						2068	632
v/s Ratio Prot		c0.45		c0.03	0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		1.35		0.73	0.52						1.08dl	1.05
Uniform Delay, d1		30.1		42.6	19.5						24.5	24.1
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		164.2		26.0	1.3						12.0	50.3
Delay (s)		194.4		68.6	20.8						36.5	74.4
Level of Service		F		E	C						D	E
Approach Delay (s)		194.4			24.0			0.0			46.6	
Approach LOS		F			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	88.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	330	1280	1700	1270	1180	130
Future Volume (vph)	330	1280	1700	1270	1180	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.88	0.97	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	2787	3433	5085	5085	1566
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	1770	2787	3433	5085	5085	1566
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.92	0.92
Adj. Flow (vph)	359	1347	1789	1337	1283	141
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	359	1347	1789	1337	1283	136
Confl. Peds. (#/hr)			3			3
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	5	7	7	4	8	5
Permitted Phases		5				8
Actuated Green, G (s)	23.0	88.0	65.0	99.0	30.0	53.0
Effective Green, g (s)	23.0	88.0	65.0	99.0	30.0	53.0
Actuated g/C Ratio	0.18	0.68	0.50	0.76	0.23	0.41
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	313	1972	1716	3872	1173	686
v/s Ratio Prot	c0.20	0.34	c0.52	0.26	c0.25	0.04
v/s Ratio Perm		0.14				0.05
v/c Ratio	1.15	0.68	1.04	0.35	1.09	0.20
Uniform Delay, d1	53.5	12.6	32.5	5.0	50.0	24.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	96.8	1.0	33.7	0.2	55.7	0.1
Delay (s)	150.3	13.6	66.2	5.3	105.7	25.0
Level of Service	F	B	E	A	F	C
Approach Delay (s)	42.4			40.2	97.7	
Approach LOS	D			D	F	

Intersection Summary			
HCM 2000 Control Delay	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

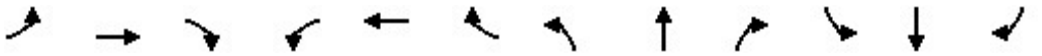
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	250	580	0	0	1000	640	40	0	120	250	30	420
Future Volume (vph)	250	580	0	0	1000	640	40	0	120	250	30	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Lane Util. Factor	1.00	0.95			0.95	1.00		1.00		0.91	0.91	
Frt	1.00	1.00			1.00	0.85		0.90		1.00	0.87	
Flt Protected	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)	1770	3539			3539	1583		1653		1610	2933	
Flt Permitted	0.95	1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (perm)	1770	3539			3539	1583		1653		1610	2933	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	272	630	0	0	1087	696	43	0	130	272	33	457
RTOR Reduction (vph)	0	0	0	0	0	427	0	111	0	0	397	0
Lane Group Flow (vph)	272	630	0	0	1087	269	0	62	0	245	120	0
Turn Type	Prot	NA			NA	Perm	Split	NA		Split	NA	
Protected Phases	5	2			6		8	8		7	7	
Permitted Phases						6						
Actuated Green, G (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Effective Green, g (s)	10.6	49.2			33.7	33.7		12.6		11.1	11.1	
Actuated g/C Ratio	0.12	0.56			0.39	0.39		0.14		0.13	0.13	
Clearance Time (s)	4.5	4.0			4.4	4.4		6.4		4.0	4.0	
Vehicle Extension (s)	3.5	2.0			3.5	3.5		2.0		2.0	2.0	
Lane Grp Cap (vph)	214	1994			1366	611		238		204	372	
v/s Ratio Prot	c0.15	0.18			c0.31			c0.04		c0.15	0.04	
v/s Ratio Perm						0.17						
v/c Ratio	1.27	0.32			0.80	0.44		0.26		1.20	0.32	
Uniform Delay, d1	38.4	10.1			23.8	19.8		33.2		38.1	34.7	
Progression Factor	1.00	1.00			1.00	1.00		1.00		1.00	1.00	
Incremental Delay, d2	153.3	0.4			4.9	2.3		0.2		127.8	0.2	
Delay (s)	191.7	10.5			28.6	22.1		33.4		165.9	34.9	
Level of Service	F	B			C	C		C		F	C	
Approach Delay (s)		65.2			26.1			33.4			77.0	
Approach LOS		E			C			C			E	

Intersection Summary			
HCM 2000 Control Delay	46.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	87.3	Sum of lost time (s)	19.3
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

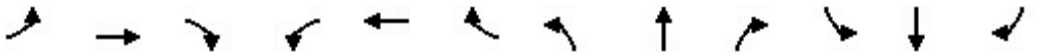
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	410	70	660	670	0	0	0	0	350	40	370
Future Volume (vph)	0	410	70	660	670	0	0	0	0	350	40	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		5.9	5.9					1.8	1.8	1.8
Lane Util. Factor		0.95		1.00	1.00					0.95	0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3453		1770	1863					1681	1701	1583
Flt Permitted		1.00		0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3453		1770	1863					1681	1701	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	446	76	717	728	0	0	0	0	380	43	402
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	0	0	0	72
Lane Group Flow (vph)	0	504	0	717	728	0	0	0	0	201	222	330
Confl. Peds. (#/hr)	5		5	5		10						
Turn Type		NA		Split	NA					Split	NA	custom
Protected Phases		7		8	8					6	6	6
Permitted Phases												7
Actuated Green, G (s)		14.3		30.7	30.7					10.7	10.7	25.0
Effective Green, g (s)		14.3		31.0	31.0					12.9	12.9	29.4
Actuated g/C Ratio		0.20		0.44	0.44					0.18	0.18	0.42
Clearance Time (s)		4.0		6.2	6.2					4.0	4.0	4.0
Vehicle Extension (s)		3.0		2.0	2.0					3.0	3.0	3.0
Lane Grp Cap (vph)		706		784	826					310	313	706
v/s Ratio Prot		c0.15		c0.41	0.39					0.12	c0.13	0.09
v/s Ratio Perm												0.12
v/c Ratio		0.71		0.91	0.88					0.65	0.71	0.47
Uniform Delay, d1		25.9		18.2	17.8					26.4	26.7	14.6
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		3.4		14.9	10.6					4.6	7.2	0.5
Delay (s)		29.3		33.1	28.4					31.0	33.9	15.1
Level of Service		C		C	C					C	C	B
Approach Delay (s)		29.3			30.7			0.0			24.0	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	69.9	Sum of lost time (s)	11.7
Intersection Capacity Utilization	72.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



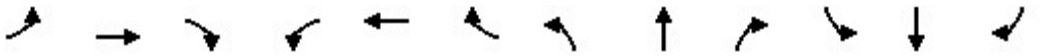
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Future Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1624		1770	4945		1770	5052	
Flt Permitted	0.43	1.00		0.55	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	805	1809		1020	1624		1770	4945		1770	5052	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	250	33	1728	391	272	576	22
RTOR Reduction (vph)	0	6	0	0	162	0	0	30	0	0	3	0
Lane Group Flow (vph)	43	190	0	413	131	0	33	2089	0	272	595	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	43.1	43.1		42.4	42.4		3.6	46.1		19.0	60.8	
Effective Green, g (s)	43.1	43.1		42.8	42.8		3.6	47.5		16.8	62.9	
Actuated g/C Ratio	0.35	0.35		0.35	0.35		0.03	0.39		0.14	0.52	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	285	641		359	571		52	1931		244	2613	
v/s Ratio Prot		0.11			0.08		0.02	c0.42		c0.15	0.12	
v/s Ratio Perm	0.05			c0.40								
v/c Ratio	0.15	0.30		1.15	0.23		0.63	1.08		1.11	0.23	
Uniform Delay, d1	26.8	28.3		39.4	27.8		58.3	37.0		52.4	16.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		95.0	0.2		17.1	46.6		91.9	0.2	
Delay (s)	26.9	28.4		134.4	28.0		75.4	83.6		144.3	16.3	
Level of Service	C	C		F	C		E	F		F	B	
Approach Delay (s)		28.1			90.2			83.5			56.3	
Approach LOS		C			F			F			E	

Intersection Summary			
HCM 2000 Control Delay	75.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	102.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



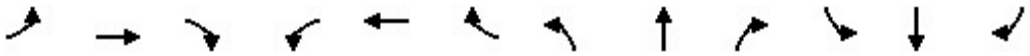
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	1050	290	240	950	160	450	1050	240	210	700	330
Future Volume (vph)	620	1050	290	240	950	160	450	1050	240	210	700	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	3424		1770	3454		1770	4930		1770	5085	1569
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1770	3424		1770	3454		1770	4930		1770	5085	1569
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	1141	315	261	1033	174	489	1141	261	228	761	359
RTOR Reduction (vph)	0	17	0	0	9	0	0	25	0	0	0	50
Lane Group Flow (vph)	674	1439	0	261	1198	0	489	1377	0	228	761	309
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases												6
Actuated Green, G (s)	38.6	58.2		22.2	41.2		28.6	42.1		8.6	22.0	60.6
Effective Green, g (s)	39.0	59.4		22.6	43.0		29.0	43.0		9.0	23.0	61.4
Actuated g/C Ratio	0.26	0.40		0.15	0.29		0.19	0.29		0.06	0.15	0.41
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9		4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3		2.0	4.1	2.0
Lane Grp Cap (vph)	460	1355		266	990		342	1413		106	779	642
v/s Ratio Prot	c0.38	0.42		0.15	c0.35		c0.28	c0.28		c0.13	0.15	0.13
v/s Ratio Perm												0.07
v/c Ratio	1.47	1.06		0.98	1.21		1.43	0.97		2.15	0.98	0.48
Uniform Delay, d1	55.5	45.3		63.5	53.5		60.5	53.0		70.5	63.2	32.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	221.0	42.8		49.6	103.9		209.6	18.6		547.9	27.1	0.2
Delay (s)	276.5	88.1		113.1	157.4		270.1	71.6		618.4	90.3	32.8
Level of Service	F	F		F	F		F	E		F	F	C
Approach Delay (s)		147.7			149.6			122.9			164.3	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	144.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	119.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	910	290	230	370	100	270	240	630	70	110	70
Future Volume (vph)	160	910	290	230	370	100	270	240	630	70	110	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.5	5.5	4.0	5.4	5.4
Lane Util. Factor	1.00	0.95	0.88	0.97	0.95	1.00	0.97	1.00	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.71	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3539	2709	3433	3539	1131	3433	1863	1555	1770	5085	1537
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	989	315	250	402	109	293	261	685	76	120	76
RTOR Reduction (vph)	0	0	172	0	0	70	0	0	58	0	0	58
Lane Group Flow (vph)	174	989	143	250	402	39	293	261	627	76	120	18
Confl. Peds. (#/hr)			27	27		170	23		15	15		23
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	11.0	33.2	41.1	10.1	32.3	32.3	7.9	24.0	34.1	6.6	22.7	22.7
Effective Green, g (s)	11.4	34.1	41.9	10.5	33.2	33.2	8.3	23.4	31.9	7.0	22.2	22.2
Actuated g/C Ratio	0.12	0.37	0.45	0.11	0.36	0.36	0.09	0.25	0.34	0.08	0.24	0.24
Clearance Time (s)	4.4	4.9	4.4	4.4	4.9	4.9	4.4	4.9	4.4	4.4	4.9	4.9
Vehicle Extension (s)	2.0	2.1	2.0	2.0	2.3	2.3	2.0	4.5	2.0	2.0	4.5	4.5
Lane Grp Cap (vph)	218	1304	1227	389	1270	405	308	471	536	133	1220	368
v/s Ratio Prot	0.10	c0.28	0.01	0.07	0.11		c0.09	0.14	c0.11	0.04	0.02	
v/s Ratio Perm			0.04			0.03			0.29			0.01
v/c Ratio	0.80	0.76	0.12	0.64	0.32	0.10	0.95	0.55	1.17	0.57	0.10	0.05
Uniform Delay, d1	39.4	25.6	14.6	39.2	21.4	19.7	41.9	30.0	30.3	41.3	27.4	27.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.0	4.2	0.0	2.7	0.7	0.5	38.0	2.1	95.3	3.6	0.1	0.1
Delay (s)	56.5	29.8	14.6	41.9	22.1	20.2	79.9	32.1	125.6	44.9	27.4	27.1
Level of Service	E	C	B	D	C	C	E	C	F	D	C	C
Approach Delay (s)		29.7			28.3			95.1			32.2	
Approach LOS		C			C			F			C	

Intersection Summary			
HCM 2000 Control Delay	51.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	92.5	Sum of lost time (s)	19.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

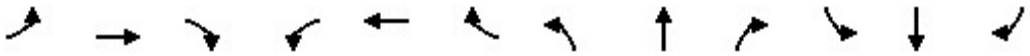


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			0.94			0.95			0.93	
Flt Protected		0.97			1.00			0.99			0.99	
Satd. Flow (prot)		1784			1727			1722			1698	
Flt Permitted		0.62			0.92			0.86			0.79	
Satd. Flow (perm)		1147			1592			1495			1365	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	174	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	3	0	0	17	0	0	19	0	0	32	0
Lane Group Flow (vph)	0	1029	0	0	342	0	0	308	0	0	55	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	pm+pt	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	5	2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)		79.2			79.2			21.0			21.0	
Effective Green, g (s)		80.1			80.1			21.9			21.9	
Actuated g/C Ratio		0.73			0.73			0.20			0.20	
Clearance Time (s)		4.9			4.9			4.9			4.9	
Vehicle Extension (s)		2.0			2.0			2.0			2.0	
Lane Grp Cap (vph)		835			1159			297			271	
v/s Ratio Prot												
v/s Ratio Perm		c0.90			0.22			c0.21			0.04	
v/c Ratio		1.23			0.30			1.04			0.20	
Uniform Delay, d1		15.0			5.2			44.0			36.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		115.1			0.6			62.0			0.1	
Delay (s)		130.0			5.8			106.0			36.9	
Level of Service		F			A			F			D	
Approach Delay (s)		130.0			5.8			106.0			36.9	
Approach LOS		F			A			F			D	

Intersection Summary			
HCM 2000 Control Delay	96.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1100	510	240	500	200	270
Future Volume (vph)	1100	510	240	500	200	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0		4.0	4.9	4.0	4.0
Lane Util. Factor	0.91		1.00	0.95	1.00	1.00
Frpb, ped/bikes	0.97		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.95		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	4677		1770	3539	1770	1583
Flt Permitted	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	4677		1770	3539	1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1196	554	261	543	217	293
RTOR Reduction (vph)	94	0	0	0	0	227
Lane Group Flow (vph)	1656	0	261	543	217	66
Confl. Peds. (#/hr)		53	53		46	81
Turn Type	NA		Prot	NA	Prot	Prot
Protected Phases	2		1	6	8	8
Permitted Phases						
Actuated Green, G (s)	29.2		12.9	46.5	15.3	15.3
Effective Green, g (s)	31.1		13.3	46.5	16.2	16.2
Actuated g/C Ratio	0.43		0.19	0.65	0.23	0.23
Clearance Time (s)	4.9		4.4	4.9	4.9	4.9
Vehicle Extension (s)	2.9		2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	2031		328	2298	400	358
v/s Ratio Prot	c0.35		c0.15	0.15	c0.12	0.04
v/s Ratio Perm						
v/c Ratio	0.82		0.80	0.24	0.54	0.19
Uniform Delay, d1	17.7		27.9	5.2	24.4	22.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.7		11.8	0.2	0.8	0.1
Delay (s)	21.5		39.6	5.4	25.2	22.5
Level of Service	C		D	A	C	C
Approach Delay (s)	21.5			16.5	23.6	
Approach LOS	C			B	C	

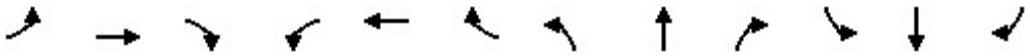
Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	71.6	Sum of lost time (s)	11.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	30	20	60	40	130	30	90	190	70
Future Volume (vph)	20	20	20	30	20	60	40	130	30	90	190	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	33	22	65	43	141	33	98	207	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	66	120	217	381
Volume Left (vph)	22	33	43	98
Volume Right (vph)	22	65	33	76
Hadj (s)	-0.10	-0.24	-0.02	-0.03
Departure Headway (s)	5.4	5.2	4.9	4.7
Degree Utilization, x	0.10	0.17	0.29	0.49
Capacity (veh/h)	576	614	701	743
Control Delay (s)	9.0	9.3	9.9	12.1
Approach Delay (s)	9.0	9.3	9.9	12.1
Approach LOS	A	A	A	B

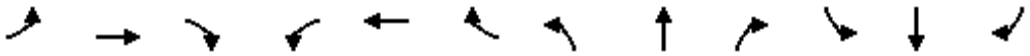
Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	48.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	20	30	40	20	30	130	30	40	130	70
Future Volume (vph)	40	20	20	30	40	20	30	130	30	40	130	70
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	22	33	43	22	33	141	33	43	141	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	87	98	207	260
Volume Left (vph)	43	33	33	43
Volume Right (vph)	22	22	33	76
Hadj (s)	-0.02	-0.03	-0.03	-0.11
Departure Headway (s)	5.1	5.1	4.7	4.5
Degree Utilization, x	0.12	0.14	0.27	0.33
Capacity (veh/h)	630	635	732	753
Control Delay (s)	8.9	8.9	9.4	9.7
Approach Delay (s)	8.9	8.9	9.4	9.7
Approach LOS	A	A	A	A

Intersection Summary				
Delay	9.4			
Level of Service	A			
Intersection Capacity Utilization	34.8%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	20	20	20	70	30	30	20	220	400	10	160	20
Future Volume (vph)	20	20	20	70	30	30	20	220	400	10	160	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	22	22	76	33	33	22	239	435	11	174	22

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1
Volume Total (vph)	66	142	261	435	207
Volume Left (vph)	22	76	22	0	11
Volume Right (vph)	22	33	0	435	22
Hadj (s)	-0.10	0.00	0.08	-0.67	-0.02
Departure Headway (s)	6.0	5.9	5.5	4.7	5.4
Degree Utilization, x	0.11	0.23	0.40	0.57	0.31
Capacity (veh/h)	531	555	645	747	638
Control Delay (s)	9.7	10.7	10.8	12.6	10.7
Approach Delay (s)	9.7	10.7	11.9		10.7
Approach LOS	A	B	B		B

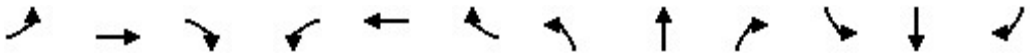
Intersection Summary				
Delay	11.4			
Level of Service	B			
Intersection Capacity Utilization	49.5%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	40	40	60	50	60	110
Future Volume (vph)	40	40	60	50	60	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	43	65	54	65	120

Direction, Lane #	EB 1	WB 1	NB 1
Volume Total (vph)	86	119	185
Volume Left (vph)	0	65	65
Volume Right (vph)	43	0	120
Hadj (s)	-0.27	0.14	-0.28
Departure Headway (s)	4.2	4.5	4.1
Degree Utilization, x	0.10	0.15	0.21
Capacity (veh/h)	818	751	840
Control Delay (s)	7.6	8.3	8.2
Approach Delay (s)	7.6	8.3	8.2
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	34.3%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	30	30	30	50	30	20	80	160	140	20	70	20
Future Volume (vph)	30	30	30	50	30	20	80	160	140	20	70	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	33	33	33	54	33	22	87	174	152	22	76	22

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	99	109	413	120
Volume Left (vph)	33	54	87	22
Volume Right (vph)	33	22	152	22
Hadj (s)	-0.10	0.01	-0.14	-0.04
Departure Headway (s)	5.2	5.3	4.5	4.9
Degree Utilization, x	0.14	0.16	0.51	0.16
Capacity (veh/h)	612	605	776	676
Control Delay (s)	9.1	9.3	12.1	8.9
Approach Delay (s)	9.1	9.3	12.1	8.9
Approach LOS	A	A	B	A

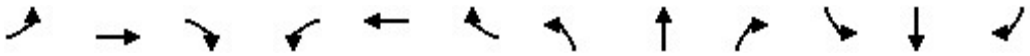
Intersection Summary				
Delay	10.8			
Level of Service	B			
Intersection Capacity Utilization	50.7%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	40	110	20	60	50	120	300	30	20	70	170
Future Volume (vph)	270	40	110	20	60	50	120	300	30	20	70	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.95		1.00	0.99		1.00	0.89	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1737			1742		1765	1833		1764	1637	
Flt Permitted		0.76			0.92		0.57	1.00		0.47	1.00	
Satd. Flow (perm)		1357			1608		1068	1833		873	1637	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	293	43	120	22	65	54	130	326	33	22	76	185
RTOR Reduction (vph)	0	26	0	0	32	0	0	4	0	0	104	0
Lane Group Flow (vph)	0	430	0	0	109	0	130	355	0	22	157	0
Confl. Peds. (#/hr)	5					5	3		4	4		3
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		20.7			20.7		22.5	22.5		22.5	22.5	
Effective Green, g (s)		20.7			20.7		22.5	22.5		22.5	22.5	
Actuated g/C Ratio		0.40			0.40		0.44	0.44		0.44	0.44	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		2.0			2.0		2.1	2.1		2.1	2.1	
Lane Grp Cap (vph)		548			650		469	805		383	719	
v/s Ratio Prot								c0.19			0.10	
v/s Ratio Perm		c0.32			0.07		0.12			0.03		
v/c Ratio		0.79			0.17		0.28	0.44		0.06	0.22	
Uniform Delay, d1		13.3			9.7		9.2	10.0		8.3	8.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		6.7			0.0		1.5	1.7		0.3	0.7	
Delay (s)		20.1			9.8		10.6	11.7		8.5	9.6	
Level of Service		C			A		B	B		A	A	
Approach Delay (s)		20.1			9.8			11.4			9.5	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1060	240	300	590	20	130	20	220	30	20	20
Future Volume (vph)	70	1060	240	300	590	20	130	20	220	30	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	1.00			0.92			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.98	
Satd. Flow (prot)	1765	4904		1770	3517			1668			1744	
Flt Permitted	0.40	1.00		0.15	1.00			0.86			0.77	
Satd. Flow (perm)	743	4904		284	3517			1466			1372	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	1152	261	326	641	22	141	22	239	33	22	22
RTOR Reduction (vph)	0	47	0	0	3	0	0	84	0	0	16	0
Lane Group Flow (vph)	76	1366	0	326	660	0	0	318	0	0	61	0
Confl. Peds. (#/hr)	13		12	12		13	6		2	2		6
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	24.4	21.7		36.5	29.4			16.6			16.6	
Effective Green, g (s)	25.2	22.7		36.9	30.3			17.5			17.5	
Actuated g/C Ratio	0.40	0.36		0.59	0.48			0.28			0.28	
Clearance Time (s)	4.4	5.0		4.4	4.9			4.9			4.9	
Vehicle Extension (s)	2.0	3.3		2.0	3.3			2.0			2.0	
Lane Grp Cap (vph)	348	1769		419	1694			407			381	
v/s Ratio Prot	0.01	0.28		c0.13	0.19							
v/s Ratio Perm	0.08			c0.32				c0.22			0.04	
v/c Ratio	0.22	0.77		0.78	0.39			0.78			0.16	
Uniform Delay, d1	11.8	17.8		11.9	10.4			20.9			17.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.1	3.3		8.1	0.7			8.7			0.1	
Delay (s)	11.9	21.2		20.0	11.1			29.6			17.2	
Level of Service	B	C		C	B			C			B	
Approach Delay (s)		20.7			14.0			29.6			17.2	
Approach LOS		C			B			C			B	

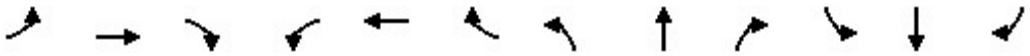
Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	62.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Future Volume (vph)	110	20	30	10	20	20	20	110	30	40	160	90
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	22	33	11	22	22	22	120	33	43	174	98

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	175	55	175	315
Volume Left (vph)	120	11	22	43
Volume Right (vph)	33	22	33	98
Hadj (s)	0.06	-0.17	-0.05	-0.13
Departure Headway (s)	5.2	5.2	4.9	4.6
Degree Utilization, x	0.25	0.08	0.24	0.40
Capacity (veh/h)	631	608	692	739
Control Delay (s)	10.0	8.6	9.4	10.7
Approach Delay (s)	10.0	8.6	9.4	10.7
Approach LOS	A	A	A	B

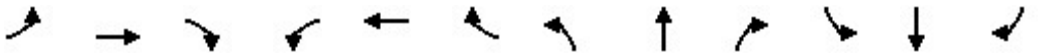
Intersection Summary				
Delay	10.1			
Level of Service	B			
Intersection Capacity Utilization	45.4%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	40	20	60	10	20	20	40	100	20	20	150	50
Future Volume (vph)	40	20	60	10	20	20	40	100	20	20	150	50
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	43	22	65	11	22	22	43	109	22	22	163	54

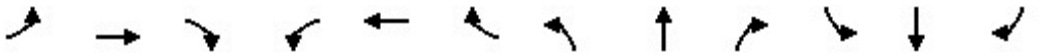
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	130	55	174	239
Volume Left (vph)	43	11	43	22
Volume Right (vph)	65	22	22	54
Hadj (s)	-0.20	-0.17	0.01	-0.08
Departure Headway (s)	4.7	4.9	4.7	4.5
Degree Utilization, x	0.17	0.07	0.22	0.30
Capacity (veh/h)	692	660	734	761
Control Delay (s)	8.7	8.3	9.0	9.4
Approach Delay (s)	8.7	8.3	9.0	9.4
Approach LOS	A	A	A	A

Intersection Summary				
Delay		9.0		
Level of Service		A		
Intersection Capacity Utilization		37.0%	ICU Level of Service	A
Analysis Period (min)		15		



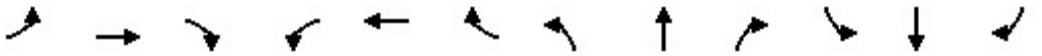
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	670	60	30	580	160	0	0	30	220	150	330
Future Volume (vph)	580	670	60	30	580	160	0	0	30	220	150	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95				1.00	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97				0.86	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (prot)	3433	3487		1770	3412				1611	1681	1734	1561
Flt Permitted	0.95	1.00		0.95	1.00				1.00	0.95	0.98	1.00
Satd. Flow (perm)	3433	3487		1770	3412				1611	1681	1734	1561
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	728	65	33	630	174	0	0	33	239	163	359
RTOR Reduction (vph)	0	7	0	0	28	0	0	0	0	0	0	259
Lane Group Flow (vph)	630	786	0	33	776	0	0	0	33	127	275	100
Confl. Peds. (#/hr)	5		4	4		5						3
Turn Type	Prot	NA		Prot	NA				Free	Split	NA	Perm
Protected Phases	5	2		1	6					4	4	
Permitted Phases									Free			4
Actuated Green, G (s)	13.5	36.6		2.0	25.1				71.1	17.9	17.9	17.9
Effective Green, g (s)	13.9	37.5		2.4	26.0				71.1	19.2	19.2	19.2
Actuated g/C Ratio	0.20	0.53		0.03	0.37				1.00	0.27	0.27	0.27
Clearance Time (s)	4.4	4.9		4.4	4.9					5.3	5.3	5.3
Vehicle Extension (s)	2.0	3.3		2.0	3.8					4.4	4.4	4.4
Lane Grp Cap (vph)	671	1839		59	1247				1611	453	468	421
v/s Ratio Prot	c0.18	0.23		0.02	c0.23					0.08	c0.16	
v/s Ratio Perm									0.02			0.06
v/c Ratio	0.94	0.43		0.56	0.62				0.02	0.28	0.59	0.24
Uniform Delay, d1	28.2	10.3		33.8	18.5				0.0	20.5	22.5	20.2
Progression Factor	1.00	1.00		1.00	1.00				1.00	1.00	1.00	1.00
Incremental Delay, d2	20.6	0.7		6.4	2.3				0.0	0.6	2.5	0.5
Delay (s)	48.8	11.0		40.2	20.9				0.0	21.1	25.0	20.7
Level of Service	D	B		D	C				A	C	C	C
Approach Delay (s)		27.7			21.6			0.0			22.3	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	71.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1440	110	70	1010	60	120	110	140	40	90	20
Future Volume (vph)	60	1440	110	70	1010	60	120	110	140	40	90	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00			1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.92			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1678	3403		1671	3405		1646	1575			1704	
Flt Permitted	0.95	1.00		0.95	1.00		0.49	1.00			0.44	
Satd. Flow (perm)	1678	3403		1671	3405		852	1575			764	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1565	120	76	1098	65	130	120	152	43	98	22
RTOR Reduction (vph)	0	3	0	0	3	0	0	34	0	0	4	0
Lane Group Flow (vph)	65	1682	0	76	1160	0	130	238	0	0	159	0
Confl. Peds. (#/hr)	4		3	3		4	6		5	5		6
Confl. Bikes (#/hr)			3			2			4			
Bus Blockages (#/hr)	13	13	13	14	14	14	16	16	16	13	13	13
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			4			4	
Permitted Phases							4			4		
Actuated Green, G (s)	9.3	94.7		10.0	95.4		26.1	26.1			26.1	
Effective Green, g (s)	9.7	95.6		10.4	96.3		27.0	27.0			27.0	
Actuated g/C Ratio	0.07	0.66		0.07	0.66		0.19	0.19			0.19	
Clearance Time (s)	4.4	4.9		4.4	4.9		4.9	4.9			4.9	
Vehicle Extension (s)	2.0	2.1		2.0	2.1		2.0	2.0			2.0	
Lane Grp Cap (vph)	112	2243		119	2261		158	293			142	
v/s Ratio Prot	0.04	c0.49		c0.05	0.34			0.15				
v/s Ratio Perm							0.15				c0.21	
v/c Ratio	0.58	0.75		0.64	0.51		0.82	0.81			1.12	
Uniform Delay, d1	65.7	16.6		65.5	12.4		56.7	56.6			59.0	
Progression Factor	1.00	1.00		1.00	0.82		1.00	1.00			1.00	
Incremental Delay, d2	4.9	2.4		3.0	0.3		26.8	14.8			111.1	
Delay (s)	70.5	19.0		68.7	10.5		83.5	71.4			170.1	
Level of Service	E	B		E	B		F	E			F	
Approach Delay (s)		20.9			14.1			75.3			170.1	
Approach LOS		C			B			E			F	

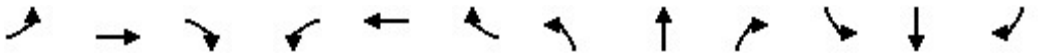
Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Future Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.96	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3464		1770	3380		1770	3539	1526	1770	3180	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3464		1770	3380		1770	3539	1526	1770	3180	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	1533	174	239	913	239	109	467	261	337	239	174
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	62	0	90	0
Lane Group Flow (vph)	478	1701	0	239	1136	0	109	467	199	337	323	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	31.6	59.1		15.6	42.6		12.5	25.9	41.5	25.7	39.2	
Effective Green, g (s)	32.0	60.0		16.0	44.0		12.9	26.9	42.3	26.1	40.1	
Actuated g/C Ratio	0.22	0.41		0.11	0.30		0.09	0.19	0.29	0.18	0.28	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	390	1433		195	1025		157	656	445	318	879	
v/s Ratio Prot	c0.27	c0.49		0.14	0.34		0.06	c0.13	0.05	c0.19	0.10	
v/s Ratio Perm									0.08			
v/c Ratio	1.23	1.19		1.23	1.11		0.69	0.71	0.45	1.06	0.37	
Uniform Delay, d1	56.5	42.5		64.5	50.5		64.1	55.4	41.8	59.5	42.2	
Progression Factor	1.07	0.95		1.10	0.93		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	118.8	90.2		133.9	61.0		10.2	3.9	0.3	67.1	0.2	
Delay (s)	179.3	130.7		204.7	107.7		74.4	59.3	42.1	126.6	42.4	
Level of Service	F	F		F	F		E	E	D	F	D	
Approach Delay (s)		141.4			124.4			55.9			80.2	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	114.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	105.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



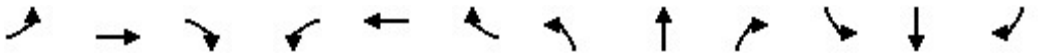
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1940	100	160	1280	60	100	20	220	50	20	20
Future Volume (vph)	10	1940	100	160	1280	60	100	20	220	50	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.98		0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.97	
Satd. Flow (prot)	1770	5039		1770	3512			1788	1553		1742	
Flt Permitted	0.95	1.00		0.95	1.00			0.67	1.00		0.63	
Satd. Flow (perm)	1770	5039		1770	3512			1248	1553		1126	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	2109	109	174	1391	65	109	22	239	54	22	22
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	202	0	8	0
Lane Group Flow (vph)	11	2215	0	174	1454	0	0	131	37	0	90	0
Confl. Peds. (#/hr)			3	3								
Confl. Bikes (#/hr)			11			1			5			20
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		
Actuated Green, G (s)	2.0	90.1		18.6	106.7			21.7	21.7		21.7	
Effective Green, g (s)	2.4	91.4		19.0	108.0			22.6	22.6		22.6	
Actuated g/C Ratio	0.02	0.63		0.13	0.74			0.16	0.16		0.16	
Clearance Time (s)	4.4	5.3		4.4	5.3			4.9	4.9		4.9	
Vehicle Extension (s)	2.0	4.4		2.0	4.4			2.0	2.0		2.0	
Lane Grp Cap (vph)	29	3176		231	2615			194	242		175	
v/s Ratio Prot	0.01	c0.44		c0.10	0.41							
v/s Ratio Perm								c0.10	0.02		0.08	
v/c Ratio	0.38	0.70		0.75	0.56			0.68	0.15		0.52	
Uniform Delay, d1	70.6	17.7		60.7	8.1			57.7	52.9		56.2	
Progression Factor	0.86	1.19		1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.3	0.1		11.6	0.9			7.1	0.1		1.1	
Delay (s)	61.0	21.2		72.4	8.9			64.8	53.0		57.3	
Level of Service	E	C		E	A			E	D		E	
Approach Delay (s)		21.4			15.7			57.2			57.3	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

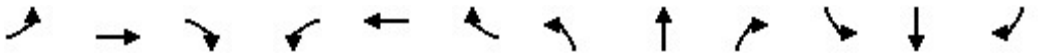
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	380	2040	0	0	0	0	0	350	190
Future Volume (vph)	0	0	0	380	2040	0	0	0	0	0	350	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0						4.0	
Lane Util. Factor					0.91						0.91	
Frpb, ped/bikes					1.00						0.99	
Flpb, ped/bikes					1.00						1.00	
Frt					1.00						0.95	
Flt Protected					0.99						1.00	
Satd. Flow (prot)					5038						4778	
Flt Permitted					0.99						1.00	
Satd. Flow (perm)					5038						4778	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	413	2217	0	0	0	0	0	380	207
RTOR Reduction (vph)	0	0	0	0	13	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2617	0	0	0	0	0	587	0
Confl. Peds. (#/hr)				6								7
Turn Type				Perm	NA						NA	
Protected Phases					6						4	
Permitted Phases				6								
Actuated Green, G (s)					61.8						18.0	
Effective Green, g (s)					63.1						18.9	
Actuated g/C Ratio					0.70						0.21	
Clearance Time (s)					5.3						4.9	
Vehicle Extension (s)					0.2						0.2	
Lane Grp Cap (vph)					3532						1003	
v/s Ratio Prot											c0.12	
v/s Ratio Perm					0.52							
v/c Ratio					0.74						0.59	
Uniform Delay, d1					8.4						32.0	
Progression Factor					1.00						0.91	
Incremental Delay, d2					1.4						0.1	
Delay (s)					9.8						29.3	
Level of Service					A						C	
Approach Delay (s)		0.0			9.8			0.0			29.3	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



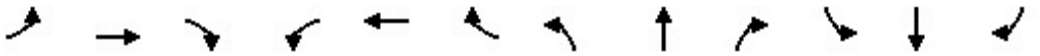
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1640	150	0	0	0	0	0	0	310	420	0
Future Volume (vph)	0	1640	150	0	0	0	0	0	0	310	420	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									0.99	
Frt		0.99									1.00	
Flt Protected		1.00									0.98	
Satd. Flow (prot)		5011									4938	
Flt Permitted		1.00									0.98	
Satd. Flow (perm)		5011									4938	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1783	163	0	0	0	0	0	0	337	457	0
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	0	0	16	0
Lane Group Flow (vph)	0	1936	0	0	0	0	0	0	0	0	778	0
Confl. Peds. (#/hr)			9							14		
Turn Type		NA								Perm	NA	
Protected Phases		2									4	
Permitted Phases										4		
Actuated Green, G (s)		59.1									21.9	
Effective Green, g (s)		59.1									22.9	
Actuated g/C Ratio		0.66									0.25	
Clearance Time (s)		4.0									5.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		3290									1256	
v/s Ratio Prot		c0.39										
v/s Ratio Perm											0.16	
v/c Ratio		0.59									0.62	
Uniform Delay, d1		8.6									29.7	
Progression Factor		0.39									0.76	
Incremental Delay, d2		0.5									0.8	
Delay (s)		3.9									23.4	
Level of Service		A									C	
Approach Delay (s)		3.9			0.0			0.0			23.4	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1270	120	150	1410	120	120	50	130	80	80	210
Future Volume (vph)	240	1270	120	150	1410	120	120	50	130	80	80	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95		1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3494		1770	3539	1557	1770	1863	1583	3433	1863	1563
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	1380	130	163	1533	130	130	54	141	87	87	228
RTOR Reduction (vph)	0	6	0	0	0	121	0	0	118	0	0	136
Lane Group Flow (vph)	261	1504	0	163	1533	9	130	54	23	87	87	92
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA		Prot	NA	custom	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases						7			8			4
Actuated Green, G (s)	7.0	40.8		9.0	42.9	5.7	7.0	12.2	12.2	5.7	11.8	11.8
Effective Green, g (s)	7.0	42.3		9.0	44.3	5.7	7.0	14.0	14.0	5.7	12.7	12.7
Actuated g/C Ratio	0.08	0.49		0.10	0.51	0.07	0.08	0.16	0.16	0.07	0.15	0.15
Clearance Time (s)	4.0	5.5		4.0	5.4	4.0	4.0	5.8	5.8	4.0	4.9	4.9
Vehicle Extension (s)	2.0	3.7		2.0	4.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0
Lane Grp Cap (vph)	276	1698		183	1802	102	142	299	254	224	271	228
v/s Ratio Prot	0.08	0.43		c0.09	c0.43		c0.07	0.03		0.03	0.05	
v/s Ratio Perm						0.01			0.01			c0.06
v/c Ratio	0.95	0.89		0.89	0.85	0.08	0.92	0.18	0.09	0.39	0.32	0.40
Uniform Delay, d1	39.8	20.2		38.5	18.5	38.2	39.7	31.5	31.1	39.0	33.3	33.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	39.0	7.2		36.8	5.3	0.1	49.8	0.1	0.1	0.4	0.7	1.2
Delay (s)	78.8	27.4		75.3	23.8	38.3	89.5	31.6	31.1	39.4	34.0	34.9
Level of Service	E	C		E	C	D	F	C	C	D	C	C
Approach Delay (s)		35.0			29.4			54.6			35.7	
Approach LOS		C			C			D			D	

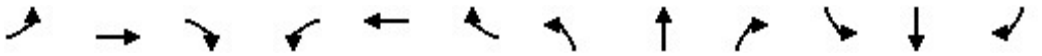
Intersection Summary			
HCM 2000 Control Delay	34.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	87.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	200	1800	220	340	570	0	0	350	120
Future Volume (vph)	0	0	0	200	1800	220	340	570	0	0	350	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.9		4.4	4.9			5.4	
Lane Util. Factor					0.86		1.00	0.95			0.95	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6258		1770	3539			3389	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6258		1770	3539			3389	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	211	1895	232	358	600	0	0	368	126
RTOR Reduction (vph)	0	0	0	0	16	0	0	0	0	0	31	0
Lane Group Flow (vph)	0	0	0	0	2322	0	358	600	0	0	463	0
Confl. Peds. (#/hr)	4		13	13		4	2		2	2		2
Confl. Bikes (#/hr)												1
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					6		3	8			4	
Permitted Phases				6								
Actuated Green, G (s)					51.4		25.7	48.8			18.2	
Effective Green, g (s)					51.4		25.7	48.8			18.2	
Actuated g/C Ratio					0.47		0.23	0.44			0.17	
Clearance Time (s)					4.9		4.4	4.9			5.4	
Vehicle Extension (s)					2.4		3.0	3.3			2.4	
Lane Grp Cap (vph)					2924		413	1570			560	
v/s Ratio Prot							c0.20	0.17			c0.14	
v/s Ratio Perm					0.37							
v/c Ratio					0.79		0.87	0.38			0.83	
Uniform Delay, d1					24.8		40.5	20.5			44.4	
Progression Factor					1.00		1.00	1.00			1.00	
Incremental Delay, d2					2.3		17.1	0.2			9.5	
Delay (s)					27.1		57.6	20.7			53.9	
Level of Service					C		E	C			D	
Approach Delay (s)		0.0			27.1			34.5			53.9	
Approach LOS		A			C			C			D	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.7
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1210	100	0	0	0	0	800	420	140	330	0
Future Volume (vph)	120	1210	100	0	0	0	0	800	420	140	330	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0					4.9		4.0	4.9	
Lane Util. Factor		0.91	1.00					0.91		1.00	0.91	
Frpb, ped/bikes		1.00	0.97					0.99		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5061	1532					4775		1770	5085	
Flt Permitted		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)		5061	1532					4775		1770	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	1315	109	0	0	0	0	870	457	152	359	0
RTOR Reduction (vph)	0	0	65	0	0	0	0	85	0	0	0	0
Lane Group Flow (vph)	0	1445	44	0	0	0	0	1242	0	152	359	0
Confl. Peds. (#/hr)	5		25				6		12	12		6
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		2						8		7	4	
Permitted Phases	2		2									
Actuated Green, G (s)		35.1	35.1					25.1		15.6	45.1	
Effective Green, g (s)		36.0	36.0					25.1		16.0	45.1	
Actuated g/C Ratio		0.40	0.40					0.28		0.18	0.50	
Clearance Time (s)		4.9	4.9					4.9		4.4	4.9	
Vehicle Extension (s)		4.4	4.4					3.3		2.0	3.3	
Lane Grp Cap (vph)		2024	612					1331		314	2548	
v/s Ratio Prot								c0.26		c0.09	0.07	
v/s Ratio Perm		0.29	0.03									
v/c Ratio		0.71	0.07					0.93		0.48	0.14	
Uniform Delay, d1		22.7	16.7					31.6		33.3	12.1	
Progression Factor		1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2		2.2	0.2					13.1		5.3	0.1	
Delay (s)		24.9	16.9					44.8		38.5	12.2	
Level of Service		C	B					D		D	B	
Approach Delay (s)		24.3			0.0			44.8			20.0	
Approach LOS		C			A			D			C	

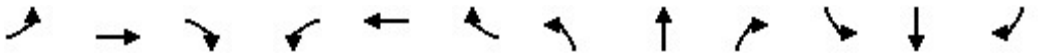
Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.9
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1430	750	510	1490	460	260
Future Volume (vph)	1430	750	510	1490	460	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.5	4.0	4.0	4.0
Lane Util. Factor	0.95	1.00	0.97	0.95	0.97	0.91
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3539	1569	3433	3539	3433	1418
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3539	1569	3433	3539	3433	1418
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1554	815	554	1620	500	283
RTOR Reduction (vph)	0	2	0	0	0	217
Lane Group Flow (vph)	1554	813	554	1620	500	66
Confl. Peds. (#/hr)						1
Confl. Bikes (#/hr)		6				3
Turn Type	NA	pm+ov	Prot	NA	Prot	Perm
Protected Phases	2	8	1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	40.6	60.1	15.8	61.6	19.5	19.5
Effective Green, g (s)	42.8	64.5	15.7	63.0	21.7	21.7
Actuated g/C Ratio	0.46	0.70	0.17	0.68	0.23	0.23
Clearance Time (s)	6.2	6.2	4.4	5.4	6.2	6.2
Vehicle Extension (s)	4.0	2.0	2.0	5.2	2.0	2.0
Lane Grp Cap (vph)	1633	1159	581	2405	803	331
v/s Ratio Prot	c0.44	c0.16	c0.16	0.46	0.15	
v/s Ratio Perm		0.35				0.05
v/c Ratio	0.95	0.70	0.95	0.67	0.62	0.20
Uniform Delay, d1	24.0	8.4	38.1	8.8	31.8	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.4	1.6	25.9	1.5	1.1	0.1
Delay (s)	37.4	10.0	64.0	10.3	32.9	28.6
Level of Service	D	A	E	B	C	C
Approach Delay (s)	27.9			24.0	31.4	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	92.7	Sum of lost time (s)	12.5
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1080	330	360	350	0	0	0	0	400	0	1190
Future Volume (vph)	0	1080	330	360	350	0	0	0	0	400	0	1190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		3.4
Lane Util. Factor		0.95	1.00	0.97	0.95					1.00		1.00
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1560	3433	3539					1770		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1560	3433	3539					1770		1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1174	359	391	380	0	0	0	0	435	0	1293
RTOR Reduction (vph)	0	0	230	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1174	129	391	380	0	0	0	0	435	0	1293
Confl. Peds. (#/hr)			2	2								
Turn Type		NA	Perm	Prot	NA					Prot		Free
Protected Phases		2		1	6					4		
Permitted Phases			2									Free
Actuated Green, G (s)		25.9	25.9	13.4	43.5					21.9		75.0
Effective Green, g (s)		26.9	26.9	13.6	44.5					22.5		75.0
Actuated g/C Ratio		0.36	0.36	0.18	0.59					0.30		1.00
Clearance Time (s)		5.0	5.0	4.2	5.0					4.6		
Vehicle Extension (s)		0.2	0.2	0.2	0.2					0.2		
Lane Grp Cap (vph)		1269	559	622	2099					531		1583
v/s Ratio Prot		0.33		0.11	0.11					0.25		
v/s Ratio Perm			0.08									c0.82
v/c Ratio		0.93	0.23	0.63	0.18					0.82		0.82
Uniform Delay, d1		23.1	16.8	28.4	6.9					24.4		0.0
Progression Factor		1.00	1.00	0.86	1.39					1.00		1.00
Incremental Delay, d2		12.7	1.0	0.8	0.1					9.1		4.8
Delay (s)		35.8	17.8	25.2	9.7					33.5		4.8
Level of Service		D	B	C	A					C		A
Approach Delay (s)		31.6			17.6			0.0			12.0	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	870	720	0	0	590	500	190	20	450	0	0	0
Future Volume (vph)	870	720	0	0	590	500	190	20	450	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0			5.0			4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95			1.00	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (prot)	3433	3539			3272			1782	1583			
Flt Permitted	0.95	1.00			1.00			0.96	1.00			
Satd. Flow (perm)	3433	3539			3272			1782	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	946	783	0	0	641	543	207	22	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	185	0	0	0	231	0	0	0
Lane Group Flow (vph)	946	783	0	0	999	0	0	229	258	0	0	0
Confl. Peds. (#/hr)	3		1	1		3						
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	5	2			6		4	4				
Permitted Phases									4			
Actuated Green, G (s)	20.8	54.5			29.5			10.4	10.4			
Effective Green, g (s)	21.0	55.0			30.0			11.0	11.0			
Actuated g/C Ratio	0.28	0.73			0.40			0.15	0.15			
Clearance Time (s)	4.2	5.5			5.5			4.6	4.6			
Vehicle Extension (s)	0.2	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	961	2595			1308			261	232			
v/s Ratio Prot	c0.28	0.22			c0.31			0.13				
v/s Ratio Perm									c0.16			
v/c Ratio	0.98	0.30			0.76			0.88	1.11			
Uniform Delay, d1	26.8	3.4			19.4			31.3	32.0			
Progression Factor	1.40	0.66			1.00			1.00	1.00			
Incremental Delay, d2	18.8	0.2			4.3			25.8	92.1			
Delay (s)	56.5	2.4			23.7			57.1	124.1			
Level of Service	E	A			C			E	F			
Approach Delay (s)		32.0			23.7			102.7			0.0	
Approach LOS		C			C			F			A	

Intersection Summary			
HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	230	200	150	870	890	180
Future Volume (vph)	230	200	150	870	890	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5		4.5	4.5	4.5	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frt	0.94		1.00	1.00	0.97	
Flt Protected	0.97		0.95	1.00	1.00	
Satd. Flow (prot)	1700		1770	3539	3450	
Flt Permitted	0.97		0.95	1.00	1.00	
Satd. Flow (perm)	1700		1770	3539	3450	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	217	163	946	967	196
RTOR Reduction (vph)	26	0	0	0	11	0
Lane Group Flow (vph)	441	0	163	946	1152	0
Turn Type	Prot		Prot	NA	NA	
Protected Phases	7		1	6	2	
Permitted Phases						
Actuated Green, G (s)	37.9		16.0	83.1	62.6	
Effective Green, g (s)	37.9		16.0	83.1	62.6	
Actuated g/C Ratio	0.29		0.12	0.64	0.48	
Clearance Time (s)	4.5		4.5	4.5	4.5	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	495		217	2262	1661	
v/s Ratio Prot	c0.26		c0.09	0.27	c0.33	
v/s Ratio Perm						
v/c Ratio	0.89		0.75	0.42	0.69	
Uniform Delay, d1	44.1		55.1	11.5	26.2	
Progression Factor	1.00		1.04	1.26	1.00	
Incremental Delay, d2	18.0		12.5	0.5	2.4	
Delay (s)	62.1		69.6	15.0	28.6	
Level of Service	E		E	B	C	
Approach Delay (s)	62.1			23.0	28.6	
Approach LOS	E			C	C	

Intersection Summary			
HCM 2000 Control Delay	32.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	74.9%	ICU Level of Service	D
Analysis Period (min)	15		

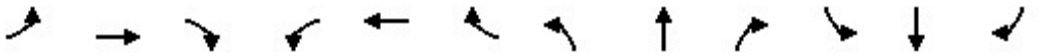
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	430	0	0	360	160
Future Volume (Veh/h)	0	430	0	0	360	160
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	467	0	0	391	174
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				897	1285	
pX, platoon unblocked						
vC, conflicting volume	478	282	565			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	478	282	565			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	35	100			
cM capacity (veh/h)	516	714	1003			

Direction, Lane #	EB 1	SB 1	SB 2
Volume Total	467	261	304
Volume Left	0	0	0
Volume Right	467	0	174
cSH	714	1700	1700
Volume to Capacity	0.65	0.15	0.18
Queue Length 95th (ft)	122	0	0
Control Delay (s)	19.0	0.0	0.0
Lane LOS	C		
Approach Delay (s)	19.0	0.0	
Approach LOS	C		

Intersection Summary			
Average Delay	8.6		
Intersection Capacity Utilization	48.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	30	260	320	290	0	0	0	0	50	720	70
Future Volume (vph)	0	30	260	320	290	0	0	0	0	50	720	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0						4.0	
Lane Util. Factor		1.00		1.00	1.00						0.95	
Frt		0.88		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		1638		1770	1863						3485	
Flt Permitted		1.00		0.50	1.00						1.00	
Satd. Flow (perm)		1638		931	1863						3485	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	33	283	348	315	0	0	0	0	54	783	76
RTOR Reduction (vph)	0	33	0	0	0	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	283	0	348	315	0	0	0	0	0	904	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		26.1		26.1	26.1						25.6	
Effective Green, g (s)		26.1		26.1	26.1						25.6	
Actuated g/C Ratio		0.44		0.44	0.44						0.43	
Clearance Time (s)		4.0		4.0	4.0						4.0	
Vehicle Extension (s)		3.0		3.0	3.0						3.0	
Lane Grp Cap (vph)		716		407	814						1494	
v/s Ratio Prot		0.17			0.17							
v/s Ratio Perm				c0.37							0.26	
v/c Ratio		0.40		0.86	0.39						0.61	
Uniform Delay, d1		11.4		15.1	11.4						13.2	
Progression Factor		1.00		1.00	1.00						1.00	
Incremental Delay, d2		0.4		15.9	0.3						1.8	
Delay (s)		11.8		31.0	11.7						15.0	
Level of Service		B		C	B						B	
Approach Delay (s)		11.8			21.8			0.0			15.0	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	59.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

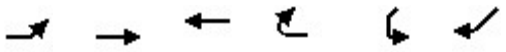
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	120	200	180	370	480	220
Future Volume (vph)	120	200	180	370	480	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.96	
Flt Protected	0.98			0.98	1.00	
Satd. Flow (prot)	1674			1833	1784	
Flt Permitted	0.98			0.51	1.00	
Satd. Flow (perm)	1674			942	1784	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	217	196	402	522	239
RTOR Reduction (vph)	89	0	0	0	22	0
Lane Group Flow (vph)	258	0	0	598	739	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	13.9			47.0	47.0	
Effective Green, g (s)	13.9			47.0	47.0	
Actuated g/C Ratio	0.20			0.68	0.68	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	337			642	1216	
v/s Ratio Prot	c0.15				0.41	
v/s Ratio Perm				c0.63		
v/c Ratio	0.77			0.93	0.61	
Uniform Delay, d1	26.0			9.5	5.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	10.0			22.2	2.3	
Delay (s)	36.0			31.7	8.2	
Level of Service	D			C	A	
Approach Delay (s)	36.0			31.7	8.2	
Approach LOS	D			C	A	

Intersection Summary			
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	68.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	60	1090	1200	60	160	240
Future Volume (vph)	60	1090	1200	60	160	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	0.99		0.92	
Flt Protected	0.95	1.00	1.00		0.98	
Satd. Flow (prot)	1770	3539	3514		1678	
Flt Permitted	0.13	1.00	1.00		0.98	
Satd. Flow (perm)	237	3539	3514		1678	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1185	1304	65	174	261
RTOR Reduction (vph)	0	0	6	0	27	0
Lane Group Flow (vph)	65	1185	1363	0	408	0
Turn Type	Perm	NA	NA		Prot	
Protected Phases		4	8		6	
Permitted Phases	4					
Actuated Green, G (s)	31.5	31.5	31.5		22.1	
Effective Green, g (s)	31.5	31.5	31.5		22.1	
Actuated g/C Ratio	0.51	0.51	0.51		0.36	
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	121	1809	1796		602	
v/s Ratio Prot		0.33	c0.39		c0.24	
v/s Ratio Perm	0.27					
v/c Ratio	0.54	0.66	0.76		0.68	
Uniform Delay, d1	10.1	11.1	12.0		16.7	
Progression Factor	1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.5	0.9	1.9		6.0	
Delay (s)	14.7	11.9	13.9		22.8	
Level of Service	B	B	B		C	
Approach Delay (s)		12.1	13.9		22.8	
Approach LOS		B	B		C	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	61.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	20	90	60	110	280	160	480	370	210	500	160
Future Volume (vph)	130	20	90	60	110	280	160	480	370	210	500	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.95			0.92		1.00	0.93		1.00	0.96	
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1722			1699		1770	3308		1770	3410	
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1722			1699		1770	3308		1770	3410	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	22	98	65	120	280	174	522	402	228	543	174
RTOR Reduction (vph)	0	22	0	0	55	0	0	138	0	0	30	0
Lane Group Flow (vph)	0	239	0	0	410	0	174	786	0	228	687	0
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	
Protected Phases	8	8		4	4		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		15.4			25.5		12.8	24.9		14.2	26.3	
Effective Green, g (s)		15.4			25.5		12.8	24.9		14.2	26.3	
Actuated g/C Ratio		0.16			0.26		0.13	0.25		0.14	0.27	
Clearance Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		270			442		231	840		256	915	
v/s Ratio Prot		c0.14			c0.24		0.10	c0.24		c0.13	0.20	
v/s Ratio Perm												
v/c Ratio		0.89			0.93		0.75	0.94		0.89	0.75	
Uniform Delay, d1		40.4			35.4		41.1	35.8		41.1	32.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		27.2			25.6		13.0	17.3		29.5	3.5	
Delay (s)		67.7			61.0		54.1	53.1		70.6	36.4	
Level of Service		E			E		D	D		E	D	
Approach Delay (s)		67.7			61.0			53.2			44.6	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		

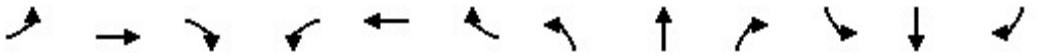
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	180	260	190	140	270	320
Future Volume (vph)	180	260	190	140	270	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			1.00	1.00	
Frt	0.92			1.00	0.93	
Flt Protected	0.98			0.97	1.00	
Satd. Flow (prot)	1680			1811	1726	
Flt Permitted	0.98			0.42	1.00	
Satd. Flow (perm)	1680			776	1726	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	283	207	152	293	348
RTOR Reduction (vph)	82	0	0	0	63	0
Lane Group Flow (vph)	397	0	0	359	578	0
Turn Type	Prot		Perm	NA	NA	
Protected Phases	4			2	6	
Permitted Phases			2			
Actuated Green, G (s)	17.4			38.1	38.1	
Effective Green, g (s)	17.4			38.1	38.1	
Actuated g/C Ratio	0.27			0.60	0.60	
Clearance Time (s)	4.0			4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	460			465	1035	
v/s Ratio Prot	c0.24				0.33	
v/s Ratio Perm				c0.46		
v/c Ratio	0.86			0.77	0.56	
Uniform Delay, d1	21.9			9.5	7.6	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	15.3			11.8	2.2	
Delay (s)	37.2			21.2	9.8	
Level of Service	D			C	A	
Approach Delay (s)	37.2			21.2	9.8	
Approach LOS	D			C	A	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	63.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	200	100	100	100	80	100	2790	240	200	2210	50
Future Volume (vph)	100	200	100	100	100	80	100	2790	240	200	2210	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.95		1.00	0.93		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3362		1770	3304		1770	5025		1770	5069	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3362		1770	3304		1770	5025		1770	5069	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	217	109	109	109	87	109	3033	261	217	2402	54
RTOR Reduction (vph)	0	41	0	0	78	0	0	7	0	0	1	0
Lane Group Flow (vph)	109	285	0	109	118	0	109	3287	0	217	2455	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Effective Green, g (s)	9.0	16.0		9.0	16.0		12.7	95.0		14.0	96.3	
Actuated g/C Ratio	0.06	0.11		0.06	0.11		0.08	0.63		0.09	0.64	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	106	358		106	352		149	3182		165	3254	
v/s Ratio Prot	c0.06	c0.08		0.06	0.04		0.06	c0.65		c0.12	0.48	
v/s Ratio Perm												
v/c Ratio	1.03	0.80		1.03	0.34		0.73	1.03		1.32	0.75	
Uniform Delay, d1	70.5	65.4		70.5	62.1		67.0	27.5		68.0	18.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	95.2	16.6		95.2	2.6		16.8	25.3		178.1	1.7	
Delay (s)	165.7	82.0		165.7	64.6		83.8	52.8		246.1	20.3	
Level of Service	F	F		F	E		F	D		F	C	
Approach Delay (s)		103.0			100.8			53.8			38.6	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	53.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

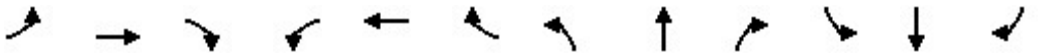
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	100	0	400	620	0	0
Future Volume (vph)	100	0	400	620	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0		
Lane Util. Factor	1.00		1.00	0.95		
Frt	1.00		1.00	1.00		
Flt Protected	0.95		0.95	1.00		
Satd. Flow (prot)	1770		1770	3539		
Flt Permitted	0.95		0.95	1.00		
Satd. Flow (perm)	1770		1770	3539		
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	0	435	674	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	109	0	435	674	0	0
Turn Type	Prot		Perm	NA		
Protected Phases	4			2		
Permitted Phases			2			
Actuated Green, G (s)	16.0		16.0	16.0		
Effective Green, g (s)	16.0		16.0	16.0		
Actuated g/C Ratio	0.40		0.40	0.40		
Clearance Time (s)	4.0		4.0	4.0		
Lane Grp Cap (vph)	708		708	1415		
v/s Ratio Prot	c0.06			0.19		
v/s Ratio Perm			c0.25			
v/c Ratio	0.15		0.61	0.48		
Uniform Delay, d1	7.7		9.5	8.9		
Progression Factor	1.00		1.00	1.00		
Incremental Delay, d2	0.5		4.0	1.2		
Delay (s)	8.1		13.5	10.0		
Level of Service	A		B	B		
Approach Delay (s)	8.1			11.4	0.0	
Approach LOS	A			B	A	

Intersection Summary			
HCM 2000 Control Delay	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Peak Hour Intersection Calculation Worksheets - Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	5085	1531	3433	1863	1565	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	5085	1531	3433	1863	1565	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	123	0	0	65	0	0	35	0	12	0
Lane Group Flow (vph)	65	1239	312	174	1446	131	522	435	128	630	422	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	6.2	43.6	69.1	11.2	48.5	76.4	25.5	34.8	46.0	27.9	35.4	
Effective Green, g (s)	6.6	44.9	71.7	11.6	49.9	79.2	25.9	35.6	47.6	26.9	36.6	
Actuated g/C Ratio	0.05	0.33	0.53	0.09	0.37	0.59	0.19	0.26	0.35	0.20	0.27	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	86	1691	870	294	1879	916	658	491	593	684	480	
v/s Ratio Prot	0.04	0.24	0.07	c0.05	c0.28	0.03	0.15	0.23	0.02	c0.18	c0.24	
v/s Ratio Perm			0.13			0.05			0.06			
v/c Ratio	0.76	0.73	0.36	0.59	0.77	0.14	0.79	0.89	0.22	0.92	0.88	
Uniform Delay, d1	63.4	39.8	18.3	59.4	37.5	12.6	52.0	47.7	30.6	53.0	47.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	27.9	2.9	0.1	2.1	3.1	0.0	6.1	17.6	0.1	17.6	16.0	
Delay (s)	91.3	42.6	18.4	61.5	40.6	12.6	58.1	65.4	30.7	70.6	63.1	
Level of Service	F	D	B	E	D	B	E	E	C	E	E	
Approach Delay (s)		38.4			39.6			56.9			67.5	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	47.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		

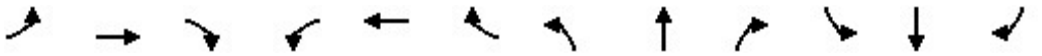
c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	550	1190	370	0	0	650
Future Volume (vph)	550	1190	370	0	0	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	1293	402	0	0	707
RTOR Reduction (vph)	0	475	0	0	0	0
Lane Group Flow (vph)	598	818	402	0	0	707
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	11.0	11.0	12.2			12.2
Effective Green, g (s)	11.0	11.0	12.2			12.2
Actuated g/C Ratio	0.30	0.30	0.33			0.33
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1015	1067	1160			1160
v/s Ratio Prot	0.17		0.11			c0.20
v/s Ratio Perm		c0.23				
v/c Ratio	0.59	0.77	0.35			0.61
Uniform Delay, d1	11.2	11.9	9.5			10.5
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.6	3.0	0.1			0.6
Delay (s)	11.7	15.0	9.5			11.1
Level of Service	B	B	A			B
Approach Delay (s)	13.9		9.5			11.1
Approach LOS	B		A			B

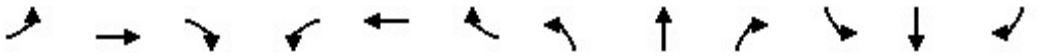
Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	37.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



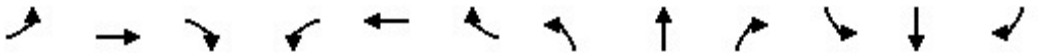
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	300	270	30	140	290	190	460	50	440	520	240
Future Volume (vph)	440	300	270	30	140	290	190	460	50	440	520	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.1	4.0	3.1	3.0	4.0	4.0	3.1	4.0		3.1	4.0	4.0
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1565	1770	3539	1572	3433	3482		3433	3539	1565
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1565	1770	3539	1572	3433	3482		3433	3539	1565
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	326	293	33	152	315	207	500	54	478	565	261
RTOR Reduction (vph)	0	0	63	0	0	45	0	6	0	0	0	127
Lane Group Flow (vph)	478	326	230	33	152	270	207	548	0	478	565	134
Confl. Peds. (#/hr)			4			3			5			8
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	20.8	36.9	49.2	3.2	19.2	40.0	12.3	22.7		20.8	31.2	52.0
Effective Green, g (s)	21.7	37.8	51.0	4.2	20.2	40.0	13.2	23.6		21.7	32.1	52.0
Actuated g/C Ratio	0.21	0.37	0.50	0.04	0.20	0.39	0.13	0.23		0.21	0.32	0.51
Clearance Time (s)	4.0	4.9	4.0	4.0	5.0	4.0	4.0	4.9		4.0	4.9	4.0
Vehicle Extension (s)	3.0	0.2	3.0	3.0	8.0	3.0	3.0	3.1		3.0	5.5	3.0
Lane Grp Cap (vph)	734	694	787	73	705	620	446	810		734	1120	802
v/s Ratio Prot	c0.14	c0.18	0.04	0.02	0.04	0.09	0.06	c0.16		c0.14	0.16	0.03
v/s Ratio Perm			0.11			0.08						0.05
v/c Ratio	0.65	0.47	0.29	0.45	0.22	0.44	0.46	0.68		0.65	0.50	0.17
Uniform Delay, d1	36.4	24.2	14.7	47.5	34.0	22.4	40.8	35.4		36.4	28.2	13.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	2.1	0.2	0.2	4.4	0.7	0.5	0.8	2.3		2.1	0.9	0.1
Delay (s)	38.5	24.4	14.9	51.9	34.6	22.9	41.6	37.7		38.5	29.1	13.3
Level of Service	D	C	B	D	C	C	D	D		D	C	B
Approach Delay (s)		28.0			28.4			38.8			29.3	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	101.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Future Volume (vph)	220	1460	170	340	1800	300	120	330	210	230	280	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6280		3433	6408	1544	1770	3539	1545	3433	3539	1554
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6280		3433	6408	1544	1770	3539	1545	3433	3539	1554
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	1587	185	370	1957	326	130	359	228	250	304	196
RTOR Reduction (vph)	0	17	0	0	0	77	0	0	74	0	0	80
Lane Group Flow (vph)	239	1755	0	370	1957	249	130	359	154	250	304	116
Confl. Peds. (#/hr)	14		25	25		14	18		27	27		14
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	8.8	39.3		13.4	44.0	53.5	9.5	24.0	37.4	9.5	24.0	32.8
Effective Green, g (s)	9.2	40.4		13.8	45.0	53.5	9.9	24.9	39.2	9.9	24.9	34.6
Actuated g/C Ratio	0.09	0.38		0.13	0.43	0.51	0.09	0.24	0.37	0.09	0.24	0.33
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	2416		451	2746	786	166	839	628	323	839	512
v/s Ratio Prot	0.07	c0.28		0.11	c0.31	0.03	c0.07	c0.10	0.03	c0.07	0.09	0.02
v/s Ratio Perm						0.13			0.07			0.05
v/c Ratio	0.80	0.73		0.82	0.71	0.32	0.78	0.43	0.25	0.77	0.36	0.23
Uniform Delay, d1	47.0	27.6		44.4	24.7	15.1	46.5	34.0	22.7	46.5	33.4	25.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	12.8	1.9		10.9	1.6	0.1	19.6	0.1	0.1	10.1	0.1	0.1
Delay (s)	59.8	29.5		55.3	26.3	15.2	66.1	34.1	22.8	56.5	33.5	25.6
Level of Service	E	C		E	C	B	E	C	C	E	C	C
Approach Delay (s)		33.1			29.0			36.3			39.1	
Approach LOS		C			C			D			D	

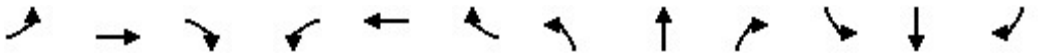
Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	105.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	350	190	540	520	0	0	0	0	280	360	410
Future Volume (vph)	0	350	190	540	520	0	0	0	0	280	360	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3358	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3358	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	380	207	587	565	0	0	0	0	304	391	446
RTOR Reduction (vph)	0	0	90	0	0	0	0	0	0	0	0	332
Lane Group Flow (vph)	0	380	117	587	565	0	0	0	0	213	482	114
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		30.2	30.2	16.1	50.7					19.5	19.5	19.5
Effective Green, g (s)		31.1	31.1	16.5	51.6					20.4	20.4	20.4
Actuated g/C Ratio		0.39	0.39	0.21	0.65					0.25	0.25	0.25
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1375	615	708	2282					410	856	710
v/s Ratio Prot		c0.11		c0.17	0.16							
v/s Ratio Perm			0.07							0.13	0.14	0.04
v/c Ratio		0.28	0.19	0.83	0.25					0.52	0.56	0.16
Uniform Delay, d1		16.7	16.1	30.4	6.0					25.6	25.9	23.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	7.6	0.3					0.5	0.5	0.0
Delay (s)		17.2	16.8	38.0	6.3					26.1	26.4	23.2
Level of Service		B	B	D	A					C	C	C
Approach Delay (s)		17.1			22.4			0.0			25.1	
Approach LOS		B			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

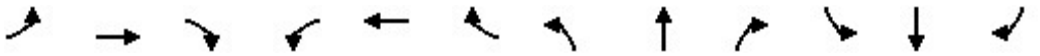


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	660	80	40	540	0	0	0	0	540	340	510
Future Volume (vph)	0	660	80	40	540	0	0	0	0	540	340	510
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		5003		1770	3539						4663	1362
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		5003		1770	3539						4663	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	717	87	43	587	0	0	0	0	587	370	554
RTOR Reduction (vph)	0	23	0	0	0	0	0	0	0	0	0	106
Lane Group Flow (vph)	0	781	0	43	587	0	0	0	0	0	957	448
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		22.1		2.8	27.6						25.4	25.4
Effective Green, g (s)		20.3		3.2	27.5						24.5	26.8
Actuated g/C Ratio		0.31		0.05	0.42						0.38	0.41
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1562		87	1497						1757	561
v/s Ratio Prot		c0.16		0.02	c0.17							
v/s Ratio Perm											0.21	c0.33
v/c Ratio		0.50		0.49	0.39						0.93dl	0.80
Uniform Delay, d1		18.2		30.1	13.0						15.9	16.7
Progression Factor		1.00		1.32	0.84						1.00	1.00
Incremental Delay, d2		1.1		1.5	0.7						0.2	7.3
Delay (s)		19.4		41.2	11.6						16.1	24.0
Level of Service		B		D	B						B	C
Approach Delay (s)		19.4			13.6			0.0			19.0	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	65.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

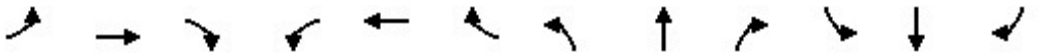
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Future Volume (vph)	20	30	30	440	110	160	40	1330	210	140	740	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.93		1.00	0.91		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1710		1764	1697		1770	4981		3433	4955	
Flt Permitted	0.47	1.00		0.71	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	868	1710		1326	1697		1770	4981		3433	4955	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	33	33	478	120	174	43	1446	228	152	804	141
RTOR Reduction (vph)	0	21	0	0	59	0	0	23	0	0	26	0
Lane Group Flow (vph)	22	45	0	478	235	0	43	1651	0	152	919	0
Confl. Peds. (#/hr)			4	4			1					1
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	33.8	33.8		33.1	33.1		3.5	33.3		8.6	38.2	
Effective Green, g (s)	33.8	33.8		33.5	33.5		3.5	34.7		9.1	40.3	
Actuated g/C Ratio	0.38	0.38		0.37	0.37		0.04	0.39		0.10	0.45	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.5	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		3.0	3.7	
Lane Grp Cap (vph)	327	645		495	634		69	1929		348	2228	
v/s Ratio Prot		0.03			0.14		0.02	c0.33		c0.04	0.19	
v/s Ratio Perm	0.03			c0.36								
v/c Ratio	0.07	0.07		0.97	0.37		0.62	0.86		0.44	0.41	
Uniform Delay, d1	17.8	17.8		27.5	20.4		42.4	25.2		37.8	16.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.0		31.5	0.4		11.9	5.1		0.9	0.6	
Delay (s)	17.9	17.9		59.0	20.8		54.3	30.3		38.7	17.2	
Level of Service	B	B		E	C		D	C		D	B	
Approach Delay (s)		17.9			44.4			30.9			20.2	
Approach LOS		B			D			C			C	

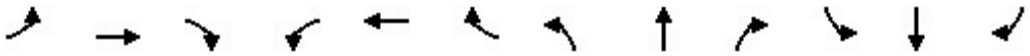
Intersection Summary			
HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	89.6	Sum of lost time (s)	12.3
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Future Volume (vph)	650	560	140	150	730	170	300	690	100	110	710	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4933		1770	4926		3433	5085	1562	1770	5085	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4933		1770	4926		3433	5085	1562	1770	5085	1568
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	707	609	152	163	793	185	326	750	109	120	772	272
RTOR Reduction (vph)	0	35	0	0	30	0	0	0	80	0	0	52
Lane Group Flow (vph)	707	726	0	163	948	0	326	750	29	120	772	220
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	28.3	42.1		14.4	27.6		14.9	30.0	30.0	9.3	24.3	52.6
Effective Green, g (s)	28.7	43.3		14.8	29.4		15.3	30.9	30.0	9.7	25.3	53.4
Actuated g/C Ratio	0.25	0.38		0.13	0.26		0.13	0.27	0.26	0.08	0.22	0.47
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	858	1862		228	1262		457	1369	408	149	1121	730
v/s Ratio Prot	c0.21	0.15		0.09	c0.19		c0.09	0.15		0.07	c0.15	0.08
v/s Ratio Perm									0.02			0.06
v/c Ratio	0.82	0.39		0.71	0.75		0.71	0.55	0.07	0.81	0.69	0.30
Uniform Delay, d1	40.6	26.1		47.9	39.3		47.6	35.9	31.9	51.6	41.1	19.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2	0.2		8.5	2.5		4.4	1.6	0.3	24.9	3.5	0.1
Delay (s)	46.8	26.2		56.5	41.8		52.0	37.5	32.2	76.5	44.5	19.1
Level of Service	D	C		E	D		D	D	C	E	D	B
Approach Delay (s)		36.1			43.9			41.0			41.9	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	40.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Future Volume (vph)	140	230	70	20	140	210	50	180	250	20	20	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			0.98			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.91			0.93			0.94	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1787		1770	1695			1690			1728	
Flt Permitted	0.95	1.00		0.95	1.00			0.96			0.81	
Satd. Flow (perm)	1770	1787		1770	1695			1633			1412	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	250	76	22	152	228	54	196	272	22	22	33
RTOR Reduction (vph)	0	13	0	0	66	0	0	53	0	0	23	0
Lane Group Flow (vph)	152	313	0	22	314	0	0	469	0	0	54	0
Confl. Peds. (#/hr)			3	3					8	8		
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	11.5	36.4		1.5	26.0			22.4			22.4	
Effective Green, g (s)	11.9	37.3		2.4	26.9			23.3			23.3	
Actuated g/C Ratio	0.16	0.50		0.03	0.36			0.31			0.31	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	284	899		57	615			513			443	
v/s Ratio Prot	c0.09	0.17		0.01	c0.19							
v/s Ratio Perm								c0.29			0.04	
v/c Ratio	0.54	0.35		0.39	0.51			0.91			0.12	
Uniform Delay, d1	28.6	11.1		35.1	18.5			24.4			18.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	1.1		4.3	3.0			20.4			0.0	
Delay (s)	29.5	12.1		39.4	21.5			44.8			18.2	
Level of Service	C	B		D	C			D			B	
Approach Delay (s)		17.7			22.5			44.8			18.2	
Approach LOS		B			C			D			B	

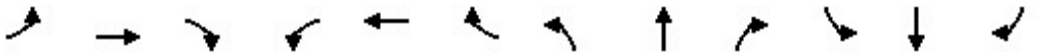
Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	74.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	660	90	170	1240	70	70	130	110	260	380	250
Future Volume (vph)	190	660	90	170	1240	70	70	130	110	260	380	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4963		1770	5030		1770	3539	1550	1770	3267	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4963		1770	5030		1770	3539	1550	1770	3267	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	717	98	185	1348	76	76	141	120	283	413	272
RTOR Reduction (vph)	0	14	0	0	5	0	0	0	45	0	91	0
Lane Group Flow (vph)	207	801	0	185	1419	0	76	141	75	283	594	0
Confl. Peds. (#/hr)	23		24	24		23	19		14	14		19
Confl. Bikes (#/hr)			9			5			12			6
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	10.1	39.6		16.3	45.3		7.6	21.4	37.7	24.0	37.9	
Effective Green, g (s)	10.5	40.5		16.7	46.7		8.0	22.4	38.5	24.4	38.8	
Actuated g/C Ratio	0.09	0.34		0.14	0.39		0.07	0.19	0.32	0.20	0.32	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	300	1675		246	1957		118	660	497	359	1056	
v/s Ratio Prot	0.06	0.16		c0.10	c0.28		c0.04	0.04	0.02	c0.16	c0.18	
v/s Ratio Perm									0.03			
v/c Ratio	0.69	0.48		0.75	0.73		0.64	0.21	0.15	0.79	0.56	
Uniform Delay, d1	53.2	31.4		49.7	31.2		54.6	41.3	29.1	45.3	33.6	
Progression Factor	1.26	0.72		1.05	0.79		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.9	0.9		9.0	1.9		8.7	0.2	0.1	10.1	0.6	
Delay (s)	71.9	23.6		61.2	26.4		63.3	41.6	29.1	55.5	34.2	
Level of Service	E	C		E	C		E	D	C	E	C	
Approach Delay (s)		33.4			30.4			42.0			40.4	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1567	3433	5085	1527	3433	1863	1558	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1567	3433	5085	1527	3433	1863	1558	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1815	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	70	0	0	90	0	0	60	0	4	0
Lane Group Flow (vph)	98	1815	539	130	1261	301	500	380	136	326	322	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	12.2	67.0	91.9	8.6	63.3	84.5	24.9	35.7	44.3	21.2	30.2	
Effective Green, g (s)	12.6	68.3	94.5	9.0	64.7	87.3	25.3	36.5	45.9	20.2	31.4	
Actuated g/C Ratio	0.08	0.46	0.63	0.06	0.43	0.58	0.17	0.24	0.31	0.13	0.21	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	148	2315	987	205	2193	888	579	453	476	462	381	
v/s Ratio Prot	c0.06	c0.36	0.10	0.04	0.25	0.05	0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.25			0.15			0.07			
v/c Ratio	0.66	0.78	0.55	0.63	0.58	0.34	0.86	0.84	0.28	0.71	0.85	
Uniform Delay, d1	66.6	34.6	15.7	68.9	32.3	16.3	60.7	54.0	39.6	62.1	57.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.3	2.7	0.3	4.6	1.1	0.1	12.3	13.2	0.1	4.0	15.1	
Delay (s)	75.0	37.3	16.0	73.5	33.4	16.4	72.9	67.2	39.7	66.0	72.1	
Level of Service	E	D	B	E	C	B	E	E	D	E	E	
Approach Delay (s)		33.7			32.6			64.9			69.1	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	42.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	830	1790	930	0	0	870
Future Volume (vph)	830	1790	930	0	0	870
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0			7.0
Lane Util. Factor	0.97	0.76	0.95			0.95
Frt	1.00	0.85	1.00			1.00
Flt Protected	0.95	1.00	1.00			1.00
Satd. Flow (prot)	3433	3610	3539			3539
Flt Permitted	0.95	1.00	1.00			1.00
Satd. Flow (perm)	3433	3610	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	902	1946	1011	0	0	946
RTOR Reduction (vph)	0	7	0	0	0	0
Lane Group Flow (vph)	902	1939	1011	0	0	946
Turn Type	Prot	Perm	NA			NA
Protected Phases	4		2			6
Permitted Phases		4				
Actuated Green, G (s)	71.1	71.1	41.5			41.5
Effective Green, g (s)	71.1	71.1	41.5			41.5
Actuated g/C Ratio	0.56	0.56	0.33			0.33
Clearance Time (s)	7.0	7.0	7.0			7.0
Vehicle Extension (s)	0.2	0.2	0.2			0.2
Lane Grp Cap (vph)	1928	2027	1160			1160
v/s Ratio Prot	0.26		c0.29			0.27
v/s Ratio Perm		c0.54				
v/c Ratio	0.47	0.96	0.87			0.82
Uniform Delay, d1	16.5	26.3	40.0			39.0
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	0.1	11.3	7.2			4.3
Delay (s)	16.6	37.5	47.2			43.3
Level of Service	B	D	D			D
Approach Delay (s)	30.9		47.2			43.3
Approach LOS	C		D			D

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	126.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	420	310	80	540	700	460	510	130	420	700	390
Future Volume (vph)	380	420	310	80	540	700	460	510	130	420	700	390
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.9	4.0	4.0		4.0	4.0	4.9
Lane Util. Factor	0.97	1.00	1.00	1.00	0.95	1.00	0.97	0.95		0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1568	1770	3539	1569	3433	3432		3433	3539	1562
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3433	1863	1568	1770	3539	1569	3433	3432		3433	3539	1562
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	457	337	87	587	761	500	554	141	457	761	424
RTOR Reduction (vph)	0	0	47	0	0	45	0	17	0	0	0	51
Lane Group Flow (vph)	413	457	290	87	587	716	500	678	0	457	761	373
Confl. Peds. (#/hr)	6		3	3		6	6					6
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA		Prot	NA	pm+ov
Protected Phases	5	2	3	1	6	7	3	8		7	4	5
Permitted Phases			2			6						4
Actuated Green, G (s)	18.1	42.2	67.1	8.0	32.1	70.5	24.9	31.7		38.4	45.2	63.3
Effective Green, g (s)	19.0	43.1	68.9	9.0	33.1	70.5	25.8	32.6		39.3	46.1	63.3
Actuated g/C Ratio	0.14	0.31	0.49	0.06	0.24	0.50	0.18	0.23		0.28	0.33	0.45
Clearance Time (s)	4.9	4.9	4.9	5.0	5.0	4.9	4.9	4.9		4.9	4.9	4.9
Vehicle Extension (s)	0.2	0.2	3.1	8.0	8.0	5.5	3.1	3.1		5.5	5.5	0.2
Lane Grp Cap (vph)	465	573	816	113	836	845	632	799		963	1165	706
v/s Ratio Prot	0.12	c0.25	0.07	0.05	0.17	c0.23	0.15	c0.20		0.13	0.22	0.07
v/s Ratio Perm			0.12			0.22						0.17
v/c Ratio	0.89	0.80	0.36	0.77	0.70	0.85	0.79	0.85		0.47	0.65	0.53
Uniform Delay, d1	59.5	44.4	21.9	64.5	48.9	30.1	54.5	51.3		41.8	40.1	27.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	17.8	11.0	0.3	37.4	4.9	8.9	6.7	8.4		0.9	2.0	0.3
Delay (s)	77.3	55.5	22.2	101.9	53.8	39.0	61.3	59.8		42.7	42.1	27.9
Level of Service	E	E	C	F	D	D	E	E		D	D	C
Approach Delay (s)		53.6			48.9			60.4			38.6	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	49.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

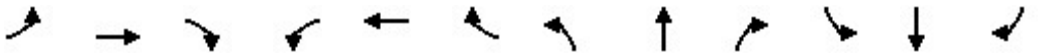
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Future Volume (vph)	380	1870	200	510	1550	390	230	640	410	350	530	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.4	4.0	4.0	3.5	4.0	4.0	3.5
Lane Util. Factor	0.97	0.86		0.97	0.86	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.93	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	6238		3433	6408	1468	1770	3539	1526	3433	3539	1520
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	6238		3433	6408	1468	1770	3539	1526	3433	3539	1520
Peak-hour factor, PHF	0.92	0.95	0.92	0.92	0.95	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	413	1968	217	554	1632	424	250	696	446	380	576	315
RTOR Reduction (vph)	0	13	0	0	0	39	0	0	52	0	0	56
Lane Group Flow (vph)	413	2172	0	554	1632	385	250	696	394	380	576	259
Confl. Peds. (#/hr)	48		65	65		48	42		40	40		42
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	5	2		1	6	7	3	8	1	7	4	5
Permitted Phases						6			8			4
Actuated Green, G (s)	21.2	52.6		24.0	55.5	74.4	20.9	30.7	54.7	18.9	28.7	49.9
Effective Green, g (s)	21.6	53.7		24.4	56.5	74.4	21.3	31.6	56.5	19.3	29.6	51.7
Actuated g/C Ratio	0.15	0.37		0.17	0.39	0.51	0.15	0.22	0.39	0.13	0.20	0.36
Clearance Time (s)	4.4	5.1		4.4	5.0	4.4	4.4	4.9	4.4	4.4	4.9	4.4
Vehicle Extension (s)	2.0	3.5		2.0	3.7	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	511	2310		577	2496	753	260	771	631	456	722	541
v/s Ratio Prot	0.12	c0.35		c0.16	0.25	0.07	0.14	c0.20	0.11	0.11	c0.16	0.07
v/s Ratio Perm						0.20			0.15			0.10
v/c Ratio	0.81	0.94		0.96	0.65	0.51	0.96	0.90	0.62	0.83	0.80	0.48
Uniform Delay, d1	59.7	44.1		59.8	36.2	23.3	61.4	55.2	35.7	61.3	54.9	36.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.6	9.2		27.5	0.7	0.2	44.8	13.6	1.4	11.8	5.7	0.2
Delay (s)	68.3	53.3		87.3	36.9	23.5	106.2	68.8	37.1	73.1	60.6	36.4
Level of Service	E	D		F	D	C	F	E	D	E	E	D
Approach Delay (s)		55.7			45.4			65.3			58.3	
Approach LOS		E			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	54.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.4
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	720	290	430	480	0	0	0	0	400	550	1020
Future Volume (vph)	0	720	290	430	480	0	0	0	0	400	550	1020
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	0.97	0.95					0.91	0.91	0.88
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3539	1583	3433	3539					1610	3390	2787
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3539	1583	3433	3539					1610	3390	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	783	315	467	522	0	0	0	0	435	598	1109
RTOR Reduction (vph)	0	0	148	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	783	167	467	522	0	0	0	0	435	598	927
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases			2							4		4
Actuated Green, G (s)		35.9	35.9	16.0	56.3					53.9	53.9	53.9
Effective Green, g (s)		36.8	36.8	16.4	57.2					54.8	54.8	54.8
Actuated g/C Ratio		0.31	0.31	0.14	0.48					0.46	0.46	0.46
Clearance Time (s)		4.9	4.9	4.4	4.9					4.9	4.9	4.9
Vehicle Extension (s)		3.8	3.8	2.0	4.2					2.0	2.0	2.0
Lane Grp Cap (vph)		1085	485	469	1686					735	1548	1272
v/s Ratio Prot		c0.22		c0.14	0.15							
v/s Ratio Perm			0.11							0.27	0.18	c0.33
v/c Ratio		0.72	0.34	1.00	0.31					0.59	0.39	0.73
Uniform Delay, d1		37.0	32.3	51.8	19.3					24.3	21.5	26.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		4.2	1.9	40.1	0.5					0.9	0.1	1.8
Delay (s)		41.2	34.2	91.9	19.8					25.1	21.6	28.3
Level of Service		D	C	F	B					C	C	C
Approach Delay (s)		39.2			53.8			0.0			25.8	
Approach LOS		D			D			A			C	

Intersection Summary			
HCM 2000 Control Delay	35.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1090	340	50	700	0	0	0	0	730	1100	660
Future Volume (vph)	0	1090	340	50	700	0	0	0	0	730	1100	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.7		4.0	6.7						6.3	4.0
Lane Util. Factor		0.91		1.00	0.95						0.86	0.86
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.98	1.00
Satd. Flow (prot)		4904		1770	3539						4712	1362
Flt Permitted		1.00		0.95	1.00						0.98	1.00
Satd. Flow (perm)		4904		1770	3539						4712	1362
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1185	370	54	761	0	0	0	0	793	1196	717
RTOR Reduction (vph)	0	34	0	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	1521	0	54	761	0	0	0	0	0	1989	666
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		2		1	6						4	
Permitted Phases										4		4
Actuated Green, G (s)		30.7		3.4	36.8						41.2	41.2
Effective Green, g (s)		28.9		3.8	36.7						40.3	42.6
Actuated g/C Ratio		0.32		0.04	0.41						0.45	0.47
Clearance Time (s)		4.9		4.4	6.6						5.4	5.4
Vehicle Extension (s)		1.0		2.0	1.0						1.0	1.0
Lane Grp Cap (vph)		1574		74	1443						2109	644
v/s Ratio Prot		c0.31		0.03	c0.22							
v/s Ratio Perm											0.42	c0.49
v/c Ratio		0.97		0.73	0.53						1.05dl	1.03
Uniform Delay, d1		30.1		42.6	20.1						23.8	23.7
Progression Factor		1.00		1.00	1.00						1.00	1.00
Incremental Delay, d2		16.0		26.0	1.4						9.3	44.5
Delay (s)		46.1		68.6	21.5						33.0	68.2
Level of Service		D		E	C						C	E
Approach Delay (s)		46.1			24.6			0.0			42.3	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	40.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

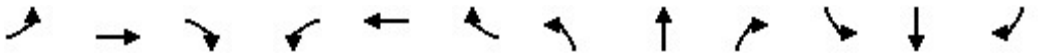
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Future Volume (vph)	40	150	30	380	40	230	30	1590	360	250	530	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.3	4.3		4.0	4.0		6.2	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.87		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1809		1757	1624		1770	4945		3433	5052	
Flt Permitted	0.45	1.00		0.56	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	842	1809		1042	1624		1770	4945		3433	5052	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	163	33	413	43	250	33	1728	391	272	576	22
RTOR Reduction (vph)	0	6	0	0	99	0	0	30	0	0	3	0
Lane Group Flow (vph)	43	190	0	413	194	0	33	2089	0	272	595	0
Confl. Peds. (#/hr)			9	9			2					2
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								
Actuated Green, G (s)	46.6	46.6		45.9	45.9		3.6	49.6		12.0	57.3	
Effective Green, g (s)	46.6	46.6		46.3	46.3		3.6	51.0		9.8	59.4	
Actuated g/C Ratio	0.38	0.38		0.38	0.38		0.03	0.42		0.08	0.49	
Clearance Time (s)	4.0	4.0		4.7	4.7		4.0	5.4		4.0	6.1	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	4.8		2.0	3.7	
Lane Grp Cap (vph)	322	693		396	618		52	2073		276	2467	
v/s Ratio Prot		0.10			0.12		0.02	c0.42		c0.08	0.12	
v/s Ratio Perm	0.05			c0.40								
v/c Ratio	0.13	0.27		1.04	0.31		0.63	1.01		0.99	0.24	
Uniform Delay, d1	24.4	25.8		37.6	26.5		58.3	35.3		55.8	18.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.1		56.8	0.3		17.1	21.6		49.6	0.2	
Delay (s)	24.4	25.9		94.5	26.8		75.4	56.9		105.5	18.3	
Level of Service	C	C		F	C		E	E		F	B	
Approach Delay (s)		25.7			66.4			57.2			45.5	
Approach LOS		C			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	54.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	14.5
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

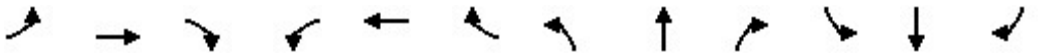
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	1050	290	240	950	160	450	1050	240	210	700	330
Future Volume (vph)	620	1050	290	240	950	160	450	1050	240	210	700	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.9	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		0.97	0.91	1.00	1.00	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4920		1770	4964		3433	5085	1562	1770	5085	1566
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4920		1770	4964		3433	5085	1562	1770	5085	1566
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	1141	315	261	1033	174	489	1141	261	228	761	359
RTOR Reduction (vph)	0	46	0	0	21	0	0	0	203	0	0	42
Lane Group Flow (vph)	674	1410	0	261	1186	0	489	1141	58	228	761	317
Confl. Peds. (#/hr)	4					4	5		1	1		5
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases									2			6
Actuated Green, G (s)	21.1	34.8		16.8	29.9		16.3	24.3	24.3	14.1	22.0	43.1
Effective Green, g (s)	21.5	36.0		17.2	31.7		16.7	25.2	24.3	14.5	23.0	43.9
Actuated g/C Ratio	0.20	0.33		0.16	0.29		0.15	0.23	0.22	0.13	0.21	0.40
Clearance Time (s)	4.4	5.2		4.4	5.8		4.4	4.9	4.9	4.4	5.0	4.4
Vehicle Extension (s)	2.0	3.9		2.0	2.7		2.0	3.3	3.3	2.0	4.1	2.0
Lane Grp Cap (vph)	677	1626		279	1444		526	1176	348	235	1073	631
v/s Ratio Prot	c0.20	c0.29		0.15	0.24		c0.14	c0.22		0.13	0.15	0.10
v/s Ratio Perm									0.04			0.10
v/c Ratio	1.00	0.87		0.94	0.82		0.93	0.97	0.17	0.97	0.71	0.50
Uniform Delay, d1	43.7	34.2		45.3	36.0		45.5	41.5	34.1	47.0	39.8	24.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	33.2	5.3		36.3	3.8		22.6	20.0	1.0	49.9	4.0	0.2
Delay (s)	76.9	39.5		81.6	39.8		68.1	61.5	35.2	96.9	43.8	24.5
Level of Service	E	D		F	D		E	E	D	F	D	C
Approach Delay (s)		51.4			47.2			59.6			47.7	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	52.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	108.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Future Volume (vph)	580	300	70	20	160	150	90	100	110	20	20	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		3.1	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.99		1.00	0.99			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.93			0.95			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1770	1800		1770	1709			1724			1696	
Flt Permitted	0.95	1.00		0.95	1.00			0.88			0.84	
Satd. Flow (perm)	1770	1800		1770	1709			1538			1437	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	630	326	76	22	174	163	98	109	120	22	22	43
RTOR Reduction (vph)	0	8	0	0	35	0	0	24	0	0	33	0
Lane Group Flow (vph)	630	394	0	22	302	0	0	303	0	0	54	0
Confl. Peds. (#/hr)	1		3	3		1	1		4	4		1
Turn Type	Prot	NA		Prot	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8			4		
Actuated Green, G (s)	32.0	53.8		1.5	22.9			18.7			18.7	
Effective Green, g (s)	32.4	54.7		2.4	23.8			19.6			19.6	
Actuated g/C Ratio	0.37	0.62		0.03	0.27			0.22			0.22	
Clearance Time (s)	4.4	4.9		4.0	4.9			4.9			4.9	
Vehicle Extension (s)	1.0	2.0		3.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	653	1121		48	463			343			320	
v/s Ratio Prot	c0.36	0.22		0.01	c0.18							
v/s Ratio Perm								c0.20			0.04	
v/c Ratio	0.96	0.35		0.46	0.65			0.88			0.17	
Uniform Delay, d1	27.1	8.0		42.1	28.3			33.0			27.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	26.3	0.9		6.8	7.0			21.9			0.1	
Delay (s)	53.5	8.9		48.9	35.3			54.9			27.6	
Level of Service	D	A		D	D			D			C	
Approach Delay (s)		36.1			36.1			54.9			27.6	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	87.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

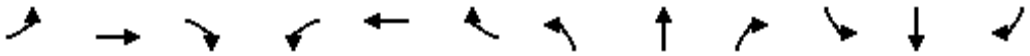


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Future Volume (vph)	440	1410	160	220	840	220	100	430	240	310	220	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.97	1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.97		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	4976		1770	4857		1770	3539	1533	1770	3180	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	4976		1770	4857		1770	3539	1533	1770	3180	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	478	1533	174	239	913	239	109	467	261	337	239	174
RTOR Reduction (vph)	0	10	0	0	31	0	0	0	38	0	89	0
Lane Group Flow (vph)	478	1697	0	239	1121	0	109	467	223	337	324	0
Confl. Peds. (#/hr)	26		26	26		26	41		25	25		41
Confl. Bikes (#/hr)			8			2			13			8
Turn Type	Prot	NA		Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2		1	6		3	8	1	7	4	
Permitted Phases									8			
Actuated Green, G (s)	22.6	51.9		20.2	49.0		13.0	25.1	45.3	29.1	41.3	
Effective Green, g (s)	23.0	52.8		20.6	50.4		13.4	26.1	46.1	29.5	42.2	
Actuated g/C Ratio	0.16	0.36		0.14	0.35		0.09	0.18	0.32	0.20	0.29	
Clearance Time (s)	4.4	4.9		4.4	5.4		4.4	5.0	4.4	4.4	4.9	
Vehicle Extension (s)	2.0	4.2		2.0	3.0		2.0	4.0	2.0	2.0	2.6	
Lane Grp Cap (vph)	544	1811		251	1688		163	637	487	360	925	
v/s Ratio Prot	0.14	c0.34		c0.14	0.23		0.06	c0.13	0.07	c0.19	0.10	
v/s Ratio Perm									0.08			
v/c Ratio	0.88	0.94		0.95	0.66		0.67	0.73	0.46	0.94	0.35	
Uniform Delay, d1	59.6	44.5		61.7	40.1		63.7	56.2	39.5	56.8	40.6	
Progression Factor	1.02	0.90		0.91	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.1	9.0		39.2	1.8		7.8	4.6	0.3	30.9	0.2	
Delay (s)	73.0	49.3		95.3	42.1		71.4	60.8	39.7	87.7	40.8	
Level of Service	E	D		F	D		E	E	D	F	D	
Approach Delay (s)		54.5			51.2			55.6			61.8	
Approach LOS		D			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	54.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	145.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

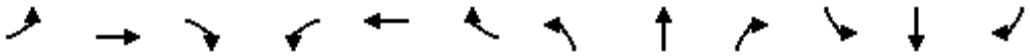
Peak Hour Intersection Calculation Worksheets - Partial Mitigation



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Future Volume (vph)	60	1140	400	160	1330	180	480	400	150	580	280	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1571	3433	3539	1527	3433	1863	1568	3433	1771	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1239	435	174	1446	196	522	435	163	630	304	130
RTOR Reduction (vph)	0	0	118	0	0	42	0	0	31	0	11	0
Lane Group Flow (vph)	65	1239	317	174	1446	154	522	435	132	630	423	0
Confl. Peds. (#/hr)	8					8			3	3		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	5.6	41.0	65.1	20.5	55.8	83.2	24.1	33.6	54.1	27.4	35.1	
Effective Green, g (s)	6.0	42.3	67.7	20.9	57.2	86.0	24.5	34.4	55.7	26.4	36.3	
Actuated g/C Ratio	0.04	0.30	0.48	0.15	0.41	0.61	0.18	0.25	0.40	0.19	0.26	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	75	1536	794	512	1445	955	600	457	664	647	459	
v/s Ratio Prot	c0.04	0.24	0.07	0.05	c0.41	0.03	0.15	0.23	0.03	c0.18	c0.24	
v/s Ratio Perm			0.13			0.07			0.05			
v/c Ratio	0.87	0.81	0.40	0.34	1.00	0.16	0.87	0.95	0.20	0.97	0.92	
Uniform Delay, d1	66.6	45.1	23.1	53.4	41.4	11.6	56.2	52.0	27.6	56.5	50.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	58.9	4.6	0.1	0.1	23.8	0.0	12.4	30.2	0.1	28.6	23.6	
Delay (s)	125.5	49.7	23.3	53.5	65.2	11.6	68.6	82.2	27.6	85.0	74.1	
Level of Service	F	D	C	D	E	B	E	F	C	F	E	
Approach Delay (s)		45.9			58.3			67.9			80.5	
Approach LOS		D			E			E			F	

Intersection Summary			
HCM 2000 Control Delay	60.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Future Volume (vph)	90	1670	560	120	1160	360	460	350	180	300	260	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.1	4.0	4.0	1.6	4.0	4.0	3.6	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	0.97	0.95	1.00	0.97	1.00	1.00	0.97	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770	5085	1568	3433	3539	1535	3433	1863	1560	3433	1822	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770	5085	1568	3433	3539	1535	3433	1863	1560	3433	1822	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1815	609	130	1261	391	500	380	196	326	283	43
RTOR Reduction (vph)	0	0	114	0	0	94	0	0	47	0	5	0
Lane Group Flow (vph)	98	1815	495	130	1261	297	500	380	149	326	321	0
Confl. Peds. (#/hr)	6		1	1		6			6	6		
Confl. Bikes (#/hr)			1			5						3
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	5	2	3	1	6	7	3	8	1	7	4	
Permitted Phases			2			6			8			
Actuated Green, G (s)	8.2	48.1	66.2	6.2	46.0	63.3	18.1	30.9	37.1	17.3	28.3	
Effective Green, g (s)	8.6	49.4	68.8	6.6	47.4	66.1	18.5	31.7	38.7	16.3	29.5	
Actuated g/C Ratio	0.07	0.41	0.57	0.05	0.39	0.55	0.15	0.26	0.32	0.14	0.25	
Clearance Time (s)	4.4	5.3	4.4	4.4	5.4	3.0	4.4	4.8	4.4	3.0	5.2	
Vehicle Extension (s)	2.0	4.4	2.0	2.0	4.4	2.0	2.0	3.8	2.0	2.0	2.0	
Lane Grp Cap (vph)	126	2093	898	188	1397	845	529	492	503	466	447	
v/s Ratio Prot	c0.06	c0.36	0.09	0.04	0.36	0.05	c0.15	c0.20	0.02	0.09	c0.18	
v/s Ratio Perm			0.23			0.14			0.08			
v/c Ratio	0.78	0.87	0.55	0.69	0.90	0.35	0.95	0.77	0.30	0.70	0.72	
Uniform Delay, d1	54.8	32.3	16.0	55.7	34.1	15.0	50.2	40.8	30.5	49.5	41.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	23.5	5.2	0.4	8.5	9.8	0.1	25.7	7.7	0.1	3.7	4.6	
Delay (s)	78.2	37.5	16.4	64.2	43.9	15.1	75.9	48.5	30.6	53.2	46.0	
Level of Service	E	D	B	E	D	B	E	D	C	D	D	
Approach Delay (s)		34.0			39.1			58.0			49.6	
Approach LOS		C			D			E			D	

Intersection Summary			
HCM 2000 Control Delay	41.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Peak Hour Intersection Calculation Worksheets - Partial Mitigation

Appendix J
VMT Analysis Worksheet – Adopted Plan

2035a - Adopted GP - Old Town

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	3,087	-	3,087	4,336,442
CHULA VISTA TOTAL	5,601,350	7,698	-	7,698	5,593,652
CORONADO TOTAL	466,994	1,344	-	1,344	465,650
DEL MAR TOTAL	101,376	60	-	60	101,316
EL CAJON TOTAL	2,442,502	3,987	-	3,987	2,438,515
ENCINITAS TOTAL	2,556,112	3,788	-	3,788	2,552,324
ESCONDIDO TOTAL	3,482,331	1,991	-	1,991	3,480,340
External TOTAL	526,485	428	-	428	526,057
IMPERIAL BEACH TOTAL	131,328	26	-	26	131,302
LA MESA TOTAL	2,089,142	6,352	-	6,352	2,082,790
LEMON GROVE TOTAL	959,602	1,726	-	1,726	957,876
NATIONAL CITY TOTAL	1,962,160	6,474	-	6,474	1,955,686
OCEANSIDE TOTAL	4,088,716	1,017	-	1,017	4,087,699
POWAY TOTAL	1,304,035	615	-	615	1,303,420
SAN DIEGO TOTAL	47,221,594	277,444	18,009	259,435	46,944,150
SAN MARCOS TOTAL	2,642,965	296	-	296	2,642,669
SANTEE TOTAL	1,347,654	846	-	846	1,346,808
SOLANA BEACH TOTAL	715,186	1,390	-	1,390	713,796
Unincorporated TOTAL	24,605,963	12,944	-	12,944	24,593,019
VISTA TOTAL	1,899,984	104	-	104	1,899,880
REGIONWIDE TOTAL	108,485,008	331,617	18,009	313,608	108,153,391

2035a - Adopted GP - Midway

JURISDICTION	TOTAL VMT	TOTAL City of San Diego VMT	Two Trip End City of San Diego VMT	One Trip End City of San Diego VMT	NON-City of San Diego VMT
		I-I, I-E and E-I	I-I	I-E and E-I	
CARLSBAD TOTAL	4,339,529	13,654	-	13,654	4,325,875
CHULA VISTA TOTAL	5,601,350	32,436	-	32,436	5,568,914
CORONADO TOTAL	466,994	6,103	-	6,103	460,891
DEL MAR TOTAL	101,376	232	-	232	101,144
EL CAJON TOTAL	2,442,502	15,077	-	15,077	2,427,425
ENCINITAS TOTAL	2,556,112	16,034	-	16,034	2,540,078
ESCONDIDO TOTAL	3,482,331	8,349	-	8,349	3,473,982
External TOTAL	526,485	2,332	-	2,332	524,153
IMPERIAL BEACH TOTAL	131,328	293	-	293	131,035
LA MESA TOTAL	2,089,142	23,565	-	23,565	2,065,577
LEMON GROVE TOTAL	959,602	7,337	-	7,337	952,265
NATIONAL CITY TOTAL	1,962,160	27,348	-	27,348	1,934,812
OCEANSIDE TOTAL	4,088,716	5,026	-	5,026	4,083,690
POWAY TOTAL	1,304,035	2,464	-	2,464	1,301,571
SAN DIEGO TOTAL	47,221,594	1,228,648	204,475	1,024,173	45,992,946
SAN MARCOS TOTAL	2,642,965	1,173	-	1,173	2,641,792
SANTEE TOTAL	1,347,654	3,470	-	3,470	1,344,184
SOLANA BEACH TOTAL	715,186	5,763	-	5,763	709,423
Unincorporated TOTAL	24,605,963	59,614	-	59,614	24,546,349
VISTA TOTAL	1,899,984	657	-	657	1,899,327
REGIONWIDE TOTAL	108,485,008	832,025 2,291,600	204,475	1,255,100	107,025,433